DIRECT EFFECT ANALYSIS OF ONLINE INTEGRATED BANKING SYSTEM IMPLEMENTATION ON CUSTOMER SATISFACTION AND COMPLIANCE OF SUMUT BANK

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Abstract

This study investigates the influence of the OLIBs management information system implementation in PT Bank Sumut Pematang Siantar Branch's banking services on customer satisfaction, loyalty, and compliance. Employing quantitative analysis via Smart PLS, collected data was assessed. Outcomes highlight a significant positive impact of OLIBs on customer satisfaction, loyalty, and compliance. Smart PLS analysis establishes notable connections between OLIBs-related factors (service quality, accessibility, personalization, data security) and customer-oriented aspects. The study suggests that embracing OLIBs can amplify customer satisfaction, loyalty, and compliance. Implications extend to PT Bank Sumut Pematang Siantar Branch and other financial entities, providing insights to refine strategies, uphold robust relationships, and ensure compliance, ultimately enhancing overall customer experiences.

Keywords: integrated banking system; satisfaction; loyalty; bank of north sumatra

Article Info

INTRODUCTION

Economic development refers to efforts to increase economic growth and prosperity of a region or country. The goals are to improve people's welfare, improve living standards, create jobs, increase economic competitiveness, and reduce poverty. Economic development involves various policies and strategies, including infrastructure development, productivity improvement, technology development, investment financing, promotion of international trade, and support for the private sector (Siyám & Raphael, 2022; STRATIEVA, 2018) .

Several important factors contributing to economic development include political and economic stability, policies that support investment and trade, education and training, innovation and technology, and the ability to attract foreign investment. Economic development can be carried out both at the national and regional levels (Luthuli & Houghton, 2019; VAUGHAN, 2020) . However, to achieve sustainable economic development, it is necessary to pay attention to the environmental and social impacts of economic activities, so economic development policies must be designed taking these aspects into account as well.

Economic development is closely related to bank customer satisfaction, loyalty and compliance. When economic development occurs, society will be more prosperous, the number of entrepreneurs will increase, and the demand for various financial products and services will increase (Gurova, 2022; Luu et al., 2019) . This will make banks, as financial institutions, increasingly important in driving economic growth.

In this context, banks must ensure that customers are satisfied with the products and services they provide, so as to maintain customer loyalty and create opportunities for business growth (Gurova, 2022; Luthuli &

Houghton, 2019; Luu et al., 2019; Siyám & Raphael, 2022) . Satisfied customers will tend to choose to make transactions and establish a longer business relationship with the bank, and may also recommend the bank to others, so that it can help the bank expand its customer base and increase market share.

Furthermore, customer compliance refers to the ability and tendency of customers to comply with the requirements, policies and rules set by financial institutions, such as banks. (Leclercq-Machado et al., 2022) This includes complying with transactions in accordance with established procedures, complying with applicable restrictions and conditions, and following regulations and policies related to privacy and data security. Customer compliance is an important factor in maintaining the integrity of the banking system, protecting customers' own interests, and building trust between customers and financial institutions.

Therefore, banks must pay attention to the needs and desires of customers, provide high quality services, provide innovative and useful products, and maintain trust and integrity in their business relationships with customers (Christanto & Santoso, 2022) . In this case, banks need to ensure that the policies and business strategies they implement are in line with the needs and expectations of customers, so as to strengthen relationships with customers and help drive sustainable economic growth.

Satisfaction of customer loyalty and compliance is very important for banks because these three things are key factors for maintaining the continuity of the bank's business (Boonlertvanich, 2019; Moghavvemi et al., 2018) . Customer satisfaction relates to the extent to which the bank can meet the expectations and needs of customers in using the products and services provided by the bank. Customer loyalty shows the extent to which customers continue to use bank products and services consistently and choose not to switch to other banks. And customer compliance is key because it has a significant impact on various aspects of the financial industry. A high level of customer compliance plays an important role in maintaining the stability and integrity of the banking system and preventing financial risks. In addition, customer compliance also contributes to the protection of their own personal and financial data, as well as preventing illegal activities such as money laundering and financing of terrorism. Furthermore, customer compliance builds trust between customers and financial institutions, which is an important foundation in maintaining long-term relationships and strengthening the company's reputation and positive image. Therefore, financial institutions need to encourage and facilitate customer compliance by providing clear information, education, and implementing transparent and reliable policies and procedures.

Customer satisfaction, loyalty and compliance have a direct impact on the bank's financial performance (Boonlertvanich, 2019; Moghavvemi et al., 2018; Rostami & Mirshahi, 2022; Supriyanto et al., 2021) . Satisfied customers tend to use bank products and services regularly, increasing the bank's income from administration fees, interest and other fees. In addition, loyal customers will also recommend the bank to others and can help increase the number of new customers, so that the bank can expand its market share.

However, customer satisfaction, loyalty and compliance is not something that is easy to achieve. Banks must consistently provide quality services and pay attention to customer needs (Khamis & AbRashid, 2018; Rostami & Mirshahi, 2022) . Banks must also handle customer complaints quickly and effectively, and communicate effectively with customers to build strong relationships (Boonlertvanich, 2019; Luu et al., 2019) . Therefore, banks must continue to improve product and service quality and maintain good communication with customers to ensure customer satisfaction and loyalty are maintained.

One of the efforts to increase customer satisfaction, loyalty and compliance at the bank is by implementing the Online Integrated Banking System (Alsmadi et al., 2022; Ecer, 2018) . This system is a banking system that provides online banking services, including fund transfers, bill payments, purchases of products and services, as well as other banking services (Hammood et al., 2020) . With this system, customers can access banking services easily and conveniently via their computers, smartphones or tablets.

The implementation of the Online Integrated Banking System can increase customer satisfaction by making it easier for them to carry out banking transactions (Calomiris, 2021; Lin et al., 2020) . Customers no longer need to come to the bank office to make transactions, thus saving time and transportation costs (Roy & Shaw, 2022) . In addition, this system can also provide faster banking services, because transactions can be carried out in real-time without having to wait for a long time like in conventional banks.

This system can also increase customer loyalty. With easy and convenient service, customers will feel happy and satisfied with the bank, so they will be more inclined to use bank products and services consistently. In addition, this system can also help banks build strong relationships with customers (Alsmadi et al., 2022; Ecer, 2018; Hammood et al., 2020) . With easier access to the banking system, banks can more easily monitor customer transactions and provide better services.

Apart from that, implementing the Online Integrated Banking System can also help banks to save on operational costs (Rashid et al., 2020) l. With this system, banks can reduce administrative costs and speed up banking transaction processes. In addition, banks can also reduce costs for printing passbooks and providing banking services at branch offices , because transactions can be done online.

Overall, the implementation of the Online Integrated Banking System can provide significant benefits for banks in increasing customer satisfaction and loyalty, increasing operational efficiency, and strengthening relationships with customers (Lin et al., 2020; Roy & Shaw, 2022) .

Although the Implementation of the Online Integrated Banking System provides many benefits for banks, there are several weaknesses that need attention (Abu-Alhaija et al., 2019; Ertemel et al., 2021) . The adoption of online banking systems presents a dual scenario, encompassing advantages as well as challenges. On one side, these systems extend the convenience of conducting banking transactions round the clock, offering customers the flexibility to manage their finances at their own pace. However, this convenience is not devoid of potential stumbling blocks. Customers may grapple with technical intricacies, encountering issues such as grasping the system's usage or coping with unreliable internet connections. Such hurdles, if left unaddressed, could have ramifications on customer satisfaction and loyalty, necessitating proactive measures to ensure a seamless online banking experience.

Conversely, while online systems hold the promise of streamlining operational costs for financial institutions, the considerable investments required for system development, implementation, and maintenance may act as stumbling stones. These costs could potentially strain the financial resources of banks, thereby limiting their capacity to furnish consistent and satisfactory online banking services. Furthermore, as the digital shift progresses, it could inadvertently lead to a reduction in face-to-face interactions between customers and banks. This interpersonal interaction, often vital for fostering robust customer relationships, may face challenges in the digital realm. The potential decline in such interactions could prompt customers to seek alternatives that offer more compelling online banking services, emphasizing the need for balancing digital transformation with customer relationship management.

Therefore, banks need to pay attention to the weaknesses associated with implementing this Online Integrated Banking System. Banks need to ensure the security of online banking systems, provide easily accessible technical assistance services, manage costs associated with the system, and continue to interact with customers directly to build good relationships (Rangaswamy et al., 2021) . In this way , banks can increase customer satisfaction and loyalty and maximize the benefits of implementing an online banking system.

PT Bank Sumut seeks to create services with information systems that make it easier for customers to make transactions. The application of BI regulations is a challenge for Bank Sumut, especially in relation to customer satisfaction with the existing information system. To further improve efficiency and effectiveness in the process of financial transactions, PT Bank Sumut has used an integrated banking information system technology called the Online Integrated Banking System (OLIBs).

Cooperation established by PT Bank Sumut with other Regional Development Banks (BPD) in Indonesia which can be connected online, making it easier for customers to access transactions at all Regional Banks in Indonesia as well as ease of accessing funds at all ATM outlets together with banks in Indonesia so that customers can access more than 5,000 shared ATM networks. Even Bank Sumut's ATMs have joined the Malaysia Electronic Payment System (MEPS) so that customers who go to Malaysia can still take advantage of Bank Sumut's ATM card facilities at more than 2,000 ATM machines bearing the Bank Card logo in Malaysia.

Public trust in banks is inseparable from the problem of satisfaction, which can be fulfilled one of which is from excellent service (Rashid et al., 2020) . Competition between banks is getting tougher, where more and more producers are involved in fulfilling consumer needs and wants, causing each bank to place an orientation towards customer satisfaction as the main goal (Çavusoglu et al., 2021) . This is reflected in the number of banks including their customers in customer satisfaction in their mission inclusion.

Creating true customer loyalty is not only seen from transactions or repeated purchases (repeat customers), but customers can be considered loyal if customers make regular repeat purchases, customers who buy other products in the same place, customers who refer others , and customers who cannot be influenced by competitors to move (Tetteh & Boachie, 2021) . Loyal customers are invisible advocates for companies (Smith, 2020) . They will try to defend the company's products and will always try to voluntarily recommend them to others. Automatically word of mouth will work. Meanwhile, there are 4 dimensions of loyalty, namely Transaction , Relationship , Partnership and Behavior (Sofia Silviana et al., 2022) r .

That is when customers are loyal, then not only do they have the desire to transact but also have relationships, collaborate, maybe even want to own. For example by buying stocks/bonds (Issock Issock et al., 2020) . Customer loyalty is a company's strength in creating a barrier to new entry (blocking new players from entering). In order to create customer loyalty , PT Bank Sumut must think about being able to create the availability of information technology innovations in its service network that is able to retain customers on the basis of cooperative and trust relationships in order to create maximum customer satisfaction for the continuity and growth of its business.

METHOD

This research is an explanatory research which intends to provide an explanation of the causal relationship between variables through hypothesis testing as well as conducting explanations (Seidel & Watson, 2020; Toyon, 2021) . This study used Structural Equation Modeling (SEM) analysis techniques using the Smart PLS program package (Cui et al., 2018; Lai, 2019; Liu et al., 2020) . The use of Smart PLS helps researchers to test the validity and reliability of research instruments, confirm the accuracy of the model as well as test the effect of a variable on other variables (Scholar & Engineering, 2023) . The analysis model can be seen in the following figure:
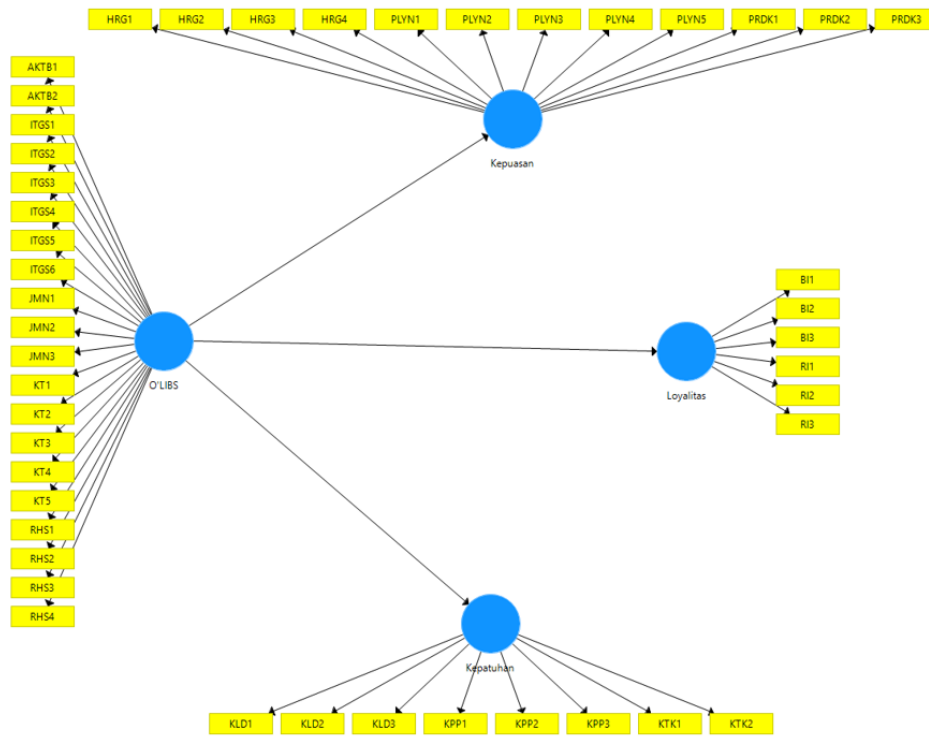
Figure 1. SEM model using Smart PLS

The population in this study are all customers who have savings at Bank Sumut Siantar Branch. The number of savers at PT Bank Sumut Pematang Siantar Branch can be seen in the following table:

Table 1. Number of savers of PT Bank Sumut, Pematang Siantar Branch As of September 2022

No	Type Of Savings	Total Customers
1	Simpeda Savings	9,349
2	Martabe Savings	24,697
3	Makbul Savings	166
	AMOUNT	34,212

Source: PT Bank Sumut, 2022

Given that the number of savers at PT Bank Sumut Pematang Siantar Branch for each type of savings is not the same, the respondents were selected using a systematic random sampling method using proportional allocation (Asad et al., 2019) . The formula used for proportional allocation is as follows:

$$ni = \frac{Ni}{N} \; x \; n$$

Where:
ni   = the number of samples taken for each type of savings.
n   = total sample taken
Ni   = total population in type of savings i
N   = total population size

Table 2. Allocation of the Number of Samples for Each Type of Savings

No	Type Of Savings	Total Customers	Sample Number
1	Simpeda Savings	9,349	28
2	Martabe Savings	24,697	72
3	Makbul Savings	166	-
	Amount	34212	100

Source: PT Bank Sumut, 2022

The allocation of the number of samples to each type of savings is presented in detail in table 3.2 as follows:

Respondents who were observed were only respondents from the Simpeda savings and Martabe savings types, because the Makbul savings type had different provisions in evaluating customer satisfaction and loyalty for the implementation of the OLIBs management information system.

RESULTS

Obtaining the InfoBank Award for the sixth time, shows that PT Bank Sumut is one of the prime performing banks in Indonesia that received the "Very Good" title, based on an assessment from InfoBank magazine. This award is certainly very encouraging and proud for all the people of North Sumatra, with the hope that Bank Sumut can become an asset to be proud of. In addition, this award can provide income in the form of regional original income from profit sharing, as well as being a driving force for the regional economy, which can automatically increase gross regional income in North Sumatra.

In the future, it is hoped that Bank Sumut's growth will be even better, so that it is truly able to drive the wheels of the economy of North Sumatra and become a bank that is reckoned with in the national environment, as well as being the hosted in its own region. The InfoBank Award is a motivation for all employees and management of Bank Sumut. This award obtained by Bank Sumut can increase motivation for all employees. Meanwhile for customers, this award is proof that Bank Sumut's performance is getting better and healthier. The award given by a leading financial magazine is considered very relevant to the current conditions of very tight national banking competition. They make an assessment based on the soundness level of the bank, which is adjusted to the regulations set by Bank Indonesia. The factor that becomes the assessment is CAMEL, which consists of capital or capital, asset quality , management, earnings or the ability to earn profits, and liquidity. In the future PT Bank Sumut will be even more expansive in developing its business, such as adding service outlets, adding ATM machines, ATM network cooperation with other banks, opening sharia business units and increasing the status of becoming a Foreign Exchange Bank which will be realized next year.

PT Bank Sumut's services consist of fund products and credit products. PT Bank Sumut's fundraising products using conventional systems consist of: Current Accounts, Simpeda Savings, Martabe Savings, Makbul Savings, Time Deposits. And the credit products offered include: General Loans, SPK Loans, Retirement Loans, Other Installment Loans, Treasurer Loans, Micro Business Care Loans, Government Program Loans, Home Ownership Loans (KPR), Subsidized KPRS, Construction Loans, Motorcycle Ownership Loans, Investment Loans, Syndicated Loans and Working Capital Loans.

To provide the best service for its customers, PT Bank Sumut currently has 20 branch offices, 59 sub-branch offices online and provides 61 ATM machine pavilions in various places in North Sumatra and Jakarta. In addition to the ease of transactions in paying telephone bills, Telkomsel bills, Indosat bills, speedy bills and purchasing Garuda Indonesia airplane tickets which can be done through ATMs online. Cooperation established by PT Bank Sumut with other Regional Development Banks (BPD) in Indonesia which can be connected online, making it easier for customers to access transactions at all Regional Banks in Indonesia as well as ease of accessing funds at all ATM outlets along with other commercial banks in Indonesia.

PT Bank Sumut Pematang Siantar Branch as a class I branch office, to increase its service range, currently has 6 sub-branches, namely Trade, Simalungun Regent's Office, Parapat, Saribu Dolok, Serbelawan and Pematang Raya. Besides car cash and ATM machines in Siantar, Commerce and Parapat.

To get a clear picture of respondents' perceptions of customer satisfaction , loyalty and compliance with the application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch, the following shows the results of the bootstrapping calculations on the Smart PLS application.
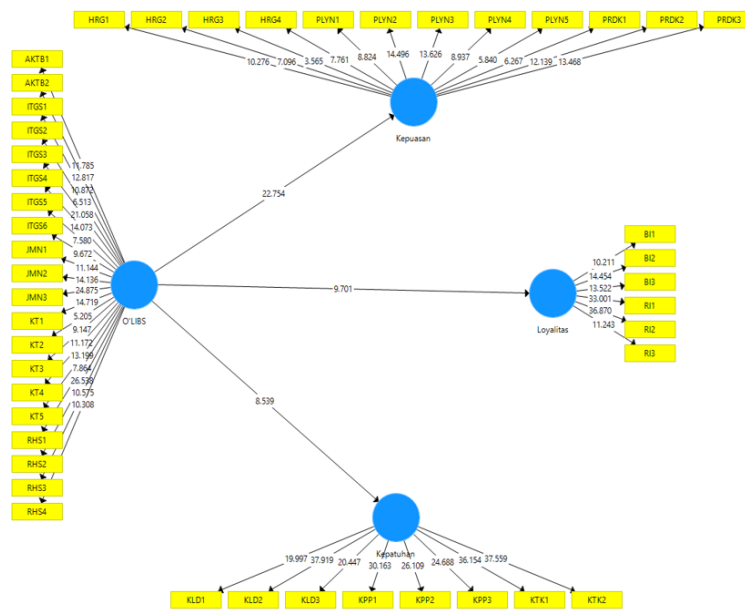
Figure 2. Bootstrapping Analysis Results

Based on the results of bootstrapping calculations, direct effects were obtained on customer satisfaction, loyalty and compliance with the implementation of the OLIBs management information system for the banking services of PT Bank Sumut Pematang Siantar Branch.

Table 3 Direct Influence Between Variables

Direct Effects	O. Sample	S. Mean	S. Deviation	Q. Statistics	P.Value
O'Libs-Satisfaction	0.804	0.819	0.635	22,754	0.000
O'Libs-Loyalty	0.665	0.682	0.068	9,701	0.000
O'Libs-Compliance	0.675	0.693	0.079	8,539	0.000

Source: Results of Smart PLS Data Processing

Based on the table above it can be concluded the application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch has an effect on customer satisfaction. This is evident from the statistical t value of 22.754, P Value (0.000 <0.05) and has a positive effect with the original sample having a positive value. The application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch has an effect on customer loyalty. This is evident from the statistical t value of 9.701, P Value (0.000 <0.05) and has a positive effect with the original sample having a positive value. The application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch has an effect on customer compliance. This is evident from the statistical t value of 8.539, P Value (0.000 < 0.05) and has a positive effect with the original sample having a positive value.

In other words, all Y variables have a positive and significant influence from the application of the OLIBs management information system to the banking services of PT Bank Sumut, Pematang Siantar Branch. Furthermore, the magnitude of the influence can be seen in the following figure:
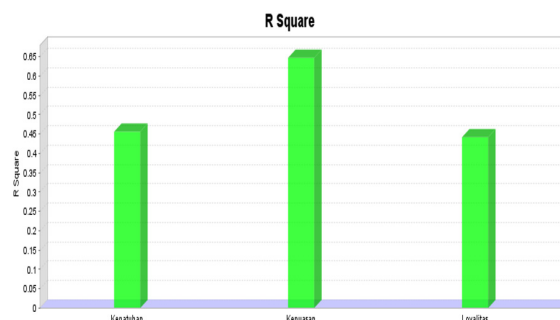

Figure 3. Magnitude of Influence between Variables

Based on the picture above, it can be seen that the effect of the application of the OLIBs management information system on the banking services of PT Bank Sumut Pematang Siantar Branch on customer satisfaction is 0.647 or 64%, while the application of the OLIBs management information system on the banking services of PT Bank Sumut Pematang Siantar Branch on loyalty is 0.456 or 46%. Then, the application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch for compliance is 0.442 or 44%. In other words, based on the picture above, it can be seen that the influence of the implementation of the OLIBs management information system on the banking services of PT Bank Sumut Pematang Siantar Branch is the strongest on customer satisfaction.

DISCUSSION

Based on the results of the direct effect test, there are findings indicating that the application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch has a positive and significant impact on customer satisfaction. This indicates that the adoption of OLIBs has a positive impact on customer satisfaction in using the banking services provided by the bank.

The application of the OLIBs management information system to banking services can provide a number of benefits that contribute to increased customer satisfaction. First of all, OLIBs can improve efficiency in the process of banking services. This system enables the automation of various administrative and transactional tasks, reduces human errors, and increases the speed of transaction completion. Thus, customers can experience a more efficient and satisfying experience when interacting with the bank (Thursday & AbRashid, 2018) .

In addition, the application of OLIBs can also improve accuracy and precision in providing services to customers. This system provides fast and accurate access to customer information, enabling bank staff to provide more appropriate solutions according to individual customer needs. With integrated information, customers can feel better served and feel that the bank understands their needs well.

The adoption of OLIBs can also bring benefits in terms of service accessibility. Customers can access information and make transactions easily through various channels, such as online banking, ATMs, or mobile banking applications. The existence of these channels increases convenience and flexibility for customers in interacting with the bank, so that they can avail services anytime and anywhere according to their needs.

The implementation of OLIBs can also provide a more personalized customer experience. With easy access to customer transaction history and preferences, bank staff can provide more appropriate and relevant services. This creates a closer relationship between the bank and the customer, which in turn can increase customer satisfaction and strengthen their loyalty to the bank.

In addition, customer data security is also considered through the adoption of OLIBs. This system is equipped with strong security features, including data encryption and transaction security. This provides security guarantees for customers in conducting transactions and storing their financial information. By feeling that their privacy and security are maintained, customers will feel more confident and satisfied in using the banking services offered by PT Bank Sumut Pematang Siantar Branch.

Then based on the results of direct effect testing, it was found that the application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch has a positive and significant influence on customer loyalty. This shows that the adoption of OLIBs makes a significant contribution in strengthening customer loyalty to bank i (Luu et al., 2019). The application of OLIBs to banking services can provide a number of benefits that play an important role in building and maintaining customer loyalty. First of all, OLIBs can improve the quality of services provided by banks. With an integrated management information system, banks can provide more efficient, accurate and responsive services to customers (Supriyanto et al., 2021). This can increase customer satisfaction and help strengthen their loyalty to the bank.

In addition, the implementation of OLIBs can also improve service accessibility for customers. This system allows customers to access information and conduct transactions through various channels, such as online banking, ATMs, or mobile banking applications. With this easy access, customers feel more well served and have flexibility in using bank services. This can increase customer satisfaction and strengthen their attachment to the bank.

The adoption of OLIBs can also provide a more personalized customer experience. This system provides fast and accurate access to customer data, enabling banks to better understand customer needs and preferences. With services tailored to individual needs, customers feel valued and cared for by the bank, thereby increasing their loyalty to the bank.

Furthermore, OLIBs can also provide better data security for customers. With the security features implemented in this system, such as data encryption and transaction security, customers feel safer and more confident in using banking services. This trust is an important factor in building customer loyalty, because customers tend to remain loyal to banks who can maintain the privacy and security of their information.

Overall, the direct effect test results show that the application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch has a positive and significant impact on customer loyalty. The adoption of OLIBs helps improve service quality, accessibility, personalization and security for customers, which in turn strengthens their loyalty to the bank.

Furthermore, based on the results of the direct effect test, it was revealed that the application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch had a positive and significant effect on customer compliance. This indicates that the adoption of OLIBs plays an important role in increasing the level of customer compliance with the requirements and policies set by the bank.

The application of OLIBs to banking services can provide a number of benefits that play a role in increasing customer compliance. First of all, OLIBs provide a structured and automated system to meet banking requirements. Customers can easily access information about account opening requirements, credit card usage and payment obligations. With a clear understanding of these requirements, customers are more likely to comply with the rules set by the bank.

In addition, the adoption of OLIBs can also increase transparency and accountability in banking services. Customers have better access to their financial information, including transaction reports and account balances. Thus, customers can monitor and verify their financial activities more easily. This helps increase customer compliance with banking policies and procedures, as well as strengthens their trust in the bank (Gurova, 2022) . .

The adoption of OLIBs also makes it easier for customers to report transactions that are suspicious or have the potential to violate regulations. This management information system allows customers to submit reports online and provides quick access to the bank's compliance team. With this convenience, customers feel supported in complying with regulations and contributing to the prevention of actions that violate banking law or ethics.

Furthermore, OLIBs can also improve customer understanding of regulations and laws that apply in the banking industry. This system can provide clear and easily accessible information about privacy policies, consumer protection, and dispute resolution procedures (Moghavvemi et al., 2018) . With a better understanding of their rights and obligations, customers are more likely to comply with the regulations and policies set by the bank.

Overall, the direct effect test results show that the application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch has a positive and significant impact on customer compliance. The adoption of OLIBs enables banks to provide clear information, high transparency, and structured services, which in turn encourage customers to comply with the terms and policies set by the bank.

CONCLUSION

Based on the results of the direct effect test, it can be concluded that the application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch has a positive and significant impact on customer satisfaction, customer loyalty and customer compliance. The adoption of OLIBs provides significant benefits in improving service quality, accessibility, personalization, data security, transparency and accountability in banking services.

In the context of customer satisfaction, the implementation of OLIBs helps improve efficiency, accuracy and speed in banking services, which in turn increases customer satisfaction. The adoption of OLIBs also brings benefits in terms of service accessibility, service personalization, and customer data security, all of which contribute to higher levels of satisfaction.

In addition, the adoption of OLIBs also has a positive impact on customer loyalty. By improving service quality, accessibility, personalization and data security, OLIBs help build closer relationships between banks and customers, which in turn strengthens customer attachment and loyalty to the bank.

Lastly, the implementation of OLIBs also has a positive influence on customer compliance. This management information system makes it easier for customers to understand requirements, access financial information, report suspicious transactions, and understand banking regulations. All of this helps increase the level of customer compliance with the requirements and policies set by the bank.

Overall, the application of the OLIBs management information system to the banking services of PT Bank Sumut Pematang Siantar Branch has a significant positive impact on customer satisfaction, customer loyalty and customer compliance. The adoption of OLIBs has led to improvements in service quality, accessibility, personalization, data security, transparency and accountability in banking services, all of which contribute to a strong relationship between banks and customers.

However, it is important to recognize that this study has limitations in terms of research scope, which does not encompass all aspects of the observed phenomenon's complexity. Furthermore, there are limitations in the sample selection that do not fully represent the broader population diversity. As such, the findings of this study should be treated with caution when attempting to generalize them to a larger population, taking into account potential variations in different contexts and characteristics.

Overall, despite offering valuable insights, it is crucial to bear in mind that the findings and conclusions derived must be viewed within the framework of these limitations. Efforts to enhance the generalizability of the findings, through further research with a more representative sample and broader coverage, could provide a more comprehensive understanding of the impact and implications of implementing the Online Integrated Banking System (OLIBs) management information system within banking services.

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