


Sharia Microfinance Institutions' (SMIs) Resilience To Technological Disruption: Innovative Ecosystem Approaches On Lombok Island

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Article Info	ABSTRACT
Keywords: LKMS, fintech, Finance	This research explores the resilience of Sharia Microfinance Institutions (LKMS) on Lombok Island in facing the era of technological disruption. Using a qualitative approach with a case study method, this research focuses on technology adaptation and the implementation of an innovative ecosystem model that involves collaboration with fintech, educational institutions and local governments. The research results show that despite facing challenges such as limited technological infrastructure, high implementation costs, and resistance to change, LKMS in Lombok succeeded in increasing operational efficiency and expanding access to financial services through digital technology. Collaboration with fintech allows LKMS to access modern technology at more affordable costs, while collaboration with educational institutions and local governments helps increase literacy and public acceptance of digital services. This research concludes that innovation and collaboration are the keys to the success of LKMS in maintaining their relevance and positive contribution to financial inclusion and poverty alleviation in the digital era. These findings provide practical guidance for MFIs in other regions to adopt similar strategies to improve their operational resilience and effectiveness.
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INTRODUCTION

The era of disruption marked by the rapid development of digital technology has brought about fundamental changes in various economic sectors (Akbar, 2019; Azzasyofiaa, 2022; Fadilurrahman et al., 2021; Fitriani Lubis, 2019; Nurdiana, 2021; Sidin et al., 2021), including the financial sector (De Koker et al., 2020; Nurasik & Fadilah, 2022). This disruption is affecting traditional business models and requires financial institutions, both large and small, to adapt quickly. One sector that has been greatly impacted is Sharia Microfinance Institutions (LKMS), which play an important role in supporting financial inclusion and poverty alleviation in Indonesia. LKMS has the main mission to provide financial access to low-income communities through sharia principles which emphasize justice, transparency and compliance with Islamic law.

However, technological disruption has created major challenges for LKMS. Competition with modern financial institutions that are more adaptive to technology, as well as management that is less than optimal, are some of the obstacles that must be faced. This

inability to compete is often caused by limited resources, minimal technological infrastructure, and resistance to change from management and staff. According to (Latifah, 2023), many LKMS experienced a decline in performance and some were even forced to close down because they were unable to adapt to the rapid development of technology (Widiarto & Emrouznejad, 2015).

Apart from challenges, the era of disruption also brings great opportunities for LKMS to improve performance and expand the reach of its services. Digital technology, such as mobile banking applications, cloud-based management systems, and peer-to-peer lending platforms, can be used to improve operational efficiency, strengthen transparency, and expand access to financial services for the public. Several studies show that digital transformation in sharia finance can have a significant positive impact, both in terms of operational efficiency and increased customer satisfaction (Latifah, 2023; Liu et al., 2023; Zhu, 2023).

In this context, the development of innovative ecosystem models is one promising solution. This ecosystem model involves collaboration between various stakeholders, including LKMS, fintech, government and society. This collaboration aims to create a conducive environment for the development of LKMS through technology adoption, increasing financial literacy, and active participation from all elements of society. Studies by (Junaidah Abu Seman et al., 2021; Widiastuti et al., 2022) show that collaboration in an integrated ecosystem can strengthen the resilience of microfinance institutions and increase the resulting socio-economic impact.

This research focuses on the innovative ecosystem strategies and models implemented by LKMS on Lombok Island as a case study. Lombok Island was chosen because it has a variety of active LKMS and various approaches to dealing with technological disruption. Through a qualitative approach, this research will explore in depth how LKMS in Lombok adapt to change, the challenges they face and the opportunities they exploit. Data was collected through field observations, in-depth interviews with LKMS managers, and documentation analysis.

It is hoped that the results of this research will make a significant contribution to our understanding of the resilience of LKMS in an era of disruption. Apart from that, this research also aims to offer an innovative ecosystem model that can be applied by LKMS in other regions to increase the resilience and effectiveness of their operations. In this way, it is hoped that LKMS can continue to play its role in supporting financial inclusion and poverty alleviation in Indonesia, even amidst the rapid changes brought about by technological disruption. This research also seeks to provide practical recommendations for stakeholders to develop policies and strategies that support digital transformation and collaboration in the sharia microfinance ecosystem.

METHODS

This research uses a qualitative approach with a case study method to understand in depth the resilience of Sharia Microfinance Institutions (LKMS) in the era of disruption and explore innovative ecosystem models as a solution. The research location was chosen on Lombok

Island, Indonesia, because this area has various active LKMS and various approaches in dealing with technological disruption. A qualitative approach was chosen to gain a comprehensive understanding of the phenomenon under study. Through in-depth interviews, participant observation, and document analysis, researchers sought to explore the internal and external dynamics that influence the resilience of LKMS to technological disruption. The case study was chosen because it allows researchers to explore the contextual and dynamic details of LKMS in Lombok, as well as their interactions with existing technologies and ecosystems.

The research process involves several steps, from selecting representative cases to careful data collection and analysis. First, researchers conducted an initial survey to identify the most relevant and representative LKMS to study based on certain criteria, such as size, diversity of services, and level of technology adoption. Once the cases were selected, the researcher approached key stakeholders, such as LKMS managers, community members, and local leaders, to request permission and collaboration in the research.

Next, researchers conducted in-depth interviews with these stakeholders to understand in detail the experiences, perceptions and strategies of LKMS in facing technological disruption. Participatory observation was carried out to gain direct understanding of the practices and internal dynamics of LKMS, while document analysis was used to extract additional information from financial reports, internal policies and related literature.

The collected data is then analyzed thematically, by identifying patterns, themes and relationships between variables. Through this process, researchers can develop a deep understanding of the challenges and opportunities faced by LKMS in the era of technological disruption, as well as the factors that influence their resilience and innovation.

RESULTS AND DISCUSSION

Results

This research examines the resilience of Sharia Microfinance Institutions (LKMS) in the era of technological disruption through a case study on Lombok Island. The results of this research are based on field observations, in-depth interviews with LKMS managers, and documentation analysis. This section is divided into three main sub-sections: technology adaptation in LKMS Lombok, technology implementation challenges, and implementation of innovative ecosystem models.

Technology Adaptation in LKMS Lombok

Field observations show that the majority of LKMS in Lombok have begun to adopt digital technology in their operations. For example, several LKMS have implemented mobile banking applications that allow customers to carry out transactions online. This application makes it easier for customers to carry out various types of transactions such as deposits, withdrawals and fund transfers without having to come to the LKMS office. Apart from that, several LKMS have also used cloud-based management systems to manage their customer data and financial operations. This system not only improves operational efficiency but also provides better data security.

From in-depth interviews, it was found that LKMS managers in Lombok see digital technology as an important tool to improve their services and remain competitive. One manager stated: “ Digital technology helps us to provide faster and more efficient services to customers. This is very important, especially in pandemic conditions like now.” Another manager added that technology also helps in reducing operational costs, such as administration and logistics costs, which can ultimately increase the profitability of LKMS.

Data obtained from documentation shows a trend of increasing the number of digital technology users in LKMS Lombok. For example, one MFI reported that the number of customers using their mobile application increased by 35% in the past year. This increase shows that technology adaptation by LKMS has received a positive response from customers, who feel more comfortable and easier to use digital services.

Technology Implementation Challenges

Despite the increased use of technology, several challenges are still faced by LKMS in Lombok. The first challenge is the lack of adequate technological infrastructure. In some rural areas, limited internet access hinders the use of mobile applications and cloud-based systems. This makes it difficult for LKMS to provide optimal digital services to customers in these areas.

The second challenge is the high administrative costs associated with implementing the technology. While technology can reduce operational costs in the long term, the initial investment required to purchase hardware, software and staff training is substantial. Some MFIs face difficulties in providing the necessary budget for this investment. One of the LKMS managers stated: “We realized the importance of technology, but the high initial costs were a big barrier for us. We need to look for more flexible financing solutions.”

The third challenge is resistance to change among staff and customers. Some staff who are used to traditional ways of working find it difficult to adapt to the new digital system. In addition, some customers, especially older ones, feel uncomfortable using digital technology and prefer conventional services. To overcome this problem, several LKMS have conducted technology training for staff and customers. This digital literacy program aims to increase understanding and acceptance of digital innovation.

Application of Innovative Ecosystem Models

Implementation of the innovative ecosystem model at LKMS Lombok involves collaboration with various parties, including fintech, educational institutions and local government. This ecosystem model is designed to increase financial literacy, expand access to financial services, and create an environment that supports financial inclusion.

Collaboration with fintechs is one of the main components in this ecosystem model. Fintech provides the technology and infrastructure needed by LKMS to implement digital services. For example, several LKMS have collaborated with fintech companies to develop mobile banking applications and cloud-based management systems. This collaboration not only helps LKMS reduce administrative costs but also improve operational efficiency and data security. One of the LKMS managers stated: “Collaboration with fintech allows us to provide more modern and efficient services to customers. This is a win-win solution for us and fintech.”

Apart from that, collaboration with educational institutions also plays an important role in this ecosystem model. Several LKMS have collaborated with universities and high schools in Lombok to provide financial literacy programs for the community. This program aims to increase public understanding of sharia financial products and the benefits of using digital services. In this program, students and lecturers from educational institutions provide training and workshops to the public on how to use mobile banking applications and other digital systems.

Local governments also have an important role in supporting the implementation of this innovative ecosystem model. The local government in Lombok has provided support in the form of regulations that support financial inclusion and provide the necessary technological infrastructure. Apart from that, the government has also carried out a financial literacy campaign to increase public awareness about the importance of using formal and safe financial services. One of the LKMS managers stated: "Support from the local government really helps us in developing digital services. Supportive policies and adequate infrastructure are critical to the success of this ecosystem model."

Discussion

The results of this research show that technological adaptation and the application of innovative ecosystem models can increase the resilience of LKMS in the era of technological disruption. While challenges exist, such as lack of technological infrastructure, high administrative costs, and resistance to change, collaborative strategies involving fintechs, educational institutions, and local governments can overcome most of these challenges.

This research also shows that digital technology has great potential to improve operational efficiency and customer satisfaction. The implementation of mobile banking applications and cloud-based management systems allows LKMS to provide faster, more efficient and safer services to customers. However, the successful implementation of this technology is highly dependent on organizational readiness and acceptance from staff and customers. Therefore, technology training and digital literacy programs are critical to ensure successful adaptation.

An innovative ecosystem model involving various stakeholders has also proven effective in increasing financial inclusion and financial literacy in Lombok. Collaboration with fintech allows MFIs to access the modern technology they need without having to bear high costs independently. In addition, collaboration with educational institutions and local governments helps increase public understanding and acceptance of digital services.

This research provides several practical recommendations for LKMS in other regions that face similar challenges. First, LKMS must consider collaborating with fintech to access the technology they need at a more affordable cost. Second, financial literacy programs and technology training must be an integral part of technology adaptation strategies. Third, support from local governments is very important to provide supporting technological and regulatory infrastructure.

Overall, this research highlights the importance of innovation and collaboration in facing an era of technological disruption. LKMS that are able to adapt to change and utilize digital technology and innovative ecosystem models have a great opportunity to remain

relevant and make a positive contribution to financial inclusion and poverty alleviation. The success of LKMS in Lombok in adopting technology and implementing an innovative ecosystem model can be an example for LKMS in other regions to follow in the same footsteps and continue to develop in this era full of change.

Data was collected through three main methods: field observation, in-depth interviews, and documentation analysis. Field observations were carried out to observe daily operations at several LKMS in Lombok, the use of technology, and interactions between staff and customers. These observations help understand how the technology is implemented and the challenges faced in practice. In-depth interviews were conducted with 10 LKMS managers to gain in-depth insight into their strategies in dealing with technological disruption, the challenges they face, and the solutions they have implemented. This interview uses a semi-structured guide to allow flexibility in exploring relevant topics. Apart from that, researchers also analyzed related documents, including LKMS annual reports, internal policies, and available publications. This analysis aims to obtain additional information about LKMS performance and the technology initiatives that have been implemented.

The data collected was analyzed using the thematic analysis method. This process involved identifying, coding, and grouping the main themes that emerged from observational, interview, and document data. These themes are then interpreted to understand patterns, relationships and implications relevant to the resilience of LKMS and innovative ecosystem models. To ensure the validity and reliability of the research, data triangulation was carried out by comparing findings from various data sources. In addition, member checking was conducted with several respondents to ensure that the researcher's interpretations matched their experiences and views. It is hoped that this research will provide in-depth insight into innovative ecosystem strategies and models that can be implemented by LKMS in other regions to increase their resilience and operational effectiveness in an era of disruption.

CONCLUSION

This research reveals that Sharia Microfinance Institutions (LKMS) on Lombok Island are able to adapt to the era of technological disruption through the application of digital technology and innovative ecosystem models. Despite facing challenges such as limited technological infrastructure, high implementation costs, and resistance to change, LKMS in Lombok have demonstrated significant progress in improving operational efficiency and expanding access to financial services through collaboration with fintechs, educational institutions, and local governments. Technology adaptation, such as the use of mobile banking applications and cloud-based management systems, has had a positive impact on faster, more efficient and safer services. Increasing financial literacy and technology training are also keys to success in helping staff and customers adapt to digital innovation. Collaboration with fintech allows LKMS to access modern technology at more affordable costs, while collaboration with educational institutions and local governments helps increase public understanding and acceptance of digital services. The innovative ecosystem model

implemented in Lombok shows that a collaborative approach can strengthen the resilience of LKMS in an era of technological disruption. Support from local governments, both in the form of supportive regulations and the provision of technological infrastructure, is critical to the success of this model. Overall, this research emphasizes the importance of innovation and collaboration in facing changes brought by technological disruption. LKMS that are able to utilize digital technology and build a collaborative ecosystem have a great opportunity to remain relevant and make a positive contribution to financial inclusion and poverty alleviation. It is hoped that the findings from this research can become a reference for LKMS in other regions to adopt similar strategies to increase the resilience and effectiveness of their operations in the digital era.

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