# The Role of Fintech on Enchancing Financial Literacy and Inclusive Financial Management in MSMEs

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#### ABSTRACT

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Fintech has transformed the global financial sector, providing more efficient, inclusive, and accessible financial services. Fintech has great potential to improve access to financial services, financial literacy, and more effective financial management for Micro, Small, and Medium Enterprises (MSMEs). MSMEs often experience barriers in accessing traditional financial services, which can hinder their business growth and sustainability. Fintech offers solutions that are more flexible and tailored to the needs of MSMEs, such as online loans with lighter terms, digital payment systems that facilitate transactions, and financial management applications that assist MSMEs in managing their finances more effectively. In addition, fintech also plays a role in improving MSMEs' financial literacy through digital financial education and training, which is crucial in helping them make informed financial decisions. This research uses descriptive method and literature analysis. Data was received from other studies that reviewed the role of fintech in the context of MSMEs. The results show that fintech has great potential to improve access to financial services, especially in developing countries. Fintech can improve the operational efficiency of MSMEs through solutions such as digital payments and financial process automation, which can help MSMEs save time and costs, and increase productivity. The urgency of improving MSMEs' knowledge and utilization of fintech is high, given the important role of MSMEs in the economy and the potential of fintech in supporting their business growth.

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### 1. Introduction

Financial technology (fintech) has changed the landscape of the global financial sector, providing innovations that enable the provision of more efficient, inclusive, and accessible financial services. Fintech, which includes technologies such as digital payment systems, online lending platforms, and financial management applications, has been a catalyst in improving access to financial services for Micro, Small, and Medium Enterprises (MSMEs). MSMEs, which are the backbone of the economy in many countries (Maran, 2022) often face barriers in accessing traditional financial services, which can hinder the growth and sustainability of their businesses.

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The role of fintech in the context of MSMEs is becoming increasingly important due to its ability to bridge the financial access gap. Fintech offers solutions that are more flexible and tailored to the needs of MSMEs, such as online loans with lighter terms, digital payment systems that facilitate transactions, and financial management applications that assist MSMEs in managing their finances more effectively (Choudhary & Thenmozhi, 2024). In addition, fintech also plays a role in improving the financial literacy of MSMEs through digital financial education and training, which is crucial in helping them make informed financial decisions.

Several studies related to the role of fintech for MSMEs show that fintech has great potential to improve access to financial services, especially in developing countries. This research emphasizes the importance of fintech in reducing the financial access gap, which is often a major obstacle for MSMEs. Further research explains that financial literacy has a significant impact on business success and sustainability (Ali et al., 2023; Permana, 2023; Philippas & Avdoulas, 2021). Fintech can play a role in improving the financial literacy of MSMEs through digital education and easily accessible financial management tools (Fauzi et al., 2023; Setrojoyo, Sutrisno, et al., 2023; Yuniarti & Rasyid, 2020). Other studies explain that fintech can improve the operational efficiency of MSMEs through solutions such as digital payments and financial process automation (Setrojoyo, Rony, et al., 2023). This can help MSMEs save time and costs, and increase productivity.

The urgency of improving the knowledge and utilization of fintech by MSMEs is very high, given the important role of MSMEs in the economy and the potential of fintech in supporting their business growth. Fintech can assist MSMEs in accessing a wider range of financial services, managing finances more efficiently, and making more informed financial decisions. In addition, increased fintech literacy and adoption by MSMEs can contribute to broader financial inclusion, reduce the financial access gap, and drive inclusive economic growth. Therefore, there is an urgent need to address the barriers that prevent MSMEs from utilizing fintech, including through education initiatives, digital infrastructure development, and adequate policy support (Lubis et al., 2023; Permana, 2023).

The Primary research objective of analyzing the role of fintech in the context of MSMEs, this journal article aims to explore how fintech can contribute to increased access to financial services, improved financial literacy, and more effective financial management for MSMEs. Through literature analysis and case studies, this research will provide insights into the potential and challenges of fintech in supporting the growth and sustainability of MSMEs.

## 2. Literature Review

Fintech plays a crucial role in enhancing financial literacy and inclusive financial management in Micro, Small, and Medium Enterprises (MSMEs). Studies have shown that fintech has the potential to provide access to financial services for underserved populations, including MSMEs, aiding them in breaking free from poverty (Lagna & Ravishankar, 2021; Sudarmo, 2021). MSMEs are increasingly adopting fintech products and services, presenting a growing opportunity for fintech companies, traditional financial institutions, and non-financial organizations to support financial management in this sector (Gupta et al., 2022). Moreover, Sharia fintech has been identified as instrumental in advancing financial inclusion for MSMEs in industries like halal products, where traditional banking services may not be readily accessible (Dewi & Adinugraha, 2023). Financial technology, through its accessibility and support mechanisms, has been described as a key player in enhancing financial inclusion within the MSME industry (Candrasari et al., 2022; Rony et al., 2019). Additionally, fintech payment solutions have been found to positively impact the financial activities of MSMEs, particularly those operated by the baby boomer generation, by promoting digital economic literacy and financial inclusion (Anggrain et al., 2024; Azzahra et al., 2022). Collaborations between regulatory bodies and Islamic fintech institutions have been suggested to improve financial literacy, consumer protection, and product integration based on Islamic principles to attract MSME users (Majid, 2021). Financial literacy has been highlighted as a significant factor influencing the performance and sustainability of MSMEs, emphasizing the importance of educating business actors on financial matters (Hilmawati & Kusumaningtias, 2021). Fintech, especially Shariah-based solutions, has been identified as a means to extend financial inclusion to MSMEs, addressing the

capital challenges they often face (Budiman et al., 2024; Yuneline, 2022). Research has also shown that financial literacy and inclusion positively impact the performance of MSMEs, with fintech playing a role in facilitating effective product usage and skill development tailored to their needs (Puspitasari & Astrini, 2022). In conclusion, the integration of fintech in MSME financial management can lead to improved financial literacy, inclusive financial practices, and ultimately enhance the overall performance and sustainability of MSMEs. By leveraging fintech solutions, MSMEs can access a wider range of financial services, improve their financial decision-making processes, and contribute to their long-term success and growth.

## Financial Technology (Fintech)

Fintech stands for Financial Technology, which is the utilization of developments in information technology to improve services in the financial industry. Another definition is a variety of business models and technological developments that have the potential to disrupt the financial systems of companies that rely less on software. Value-Stream defines fintech as technology that serves customers in financial institutions. Fintech companies are generally start-ups established to digitally transform the way finance is managed, with a focus on start-ups that innovate in the financial products and services industry.

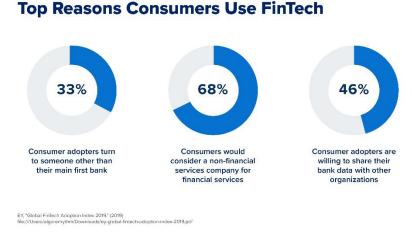


Fig.1. Behavior of Customer Use Fintech

Fintech has several models, including financing fintech, financial management fintech, investment fintech, insurance fintech, and funding fintech. Each of these models aims to improve the efficiency and effectiveness of financial services, and simplify the financial transaction process for the public. The development of fintech also brings several new approaches in financial management, such as the use of artificial intelligence (AI) and machine learning (ML) to optimize transaction processes, risk management, and data management (Harjanti et al., 2023; Zebua et al., 2023). This allows fintech to provide more personalized, effective, and efficient services. Fintech also provides various types of financial services, such as online financing, money transfer, money management, investment, insurance, and funding (Laksmana & Ningsih, 2024; Rony et al., 2023). With more sophisticated and efficient technology, fintech can offer more accessible and effective financial services, and simplify the financial transaction process for the community.

## 3. Research Methods

A qualitative research method with a case study approach was chosen because it allows researchers to deeply and comprehensively understand complex phenomena in their real context (Ibrahim et al., 2023; Kurniawan et al., 2023). Case studies allow researchers to explore how fintech impacts the financial literacy and financial management of MSMEs, taking into account the various factors and conditions that influence fintech utilization. The aspects considered in this study are the understanding

and knowledge of MSME players about fintech, how fintech is applied to MSMEs, and the role of fintech in helping MSMEs operations.

The research stage goes through the process of selecting MSMEs and distributing questionnaires to MSMEs to find out the knowledge and utilization of fintech in helping MSME business operations. The next stage is to collect data, which can be done through interviews with MSME managers, observation, and document analysis (Wada et al., 2024). Interviews can focus on their experience in using fintech, its impact on financial literacy and financial management, and the challenges faced. After that, analyze the data that has been collected to find out the extent of the role of fintech for MSMEs and compile the final article to provide the results of the analysis conducted.

#### 4. Results and Discussions

# **Knowledge of MSMEs in Utilizing Fintech**

One of the main problems faced by MSMEs in utilizing fintech is the lack of knowledge and awareness about financial technology and its benefits. Many MSME owners still rely on traditional methods of financial management and lack familiarity with digital financial services. This is often due to a lack of access to information and educational resources on fintech, as well as language and cultural barriers. Therefore, understanding the role of fintech in supporting MSMEs, as well as identifying opportunities and challenges, is crucial in promoting inclusive and sustainable economic growth. In addition, MSMEs may also face technical difficulties in adopting fintech, such as lack of digital infrastructure, limited internet access, and low technology skills. This may lead to low utilization of fintech among MSMEs, despite the great potential this technology offers in improving financial efficiency and inclusion.

In this study, there were 23 MSMEs in East Java region, who were research respondents, questionnaires related to MSME knowledge of fintech utilization were distributed online. The purpose of distributing questionnaires is to find out whether all MSMEs already know about fintech which can help MSMEs in their business operations.

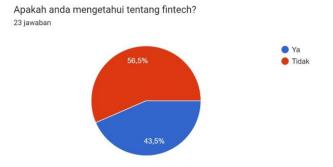


Fig.2. Questionnaire results on MSMEs' understanding of fintech

Based on Figure 2, it can be explained that 56.5% of respondents did not know about the definition of fintech, the use and utilization of fintech. Meanwhile, 43.5% of MSMEs already know fintech but not all of them have implemented it in helping businesses. So from the results of the initial questionnaire, it can be conveyed that there are still MSMEs that do not know and understand fintech in business optimization and financial management. On the other hand, there are MSMEs that already know about fintech but have not implemented it in financial management and helping business operations, so the results of this questionnaire can be the basis for making an analysis related to the use of fintech in MSMEs.

## The Effect of Fintech on MSME Financial Literacy

The research findings show that fintech has a positive impact on the financial literacy of MSMEs. Fintech applications such as financial learning platforms and financial simulations have helped

MSME owners understand basic financial concepts, including cash management, budget planning and risk analysis. However, there are still problems in implementing effective financial literacy, such as the lack of educational content tailored to the specific needs of MSMEs and limited access to quality learning resources.

Fintech apps such as Khan Academy that provides free online courses on financial basics and Coursera that offers financial management courses for small business owners, have been proven to improve the financial literacy of MSMEs. A concrete example is MSMEs reporting an improved understanding of cash management principles after taking such online courses. Strategies that can be implemented to address this issue include the development of fintech education programs that are more focused on the needs of MSMEs, as well as partnerships between fintech service providers, educational institutions, and MSME associations to provide relevant training and resources.

## **Impact of Fintech on MSME Financial Management**

Fintech has provided solutions that make it easier for MSMEs to manage their finances. Financial management applications help MSMEs in tracking financial transactions, compiling financial reports, and analyzing business performance. However, some MSMEs face problems integrating fintech technology into their existing financial systems, often due to lack of technical capabilities and incompatibility between fintech solutions and MSME IT infrastructure. Financial management applications such as QuickBooks and Xero can help MSMEs in tracking income and expenses, as well as compiling financial reports. For example, using QuickBooks to automate the recording of daily transactions saves time and reduces errors.

To address this integration issue, strategies that can be adopted include providing technical support and training for MSMEs in the use of fintech applications, as well as developing fintech solutions that are more flexible and compatible with various financial systems.

## **Challenges in Fintech Adoption by MSMEs**

One of the key challenges in the adoption of fintech by MSMEs is the issue of data security. MSMEs often lack the resources to implement robust security measures, but applications like Norton Small Business offer security solutions designed specifically for MSMEs. MSEs can reduce the risk of cyberattacks by implementing Norton Small Business and training their employees on data security. In addition, lack of trust in fintech technology and concerns about data privacy are also barriers. Strategies to address these security challenges include raising awareness about the importance of cybersecurity through educational campaigns, as well as cooperation between the government, fintech service providers, and MSMEs to develop robust and affordable security standards.

# Strategies to Increase Fintech Utilization by MSMEs

To increase the utilization of fintech by MSMEs, a comprehensive strategy is needed. One solution is through the development of an inclusive fintech ecosystem, where the government, fintech service providers, financial institutions, and MSMEs work together to create an enabling environment for innovation and growth. This may include incentives for MSMEs to adopt fintech solutions, such as subsidies or tax credits, as well as the establishment of fintech innovation hubs that provide resources and support for MSMEs in implementing fintech technologies. The establishment of an inclusive fintech ecosystem can involve working with platforms such as Shopify, Tokopedia, shoope, Lazada, blibli.com that provide complete e-commerce solutions for MSMEs, or Stripe that offers an easy-to-integrate online payment system. In the context of payment, fintech apps such as GoPay, OVO, DANA and other E-Wallets have become popular among MSMEs in Indonesia. These apps allow MSMEs to accept payments from customers digitally, which not only facilitates transactions but also improves payment security and efficiency. MSMEs can implement E-wallets as a payment method, allowing customers to pay for their meals using QR codes. This reduces the need to handle cash and speeds up the checkout process and eases financial management. Other digital payment apps such as DANA and LinkAja also offer similar features, providing a variety of options for MSMEs to choose the payment solution that best suits their business needs. By adopting fintech payment technology, MSMEs can improve customer experience, reduce the risk of losing cash, and gain better insight into their cash flow.

#### 5. Conclusion

The conclusion of the study is the role of fintech in improving financial literacy and inclusive financial management in MSMEs. The results show that fintech has great potential in helping MSMEs access wider financial services, improve financial literacy, and manage their finances more efficiently. Fintech applications such as QuickBooks, Xero, GoPay, OVO, and e-commerce platforms such as Shopify and Tokopedia, have made it easier for MSMEs to track financial transactions, accept payments digitally, and expand their markets. However, the study also revealed that there are still challenges that MSMEs face in adopting fintech, including a lack of knowledge about fintech, limited digital infrastructure, and data security concerns. Strategies that can be adopted to overcome these challenges include the development of fintech education programs focused on the needs of MSMEs, provision of technical support and training, and cooperation between the government, fintech service providers, and MSMEs to develop robust and affordable security standards. Suggestions for future research could analyze the long-term impact of fintech utilization on the growth and sustainability of MSMEs. In addition, research could focus on developing more inclusive and sustainable fintech business models that can meet the specific needs of MSMEs in different sectors. Future research could also investigate the role of technologies such as artificial intelligence and blockchain in improving the efficiency and security of fintech services for MSMEs.

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