DETERMINANT OF CUSTOMER LOYALTY FOR BANK SYARIAH INDONESIA
AFTER M&A ACTIVITY BASED ON CONFIRMATORY FACTOR ANALYSIS

M. Fariz Fadillah Mardianto
Eko Fajar Cahyono
Anggara Teguh Previan
Eka Rani Fitrianingsih
Muhammad Hafid Fauzan

Islamic Economics Department, Faculty of Economics and Business, Universitas Airlangga
Mathematics Department, Faculty of Sciences and Technology, Universitas Airlangga

Email: m.fariz.fadillah.m@fst.unair.ac.id; ekofajarc@feb.unair.ac.id; anggara.teguh.previan-2020@fst.unair.ac.id; eka.rani.fitrianingsih-2018@feb.unair.ac.id; muhammad.hafid.fauzan-2019@feb.unair.ac.id

ABSTRACT
The government of Indonesia consolidated three state-owned Islamic banks to become Bank Syariah Indonesia. Customer loyalty is affected by merger operations. This study aims to examine the role of Bank Image, Cost and Benefit of Merger, Past Behavior, Services Quality, Product Price, Bank Human Recourses, Bank Location, Information Technology Integration and Sharia Compliance on Loyalty Customers BSI's predecessor banks (Bank Syariah Mandiri, BNI Syariah and BRI Syariah). This study uses a quantitative approach by completing an online questionnaire from 92 respondents spread across Indonesia and this study uses Confirmatory Factor Analysis (CFA) as the estimation method. The results of the validity test show a strong correlation between a few independent variables and BSI customer loyalty. These include bank human resources, bank location, and information technology integration, Product quality and service quality. On the other hand, the validity test shows that a number of independent variables are unrelated to BSI customer loyalty, including Bank Image, Cost and Benefit of Merger, Past Behavior, Product Price, and Sharia Compliance. For BSI managers, prioritizing key drivers of customer loyalty such as product quality, service efficiency, and technological integration is crucial for strategic resource allocation and maintaining a positive customer experience. BSI customers are encouraged to stay informed about the bank’s offerings, engage in educational initiatives, and provide...
regular feedback, while the government can support BSI's success by fostering a regulatory environment conducive to innovation and customer-centric initiatives.

INTRODUCTION

The growth of Islamic banking in Indonesia has been significant over the past three decades, particularly since the establishment of the first Islamic bank, Bank Muamalat Indonesia in 1992 (Trisnaningtyas 2022). However, Islamic banking still lags behind conventional banking, with Islamic banks holding only a 6.18 percent market share compared to the 93.82 percent market share held by conventional banks. This discrepancy in market share raises questions about the competitiveness and market power of Islamic banks in Indonesia (Cupian and Abduh 2017). According to data from the Financial Services Authority's (OJK) official website, the total assets of Islamic banks of Indonesia in 2022 amounted to IDR 686.29 billion, although the assets of conventional banks were still significantly greater at IDR 10,581.45 billion. According to OJK, the entire number of conventional commercial banks and rural banks as of January was 1,612 banks, while the total number of Islamic banks, includes Sharia Commercial Banks (BUS), Sharia Business Units (UUS), and Sharia People's Credit Banks (BPRS) was 197 banks. Based on these reality, Islamic banks continue to lag well behind conventional banks, which is ironic in a country with the world's largest Muslim population. As a result, in the framework of achieving financial stability, the government sets plans or takes additional actions to grow the Islamic banking industry, which in this case includes planning an Islamic bank merger.

Ministry of State-Owned Enterprises (BUMN) announced the inauguration of the merger of three Islamic banks which are subsidiaries of a state-owned bank into Bank Syariah Indonesia (BSI). The three Islamic banks in question are PT Bank Rakyat Indonesia Syariah (BRIS), PT Bank Negara Indonesia Syariah (BNIS), and PT Bank Syariah Mandiri (BSM) (Nastiti and Kasri 2019). Mergers or other corporate actions aim to increase shareholder value. After becoming one, it is hoped that these three Islamic banks will become financially strong banks, so that they can carry out their banking roles even better and certainly can increase value for other stakeholders such as the.

Islamic banking industry, the business world (MSMEs), education, fund management hajj and for the development of the sharia economic ecosystem in a broad sense. If the role of Islamic banking is realized properly, it will create financial stability. To realize BSI's mission to improve financial stability, it is necessary to have customer loyalty to BSI. The relationship between customers and banks is a factor in achieving customer loyalty through customer satisfaction. Based on total assets data from OJK in 2022, that Islamic banking is less attractive and customer loyalty is still low (Souiden and Rani 2015).

Mergers and acquisitions (M&A) are widely used in the banking sector as a strategic tool for growth, improved performance, and survival (Hagendorff & Keasey, 2009). The banking industry has one of the most active markets for M&A, and consolidation through M&A
indicates a major outcome of the financial transformation process and a contemporary trend in the banking sector (Kuriakose & Paul, 2016). M&A activities in the banking sector are aimed at improving financial stability, gaining operational efficiency, and creating synergy advantages (Shahid & Abbas, 2012) (Roopesh & Sandhya, 2022). They are also used to maximize shareholders' wealth and create universal banks with technological expertise to compete effectively in the market (Priya & Tom, 2023).

In the context of the banking sector, M&A activities have been found to have a significant impact on financial performance. Studies have reported that M&A can lead to improvements in financial performance, including profitability, leverage, and solvency (Haakantu & Phiri, 2022). However, it is important to note that the impact of M&A on bank performance can vary, and the outcomes may not always be positive. Some studies have revealed negative associations between M&A and net profit margin in the banking sector (Musah et al., 2020).

Additionally, the performance of merged banks has been found to outperform the banking industry as a whole (Liargovas & Repousis, 2011). Furthermore, M&A activities in the banking sector are influenced by various factors, including economic conditions, financial risks, and regulatory environments. Factors such as GDP growth and financial market capitalization can influence the volume of M&A in the banking market (Vozárová et al., 2022). Additionally, the impact of M&A on banks' objectives, such as net income, effective spending, and revenue growth, has been studied, highlighting the positive effects of M&A on financial institutions (Patrick et al., 2022). It is also important to consider the risks and challenges associated with M&A in the banking sector. Financial risk control and avoidance measures are crucial considerations in M&A transactions, especially in the context of overseas mergers and acquisitions (H. Liu, 2022).

Moreover, the impact of M&A on the performance of banks around financial crises, such as the 2007-2009 financial crisis, has been studied, revealing the complexities and interconnectedness of individual bank performance with broader industry trends (T. King & Kong, 2016).

The impact of merger and acquisition (M&A) events on customer loyalty is a multifaceted phenomenon that involves various factors and considerations. The influence of M&A on customer loyalty can be understood through the lens of customer acquisition and retention, financial performance, and customer perception. M&A events can influence customer loyalty through their impact on customer acquisition and retention efforts. The allocation of resources between customer acquisition and retention is crucial in maximizing customer profitability (Reinartz et al., 2005). The post-M&A environment may require a reevaluation of these resource allocations to ensure that customer relationships are effectively managed, which can directly impact customer loyalty (G. J. King et al., 2016).

Furthermore, the financial performance of the merged entity can influence customer loyalty. The financial stability and performance of the acquiring company post-merger can impact customer confidence and trust in the brand, thereby influencing customer loyalty (Livne et al., 2011). Additionally, the level of customer satisfaction and service quality resulting from the M&A can significantly impact customer retention and loyalty (Abdul-Ramon & Ayorinde, 2021). Moreover, customer perception and brand loyalty can be influenced by M&A.
events. The merger of companies can trigger new customer perceptions and impact brand loyalty (Putra et al., 2021). The way in which the M&A is communicated to customers and the perceived benefits or drawbacks of the merger can shape customer attitudes and loyalty towards the merged entity (Putra et al., 2021). It is important to note that the success of M&A events in influencing customer loyalty is contingent on various factors, including the effective management of customer relationships, the maintenance of service quality, and the alignment of customer-focused strategies with the post-merger environment (Thomas, 2001).

There may be limited studies that specifically focus on customer loyalty within the context of Islamic banking mergers and acquisitions (M&A) in Indonesia. Several studies have specifically examined customer loyalty in the context of Islamic banking in Indonesia. For instance, (Fauzi & Suryani, 2019) investigated the effects of service quality on customer satisfaction, trust, and loyalty in Indonesian Islamic banking (Fauzi & Suryani, 2019). Similarly, Suhartanto et al. (2019) explored loyalty towards Islamic banking by integrating service quality, emotional attachment, and religiosity paths. These studies provide evidence of research focusing on customer loyalty within the context of Islamic banking in Indonesia but not specific after merger event. Furthermore, it is crucial to evaluate whether previous studies have comprehensively identified and analyzed the determinants influencing customer loyalty in the context of Islamic banking after M&A activities. If there are factors that have been overlooked or underexplored, it could indicate a research gap in understanding the key drivers of customer loyalty in this specific context. This research is intended to fill research gaps. Therefore, this study aims to examine the role of Bank Image, Cost and Benefit of Merger, Past Behavior, Services Quality, Product Price, Bank Human Recourses, Bank Location, Information Technology Integration and Sharia Compliance on Loyalty Customers BSI's predecessor banks (Bank Syariah Mandiri, BNI Syariah and BRI Syariah).

**LITERATURE REVIEW**

**Customer Loyalty**

The theory of customer loyalty is influenced by various factors such as customer satisfaction, perceived value, service quality, and customer relationship management efforts (Benjamin et al., 2019)(Marso et al., 2020). Customer loyalty is not solely based on customer satisfaction, as it is also influenced by perceived value and the overall quality of service provided by the company (Tan, 2022). Additionally, customer loyalty is a key determinant of a company’s survival, competitive advantage, and long-term success (Homsud & Chaveesuk, 2014). This highlights the significance of customer loyalty as a driver of firm profitability and emphasizes the importance of strategies aimed at maximizing customer share and retaining customers (Verhoef, 2003). Furthermore, customer loyalty is influenced by various factors such as service quality, customer satisfaction, and relationship marketing, which play crucial roles in shaping customer retention (Commey & Adom, 2020).
**Merger Event and Customer Loyalty**

The impact of mergers and acquisitions on customer loyalty is a critical area of study. Research has shown that mergers and acquisitions have a substantial impact on customer satisfaction and service quality (Umashankar et al., 2021). Following a merger, customer loyalty to the brand can be influenced by nostalgic feelings and the prevailing brand’s identity (Toledo & Lopes, 2016). Moreover, the financial performance and customer satisfaction are crucial aspects affected by mergers and acquisitions (Swaminathan et al., 2013). Understanding the impact of mergers and acquisitions on customer loyalty is essential for businesses undergoing such corporate transformations. The study by Umashankar et al. (2021) highlights the need to consider customer reactions to mergers and acquisitions, as customers are directly impacted by these corporate transformations.

Additionally, the study by Toledo & Lopes (2016) emphasizes the effect of nostalgic feelings on consumer loyalty to the prevailing brand following the extinction of a brand in a merger/acquisition process. Furthermore, the study by Swaminathan et al. (2013) underscores the importance of achieving the dual goal of customer satisfaction and efficiency in a merger context, as it is likely to have a stronger, positive impact on firm performance.

**Bank Image and Customer Loyalty**

The influence of bank image on customer loyalty is a complex and multifaceted relationship that is influenced by various factors. Several studies have highlighted the significance of bank image in shaping customer loyalty. Kaura et al. (2015) emphasized the impact of service quality, perceived price, fairness, and service convenience on customer satisfaction and loyalty in the Indian retail banking sector. In line with the findings from Omorogie et al. (2019) further supported this by indicating that the perception of service quality significantly affects the image of the bank, which in turn, influences customer loyalty. Additionally, Chikazhe et al. (2021) stressed the importance of considering customer satisfaction, service quality, and bank image collectively to influence customer loyalty. Moreover, Asiati et al. (2019) provided insights into the intricate relationships between service quality, image, trust, satisfaction, and customer loyalty in the context of Syari’ah banking. The study revealed the significant impact of service quality and bank image on customer loyalty, emphasizing the interconnectedness of these factors. Furthermore, Riyadi (2019) highlighted the significant influence of bank image and brand image on customer loyalty in Sharia banks, underscoring the importance of these factors in shaping customer loyalty.

**Cost and Benefit of Merger and Customer Loyalty**

The impact of a bank merger on customer loyalty is multifaceted and can be influenced by various factors. Research has shown that perceived price, fairness, and service convenience play a crucial role in shaping customer satisfaction and loyalty in the banking sector (Kaura et
al., 2015). Additionally, bank mergers have the potential to boost productivity and reduce costs for the combined entity, which can ultimately benefit customers (Al-Binali et al., 2023). This suggests that cost efficiencies achieved through mergers can positively impact customer loyalty by potentially leading to improved services and offerings. Furthermore, the influence of a merger on customer loyalty can be mediated by various factors. For instance, the level of trust, service quality, and religiosity have been identified as significant elements that affect customer loyalty to a bank after a merger (Juliana et al., 2023). Additionally, the impact of a merger on customer perception and brand loyalty has been highlighted, indicating that mergers trigger new customer perceptions and can impact the level of brand loyalty (Putra et al., 2021). Moreover, the quality and image of banking services, including factors such as accessibility, have been found to have a significant influence on customer satisfaction and loyalty (Saleh et al., 2017). Therefore, the changes in service quality and image resulting from a merger can have a direct impact on customer loyalty. Additionally, the impact of a merger extends beyond customers to encompass employees and the community, indicating the broader implications of mergers on various stakeholders (Ulfa, 2021).

Past Behavior and Customer Loyalty

The influence of past behavior on customer loyalty is a critical aspect of understanding consumer retention and purchase patterns. Research has shown that past behavior, such as a history of changing products or brands, can significantly impact future customer loyalty. For instance, studies have demonstrated that behavioral loyalty, which encompasses repeat purchase patterns and switching intentions, is a key indicator of customer loyalty (So et al., 2015). Customers who exhibit a tendency to switch products or brands may have lower behavioral loyalty, which can affect their future loyalty to a specific brand or product. Moreover, the relationship between perceived marketing actions, customer attitudes, and future sales has been studied, indicating that past behavior can shape future purchasing patterns and brand loyalty (Vogel et al., 2008). This suggests that customers' past experiences and behaviors play a crucial role in influencing their future loyalty and purchase intentions. Additionally, the impact of loyalty program membership on relational outcomes has been explored, highlighting the potential influence of past behavior on customer loyalty and engagement with loyalty programs (Lacey, 2009).

Services Quality and Customer Loyalty

The influence of service quality on bank customer loyalty has been extensively studied, with numerous findings highlighting the significant impact of service quality on customer satisfaction and loyalty. For instance, research has shown that service quality plays a crucial role in influencing customer retention in the banking sector (Parawansa, 2018). The study demonstrated the mediation effect of service quality on customer retention, emphasizing the pivotal role of service quality in fostering customer loyalty in rural banks. Moreover, in the
context of Islamic banks, the joint significant effects of service quality and customer trust on customer satisfaction have been highlighted, indicating the importance of service quality in shaping customer satisfaction and potentially influencing loyalty (Hidayat et al., 2015).

Additionally, a study in the financial industry emphasized the relationship between service quality, customer satisfaction, and corporate performance, underscoring the link between service quality and customer satisfaction as an internal assessment indicator for customers (C.-M. Liu & Wang, 2017). Furthermore, the impact of service quality on customer satisfaction and loyalty has been explored in the context of Indonesian public banking, with findings supporting the positive relationship between service quality, customer satisfaction, and loyalty (Salim et al., 2018). Similarly, the influence of service quality on customer retention through commitment and satisfaction as mediation variables has been studied, confirming the significant effect of service quality on customer satisfaction and retention (Sari et al., 2018).

**Bank Location and Customer Loyalty**

The location of a bank can significantly influence customer loyalty. Proximity to a bank has been identified as a significant factor impacting customer loyalty in various banking sectors (Obioha, 2022). Customers often value convenience and accessibility, and the physical location of a bank can directly affect their satisfaction and loyalty. Research has shown that the proximity of banks has a positive impact on customer loyalty, particularly in retail banking (Obioha, 2022). Additionally, the convenience of the bank’s location can contribute to customer satisfaction, which in turn influences loyalty. Furthermore, the physical presence of a bank in a particular area can contribute to the overall image and trustworthiness of the bank, which are important factors in influencing customer loyalty. The location of a bank can shape its image and influence customer perceptions, ultimately impacting their loyalty. Additionally, the strategic office location has been identified as a factor in improving the image of micro-banking services, which can contribute to customer satisfaction and loyalty (Hayati et al., 2020). Moreover, the impact of service quality and customer satisfaction on loyalty has been studied, with findings indicating that the location and accessibility of bank branches play a role in shaping customer satisfaction and, consequently, loyalty (C.-M. Liu & Wang, 2017). The convenience and accessibility of bank locations are integral to providing high-quality service to customers, which can influence their loyalty.

**Information Technology Integration and Customer Loyalty**

The integration of Information Technology (IT) services in banks is crucial for maintaining customer loyalty during merger and acquisition events. As banks undergo mergers and acquisitions, they face challenges in integrating IT systems (Musah et al., 2020). This integration is essential for ensuring seamless operations and maintaining service quality for customers (Sharma 2018). The use of IT in customer relationship management is particularly important, as it allows banks to formulate strategies that integrate marketing with information technologies, leading to long-term customer relationship management (Bachir 2021). Furthermore, the impact of mergers and acquisitions on the financial performance of
banks can be positive, with improved operating performance and increased profitability (Abbas et al., 2014). However, it is crucial for banks to ensure that the integration of IT systems does not hamper customer service, and that customers continue to enjoy competitive interest rates and enhanced service quality post-merger (Bajgai and Pradhan 2021). The role of IT integration in the success of mergers and acquisitions is further emphasized by the need for banks to adapt to digitalization disruptions by exploiting M&A activities to capture dynamic capabilities (Fariq, et al., 2022). Additionally, the impact of mergers and acquisitions between banks and insurance companies on the insurance services provided by banks highlights the importance of IT integration in bancassurance, further underlining the significance of IT in the post-merger phase (Hamdi 2023). Moreover, the study by emphasizes that M&A strategies, including IT integration, are crucial for creating competitive and efficient banking systems (Ahmed, et al., 2018).

**Bank Human Resources and Customer Loyalty**

The impact of bank human resources on customer loyalty during merger and acquisition events is significant. Service quality dimensions, employee behavior, and customer satisfaction directly influence customer loyalty (Kaura, et al., 2015). Bank employees' behavior, competence, and ability to provide quality service directly influence customer satisfaction and loyalty. Additionally, employee satisfaction and loyalty are influenced by their involvement in corporate social responsibility activities (Shafique and Ahmad 2020). This underscores the crucial role of human resources in fostering a positive work environment, which in turn impacts customer loyalty. The human aspects of service quality have been found to influence customer satisfaction more than the technical and tangible aspects, emphasizing the importance of employee behavior and interactions in shaping customer perceptions (Lenka, et al., 2009). Furthermore, customer satisfaction plays a mediating role in the relationship between customer relationship management and long-term customer loyalty, emphasizing the significance of customer satisfaction, which is influenced by the quality of interactions with bank employees (Iriqat and Daqar 2017).

**Product Price and Customer Loyalty**

The relationship between product price and customer loyalty has been extensively researched in the marketing literature. Price perception has been identified as a critical factor influencing customer satisfaction and loyalty (Jiang & Rosenbloom, 2005), (Sudari et al., 2019), (Winarno et al., 2020). Studies have shown that price can significantly influence the level of satisfaction among customers, which in turn affects their loyalty (Silva et al., 2022) (Hudaya, 2021). Furthermore, the cost of acquiring new brand favorites has been highlighted as relatively more expensive than maintaining existing customers, underscoring the importance of customer loyalty in pricing strategies (Trasorras et al., 2009). The influence of price on customer satisfaction and loyalty has been found to be significant, with price sensitivity being a primary confounding factor on loyalty (Winarno et al., 2020). Moreover,
the study by Gengeswari et al. (2013) found that price insensitivity significantly influences firm performance, highlighting the importance of customer retention practices in the context of pricing strategies. Additionally, the study by Pahrudin et al. (2023) emphasized that pricing strategies are an important aspect of the marketing mix that contributes to customer loyalty and retention in commercial banks.

**Product Quality and Customer Loyalty**

Product quality plays a crucial role in influencing customer loyalty. Several studies have consistently demonstrated the significant impact of product quality on customer loyalty through customer satisfaction (Millenia & Sukma, 2022) (Sia et al., 2022), the higher the quality of the product, the more likely it is to lead to increased customer satisfaction, which in turn fosters customer loyalty (Wijaya & Bernardo, 2022). Additionally, it has been found that product quality has a direct positive relationship with customer loyalty (Hongdiyanto & Liemen, 2021). Furthermore, the influence of product quality on customer loyalty has been shown to be mediated by customer satisfaction (Silva et al., 2022). This indicates that customer satisfaction acts as a bridge between product quality and customer loyalty. Moreover, it is important to note that while service quality also plays a role in customer loyalty, the influence of product quality on customer loyalty is often found to be stronger than that of service quality (Taufik et al., 2022). This suggests that while service quality is important, the impact of product quality on customer loyalty is more pronounced.

**Sharia Compliance and Customer Loyalty**

The relationship between Sharia compliance and customer loyalty in Islamic banking has been extensively researched. Islamic banks are required to operate in compliance with Sharia law, which prohibits the payment or acceptance of interest fees for loans, as well as engaging in unethical or speculative transactions. The adherence to Sharia principles is a fundamental aspect of Islamic banking, and it significantly influences customer loyalty (Suhartanto et al., 2019) (Abror et al., 2019) (Asnawi, 2022) (Fusva et al., 2020).

The adherence to Sharia principles is perceived as a key determinant of customer satisfaction and loyalty (Aisyah, 2018) (Effendi et al., 2020) (Mulia et al., 2020). Customers of Islamic banks place significant importance on the Sharia compliance of the bank, and it influences their decision-making process in selecting Islamic banking services (Firmansyah & Faisal, 2020). The Sharia compliance of Islamic banks is a distinguishing factor that attracts customers with Islamic religiosity and influences their loyalty to the bank (Purnama et al., 2021). Furthermore, the visibility of Sharia-compliant offerings and corporate social responsibility (CSR) activities positively impacts customer engagement and awareness, which in turn influences customer loyalty (Moosa & Kashiramka, 2022).
RESEARCH METHODS

Research Approach
The quantitative approach in research emphasizes the collection and analysis of numerical data to understand and explain phenomena. It involves the use of statistical and mathematical tools to derive patterns, correlations, and causal relationships between variables (Maxim 2006). This approach is particularly effective in validating and testing existing theories, as well as in generalizing findings to broader populations (Pesce 2012). Quantitative research is characterized by its larger sample sizes and efficient data collection methods, making it suitable for studies requiring a high degree of objectivity and empirical analysis (Venkatesh, et al., 2016). Furthermore, the integration of qualitative and quantitative research methods offers a comprehensive approach to research, allowing for corroboration and a broader understanding of the research topic (Lund 2012).

Confirmatory Estimation Method

Confirmatory Factor Analysis (CFA) is a statistical technique widely used in various fields to validate and confirm the underlying structure of latent variables. CFA is particularly valuable in understanding complex constructs and has found extensive application in fields such as psychology, medicine, business, and social sciences. The method allows researchers to assess the relationships between observed variables and their underlying latent constructs, providing a rigorous and systematic approach to model validation (Certo et al., 2006) (Wang & Ahmed, 2004). One of the key strengths of CFA is its ability to confirm the factor structure of latent variables, which is essential for developing and validating measurement instruments. By confirming the relationships between observed indicators and latent constructs, CFA provides a robust framework for assessing the validity and reliability of measurement scales (Pepe et al., 2017).

This is particularly important in fields such as psychology and education, where the development of valid and reliable measurement instruments is crucial for accurate assessment and evaluation. Moreover, CFA has been integrated with Structural Equation Modeling (SEM), allowing for the simultaneous assessment of measurement and structural models. This integration provides a comprehensive framework for understanding the complex relationships between latent variables and their impact on observed variable (Veronese & Pepe, 2020) (Sudarsono et al., 2022). Additionally, CFA has been used to assess factorial invariance across different groups, enabling researchers to determine whether the measurement model holds across diverse populations or contexts.

Participants or Sample Selection and Data Sources
The data used in this study is primary data collected through the dissemination of questionnaires using Google Form. The questionnaire's questions cover topics including bank location, perception of bank administration costs, service quality, product quality, HR quality,
and IT and operational integration. With the conditions for employing state-owned Islamic banks (BNI Syariah, BRI Syariah, and Syariah Mandiri) integrated into BSI. According to the Financial Services Authority (OJK), the number of BSI bank customers in November 2021 will be 15.5 million. There were 92 respondents in this survey who filled out the questionnaire between April 28th and May 31st 2021 in Indonesia where the number of respondents was determined based on the Slovin formula with a significance level of 5%. The demographic distribution of respondents was that the majority came from East Java (48.91%), Central Java (13.04%), and DKI Jakarta (9.78%) where the respondents came from distributing questionnaires online due to the situation and conditions. The variables used in this study are the dependent variable or response \((Y)\) variable and the independent variable or predictor variable \((A)\). Table 1 explain both variables and indicators related to the loyalty factors of BSI bank customers.

### Table 1. Indicator of The Research

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Loyalty ((Y))</td>
<td>Loyal to saving at BSI</td>
</tr>
<tr>
<td>Bank Image ((X1))</td>
<td>Trust in institutions.</td>
</tr>
<tr>
<td></td>
<td>Excellent banking capabilities.</td>
</tr>
<tr>
<td></td>
<td>Bank is more Competitive in the international arena.</td>
</tr>
<tr>
<td>Cost and Benefit ((X2))</td>
<td>Bad consequences for the Customer.</td>
</tr>
<tr>
<td></td>
<td>The cost for customers are greater than those who did not move to BSI.</td>
</tr>
<tr>
<td></td>
<td>Costs for customers greater before the merger.</td>
</tr>
<tr>
<td>Past Behavior ((X3))</td>
<td>The customer has changed banks once in the last 4 years.</td>
</tr>
<tr>
<td></td>
<td>Customers often change banks in the last 4 years.</td>
</tr>
<tr>
<td>Service Quality ((X4))</td>
<td>BSI's service quality is getting better. ((A9))</td>
</tr>
<tr>
<td></td>
<td>Better service quality.</td>
</tr>
<tr>
<td></td>
<td>Bank services become more complete.</td>
</tr>
<tr>
<td></td>
<td>Passbook application is getting easier.</td>
</tr>
<tr>
<td></td>
<td>Easier saving process.</td>
</tr>
<tr>
<td></td>
<td>Smooth banking activity services.</td>
</tr>
<tr>
<td></td>
<td>Simple bureaucracy.</td>
</tr>
<tr>
<td>Bank Location ((X5))</td>
<td>Affordable location from home.</td>
</tr>
<tr>
<td></td>
<td>Affordable location for daily activities.</td>
</tr>
<tr>
<td>Information Technology ((X6))</td>
<td>Smooth banking activity IT Services</td>
</tr>
<tr>
<td></td>
<td>Simple IT integration.</td>
</tr>
<tr>
<td>Human Resource ((X7))</td>
<td>BSI employees are becoming more professional and trustworthy.</td>
</tr>
<tr>
<td></td>
<td>BSI employees are increasingly skilled and knowledgeable.</td>
</tr>
</tbody>
</table>
BSI employees are increasingly friendly in communicating to serve customers.

<table>
<thead>
<tr>
<th>Product Price (X8)</th>
<th>Administration fees for customers are the same</th>
<th>A13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Administrative costs for customers are more expensive.</td>
<td>A14</td>
</tr>
<tr>
<td>Product Quality (X9)</td>
<td>Bank product quality is getting better.</td>
<td>A10</td>
</tr>
<tr>
<td>Sharia Compliance (X10)</td>
<td>Implementation according to Islamic principles.</td>
<td>A26</td>
</tr>
<tr>
<td></td>
<td>Products comply with Islamic principles.</td>
<td>A27</td>
</tr>
</tbody>
</table>

The research variables were selected based on previous research conducted by Homsud & Chavesuk (2014); Toledo and Lopes (2016); Chikazhe, et al. (2021); Putra et al. (2021); Wijaya & Bernardo (2022); Vogel (2008); Hidayat et al. (2015); Obioha (2022); Winarno et al. (2020); and Asnawi (2022). Each independent variable has an ordinal scale with an interval of 1 to 5 which sequentially from the smallest value states strongly disagree to very suitable. In addition, the dependent variable has a nominal scale of 0 (No) and 1 (Yes).

**Instrumentation or Data Collection**

The confirmatory factor analysis (CFA) offers several advantages and strengths that make it a valuable tool in research. CFA allows researchers to test the fit of a hypothesized measurement model to the observed data, providing a rigorous evaluation of the relationships between observed variables and the latent constructs they represent (Howard 2013). One of the key advantages of CFA is its ability to examine correlations among factors, providing insights into the interrelationships between latent constructs (Leak 2011). Additionally, CFA enables the estimation of parameters such as factor loadings without the influence of measurement error, contributing to the validity and reliability of measurement instruments (Leak 2011). Moreover, CFA is instrumental in assessing the factorial invariance of measurement instruments across different groups or time points, ensuring the consistency of the measurement properties (Lin and Hsieh 2009). This aspect of CFA strengthens its applicability in diverse research contexts, including psychology, economics, business, and education (Donni et al. 2018).

![CFA Path Diagram Example](image)
Variable X is the standard deviation of each mean, so the covariance of the X matrix is the expected value of $XX'$. The covariance of the X matrix is written as a function $\theta$ and present it as $\Sigma(\theta)$.

$$
\Sigma(\theta) = E(XX')
= E[(\Lambda_x\xi + \delta)(\Lambda_x\xi' + \delta')]
= \Lambda_xE(\xi\xi')\Lambda'_x + \Theta_\delta
$$

$$
\Sigma(\theta) = \Lambda_x\Phi\Lambda'_x + \Theta_\delta \quad (1)
$$

$X$ is covariance matrix for general factor analysis, with the following information:
- $X$: Vector for indicator variables measuring $q \times 1$
- $\Lambda_x$: Matrix for loading factor ($\lambda$) or coefficient that shows the relationship $X$ with $\xi$ size $q \times n$
- $\xi$: Vector for latent variables of size $n \times 1$
- $\delta$: The vector for the measurement error of size $q \times 1$
- $\Phi$: Covariance matrix for latent variable
- $\Theta_\delta$: Covariance matrix for error

In Confirmatory Factor Analysis, the tests performed are as follows.

Data Analysis or Estimating Model

Multivariate Normality Test

The assumption that must be met before conducting confirmatory factor analysis is to test whether the data has a normal multivariate distribution. To test the normal multivariate used plot $\chi^2$ multivariate. The hypothesis used is as follows:

$H_0$: Normal multivariate distribution data

$H_1$: Data are not normally distributed multivariate

Significant level: $\alpha = 0.10$

Critical Area: Reject $H_0$ if $\chi^2 > \chi^2_{(0.10; df)}$ or $P_{value} < \alpha$

Model Fit Test

The model suitability test aims to assess whether the model is feasible or not. There is no single measure for assessing the feasibility of a model. The following are some measures of model suitability that are often used to assess the feasibility of a model:

1. Chi-Square Test

The model is good if the test $\chi^2$ is not real at a certain level of significance. This chi-square value will only be valid if the assumption of data normality is met and the sample size is large. The hypothesis used is as follows.

$H_0$: $\sum = \Sigma(\theta)$

$H_1$: $\sum \neq \Sigma(\theta)$

The expected result is to accept $H_0$ on condition that the value $\chi^2$ is smaller than the $\chi^2$ table value or $P$-value $> \varsigma$, which $\varsigma$ is equal to 0.10 (Gupta and Varma 2019).
2. **Goodness of Fit Index (GFI)**
   A recommended general rule for the feasibility of a model is that its Goodness of Fit Index (GFI) value is greater than 0.90 and the maximum value is 1. A high score in this index indicates a better fit. The value of GFI 0.90 is a good fit, while 0.80 GFI 0.90 is often called marginal fit (Gupta and Varma 2019).

3. **Adjusted Goodness of Fit Index (AGFI)**
   Adjusted Goodness of Fit Index (AGFI) is the adjusted value of GFI. The value of a model is said to be good if the AGFI value is greater than 0.80 and the maximum value is 1 (Gupta and Varma 2019).

4. **Root Mean Square of Error Approximation (RMSEA)**
   Root Mean Square of Error Approximation (RMSEA) is one of the informative indices in the CFA which is used to correct the value of Chi-Square test statistic in a large sample. RMSEA value 0.05 indicates close fit, while 0.05 < RMSEA 0.08 indicates good fit (Shah 2022).

   \[
   RMSEA = \sqrt{\frac{d}{df}}
   \]

   the value of \(d\) is obtained from the formula:

   \[
   d = \frac{\chi^2 - df}{(N - 1)}
   \]

   with the following information:

   \(\chi^2\) : Chi-Square test statistic value

   \(df\) : Free degree of model testing

   \(N\) : Number of samples

5. **Comparative Fit Index (CFI)**
   According to Hu and Bentler (1999), the Comparative Fit Index (CFI) is a value that is not influenced by the number of samples so that it is often used as a reference in measuring the level of suitability of a research model. The CFI value is usually in the range of 0 to 1. The closer to 1 it can be categorized as a value that has a good level of fit.

**Validity and Reliability Test**

According to Shah (2022), validity testing is done by testing the significance of the measurement model parameters. Loading factor (\(\lambda\)) is a parameter related to the measurement of the latent variable by the indicator variable. The test statistic used is t-test with the following hypothesis.

\(H_0\) : \(\lambda_i = 0\)

\(H_1\) : \(\lambda_i \neq 0\)
Rejection area reject $H_0$ if $t > t_{\frac{\alpha}{2}(df)}$ or the value of loading factor ($\lambda$) $\geq 0.5$. High reliability indicates that the indicators have high consistency in measuring the latent variable. To measure reliability, the Construct Reliability (CR) formula can be used as follows.

$$CR = \frac{[\sum_{i=1}^{n} \lambda_i]^2}{[\sum_{i=1}^{n} \lambda_i]^2 + [\sum_{i=1}^{n} \delta_i]}$$  \hspace{1cm} (4)

RESULT AND ANALYSIS

Based on the output of the validation test of questionnaire at the significance level $\alpha = 0.05$. Indicator A25 “Simple bureaucracy”, A24 “Smooth banking activity services”, A23 “Simple IT integration”, A22 “Smooth banking activity IT Services”, A21 “Affordable location for daily activities”, A20 “Affordable location from home”, A19 “Easier saving process”, A18 “Passbook application is getting easier”, A17 “BSI employees are increasingly friendly in communicating to serve customers”, A16 “BSI employees are increasingly skilled and knowledgeable”, A15 “BSI employees are becoming more professional and trustworthy”, A12 “Bank services become more complete”, A11 “Better service quality”, A10 “Bank product quality is getting better”, and A9 “BSI’s service quality is getting better” are valid because the majority of these indicator have a $P_{value} < 0.05$ on other indicator. Other indicators A1-A8, A13, A14, A26, and A27 did not pass the validity test results because the P-value > alpha, so they were not used in the CFA model. This study only discusses significant indicators based on the questioner validity test.

Confirmatory Factor Analysis Estimation Result

Testing the analysis of the factors that influence BSI customer loyalty using the Confirmatory Factor Analysis (CFA) method with the help of software R. CFA is a method of multivariate analysis that can be used to confirm whether the measurement model built is in accordance with the hypothesis. In confirmatory factor analysis, there are latent variables and indicator variables and there is an assumption that the data are normally distributed in multivariate.

The assumption that must be met before conducting CFA is to test whether the data is normally multivariate distribution. To test the normal multivariate, a $\chi^2$ multivariate plot was used. The hypothesis used is as follows.

$H_0$ : Normal multivariate distribution data

$H_1$ : Data are not normally distributed multivariate

Significant level: $\alpha = 0.05$

Critical Area: Reject $H_0$ if $\chi^2 > \chi^2_{(0.05, df)}$ or $P_{value} < \alpha$.

<table>
<thead>
<tr>
<th>Table 2. Multivariate Normality Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
</tr>
<tr>
<td>----------</td>
</tr>
</tbody>
</table>

443
Based on Table 3 shows that the value $\chi^2 = 84.746$ is less than $\chi^2_{(0.05;df)} = 113.145$ or $P_{value} = 0.266$ more than $\alpha = 0.05$. So that the decision to accept $H_0$ is obtained, which means that the model is appropriate or the BSI customer data has a normal multivariate distribution.

The model suitability test aims to assess whether the model is feasible or not. There is no single measure for assessing the feasibility of a model.

### Table 3. Model Conformity Test Results

<table>
<thead>
<tr>
<th>Goodness of Fit Index</th>
<th>Cut of Value</th>
<th>Results</th>
<th>Model Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$ Chi-Square</td>
<td>$\leq 107.565$</td>
<td>84,764</td>
<td>Good</td>
</tr>
<tr>
<td>Significance Probability</td>
<td>$\geq 0.05$</td>
<td>0.266</td>
<td>Good</td>
</tr>
<tr>
<td>RMSEA</td>
<td>$\leq 0.08$</td>
<td>0.037</td>
<td>Good</td>
</tr>
<tr>
<td>GFI</td>
<td>$\geq 0.90$</td>
<td>0.946</td>
<td>Good</td>
</tr>
<tr>
<td>CFI</td>
<td>$\geq 0.95$</td>
<td>0.955</td>
<td>Good</td>
</tr>
<tr>
<td>AGFI</td>
<td>$\geq 0.90$</td>
<td>0.939</td>
<td>Good</td>
</tr>
</tbody>
</table>

Based on Table 3, it can be seen that the overall criteria for the goodness of the model have been met, so that it can be continued at the next testing stage.

After obtaining the path diagram in Figure 2, then proceed with identifying the model. Model identification is carried out before the estimation stage of the CFA model. Based on Figure 2 and by referring to Table 2, there are 15 indicators that are significant according to the validity test. In general, the hypothesis for each indicator is as follows:
The significance test of the indicator is needed to determine the magnitude of the effect of the indicator. The hypotheses proposed for each indicator are:

\[ H_0 : \text{An indicators do not play a significant role in compiling latent variables} \]

\[ H_1 : \text{An indicators play a significant role in compiling latent variables} \]

Significant level: \( \alpha = 0.05 \)

Therefore, the estimation results allow the model to be rejected, so that the model with these conditions is the desired model in the analysis.

Table 4. Indicator Significance Test Results

| Indicator | \( R\)-Square Estimate | \( P(>|z|) \) | \( P\) Value Terms |
|-----------|-------------------------|--------------|-------------------|
| A25       | 0.823 (1)               | 0.000        | \( \leq 0.05 \)   |
| A24       | 0.799 (2)               | 0.000        | \( \leq 0.05 \)   |
| A23       | 0.714 (5)               | 0.000        | \( \leq 0.05 \)   |
| A22       | 0.765 (4)               | 0.000        | \( \leq 0.05 \)   |
| A21       | 0.331 (15)              | 0.000        | \( \leq 0.05 \)   |
| A20       | 0.388 (14)              | 0.000        | \( \leq 0.05 \)   |
| A19       | 0.778 (3)               | 0.000        | \( \leq 0.05 \)   |
| A18       | 0.564 (11)              | 0.000        | \( \leq 0.05 \)   |
| A17       | 0.457 (13)              | 0.000        | \( \leq 0.05 \)   |
| A16       | 0.685 (6)               | 0.000        | \( \leq 0.05 \)   |
| A15       | 0.659 (8)               | 0.000        | \( \leq 0.05 \)   |
| A12       | 0.509 (12)              | 0.000        | \( \leq 0.05 \)   |
| A11       | 0.640 (9)               | 0.000        | \( \leq 0.05 \)   |
| A10       | 0.663 (7)               | 0.000        | \( \leq 0.05 \)   |
| A9        | 0.683                   | 0.000        | \( \leq 0.05 \)   |

Based on Table 4, the \( P\)-Value or \( P(>|z|) \) values of all indicators are in the \( \leq 0.05 \) interval. So it can be decided to reject \( H_0 \) for all indicators or all indicators have a significant effect on the latent variable. There are 5 indicators that have the most significant influence as measured by the largest R-Square Estimate value. namely: A25 "Simple bureaucracy."
 Validity testing is done by testing the significance of the measurement model parameters. Loading factor ($\lambda$) is a parameter related to the measurement of the latent variable by the indicator variable. The test statistic used is t-test with the following hypothesis.

$H_0$ : Indicator variables have a relationship with latent variables

$H_1$ : indicator variables have not a relationship with latent variables

Validity is achieved when the value of loading factor ($\lambda$) $\geq$ 0.5 and ideal validity is achieved when the loading factor ($\lambda$) $\geq$ 0.5.

Table 6. Validity Test Results

<table>
<thead>
<tr>
<th>Connection</th>
<th>$\lambda$</th>
<th>Decision</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest $\leftarrow A_{25}$</td>
<td>0.907</td>
<td>Interest $\leftarrow A_{17}$</td>
<td>0.676</td>
</tr>
<tr>
<td>Interest $\leftarrow A_{24}$</td>
<td>0.894</td>
<td>Interest $\leftarrow A_{16}$</td>
<td>0.827</td>
</tr>
<tr>
<td>Interest $\leftarrow A_{23}$</td>
<td>0.845</td>
<td>Interest $\leftarrow A_{15}$</td>
<td>0.812</td>
</tr>
<tr>
<td>Interest $\leftarrow A_{22}$</td>
<td>0.874</td>
<td>Interest $\leftarrow A_{12}$</td>
<td>0.713</td>
</tr>
<tr>
<td>Interest $\leftarrow A_{21}$</td>
<td>0.575</td>
<td>Interest $\leftarrow A_{11}$</td>
<td>0.800</td>
</tr>
<tr>
<td>Interest $\leftarrow A_{20}$</td>
<td>0.581</td>
<td>Interest $\leftarrow A_{10}$</td>
<td>0.814</td>
</tr>
<tr>
<td>Interest $\leftarrow A_{19}$</td>
<td>0.882</td>
<td>Interests $\leftarrow A_9$</td>
<td>0.766</td>
</tr>
<tr>
<td>Interest $\leftarrow A_{18}$</td>
<td>0.751</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Validity has been met because the loading factor value 0.5 or accept $H_0$ for all relationships between latent variables and their indicators. The validity test results show that several independent variables have a relationship with BSI customer loyalty, among others

1. Product quality variables represented by indicators of customer perceptions regarding BSI product quality

2. Service quality variables are represented by indicators of customer perception regarding simple banking bureaucracy, smooth banking activities, easy fund saving process, easy account creation process, more complete banking services and improvements in the quality of banking services.
3. Bank human resources variables which are represented by indicators of customer perception regarding the performance of bank employees in the field of friendliness towards customers, increasing the knowledge and skills of BSI employees and the professionalism of BSI employees.

4. The bank location variable is represented by the perception of the bank's accessibility from the customer's home and the accessibility of the customer's daily activities.

5. The information technology integration variable is represented by customer perceptions regarding the simplicity of IT integration and smooth IT services.

On the other hand, the results of the validity test provide evidence that several independent variables are not related to BSI customer loyalty, such as Bank Image, Cost and Benefit of Merger, Past Behavior, Product Price and Sharia Compliance.

Construct Reliability (CR) reliability testing with an expected CR value of more than 0.7 or can range from 0.6 on the condition that the validity of the indicators in the model is good. The calculation of the CR value is as follows:

\[
CR = \frac{\left(\sum_{i=1}^{n} \lambda_{i}\right)^2}{\left(\sum_{i=1}^{n} \lambda_{i}\right)^2 + \left(\sum_{i=1}^{n} \delta_{i}\right)} = \frac{137.288}{(137.288 + 1.89680)} = 0.960189
\]

The CR value of the latent variable of BSI customer interest resulted in a value of 0.96, so that the latent variable of BSI customer interest is said to have very good reliability.

The results show that the information technology integration variable represented by the Bank's smooth IT service indicators and simple IT unification has a positive and significant effect on BSI customer loyalty. The results also show that service quality variables represented by smooth banking activity services and simple bureaucratic indicators have a significant and positive influence on customer loyalty. This is in line with research by Kato and Schoenberg (2012) that the level of IT integration has a positive effect on service performance, so that if the IT integration performance in the bank is getting better, the service performance is getting better, and customers are also more loyal to the bank.

Furthermore, the results also show that the service quality variable represented by indicators of good service quality, good bank product quality, easier storage process, and more complete bank services does not have a significant relationship with all indicators, so it does not meet the validity test.

The claim that the service quality variable, represented by indicators of good service quality, good bank product quality, easier storage process, and more complete bank services, does not have a significant relationship with all indicators, and thus does not meet the validity test, is supported by the research of Abror et al. (2019), which indicates that service quality has an indirect impact on customer loyalty through customer satisfaction as the mediating variable.

On the other hand, there are several variables such as cost and benefit merger variables, past behavior, product quality, product prices, human resources, bank location and sharia compliance that cannot be analyzed, this is based on the statistical results of these
Discussion and Analysis

Product Quality and Customer Loyalty

Product quality variables, as indicators of customer perceptions regarding bank product quality, play a significant role in influencing bank customer loyalty. Research has consistently shown that product quality has a direct and significant effect on customer satisfaction, which in turn directly affects customer loyalty (Taufik et al., 2022) (Restiana, 2021). Furthermore, it has been found that service quality significantly influences customer loyalty, albeit often indirectly through customer satisfaction (Tegambwage & Kasoga, 2022) (Supriyanto & Wiyono, 2021). This indicates that both product quality and service quality are important factors in shaping customer satisfaction and loyalty. Moreover, the influence of product quality on customer loyalty has been shown to be mediated by customer satisfaction. This suggests that customer satisfaction acts as a bridge between product quality and customer loyalty. Additionally, the results of a study on Islamic banking customer loyalty revealed a positive relationship between customer satisfaction and service quality constructs, such as bank personnel, bank image, bank services, and bank accessibility (Rusdianto & Jasin, 2022).

Bank Information Technology and Customer Loyalty

In the context of examining the influence of bank technology information services on customer loyalty, the literature provides substantial support for the claim. Kaura et al. (2015) contribute to this discussion by revealing that service quality dimensions, including technology-based service quality, play a crucial role in enhancing customer satisfaction and loyalty. Their findings align seamlessly with the assertion that bank technology information services positively contribute to customer loyalty, underscoring the significance of technology-related factors in shaping customer perceptions and preferences. Furthermore, Ganguli & Roy (2011) offer valuable insights by identifying technology convenience as a pivotal dimension within the broader spectrum of service quality in technology-based banking services. This recognition underscores the importance of convenience derived from technological advancements in influencing both customer satisfaction and loyalty. This aligns coherently with the overarching claim that technology information services in the banking sector have a positive impact on fostering customer loyalty.

The work of Fatmawati & Permatasari (2019) reinforces and extends this narrative by establishing a significant positive relationship between technological acceptance, e-service quality, and consumer loyalty. Their findings emphasize the intricate interplay between customers' acceptance of technology and the quality of electronic services, highlighting how these factors collectively contribute to building and sustaining customer loyalty. Consequently, this supports the contention that the positive influence of bank technology information services on customer loyalty is not only plausible but substantiated by empirical evidence. In summary, the synthesis of evidence from Kaura et al. (2015), Ganguli and Roy (2011), and
Fatmawati and Permatasari (2019) collectively bolsters the argument that bank technology information services exert a positive effect to attract customer loyalty.

Services Quality and Customer Loyalty

The claim asserting a significant and positive influence of the service quality variable on customer loyalty finds robust support and nuanced contextualization within the existing literature. Employing the service quality model, Kheng et al. (2010) conducted a meticulous evaluation of service quality and its impact on customer loyalty among bank customers in Penang, Malaysia. Their study not only underscores the relevance of service quality but also introduces the mediating role of customer satisfaction, providing a comprehensive understanding of the intricate relationship between these variables within the banking sector.

Addressing previous disparities in research conclusions, Supriyanto & Wiyono (2021) make a notable contribution to the discourse by elucidating the influence of service quality on customer loyalty. Their findings not only bridge gaps in prior studies but also highlight the unequivocal impact of service quality on fostering customer loyalty. This nuanced perspective adds depth to the existing body of knowledge and contributes valuable insights into the dynamics of service quality in shaping customer loyalty. Building on this foundation, Purnomo (2022) further reinforces the claim by concluding that service quality significantly affects customer loyalty. The alignment of this study's findings with the overarching assertion strengthens the argument regarding the pivotal role of service quality within the banking industry. Purnomo's work, in conjunction with Kheng et al. (2010) and Supriyanto and Wiyono (2021), forms a cohesive narrative affirming the substantial and positive influence of service quality on customer loyalty.

Bank Human Resources and Customer Loyalty

The performance of bank employees, particularly in terms of friendliness towards customers, increasing knowledge and skills, and professionalism, significantly influences customer perceptions and, consequently, customer loyalty. Research has consistently shown that employee behavior and competencies play a crucial role in shaping customer satisfaction and loyalty (Sultana et al., 2022) (Raza, 2023). For instance, employees are expected not only to be polite and courteous but also to possess the necessary product knowledge and communication skills to create strong relationships with customers, which is vital in sustaining customer loyalty (Long et al., 2013). Additionally, the study by Sultana et al. (2022) found that customer satisfaction is influenced by factors such as employee responsiveness, appearance of tangibles, social responsibility, services innovation, positive word-of-mouth, competence, and reliability. Furthermore, the mediating role of customer perceptions in the relationship between ethical responsibility, religious value, benefit, and security on satisfaction has been highlighted, indicating the importance of aligning employee behaviors with customer expectations and values (Rahman et al., 2023). Additionally, the study by Raza et al. (2023) confirmed the mediating effect of consumers' trust in the banking industry on the relationships between their perceptions of frontline employees' empathy and consumer
orientation and their perceptions of frontline employees' performance, emphasizing the significance of trust and empathy in influencing customer perceptions of employee performance.

**Bank Location and Customer Loyalty**

The proximity and accessibility of bank branches from customers' homes and daily activities significantly influence customer loyalty. Research consistently demonstrates that the location and accessibility of bank branches play a crucial role in shaping customers' perceptions and, consequently, their loyalty. For example, Small & Verhoef (2007) found that the location of bank branches, in terms of distance from customers' homes and offices, significantly affects customers' perceptions of the bank's accessibility. Customers prefer banks that are located close to their residences and workplaces for convenience. Similarly, Shliselberg (2015) revealed that the distance between customers' homes and bank branches has a significant negative impact on customer satisfaction. Customers tend to be more satisfied with banks that have branches located close to their residences.

Some Variable not have relationship with BSI Customer Loyalty, Based on the research result, it seems that the results of the validity test indicate that several independent variables are not significantly related to bank customer loyalty, including Bank Image, Cost and Benefit of Merger, Past Behavior, Product Price, and Sharia Compliance. However, without seeing the full results and methodology of the validity test, it is difficult to conclusively determine which variables influence bank customer loyalty. Some studies have found that bank image can positively influence customer loyalty (Knoben & Oerlemans, 2006) (Mazhari et al., 2012), while others have found no significant relationship (Sumadi & Soliha, 2015) (Ratnasari & Sasongko, 2019) (Sumadi & Soliha, 2015). Similarly, mixed results have been reported for the impact of product price (Boateng et al., 2021) and sharia compliance (Tegambwage & Kasoga, 2022) (Hayati et al., 2020) on customer loyalty. The influence of cost and benefit of merger and past behavior on customer loyalty also seems to vary across studies (Hadera & Birhanu, 2019) (Kelmer et al., 2012) (Faryabi et al., 2015). Overall, the evidence regarding the impact of these variables on bank customer loyalty is inconclusive. Methodological differences across studies, such as sample characteristics, measurement scales, and statistical analyses, could contribute to the divergent results (Burgoine et al., 2013). Further research with robust methodology is needed to provide more clarity on which factors truly influence bank customer loyalty.

**CONCLUSION**

The results of the validity test show a strong correlation between a few independent variables and BSI customer loyalty. These include bank human resources, measured by customer perceptions of employee friendliness, increased knowledge and skills, and overall professionalism; bank location, measured by accessibility from the customer's home and daily activities; and information technology integration, reflected in customer perceptions of IT simplicity and smoothness. Product quality is assessed through customer perceptions of BSI
product quality. Service quality is represented by indicators such as simple banking bureaucracy, smooth activities, easy fund-saving and account creation processes, and improvements in service quality. On the other hand, the validity test shows that a number of independent variables are unrelated to BSI customer loyalty, including Bank Image, Cost and Benefit of Merger, Past Behavior, Product Price, and Sharia Compliance.

The study emphasizes how important it is to prioritize and improve the main factors that influence client loyalty. The study revealed several areas that bank human resources, information technology integration, location, and the quality of their products and services should be the focus of strategic resource allocation by BSI managers. Using cutting-edge technologies and funding staff training initiatives will increase client loyalty and satisfaction. It's critical to regularly monitor client feedback in order to quickly adjust to evolving expectations. Customers of BSI stand to gain from the research by learning more about the bank's primary factors that influence client loyalty, which include high-quality goods and services, effective banking procedures, and technology integration. To make sure their preferences and expectations are taken into account, consumers should actively participate in feedback channels, stay updated about the bank's products, and take part in educational activities offered by BSI. The bank can benefit from the supportive regulatory framework that the Ministry of State Enterprise, which initiated BSI, can offer to promote innovation and quality enhancements in the banking industry. Encouraging a regulatory environment that facilitates technological innovations and customer-focused programs will be essential to BSI's performance and the long-term viability of Indonesia's banking sector.

However, this study is limited in the number of respondents and this study was conducted once at a time after the launch of BSI. Therefore it is recommended for further research by performing longitudinal research to evaluate the sustainability of factors impacting consumer loyalty over time, future researchers can build upon this work. Studies that compare several banks will provide information on best practices and trends unique to the sector. In addition to quantitative results, qualitative research can offer a more profound comprehension of consumer attitudes. Examining external variables like the state of the economy and changes in regulations can help us gain a deeper understanding of customer loyalty in the Indonesian banking sector.

Acknowledgment

The research team would like to thank the respondents who were willing to give their time and energy to fill out the questionnaire.

Author Contributions

The first author acted as a corresponding author in the research, writing responses to reviewer and editor comments and writing the research methods section. The second author initiated the research idea and wrote the introduction and identified the research novelty and research objectives and wrote the conclusions and implications. The third author processed the
research data and compiled the research results section. The fourth and fifth authors jointly compiled the literature review and research analysis sections.

REFERENCES


453


King, T., & Kong, R. (2016). Are All Bank Acquisitions Equal? The Impact of Bank Mergers and


Published by University of Airlangga.
This is an open access article under the CC BY license (https://creativecommons.org/licenses/by-nc-sa/4.0/)


Mardianto, Cahyono, Previan, Fitrianingsih, Fauzan


Satisfaction on Customer Loyalty at Kedai Kopi Kenangan Mall of Indonesia. *International Journal of Economics Business and Accounting Research (Ijebar).* https://doi.org/10.29040/ijebar.v6i1.2957