Research Article

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# OVERCOMING BARRIERS TO DIGITAL FINANCIAL INCLUSION: A CASE STUDY OF MICRO ENTERPRISES IN TOMOHON

Mengatasi Hambatan dalam Inklusi Keuangan Digital: Studi Kasus Usaha Mikro di Tomohon

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#### Abstract

This research investigates the impact of digital financial inclusion on the marketing strategies of micro enterprises in Tomohon, Indonesia. Digital financial inclusion refers to the accessibility and use of financial technology by micro enterprises to enhance their operations and marketing efforts. The study employs a qualitative approach, utilizing in-depth interviews and case studies to gather data from micro enterprise owners who have adopted digital financial technology. The findings reveal that while the adoption of digital financial technology among micro enterprises in Tomohon is still limited, it has shown significant potential in improving marketing efficiency and expanding market reach. The use of social media platforms, e-commerce, and digital payments has enabled these enterprises to overcome geographical limitations and reach a broader customer base. However, the research identifies several challenges, including low financial literacy, inadequate technological infrastructure, and limited support from government and financial institutions. These challenges hinder the widespread adoption of digital financial technology among micro enterprises. To address these issues, the study recommends the development of comprehensive financial literacy programs, investment in technological infrastructure, and incentives for the adoption of digital payments. Continuous monitoring and evaluation of these initiatives are essential to ensure their effectiveness in promoting sustainable growth and inclusivity. The research concludes that digital financial inclusion can be a catalyst for economic growth and development in Tomohon, provided that the identified barriers are effectively addressed.

#### **Background**

In the digital era, digital financial inclusion has become an important factor in the growth of micro-economies. Digital financial inclusion refers to the accessibility and use of financial technology by individuals and micro-businesses to meet their financial needs (Amnas et al., 2024; He & Shen, 2021; X. Wang & Fu, 2021; Z. Wang, 2022). In Indonesia, especially in the city of Tomohon, digital financial inclusion has begun to receive attention as a means of increasing efficiency and effectiveness in various sectors, including marketing and tourism. Marketing is one of the crucial aspects in the success of micro businesses (Gao et al., 2023; Hieu et al., 2021; Nikraftar et al., 2021). With limited resources and market reach, microbusinesses often face challenges in achieving sustainable growth (Emilsson et al., 2020; Suciu (Vodă) et al., 2021). Digital financial inclusion offers innovative solutions through the use of technologies such as digital payments, e-commerce, and social media, which can help micro businesses increase the visibility and efficiency of their marketing.

Previous research has shown that digital financial inclusion can increase access to financial services for underserved groups, including microbusinesses. The use of digital financial technology, such as mobile banking and digital payments, has proven to increase the efficiency and transparency of financial transactions (Dai et al., 2023; Kurniasari et al., 2021; Odei-Appiah et al., 2022). This is important for micro businesses that often face limitations in accessing traditional finance. In the

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context of marketing, digital financial inclusion has opened new opportunities for micro businesses to expand their market reach. The use of e-commerce platforms and social media has become an effective strategy for increasing visibility and interaction with customers. Recent studies have shown that the use of digital financial technology in marketing can increase customer loyalty and sales. However, many micro businesses have not yet fully utilized the potential of digital financial inclusion in their marketing strategies.

In Indonesia, digital financial inclusion has become the main focus of efforts to increase economic inclusivity. The government and financial institutions have initiated various programs to promote the adoption of digital financial technologies. However, the adoption of digital financial technology among microbusinesses is still limited. Recent studies have shown that factors such as financial literacy, technological infrastructure, and government support are important in promoting digital financial inclusion among micro businesses (Jalil, 2021; Thathsarani & Jianguo, 2022). In Tomohon, digital financial inclusion has begun to receive attention as a means of increasing microeconomic growth. Some micro businesses have started to adopt digital financial technology in their operations and marketing strategies. However, many microbusinesses have not yet fully utilized the potential of digital financial inclusion. Recent studies show that the use of digital financial technology in marketing can help micro businesses increase the efficiency and effectiveness of their marketing.

Digital financial inclusion has become a widely discussed topic in the academic literature and business practices. Previous research has shown that digital financial inclusion can increase access to financial services for underserved groups, including microbusinesses (Aduba et al., 2023; Gopalan & Rajan, 2021; Preziuso et al., 2023; Syed et al., 2021). The use of digital financial technology, such as mobile banking and digital payments, has proven to increase the efficiency and transparency of financial transactions (Liang et al., 2022; Ullah et al., 2022; Yang & Masron, 2022). This is important for micro businesses that often face limitations in accessing traditional finance. In the context of marketing, digital financial inclusion has opened new opportunities for micro businesses to expand their market reach. The use of e-commerce platforms and social media has become an effective strategy for increasing visibility and interaction with customers. Recent studies have shown that the use of digital financial technology in marketing can increase customer loyalty and sales. However, many micro businesses have not yet fully utilized the potential of digital financial inclusion in their marketing strategies.

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Although there has been much research on digital financial inclusion and marketing, there is still a gap in research focusing on microbusinesses in the city of Tomohon. Most previous research

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has focused on digital financial inclusion in general, without focusing on its application in microbusiness marketing in specific areas. Existing research is often more national or regional in nature, thus not providing a specific picture of the situation in Tomohon. In addition, research focusing on micro businesses in Tomohon is limited, especially in terms of the use of digital financial technology in marketing. Therefore, this study aims to fill this gap by examining the impact of digital financial inclusion on micro-business marketing in Tomohon. This study identifies the marketing strategies adopted by micro businesses and their effectiveness in increasing micro business growth. In addition, this study identifies the challenges and opportunities faced by micro businesses in adopting digital financial technology, to provide more specific recommendations for the development of digital financial inclusion in the region.

This research is novel in several aspects. First, this study focuses on digital financial inclusion in micro-business marketing in the city of Tomohon, which has not been widely discussed in the literature. Second, this study examines the marketing strategies adopted by micro businesses and their effectiveness in increasing micro business growth. Third, this study identifies the challenges and opportunities faced by micro businesses in adopting digital financial technology, to provide more specific recommendations for the development of digital financial inclusion in the region. Fourth, this study uses a qualitative approach through interviews and case studies, which provides in-depth insights into the practices of digital financial inclusion in micro-business marketing in Tomohon. Thus, this study is expected to make a significant contribution to the development of digital financial inclusion in micro-business marketing in Tomohon.

The main objective of this study is to examine the impact of digital financial inclusion on micro-business marketing in Tomohon. This study aims to identify the marketing strategies adopted by micro businesses and their effectiveness in increasing micro business growth. In addition, this study aims to identify the challenges and opportunities faced by micro businesses in adopting digital financial technology, so as to provide more specific recommendations for the development of digital financial inclusion in the region. This research is expected to provide insights to micro-business owners on effective marketing strategies through digital financial inclusion. In addition, the results of this study can provide recommendations to the government and financial institutions to support the development of digital financial inclusion in the region. Thus, digital financial inclusion can become a catalyst for microeconomic growth in Tomohon.

The results of this study are expected to make a significant contribution to the development of digital financial inclusion in micro-business marketing in Tomohon. This research can provide insights to micro-business owners on effective marketing strategies through digital financial inclusion. In addition, the results of this study can provide recommendations to the government and financial institutions to support the development of digital financial inclusion in the region. Thus, digital financial inclusion can become a catalyst for microeconomic growth in Tomohon. This research can also serve as a basis for further research on digital financial inclusion in micro-business marketing in other areas of Indonesia. With the increasing use of digital financial technology, it is hoped that micro businesses in Tomohon can increase efficiency and effectiveness in marketing, thereby achieving sustainable growth. This research can also provide insights to the government on policies that can support digital financial inclusion among micro businesses, thereby increasing economic inclusivity.

#### **METHOD**

This study employed a qualitative approach using a case study method. The choice of a qualitative method is deemed appropriate as this research aims to gain an in-depth understanding of the impact of digital financial inclusion on the marketing of micro-enterprises in Tomohon. A case study is selected to provide a more specific picture of the practices of digital financial inclusion in micro enterprise marketing in the area. The research involves in-depth interviews with micro enterprise owners who have adopted digital financial technology in their operations and marketing. The interviews were conducted in a semi-structured manner to allow respondents to express their

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experiences and views more freely. In addition, this research involves the collection of secondary data through literature studies and reports related to digital financial inclusion in Indonesia.

This study used thematic analysis for data analysis. Data obtained from interviews and secondary sources were analyzed to identify relevant patterns, themes, and motifs related to digital financial inclusion in micro-enterprise marketing. Thematic analysis allows the researcher to identify effective marketing strategies, challenges faced, and opportunities that micro-enterprises can utilize to adopt digital financial technology. The results of this analysis are then used to formulate recommendations that can help enhance digital financial inclusion in micro-enterprise marketing in Tomohon. The research also involves data validation through source triangulation, that is, comparing data from interviews with secondary data to ensure the accuracy and reliability of the findings.

# RESULT AND DISCUSSION RESULT

## 1. Adoption of Digital Financial Inclusion

The study found that the adoption of digital financial technology among micro businesses in Tomohon is still limited. Most micro business owners interviewed revealed that they had only recently begun to familiarize themselves with and utilize digital financial technology in their operations and marketing. Factors influencing the adoption of digital financial technology include financial literacy levels, the availability of technological infrastructure, and support from the government and financial institutions. Many micro-business owners admitted that they still do not fully understand digital financial technology and its benefits in marketing. In addition, the limited availability of technological infrastructure in Tomohon poses a challenge to the adoption of digital financial technology. Support from the government and financial institutions is still not optimal for promoting digital financial inclusion among micro businesses. Educational programs and training on digital financial technology are still limited, leaving many micro businesses without adequate support for digital financial technology. Consequently, the adoption rate of digital financial technology among micro-businesses in Tomohon remains low. The study found that only a small number of micro businesses have fully adopted digital financial technology in their operations and marketing.

## 2. Marketing Strategies Adopted

The use of social media has become one of the most widely adopted marketing strategies by micro-businesses in Tomohon. Most microbusinesses utilize social media platforms such as Facebook, Instagram, and WhatsApp to interact with customers, promote products, and enhance the visibility of their businesses. Social media is considered an effective tool for directly reaching customers and building relationships. The use of social media also allows micro businesses to reach customers outside Tomohon, thereby expanding their market reach. Some micro businesses have begun to use e-commerce platforms to expand their market reach. Platforms such as Tokopedia, Shopee, and Bukalapak are used to sell products online, allowing them to reach customers beyond Tomohon. The use of e-commerce platforms also enables micro businesses to increase efficiency in sales and product delivery processes. In addition, the use of digital payments such as Gopay, Ovo, and Dana has increased among micro businesses in Tomohon. Digital payments are considered an effective tool for facilitating transactions and increasing customer trust.

## 3. Effectiveness of Marketing Strategies

The research indicates that the use of digital financial technology in marketing has helped micro businesses in Tomohon increase their sales and customer loyalty. Micro businesses that use social media and e-commerce platforms report an increase in the

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number of customers and sales. The use of social media and e-commerce platforms allows microbusinesses to reach new customers and expand their market reach. In addition, the use of digital payments increases transaction efficiency, thereby reducing the time and costs required in the payment process. The use of digital financial technology also increases customer trust in microbusinesses, thereby enhancing customer loyalty. The study found that micro businesses using digital financial technology in their marketing reported an increase in repeat customers and customer satisfaction levels. This demonstrates that digital financial technology can be an effective tool for enhancing the efficiency and effectiveness of micro-business marketing in Tomohon.

# 4. Challenges Faced

The low level of financial literacy among microbusinesses remains one of the main challenges in adopting digital financial technology. Many micro-business owners still do not fully understand digital financial technology and its marketing benefits. The research found that most micro-business owners in Tomohon still rely on traditional marketing methods and have not fully utilized the potential of digital financial technology. In addition, the limited availability of technological infrastructure in Tomohon poses a challenge to the adoption of digital financial technology. Some areas in Tomohon still experience problems with unstable Internet connections, which hinders the use of digital financial technology. In addition, support from the government and financial institutions is still not optimal for promoting digital financial inclusion among microbusinesses. Educational programs and training on digital financial technology are still limited, leaving many micro businesses without adequate support for digital financial technology. Consequently, the adoption rate of digital financial technology among micro-businesses in Tomohon remains low.

#### **Discussion**

#### 1. Adoption of Digital Financial Inclusion

The research findings reveal that digital financial inclusion holds significant potential for enhancing the marketing strategies of microenterprises in Tomohon. Although limited, the adoption of digital financial technology has positively impacted the efficiency and reach of these businesses. The use of social media platforms such as Facebook, Instagram, and WhatsApp has become a cornerstone for many microenterprises, allowing them to interact directly with customers and promote their products effectively (Jamil et al., 2022; Liang et al., 2022; Unnava & Aravindakshan, 2021). This direct engagement not only increases visibility but also builds stronger relationships with the customer base. The research indicates that these platforms are particularly effective in reaching a younger and more tech-savvy demographic, which is crucial for the long-term growth of these businesses. The findings also highlight that the initial steps towards digital adoption are often driven by personal familiarity with these technologies, suggesting that personal experience plays a significant role in the decision to integrate digital financial tools into business operations.

The adoption of e-commerce platforms represents another key strategy identified in this study. Platforms such as Tokopedia, Shopee, and Bukalapak have enabled micro-enterprises to expand their market reach beyond the local area. This expansion is critical for businesses seeking to grow and diversify their customer base. Research shows that the use of e-commerce platforms has led to an increase in sales and customer engagement, as these platforms provide a broader audience and more sophisticated marketing tools. The ability to list products online and reach customers through targeted advertising has proven to be a game changer for many microenterprises. However, the research also highlights the challenges associated with e-commerce adoption, such as the need for reliable internet connectivity and the complexities of managing online transactions. Despite these challenges, the benefits of e-commerce are clear, and research suggests that

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continued support and education in this area could significantly enhance the digital marketing capabilities of microenterprises in Tomohon.

Digital payments have emerged as a pivotal component of digital financial inclusion strategies for microenterprises. The research findings indicate that the use of digital payment methods, such as Gopay, Ovo, and Dana, has increased over the past few years. These payment methods offer convenience and security, which are essential for building customer trust in the brand. The study showed that digital payments reduce the time and costs associated with traditional payment methods, making transactions more efficient. This efficiency is particularly important for micro-enterprises, which often operate with limited resources. This study also highlights that digital payments can enhance the overall customer experience, leading to higher satisfaction and loyalty. However, the adoption of digital payments is still hindered by issues such as limited digital literacy and security concerns. Addressing these concerns through targeted education and support could further accelerate the adoption of digital payments among microenterprises in Tomohon.

This study underscores the importance of financial literacy in the adoption of digital financial technology. Many micro-business owners in Tomohon expressed a lack of understanding of digital financial tools and their potential benefits. This knowledge gap is a significant barrier to the widespread adoption of these technologies. The study suggests that financial literacy programs should be developed to address this gap by focusing on practical training and education. These programs should aim to demystify digital financial technology and provide clear examples of how these tools can enhance business operations and marketing strategies for MSMEs (Coco et al., 2023; Gupta & Kumar Singh, 2022; Widagdo & Sa'Diyah, 2023). The research also indicates that financial literacy is not just about understanding technology, but also about building confidence in using these tools. Therefore, hands-on training and mentorship could play crucial roles in fostering a more digitally inclusive business environment in Tomohon.

These findings highlight the role of technological infrastructure in facilitating digital financial inclusion. The limited availability of stable Internet connectivity in some areas of Tomohon poses a significant challenge for microenterprises looking to adopt digital financial technology. Reliable internet access is essential for the effective use of social media, e-commerce platforms, and digital payment systems. The research suggests that improving technological infrastructure should be a priority for both government and private sector stakeholders. Investments in broadband expansion and the development of digital service hubs could provide micro-enterprises with the necessary support to fully leverage digital financial tools. The study also notes that the lack of infrastructure is not just a technical issue but also an economic one, as it affects the overall competitiveness of microenterprises in the digital age. The limited adoption of digital financial technology among microenterprises in Tomohon is partly due to the lack of support from government programs and financial institutions. The study suggests that targeted initiatives, such as grants, low-interest loans, and technical assistance, could significantly enhance the ability of micro-enterprises to adopt and benefit from digital financial tools. Collaboration between the government, financial institutions, and technology providers can create a more supportive ecosystem for digital financial inclusion (Coco et al., 2023; Gupta & Kumar Singh, 2022; Widagdo & Sa'Diyah, 2023). This study also highlights the need for policy measures that encourage the development of digital financial products tailored to the needs of micro-enterprises, ensuring that these tools are accessible and user-friendly.

The study revealed that the adoption of digital financial technology is not uniform across different sectors and business sizes within Tomohon. Larger micro-enterprises with more resources tend to adopt digital tools more quickly than smaller ones. This disparity suggests a need for differentiated support strategies that consider the varying capacities and needs of micro-enterprises. The research indicates that smaller businesses may require more personalized assistance and lower barriers to entry when it comes to digital financial technology. Tailored support programs could help bridge this gap and ensure that all microenterprises, regardless of their size, benefit from digital financial inclusion. The findings also suggest that sector-specific initiatives could be effective in addressing the unique challenges faced by different types of microenterprises. The positive impact

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of digital financial technology on marketing, sales, and customer engagement is evident, suggesting that these tools can be a catalyst for broader economic development. The study suggests that by enhancing digital financial inclusion, microenterprises can become more resilient and competitive in the global market. The findings also indicate that digital financial inclusion can reduce economic disparities by providing equal access to financial tools and services. Future research and policy initiatives should focus on scaling up successful models and addressing the remaining challenges to ensure that digital financial inclusion becomes a cornerstone of economic development in Tomohon and beyond.

# 2. Challenges and Opportunities

The challenges faced by micro-enterprises in adopting digital financial technology are significant but not insurmountable. The low level of financial literacy among business owners suggests the need for targeted educational programs and training initiatives. These programs should focus on demystifying digital financial technology and highlighting its benefits for marketing and business growth in the hospitality industry. Many business owners in Tomohon expressed a lack of understanding of digital financial tools and their potential benefits. This knowledge gap is a significant barrier to the widespread adoption of these technologies. Financial literacy programs should be developed to address this gap by focusing on practical training and education. These programs should aim to demystify digital financial technology and provide clear examples of how these tools can enhance business operations and marketing strategies for MSMEs.

The limited technological infrastructure in Tomohon poses another significant challenge for microenterprises. Reliable internet connectivity and access to digital services are essential for the effective use of digital financial technology. Many areas in Tomohon still experience problems with unstable internet connections, which hinder the adoption and use of digital tools. This infrastructure gap affects the overall competitiveness of microenterprises in the digital age. Investing in improving Internet connectivity and expanding access to digital services is crucial. Government and private sector stakeholders should collaborate to address these infrastructure needs, ensuring that microenterprises have the necessary support to fully leverage digital financial technology for their marketing strategies.

Despite these challenges, the increasing trend of using social media and e-commerce platforms presents a significant opportunity for microbusinesses to enhance their visibility and market reach. Social media platforms, such as Facebook, Instagram, and WhatsApp, have become essential tools for micro-enterprises in Tomohon. These platforms allow businesses to interact directly with customers, promote their products, and build strong relationships. The use of e-commerce platforms such as Tokopedia, Shopee, and Bukalapak also enables micro-enterprises to expand their market reach beyond the local area. By effectively utilizing these platforms, micro-enterprises can overcome geographical limitations and tap into a larger customer base. This expansion is critical for businesses seeking to grow and diversify their customer base.

The adoption of digital payments represents another opportunity for microenterprises to streamline their operations and build customer trust. Digital payment methods such as Gopay, Ovo, and Dana offer convenience and security, which are essential for modern business transactions in Indonesia. The research indicates that digital payments reduce the time and costs associated with traditional payment methods, thereby making transactions more efficient. This efficiency is particularly important for micro-enterprises, which often operate with limited resources. The ability to offer digital payment options can enhance the overall customer experience, leading to higher satisfaction and loyalty. However, the adoption of digital payments is still hindered by issues such as limited digital literacy and security concerns. Addressing these concerns through targeted education and support could further accelerate the adoption of digital payments among microenterprises in Tomohon.

#### 3. Recomendation

To effectively address the challenges and capitalize on the opportunities identified in this study, a multifaceted approach is recommended. First, the government and financial institutions must

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collaborate to develop and implement comprehensive financial literacy programs specifically tailored for micro-business owners in Tomohon. These programs should encompass practical training sessions that provide hands-on experience with digital financial technology, focusing on its application in marketing and in transactions. By equipping business owners with the necessary knowledge and skills, these programs can significantly enhance their ability to leverage digital tools for growth. Additionally, including mentorship and follow-up support can further reinforce learning outcomes and ensure the sustained adoption of digital financial practices.

Improving Tomohon's technological infrastructure is another critical recommendation. This involves enhancing internet connectivity and ensuring widespread access to digital services across the region. Reliable and high-speed Internet is foundational for the effective use of digital financial technology, and its absence can severely limit the potential of microenterprises to expand their market reach and improve operational efficiency. Therefore, investments in infrastructure development should be prioritized, focusing on areas that currently face connectivity challenges. Public-private partnerships can play a pivotal role in mobilizing the necessary resources and expertise to achieve this goal. By improving Internet connectivity, microenterprises will be better positioned to fully utilize digital platforms for marketing, sales, and customer engagement.

Encouraging the adoption of digital payments is essential for streamlining transactions and building customer trust. Financial institutions can lead the way by offering incentives and support to microenterprises to transition to digital payment systems. This could include reduced transaction fees, promotional offers, and technical assistance to help businesses set up and manage digital payment solutions. By facilitating the adoption of digital payments, financial institutions can enhance transaction efficiency and contribute to the overall digital transformation of the local economy. Continuous monitoring and evaluation of the impact of digital financial inclusion initiatives are crucial for refining strategies and ensuring their effectiveness in the long run. Regular assessments provide valuable insights into the progress made and areas that require further intervention, thereby supporting the long-term growth and sustainability of micro-businesses in Tomohon.

#### Conclusion

Research on digital financial inclusion and its impact on microenterprises in Tomohon has revealed both significant challenges and promising opportunities. The findings indicate that while the adoption of digital financial technology among microenterprises is still limited, there is clear potential for these technologies to enhance marketing strategies, increase market reach, and improve overall business efficiency. The low level of financial literacy and inadequate technological infrastructure in Tomohon pose substantial barriers to the widespread adoption of digital financial tools in the region. However, the increasing use of social media and e-commerce platforms, along with the benefits of digital payments, presents substantial opportunities for microenterprises to overcome geographical limitations and tap into a broader customer base. This study underscores the importance of targeted educational programs, improved infrastructure, and supportive policies for promoting digital financial inclusion.

In conclusion, this study highlights the need for concerted efforts from the government, financial institutions, and the private sector to address the identified challenges and capitalize on the opportunities presented by digital financial inclusion. By implementing comprehensive financial literacy programs, enhancing technological infrastructure, and encouraging the adoption of digital payments, microenterprises in Tomohon can be better positioned to achieve sustainable growth and increased competitiveness. Continuous monitoring and evaluation of these initiatives will be crucial for refining strategies and ensuring their effectiveness in fostering a more inclusive and digitally empowered business environment in Tomohon.

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