The Effect Of Bank Digitalization On Improving Service And Customer Satisfaction On Bank Mandiri - Panyabungan

Muhammad Fahmi[1], Maudy L.R. Rangkuti[2]
Universitas Muhammadiyah Sumatera Utara
Email : muhammadfahmi@umsu.ac.id

ABSTRACT

The purpose of this research is to determine the effect of improving services through bank digitalization on customer satisfaction at Bank Mandiri, Panyabungan, both directly and indirectly. The population in this research is Bank Mandiri Panyabungan customers who use bank digitalization, namely the Livin By Mandiri application. With a sample of 100 respondents. This research uses a quantitative approach. The data management used in this research is SemPLS 4. The results of this research show that Service Improvement has a positive and significant effect on Customer Satisfaction, Service Improvement has a positive and significant effect on Bank Digitalization, Bank Digitalization has a positive and significant effect on Customer Satisfaction, Service Improvement as an intervening variable is able to significantly mediate the influence of Bank Digitalization on Customer Satisfaction. The results of testing the R-Square value showed that the path model using intervening variables was 0.692 and 0.751. In other words, the ability of the variable X, namely Service Improvement, in explaining variable Z, namely Customer Satisfaction, is 69.2%, thus the model is classified as moderate (medium) and the ability of the variable X, namely Service Improvement, explains variable Y, namely Customer Satisfaction, is 75.1%, thus the model is classified as substantial (strong).

*Keywords: **Service Improvement, Bank Digitalization, and Customer Satisfaction***

INTRODUCTION

Along with the times, the presence of digitalization media greatly affects daily life where all transactions generally use digitalization because it can make it easier, from what was originally a manual transaction can now be done anywhere without the need to meet in person and efficiently. In an effort to increase customer satisfaction, modern banks often adopt advanced technology to provide efficient and accessible online banking services. A bank is a type of company that is oriented toward customer trust. Without customer trust, a bank cannot carry out its activities effectively. Therefore, it is crucial for banks to earn the trust of their customers. Once trust is established between the bank and its customers, efforts to foster cooperation become easier, resulting in mutual benefits for both parties (Jasin et al., 2021). Customer satisfaction in the banking industry has a crucial role in building and maintaining a bank's reputation. Customer satisfaction reflects the extent to which customer expectations and needs are met by the services provided by the bank. In an increasingly competitive context, banks are required to not only provide efficient financial services but also to provide a satisfying customer experience.

Banks that are able to understand and respond to customer needs quickly and effectively will have a significant competitive advantage. Therefore, investment in technological innovation and strengthening customer service are key to growth and survival amidst increasingly fierce competition. Awareness of the importance of providing a satisfying customer experience will be a key foundation for banks that want to stay relevant and succeed in this era of digital transformation. Digitalization has entered into the joints of human life. Because customers can get services for 7 x 24 hours. The relationship between digitalization that provides electronic or digital-based banking activity services, where banking activities can be carried out by customers independently. While service improvement refers to activities carried out by a customer service to customers in an activity carried out by customers. Digitalization has permeated various aspects of human life. One example of digitalization in the banking sector is the mobile banking application, which has significantly reduced the roles of front-office employees, including tellers (Hafizha & Anggraini, 2023). Bank Indonesia predicts that digital banking transactions in 2023 will reach IDR 67,000 trillion, making the adoption of digitalization a means to meet customer needs. Every company is required to meet consumer demands while striving to create products with competitive advantages and distinguishing features compared to competitors (Arianty & Andira, 2021). As one of the banking units in Indonesia, Bank Mandiri KCP Panyabungan, North Sumatra, is one of the banks that has adopted digitalization. Below is a table showing the transformation of digitalization at Bank Mandiri KCP Panyabungan.

Table 1. Bank Digitalization Service

No	Description	Before Digitalization	After Digitalization
1.	Opening a new account	Visiting the branch office	Through a smartphone
2.	Checking account balance	Through an ATM machine	E-banking
3.	Transferring funds	Through an ATM machine	M-banking
4.	Customer service	Visiting the branch office	Chatbot

Based on the explanation in Table 1 above, it is evident that bank digitalization is a system that customers can utilize online. A digital bank is an electronic or digital-based banking service owned by a bank, allowing customers to carry out banking activities independently (Fatimah & Hendratmi, 2020). The importance of digitalization in the banking system is not only reflected in operational efficiency but also in customer satisfaction levels. The ability to perform banking transactions online provides convenience and flexibility for customers. Through the adoption of digital technology, customers can access and manage their accounts anytime and anywhere without needing to visit the bank office directly. The

speed of completing transactions, the availability of 24/7 services, and the ease of use of digital platforms all contribute to a better customer experience.

Based on the background described above, the researcher identified various issues related to the research object at Bank Mandiri, Panyabungan. These issues include customer challenges in adapting to digitalization. Many customers are unfamiliar with the process because they still use older model phones. Elderly customers often struggle to adapt to technological advancements as they are accustomed to manual processes. Additionally, some customers require more time to adapt to digitalization. Furthermore, certain customers with significant savings tend to have a sense of entitlement and expect prioritized service. Although some obstacles remain, the digitization process still provides many advantages. This can be seen from some of the research that has been done before. Research conducted by Asri & Rahmat (2022), titled "Digitalization of Islamic Banking in the VUCA Era," found that Islamic banking digitalization must continuously follow technological developments and offer application features that are easy for the public to use. Furthermore, customer satisfaction is a heartfelt expression reflected in an individual's happiness or disappointment with the performance delivered, whether it meets their expectations or not (Khumaini et al., 2022). To achieve customer satisfaction, the quality of services provided to customers must be improved. Customer satisfaction will encourage customers to repurchase or reuse the products or services offered. Research conducted by Hernandez (2022), titled "The Influence of Mobile Banking on Customer Satisfaction in Daily Transactions," showed that service quality, information quality, and system quality have a positive and significant impact on customer satisfaction. Following this, a study by Marlina & Bimo (2018), titled "The Digitalization of Banks and its Impact on Service Improvement and Customer Satisfaction," revealed a positive influence of digital banking usage on customer satisfaction. Another study by Amalia & Hastriana (2022), titled "The Influence of Usability, Ease of Security, and M-Banking Features on Customer Satisfaction in Transactions at Bank Syariah Indonesia (Case Study of BSI KCP Sumenep)," found that the usability, ease, features, and security of mobile banking significantly and positively affect customer satisfaction, both partially and simultaneously.

THEORETICAL REVIEW

Customer satisfaction is an expression of an individual who feels secure and comfortable with something achieved or obtained. Kotler (2016) defines customer satisfaction as a feeling of liking or disliking, toward a product or service after comparing its performance with expectations. Additionally, Lovelock et al. (2007) define satisfaction as an emotional state that occurs after use, which can involve feelings such as anger, dissatisfaction, excitement, contentment, and others. It can be concluded that customer satisfaction is any form of expression or feeling shown by the customer, whether it is positive or negative, referring to pre-use expectations that are felt by the user. The goals and benefits of customer satisfaction include its potential as a source of future revenue, particularly through repeat purchases, cross-selling, and upselling. Additionally, customer satisfaction helps reduce future transaction costs, such as communication, sales, and customer service costs.

Other benefits include positive recommendations, positive responses to product line expansions, brand extensions, and additional services offered by the company, as well as an

increase in the company's bargaining power relative to its network of suppliers, business partners, and distribution channels (Tjiptono & Chandra, 2012). In the context of a company, customer satisfaction is a crucial factor. If customers are satisfied with the service or product, it will create a positive position for that product or service in the market. Service improvement in banking is an element that supports success in achieving customer satisfaction. Service improvement can be carried out through systems, facilities, and services assisted by staff, employees, or workers within a company. Service quality is the level of excellence expected and the control over that level of excellence to meet customer desires. Several dimensions can be encountered, including tangible (physical evidence), reliability, responsiveness, assurance, and empathy. The purpose of service improvement is to carry out work processes that align with customer expectations and desires. Therefore, service improvements must be carried out massively and continuously so that customers receive comfort, security, happiness, and satisfaction. As a result, the enhanced banking system becomes attractive to customers as it meets their expectations.

The purpose of providing services is to support marketing efforts to consumers or customers. When the services are successfully implemented, the general benefit is increased customer loyalty. Customer improvement is measured through repeat purchases, which in turn helps the company remain sustainable in the long term and increase profitability (Prastowo, 2011). In modern banking, many use technology to carry out transactions. All transaction activities no longer need to be done offline but can also be done online. This transformation of services is called digitalization. The Financial Services Authority (OJK) states that the concept of digitalization refers to activities where customers or consumers can perform various activities, such as using bank ATMs or conducting transactions through digital media/e-commerce (Nuraeni, 2016). In this context, the role of the internet is highly significant because the technology used not only encompasses physical technology but also involves online-based digital technology. The digitalization era has brought about many changes, enhancing productivity by allowing tasks to be completed in a shorter time frame (Sabrina, 2021). The primary benefit of bank digitalization lies in the reduction of operational costs, which ultimately makes it a long-term investment. By adopting digital banking, financial institutions can expand their market reach without the need to allocate a large budget to open new branch offices or small cash offices. Transformation at the initial stages is necessary for the banking sector to achieve this. The goal of bank digitalization is to ensure customer satisfaction. In the banking services sector, customer satisfaction is considered a top priority, as customers tend to switch to other financial institutions if their expectations are not met (Marlina & Bimo, 2018).

RESEARCH METHOD

This study uses an associative approach, which will examine the relationship between the variables being researched. The research was conducted at Bank Mandiri, Panyabungan

Branch Office. The study will be carried out from January to March 2024. The population in this study includes all customers of Bank Mandiri Panyabungan. The sample consists of 100 Bank Mandiri customers, selected using the accidental sampling method, and all are customers who use digital services such as Livin Mandiri. Data collection was conducted using questionnaires as research instruments. The data will be investigated using a quantitative method by applying a statistical analysis called Partial Least Square (PLS-SEM) structural equation modeling. There are two stages involved in analyzing SEM-PLS, namely (1) measurement model analysis (outer model), which includes convergent validity, discriminant validity, and composite reliability, and (2) structural model analysis (inner model), which involves R-square, F-square, and hypothesis testing. The data analysis technique in this research uses a quantitative approach because it analyzes numerical data and then draws conclusions from the tests performed using multiple linear regression formulas, hypothesis testing, and coefficient determination.

RESULTS

1. Description of Characteristic

Table 2. Description of Characteristic

| Categori	Detail	Quantity/Person	Percentage (%)
Gender	Men	71	71
	Women	29	29
Education	Senior High School	28	28
	Diploma 3	17	17
	Bachelor (S1)	44	44
	Magister (S2)	11	11
Age	18-20 Years	7	7
	21-30 Years	34	34
	31-40 Years	42	42
	41-50 Years	13	13
	>50 Years	4	4
Works	Student	16	16
	Government Employee	9	9
	Public Employee	57	57
	Business	10	10
	Army/Police	3	3
	Others	5	5

Data source: Author, 2024

2. Outer Model Testing

Outer model testing and analysis aims to see each indicator is related to the latent variable. The outer model test specifies the relationship between the latent variable and the indicators or how each indicator is related to the latent variable. The tests carried out on the outer model are :

a. Convergent Validity, where the loading factor value on the latent variable is expected to be > 0.7.

b. Discriminant Validity, where the cross loading factor value is useful for finding out whether the construct has adequate discriminant, namely by comparing the loading value on the targeted construct which must be greater than the loading value on the other construct.

c. Average Variance Extracted (AVE), where the AVE value is expected to exceed > 0.5.

d. Composite Reliability, where data that has a CR > 0.7 has high reliability

e. Cronbach Alpha, is a test to strengthen reliability with a value expected to reach > 0.6 for all constructs.

Figure 1. Test Results Based On Outer Loading
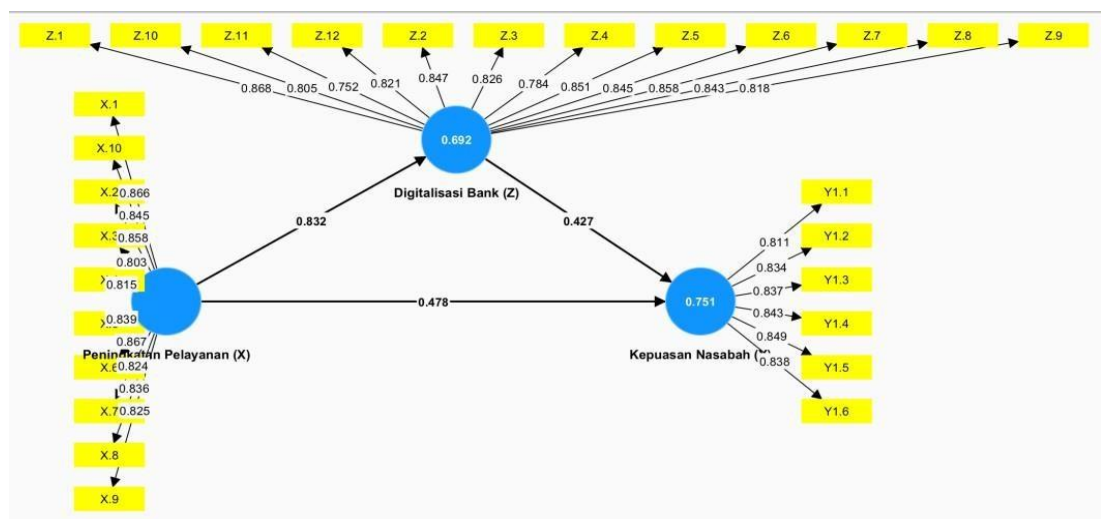
From Figure 1, it is known that all outer loading values are > 0.7, which means they have met the validity requirements based on the loading value. Next, validity testing was carried out based on Average Variance Extracted and the following data was obtained.

Table 3. Validity Testing Based on Average Variance Extracted

	Average Variance Extracted (AVE)
Bank Digitalization (Z)	0.684
Customer Satisfaction (Y)	0.698
Service Improvement (X)	0.702

Source : Processed Data, 2024

In the research, all AVE values in the table above, namely Bank Digitalization, Customer Satisfaction and Service Improvement have values > 0.5, which means that there are no convergent validity problems in the model tested

3. Composite Reliability

Composite reliability (CR) is the part used to test the reliability value of indicators on all variables. Based on table 5, it is known that the CR value of all research variables is > 0.7, which means that they fulfill the composite reliability element, so it can be concluded that all variables have a high level of reliability. This can be seen in table 4 below:

Table 4. Reliability Testing Based on Composite Reability

	Composite Reliability
BANK DIGITALIZATION (X)	0.963
CUSTOMER SATISFICATION (Y)	0.933
SERVICE IMPROVEMENT (Z)	0.959

Source : Processed Data, 2024

4. Inner Model

The testing based on the inner model shows that the highest coefficient value is for the Service Improvement variable through Digitalization, where the value reaches 13.995 > 1.661, meaning that t-hit > t-tab at a significance level of 0.05. This indicates a significant effect of service improvement on digitalization. Next, for the variable of service improvement on customer satisfaction, a t-value of 3.266 > 1.661 is obtained. This shows a significant effect of service improvement on customer satisfaction. Similarly, for the variable of digitalization on customer satisfaction, a t-value of 2.406 > 1.661 is obtained. This indicates a significant effect of digitalization on customer satisfaction. This is shown in the table below.

Table 5. Summary of Hypothesis Test Results via T-Value and P-Value

	T Statistics (|O/STDEV|) t-value	P Values
SERVICE IMPROVEMENT (X) -> CUSTOMER SATISFACTION (Y)	3.266	0.000
SERVICE IMPROVEMENT (X) -> BANK DIGITALIZATION (Z)	13.953	0.001
BANK DIGITALIZATION (Z)-> CUSTOMER SATISFACTION (Y)	2.406	0.016

Source: Processed Data, 2024

The R Square value from the research results on related variables, namely Bank Digitalization and Service Improvement, is as follows,

Table 6. R-Square

	R-Square
Customer Satisfaction	**0,751**
Bank Digitalization	**0,692**

Source: Processed Data, 2024

The R Square results show that Bank Digitalization has a value of 0.692 and Customer Satisfaction has a value of 0.751. This could be due to other factors outside the model that influence these constructs.

DISCUSSION

Based on the results of the research above, it can be seen that the Service Improvement on Customer Satisfaction has a probability value (p-value) of $0.000 < 0.05$, thus Service Improvement significantly influences Customer Satisfaction. This result indicates that the better the Service Improvement, the higher the level of Customer Satisfaction. Service quality refers to the extent to which the service meets market demands or customer desires. It is important for companies to fully understand the needs of customers, as improvements in service quality can have a positive impact on customer satisfaction (Peter & Olson, 2016). In another part, the research results also show that Service Improvement on Bank Digitalization has a probability value (p-value) of $0.001 < 0.05$, indicating that Service Improvement significantly influences Bank Digitalization. This shows that as Service Improvement becomes better, the digitalization activities will also proceed more smoothly. This is in line with previous research conducted by (Larassati & Fauzi, 2022), which found an impact of service quality improvement through banking digitalization at BSI Trade Center, Kediri City. Another study by (Purnomo & Riyadi, 2022) showed that Service Quality has a direct impact on the Implementation of Digitalization at the Customs and Excise Supervision and Service Office Type Madya Pabean Juanda, Surabaya. With these results, it can be concluded that the investment and efforts made to improve service quality by Bank Mandiri KCP Panyabungan not only provide a positive experience for customers but also directly influence and drive the development of digital technology in their banking services. In other variables, the research also reveals that Bank Digitalization has a p-value of $0.016 < 0.05$, indicating that Service Improvement has a significant impact on Bank Digitalization. This means that as Bank Digitalization improves, it will lead to higher customer satisfaction. This is in line with previous research conducted by (Marlina & Bimo, 2018), where it was explained that there is a positive impact of using Digital Banking at BTN Syariah on customer satisfaction. This is further supported by the study conducted by (Siregar & Pradesyah, 2023), which states that the Internet Banking variable has an impact on customer satisfaction.

CONCLUSION

The results of this study reveal the importance of Service Improvement in banking institutions, especially Bank Mandiri, which is a major and well-known bank in Indonesia. As a financial institution engaged in the services sector, customer service is a strategic factor that will determine the success of the organization in influencing its customers. The services provided must also be continuously improved. If Bank Mandiri does not develop and innovate in its transactional activities, other banking institutions will take over its role. Furthermore, with the rapid development of technology, banking services must align with technological advancements. Various transactions are now using digital and electronic services. Gradually, manual operations are being replaced by smart machines, which speed up transactions. Face-to-face services are starting to be abandoned, transitioning into online services that can occur anytime and anywhere. This will certainly present both challenges and opportunities for banks and customers. All of this will provide customer satisfaction if the services and digital transformation are managed well. Bank Mandiri, with its ample resources, can certainly meet the expectations and desires of customers that continue to grow in line with technological advancements.

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