

## **THE DIGITAL REVOLUTION IN EXPLORING THE IMPACT OF FINTECH ON ISLAMIC FINANCIAL SERVICES**

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### **ABSTRACT**

The implementation of financial technology (fintech) at Bank Syariah Indonesia KCP Bitung has significantly impacted financial inclusion, particularly through the BSI Mobile application. This study examines how fintech has enhanced accessibility to Islamic financial services, especially for individuals previously underserved by conventional banking systems. The findings reveal that fintech has not only expedited financial transactions but also provided customers with easier access to a variety of financial features, thereby improving their financial management capabilities. Interviews with bank staff and customers indicated that fintech solutions like BSI Mobile offer convenience, efficiency, and flexibility in the digital era. However, the research also identifies challenges, including the need for adequate infrastructure, intensive education and socialization regarding fintech usage, and potential security risks in digital transactions. To address these challenges, it is crucial for Islamic banks to foster innovation and collaboration with fintech providers to offer more inclusive and affordable solutions, thus broadening the reach of Islamic financial services. The emphasis on ongoing innovation and collaboration is key to integrating technology with Islamic finance, creating a more inclusive, transparent, and sustainable financial ecosystem that supports equitable economic growth within society.

**Keywords:** Financial Inclusion; Financial Technology; Islamic Bank

### **INTRODUCTION**

Financial inclusion has become a top priority in various countries over the past few decades, including Indonesia, in order to reduce economic disparities and promote social welfare (Ratnawati 2020). In a predominantly Muslim country like Indonesia, Sharia-based financial inclusion holds significant potential in providing access to financial services that adhere to Islamic principles for communities that were previously underserved or lacked access to formal financial services (Masrizal, Sukmana, and Trianto 2024). Data from the Financial Services Authority (OJK) shows that Indonesia's financial inclusion rate reached around 85% in 2022;

however, this figure still reflects significant disparities in remote areas, which often face limited access to conventional banking services. Bank Syariah Indonesia (BSI), as the largest Sharia bank in Indonesia, plays a strategic role in expanding access to Sharia-compliant banking services, including in regions like Bitung, North Sulawesi, which is being encouraged to enhance financial inclusion through the digitalization of banking services (OJK 2022).

Previous studies have shown that fintech has brought significant changes to banking systems in various countries. Research by Ediagbonya & Tioluwani (2023) dan Siano et al. (2020) found that fintech plays a crucial role in enhancing financial inclusion, particularly through the development of mobile banking applications that enable customers to perform various transactions quickly and easily without the need to visit a physical bank branch. However, most studies related to fintech and financial inclusion have primarily focused on conventional banks or on Islamic banking in countries with relatively advanced financial systems (Salman and Nawaz 2018; Hisham Yahya, Muhammad, and Razak Abdul Hadi 2012; Grassa and Gazdar 2014). The specific context of Islamic banking in Indonesia, particularly through a case study approach, remains underexplored in the literature. This study is expected to fill this gap by examining how the implementation of fintech in Islamic banking, specifically through the BSI Mobile application at Bank Syariah Indonesia KCP Bitung, can contribute to the enhancement of Islamic financial inclusion.

This study aims to analyze the impact of the implementation of financial technology, particularly BSI Mobile, on financial inclusion at Bank Syariah Indonesia KCP Bitung. Furthermore, this research also seeks to identify the opportunities and challenges faced in utilizing fintech within Islamic banking in Indonesia. The case study approach is expected to provide deeper insights into the adaptation of fintech services in Islamic banks, as well as uncover the factors influencing financial inclusion through digitalization in regions that still face limitations in accessing conventional financial services.

The utilization of fintech in Islamic banking holds the potential to expand financial inclusion, which fundamentally differs from conventional banking. Fintech in Islamic banking offers broader access for individuals who do not yet have bank accounts and allows existing customers to enjoy more efficient services. The BSI Mobile application, for instance, enables customers to perform various transactions, ranging from payments to fund transfers, without the need to visit a physical branch. The features available in this app also facilitate customers in meeting their daily financial needs, such as mobile top-ups and bill payments, which have become vital solutions for a society increasingly reliant on digital technology, especially in the aftermath of the COVID-19 pandemic.

Challenges such as limited infrastructure, low digital literacy among customers, and dependency on internet networks remain significant obstacles that require special attention. Based on interviews with employees and customers at Bank Syariah Indonesia KCP Bitung, several barriers have been identified in

utilizing the BSI Mobile services. Some customers face difficulties in understanding how to use the application and its features, while bank employees have pointed out that fintech-based services require intensive socialization and education for customers to fully comprehend their usage. This study is expected to provide practical recommendations for Bank Syariah Indonesia and other Islamic banking institutions to improve socialization and education related to the use of fintech, particularly in areas with relatively low digital literacy.

This research aims to enrich the literature on the role of fintech in enhancing financial inclusion in Islamic banking. The practical insights generated from this study are expected to assist stakeholders in the Islamic finance industry in overcoming the challenges that arise in the implementation of financial technology. In an increasingly digital era, a deep understanding of fintech adaptation in the context of Islamic banking in Indonesia will provide broad benefits in creating a more inclusive and efficient financial system, in line with sharia principles that emphasize equitable access and economic welfare for society.

## **METHODS**

This study employs a qualitative design with a case study approach, focusing on Bank Syariah Indonesia (BSI) Branch Office (KCP) Bitung as the primary subject. The case study was selected to allow for an in-depth and comprehensive analysis of the impact of financial technology (fintech) on financial inclusion within the context of Islamic banking, particularly in regions with specific characteristics and financial needs. This approach also offers the researcher flexibility to more thoroughly explore the perceptions and experiences of users of BSI Mobile, the fintech application launched by BSI, including both customers and bank employees directly involved in the digital service process.

Data collection in this research was carried out through in-depth interviews with a number of respondents, consisting of bank employees at BSI KCP Bitung and customers who actively use fintech in their financial activities. The choice of in-depth interviews allows the researcher to understand the subjective perspectives of both employees and customers, as well as to identify the factors that influence their experiences with BSI's digital services. The primary respondents include Customer Service representatives, Retail Sales Executives in charge of financing KUR and micro-loans, as well as various customers who use the BSI Mobile service for daily transactions. The collection of data from diverse sources aims to capture a wide range of perspectives, providing a comprehensive overview of the benefits and challenges faced by users in the context of sharia-based financial inclusion.

The data obtained is analyzed using thematic analysis, which enables the researcher to identify, analyze, and report patterns or themes that emerge from the interview data. Thematic analysis was chosen for its ability to explore complex research topics through in-depth and structured data interpretation. The steps in thematic analysis include transcribing interview data, initial coding to identify major themes, and grouping relevant themes to draw conclusions. These themes are

then evaluated against relevant theories to assess the impact of fintech on improving financial accessibility and promoting financial inclusion in the Islamic banking sector. This analysis is expected to reveal how BSI Mobile plays a role in driving more inclusive and efficient sharia-compliant financial services, while also enhancing BSI's competitiveness in the digital era.

## **RESULTS AND DISCUSSION**

### **The Role of Fintech in Promoting Financial Inclusion and Overcoming the Limitations of Conventional Banking Systems**

Financial inclusion is a critical element of economic development, particularly in efforts to reduce poverty and inequality. Financial inclusion is defined as the availability and accessibility of appropriate financial services for all segments of society, including those without bank accounts or access to formal financial institutions (Ratnawati 2020). Fintech plays a significant role in expanding financial inclusion by addressing several key challenges faced by conventional banking systems, such as infrastructure limitations, high operational costs, and the complexity of banking procedures. A study by Agustia & Anridho (2020) shows that fintech can provide more affordable and faster services, accessible through smartphones, thereby improving financial literacy and empowering low-income individuals to participate in formal economic activities.

In Indonesia, fintech has assisted both Islamic and conventional banks in overcoming the limitations inherent in traditional banking systems. Services such as mobile banking and e-wallets enable people to perform digital transactions, which are not only faster but also more cost-effective than physical bank services. According to a study by The World Bank (2021), over 70% of Indonesia's population now has access to digital financial services, thanks to the support of fintech technologies. This is particularly beneficial in areas with limited banking infrastructure, as digital financial services are able to reach people in remote regions without the need to establish physical bank branches at each location.

The Financial Inclusion theory developed by Allen et al. (2016) asserts that access to inclusive financial services has a positive impact on economic growth and social welfare. Broader access to financial services can increase economic participation, accelerate capital distribution, and reduce economic disparities in society. Fintech, as a tool to achieve financial inclusion, is considered capable of driving more equitable and sustainable economic development. In Indonesia, fintech plays a vital role in Islamic banking by providing financial services based on sharia principles. The existence of sharia-compliant fintech enables the Muslim population to access financial services aligned with their beliefs, which they previously could not obtain through conventional banks.

This study draws on financial inclusion theory to explore how financial technology, through the BSI Mobile app, can enhance the accessibility and quality of financial services at Bank Syariah Indonesia KCP Bitung. It will also examine

the challenges faced in implementing fintech in Islamic banking, including the need for digital literacy among customers and the importance of collaboration between banks and fintech service providers to expand service coverage.

### **Financial Inclusion from a Sharia Perspective**

Sharia financial inclusion refers to efforts aimed at ensuring that all segments of society, especially those previously underserved by the formal financial system, can access Sharia-compliant financial services. Sharia financial services operate based on Islamic principles, including the prohibition of *riba* (interest), *gharar* (uncertainty), and *maysir* (speculation), while emphasizing values of justice, transparency, and social responsibility (Djamil 2023). These principles are intended to ensure that the financial services provided are not only economically beneficial but also ethically aligned with Islamic teachings and contribute to societal welfare. Asutay (2017) highlights that this ethical approach positions Islamic banks uniquely in efforts to achieve broader and more equitable financial inclusion, as Sharia financial services strive to serve all of society without discrimination.

In Indonesia, the demand for Sharia financial inclusion is growing due to the large Muslim population and the increasing need for financial services that align with Islamic principles. The Indonesian government and the Financial Services Authority (OJK) have identified Sharia financial inclusion as a national priority in achieving inclusive economic development goals. According to OJK data (2022)), Sharia financial inclusion in Indonesia still faces challenges, especially in rural and remote areas where access to both conventional and Sharia banking services is limited. The Sharia approach to financial inclusion holds significant potential for expanding the reach of banking services by utilizing technology, such as Sharia-compliant mobile banking applications, which can be accessed by the wider community.

The Social Inclusion theory, adapted to the context of Sharia finance by Shinkafi et al. (2019), suggests that Sharia financial inclusion aims not only to provide financial access but also to empower underserved communities by offering services that align with their beliefs and values. Sharia principles such as *zakat*, *wakaf*, and *qard al-hasan* play a crucial role in ensuring that Sharia financial services also encompass philanthropy and social justice, thereby supporting overall social welfare. Riaz et al. (2023) argue that Islamic banks have a moral responsibility to serve all segments of society, regardless of economic status, including vulnerable groups who often face difficulties accessing formal financial services.

However, Sharia financial inclusion in Indonesia still faces significant challenges. One of the main obstacles is the low level of Sharia financial literacy among the majority of the population, especially in rural and low-income areas. A study by Sofiyawati & Halimah (2022) found that many people do not fully

understand the differences between Sharia and conventional financial services, leading to low utilization of Sharia financial products among the public. Furthermore, the lack of Sharia banking infrastructure in remote areas also limits accessibility to Sharia financial services, posing a major barrier to financial inclusion in these regions.

Another limitation is the availability of Sharia financial products and services that meet the needs of low-income populations. Sharia financial products tend to be more complex than conventional financial products due to specific requirements that must be met to comply with Sharia principles. Islam & Ahmad (2020) explain that Sharia financial services must be easily accessible to all segments of society in order to achieve optimal inclusion. However, the complexity of Sharia regulations and longer administrative procedures can be obstacles for people unfamiliar with the banking system. In this context, Ediagbonya & Tioluwani (2023) suggest that Sharia financial service providers must find ways to simplify procedures without compromising Sharia compliance, for example, by using technology to streamline transaction processes and services.

The role of fintech in Sharia financial inclusion has become increasingly important as a solution to overcome access and literacy limitations. Sharia fintech holds significant potential to expand the reach of Sharia banking services in Indonesia by providing financial services that are easily accessible, fast, and compliant with Sharia principles. Research by Setyaningrat et al. (2023) shows that the application of digital technology in Sharia banking can help reach communities that have difficulty accessing formal financial services and improve Sharia financial literacy. Fintech platforms that offer Sharia-compliant mobile banking services, such as BSI Mobile, allow the public to conduct Sharia-compliant banking transactions without needing to visit a physical bank branch, thus supporting broader and more effective financial inclusion.

### **The Impact of Fintech on Sharia Banking**

Technological disruption has significantly altered the financial industry landscape, including Islamic banking. The development of fintech is considered a disruptive phenomenon that brings both challenges and opportunities for Islamic banks to adapt in providing more inclusive, efficient, and Sharia-compliant services. The technological disruption in banking is evident with the emergence of fintech, which offers similar services to traditional banks but with a more flexible and accessible digital approach. Christensen et al. (2013) explain that new technologies that disrupt established industries tend to change traditional business models, forcing institutions to adopt new technologies or risk being left behind by customers. For Islamic banking, fintech presents a challenge to maintain relevance in meeting the needs of customers who increasingly demand fast and easy access, while still adhering to Sharia principles.

Sharia fintech also brings positive impacts to Islamic banking through the development of digital services, such as Sharia mobile banking applications. These applications allow customers to perform financial transactions in line with Sharia principles quickly and efficiently, anytime and anywhere. For instance, the BSI Mobile app allows users to make transfers, payments, and financing transactions in accordance with Sharia principles without the need to visit a physical branch. According to research conducted by Ediagbonya & Tioluwani (2023), Gomber et al. (2018) dan Syed et al. (2022), the implementation of digital technology in banking not only improves operational efficiency but also expands the coverage of financial services, which ultimately drives financial inclusion. In the context of Islamic banking, the adoption of digital technology can also reduce accessibility barriers typically faced by Islamic banks, especially in areas that are less reachable by branch offices.

The Technology Acceptance Model (TAM) introduced by Davis is relevant for understanding how users accept Sharia fintech applications like BSI Mobile (Silva 2015). TAM suggests that perceived usefulness and ease of use play a significant role in determining how willing users are to accept and use new technologies. In a study by Agustia & Anridho (2020), it was found that users of Sharia banking services tend to use mobile banking applications when they find the apps easy to use and supportive of their transaction needs in accordance with Sharia principles. Factors such as a user-friendly interface, comprehensive Sharia-compliant features, and transaction security are crucial in attracting users to adopt Sharia fintech services. TAM also highlights the importance of alignment between the app's features and users' needs, especially in the Sharia context, to ensure users remain loyal and feel well-served.

The use of Sharia mobile banking applications also directly impacts the improvement of financial inclusion in Indonesia, especially for communities with limited access to traditional banking services. Research by Masrizal et al. (2024) shows that fintech can play a crucial role in reaching underserved populations. In the context of Islamic banking, applications like BSI Mobile provide significant opportunities to expand Sharia financial services to broader segments of society, including rural areas. This is vital for supporting broader Sharia financial inclusion, where all members of society can access financial services aligned with Islamic values and principles. With mobile banking, customers can conduct transactions anytime, without geographical or time-related constraints, which have historically been barriers to accessing conventional banking services.

The impact of fintech disruption on Islamic banking is also seen in the increased competition between Islamic financial institutions and Sharia-based fintech companies that are not affiliated with banks. Research by Ali and Azmi (2021) found that the presence of Sharia fintech increases the competitiveness of the Islamic banking industry, forcing Islamic banks to innovate to stay relevant in the face of this competition. However, Islamic banks have their own advantages in terms of regulation and Sharia compliance, so fintech can be seen as a strategic partner that helps Islamic banking achieve broader financial inclusion. Through

collaboration, Islamic banks can adopt fintech technologies to expand their digital services without neglecting the Sharia compliance principles that form the foundation of their operations.

Overall, the technological disruption through fintech and the adoption of Sharia mobile banking like BSI Mobile has a positive impact on Islamic banking. Through the adoption of this technology, Islamic banking is able to expand its service reach to a broader market segment, improve operational efficiency, and meet customers' demands for more accessible and Sharia-compliant services. Sharia mobile banking applications not only support financial inclusion by providing access to previously underserved communities but also enable Islamic banking to remain relevant and competitive amid increasingly fierce competition.

### **Opportunities of Fintech in the Equitable Distribution of Financial Services**

The implementation of financial technology (fintech) through BSI Mobile has opened significant opportunities in the equitable distribution of Sharia financial services, thereby enhancing the competitiveness of Bank Syariah Indonesia (BSI). First, the presence of the BSI Mobile app provides broader access to the public, including those previously marginalized by the conventional banking system. With this digital service, customers can perform financial transactions anytime and anywhere, without the need to visit a branch. This aligns with findings from an interview with Customer Service representative, Siti Maramis, who emphasized that fintech has increased BSI's competitiveness through the efficiency of the services offered to customers. According to her, the use of technology in banking services not only accelerates transaction processes but also allows BSI to provide better education to the public about Sharia finance.

The importance of the efficiency offered by BSI Mobile lies in the public's need for responsive and easily accessible financial services. In the interview, Siti Maramis revealed that by educating the public about the use of BSI Mobile, the bank could provide more efficient and effective solutions to meet customers' transaction needs. Through this app, customers no longer face long queues and uncertain waiting times, which are often obstacles in using conventional services. Siti also noted that this efficiency improvement is felt not only by customers but also by bank employees, who can now focus more on service and building relationships with customers, rather than being bogged down by time-consuming administrative processes.

Evidence of increased access and efficiency can be seen in the positive responses from customers using BSI Mobile. They reported that the convenience of accessing various financial services, such as fund transfers, bill payments, and purchasing other financial products, has increased their satisfaction with the bank. Thus, the BSI Mobile app not only facilitates transactions but also strengthens BSI's position in the competitive Islamic banking industry. This demonstrates that

innovation in fintech services has the potential to drive better financial inclusion and strengthen economic growth in society.

In conclusion, the implementation of fintech through BSI Mobile plays a crucial role in the equitable distribution of Sharia financial services, while simultaneously enhancing the competitiveness of Bank Syariah Indonesia. The efficiency of services not only improves the customer experience but also strengthens BSI's position in the increasingly competitive banking market. By continuing to educate the public about the benefits of fintech and providing responsive services, BSI can make a significant contribution to financial inclusion, while meeting the evolving needs of society in the digital era.

### **Ease and Efficiency of Services for Customers**

Fintech, particularly through the BSI Mobile app, has provided significant ease and efficiency for customers of Bank Syariah Indonesia (BSI), as reflected in testimonials from users such as Nadia Albohari and Ardi Gultom. The use of BSI Mobile makes it easier for customers to carry out various financial transactions, including fund transfers, payments, and purchases directly through their mobile devices. This ease of access has become one of the main factors driving customers to switch from conventional banking services to digital services. With this convenience, customers no longer need to spend time going to branch offices, avoid long queues, or wait for transaction processes that often take a long time.

The importance of this ease and efficiency lies in the increasingly mobile lifestyle of modern society, which demands services that can be accessed quickly and without barriers. As stated by Nadia Albohari, access to fintech services allows customers to perform transactions anytime and anywhere, eliminating the time and location constraints that often hinder conventional systems. Additionally, Ardi Gultom added that the comprehensive features available in the BSI Mobile app provide extra convenience for customers. With this ease, customers feel more empowered in managing their finances, allowing them to carry out transactions with greater confidence.

Evidence of the positive impact of this can be seen in the increased financial literacy among customers. Nadia's testimonial shows that using BSI Mobile has encouraged her to better understand the financial products offered, including the various features and benefits available in the app. This increased understanding not only helps in making better financial decisions but also contributes to broader financial inclusion, as more educated customers tend to be more active in using financial services. Ardi Gultom also emphasized that the use of fintech has boosted his confidence in making transactions independently, without needing assistance from the bank, which is a positive step towards improved financial literacy.

In conclusion, the ease and efficiency of services offered by BSI Mobile have significantly contributed to the improvement of financial literacy and inclusion among customers. Testimonials from users like Nadia Albohari and Ardi

Gultom show that by adopting fintech, customers not only gain better access to financial services but also experience an increase in understanding and confidence in managing their finances. Therefore, fintech can be considered an effective tool for driving financial inclusion and empowering customers in the increasingly digital era.

### **Improvement in Work Ethic and Staff Efficiency at the Bank**

The implementation of fintech through the BSI Mobile app has significantly enhanced work ethic and staff efficiency at Bank Syariah Indonesia KCP Bitung, as highlighted by employee Mahfud Kofa. The key point raised by Mahfud is that fintech not only benefits customers but also alleviates the workload of bank staff, enabling them to focus on more strategic tasks and provide better service to clients. With the advent of digital technology, bank employees are able to reduce the time spent handling routine transactions, which previously consumed considerable time and effort.

The reason behind this increase in efficiency lies in fintech's ability to automate various financial service processes that once required manual interaction. Mahfud Kofa explained that by utilizing the BSI Mobile app, transactions that previously had to be done face-to-face can now be completed in seconds. This reduces the risk of human error that often occurs in manual transaction processing and speeds up service delivery to customers. This efficiency also contributes to an increase in employee motivation, as they feel more empowered and capable of making a greater contribution to the bank.

Concrete evidence of this positive impact is reflected in Mahfud's testimonial, which highlights an increase in enthusiasm among staff. He stated that using fintech has made everyday tasks more engaging and productive. Employees are no longer burdened with monotonous tasks but can focus on innovation and improving service quality. With more efficient time management, employees have the opportunity to interact more with customers and better understand their needs, thereby enhancing the customer experience.

In conclusion, the adoption of fintech, such as BSI Mobile, has had a significant impact on the work ethic and efficiency of staff at Bank Syariah Indonesia KCP Bitung. Testimonials from employees like Mahfud Kofa show that by reducing the burden of routine work, fintech not only improves service effectiveness but also motivates employees to provide better service to customers. Thus, fintech is not only beneficial to customers but also serves as a driving force in creating a more productive and innovative work environment within Islamic financial institutions.

### **Challenges in Implementing Fintech at BSI KCP Bitung**

While the implementation of fintech through the BSI Mobile app has provided numerous benefits, Bank Syariah Indonesia KCP Bitung has also faced several challenges in its execution. The main points raised by the respondents in this study are that these challenges stem from aspects such as infrastructure, digital literacy among customers, and resistance to change both within the staff and among customers. These challenges can hinder the full potential of the fintech services offered by the bank.

The root cause of these challenges lies in the lack of adequate infrastructure in some areas, which can lead to uneven access to digital services. Siti Maramis, as a Customer Service representative, highlighted that while many customers wish to use BSI Mobile, some still face difficulties in accessing the service due to limited internet connectivity or unsupported devices. In addition, the lack of understanding on how to use fintech applications remains a significant barrier, particularly among older customers or those unfamiliar with digital technology.

Concrete evidence supporting this argument can be found in an interview with a customer, Riska Fitriani Dadu, who stated that while she enjoys the convenience provided by fintech, she sometimes experiences difficulty accessing the BSI Mobile app due to network issues and her initial lack of understanding of the technology. This demonstrates that while fintech has the potential to enhance financial inclusion, infrastructure challenges and digital literacy can be major obstacles for many customers.

In conclusion, the challenges in implementing fintech at Bank Syariah Indonesia KCP Bitung include issues related to infrastructure, digital literacy, and resistance to change. Although the BSI Mobile app offers many advantages, these challenges need to be addressed so that all customers can enjoy more inclusive financial services. More intensive educational efforts and improvements to infrastructure are necessary to fully harness the potential of fintech and to ensure the bank can adapt to the ever-evolving technological landscape. By addressing these challenges, Bank Syariah Indonesia KCP Bitung can strengthen its position as an innovative and inclusive Islamic financial institution.

### **Strategies for Enhancing Fintech Services at Bank Syariah**

Increasing socialization and education regarding the use of fintech, particularly the BSI Mobile app, is a key strategy that can strengthen financial inclusion at Bank Syariah Indonesia KCP Bitung. This is crucial to ensure that all segments of society, including those less experienced with technology, can access and benefit from the services offered. By enhancing customers' understanding of fintech, the bank can encourage broader adoption and improve the customer service experience.

The primary reason behind this recommendation is that many customers, particularly in areas with low digital literacy, struggle with using fintech applications. In interviews with customers such as Ardi Gultom and Nadia Albohari, they emphasized the importance of a better understanding of how BSI Mobile works. This lack of understanding often becomes a barrier for customers to fully utilize the features provided, such as fast transactions, bill payments, and access to other financial services. Proper education can empower customers to feel more confident in using this technology, thereby encouraging increased transactions and their participation in the financial system.

Evidence from interviews with Mahfud Kofa, a staff member at BSI KCP Bitung, suggests that enhancing staff training on how to explain and demonstrate the features of BSI Mobile to customers could be a positive step. Well-trained staff would be better equipped to support customers, explain the benefits of fintech services, and assist them with any technical issues that may arise. By providing the necessary information and support, the bank can create a conducive environment for customers to adapt to these changes.

Globally, fintech continues to evolve with the rapid adoption of digital technology and increasing access to the internet and smart devices. Chen et al. (2021) state that fintech is one of the most significant disruptions in the financial industry because it enables traditional financial services to become more inclusive and efficient. In developing countries, such as Indonesia, fintech has great potential to overcome the limitations of conventional banking infrastructure, particularly in remote areas (Mujiatun et al. 2022). This is due to fintech's ability to provide digital banking services that can be accessed anytime and anywhere via smartphones, thus helping reach communities that previously lacked access to formal banking services (Laba et al. 2024).

In conclusion, enhancing the socialization and education of fintech usage at Bank Syariah Indonesia KCP Bitung is an important step to strengthen financial inclusion. By addressing the needs and challenges faced by customers, the bank can develop appropriate educational programs and support broader technology adoption. This strategy will not only improve understanding and usage of fintech services among customers but also contribute to more inclusive economic growth in alignment with the Islamic principles that underpin the bank's operations. With these steps, Bank Syariah Indonesia KCP Bitung can ensure that its financial services are more accessible and beneficial to the entire community

### **Development of Technology Infrastructure at Bank Syariah**

The enhancement of technology infrastructure at Bank Syariah Indonesia KCP Bitung is a crucial step to ensure that fintech services can operate optimally and meet customer needs. A robust and reliable infrastructure not only supports the success of fintech applications like BSI Mobile but also forms an essential foundation for creating a satisfying and efficient user experience.

The main reason for the importance of developing this infrastructure lies in the system's ability to handle potential spikes in transaction volume resulting from increased adoption of fintech services. In the context of Islamic banking, where trust and customer satisfaction are key to success, system instability or service disruptions can negatively impact the bank's reputation. For example, an interview with Mahfud Kofa revealed that the increase in transactions through the BSI Mobile app requires a system capable of handling the load without delays or disruptions. The inability to manage high traffic could result in customers switching to more reliable alternatives.

Another piece of evidence supporting the importance of infrastructure development is the testimony from employees and customers who stated that fast and responsive services heavily rely on the reliability of the supporting technology systems. According to Siti Maramis, a Customer Service representative at BSI KCP Bitung, improving network infrastructure will have a positive impact on service efficiency, allowing customers to complete transactions faster and without technical issues. A strong infrastructure also facilitates integration with emerging fintech platforms, thereby increasing the bank's opportunities to offer more innovative services.

In conclusion, the development of technology infrastructure at Bank Syariah Indonesia KCP Bitung is essential to support the optimization of fintech services. By ensuring that systems and networks are robust enough to support growing services, the bank can not only improve operational efficiency but also strengthen its competitive position in the market. Investing in this infrastructure is a strategic step that will ensure the bank can provide a satisfying user experience, build customer trust, and, in turn, support broader financial inclusion and solidify the bank's position in the Islamic banking industry.

Christensen et al. (2013) provide a relevant statement in understanding the impact of fintech on the financial sector. According to them, disruptive innovation has the ability to create new markets or disrupt existing ones by offering services or products that are more affordable and accessible to consumers. In the financial sector, fintech has acted as a disruptive innovation capable of providing more efficient services compared to conventional banks. For example, digital payment applications and e-wallets enable people to conduct financial transactions without having to visit a physical bank, thereby enhancing the accessibility of financial services, especially in areas less served by traditional banks (Alam, Awawdeh, and Muhamad 2021).

## **CONCLUSION**

The implementation of financial technology (fintech) at Bank Syariah Indonesia KCP Bitung has had a significant positive impact on financial inclusion. Fintech, particularly through the BSI Mobile application, has improved accessibility to Islamic financial services for communities that previously faced difficulties accessing conventional banking services. The use of this technology not

only accelerates financial transaction processes but also makes it easier for customers to access various features that support their financial needs. Interviews with various respondents, including employees and customers, indicate that fintech provides the convenience, efficiency, and flexibility that are much needed in today's digital era.

However, this study also identifies several challenges that need to be addressed in the implementation of fintech in Islamic banking, including the need for adequate infrastructure, the necessity for more intensive education and outreach to the public on the use of fintech, and the potential security risks in digital transactions. Therefore, it is essential for Islamic banks to continue innovating and enhancing collaboration with other fintech stakeholders to create more inclusive and affordable solutions, thus expanding the reach of Islamic financial services. The emphasis on innovation and continuous collaboration is key to integrating technology with Islamic financial services, which is expected to create a more inclusive, transparent, and sustainable financial ecosystem and support more equitable economic growth in society.

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It is our hope that this work makes a meaningful contribution to the discourse on fintech and Sharia-based financial inclusion. We warmly welcome further insights and constructive critiques to enhance future research in this field

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