
Implementation of Financial Technology and Increasing Financial Literacy of Small and Medium Enterprises in A Literature Review

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Abstract

Currently developing fintech aims to improve efficiency, accessibility and user experience in a financial context covering a variety of technological applications, including artificial intelligence, data analysis, mobile technology and internet-based platforms in the provision of financial products and services. Medium Financial literacy includes an individual's ability to understand financial concepts and principles that include financial products and services. This research takes the form of a systematic literature review with the aim of analyzing how the application of financial technology and financial literacy affects the performance, obstacles and practices of MSMEs. This research uses data obtained from online data, namely articles obtained from various selected journal articles. The search keywords used were "financial technology and financial literacy in MSMEs. The research results show that Fintech carried out by MSMEs can increase financial literacy and financial inclusion in MSMEs, as well as financial literacy on MSME performance consisting of: dimensions of financial literacy, namely: knowledge, attitudes and behavior; Factors that influence financial literacy are age, gender, education, years of service and income; strategies to increase financial literacy through training; MSME performance includes financial and non-financial performance. The impact of financial literacy on MSME performance is influenced by many factors.

Keywords: *Financial Technology, Financial Literacy, Performance of MSMEs*

INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) play a central role in driving the economy of a country, including Indonesia. In the midst of global competition and increasingly complex market dynamics, MSMEs need support, especially in terms of financial literacy and access to financial technology innovation. Financial literacy is a determining factor in the success of MSMEs in managing their financial resources, while financial technology innovation is considered a potential means of providing related solutions. Therefore, this

research focuses on the application of financial technology as an innovation that is expected to increase the financial literacy of MSMEs in Indonesia.

Economic and financial developments in Indonesia over the last few years have shown rapid growth in the financial sector. Innovative breakthroughs such as financial technology are an important basis for supporting increased financial literacy, especially for MSMEs who operate within a financial framework. In this context, this research tries to detail and analyze the impact of implementing financial technology as an innovation on the financial literacy of MSMEs.

MSMEs have their own characteristics and challenges in facing economic and financial developments. For example, East Java, as an economic center with rapid growth in the MSME sector. However, along with this growth, MSMEs in East Java are also faced with a number of obstacles, including in terms of financial literacy. The condition of financial literacy of MSMEs in East Java is a major concern, considering the business sustainability and substantial economic contribution that this MSME sector can provide. Factors such as level of education, access to information, and adoption of financial technology may have different influences at the local level.

Recent developments in information technology have forced business entities to improve, one of which is innovating financial technology and increasing financial literacy. This development was followed by a number of financial instruments, such as the growth of financial markets, increasing public understanding of finance, developments in financial technology, and not to mention support from the government (Ernawati et al., 2022), (Ajib, 2022), (Alshater et al., 2022).

This can be found in several Muslim countries in the world, including Indonesia. A number of studies have presented various spectacular ideas to stimulate the business world to improve business performance, including company financial performance (Bananuka et al., 2019), (Menne et al., 2022). However, in the specific context of MSMEs in East Java, the challenges of financial literacy and the application of financial technology are still a major concern. Differences in education levels, access to information, and local business characteristics require in-depth research to understand the extent to which these innovations can be adopted and have a positive impact on the financial literacy of MSMEs at the local level. Therefore, the focus of this research is on the implementation of financial technology as an innovation that can increase the financial literacy of MSMEs in East Java. With this approach, it is hoped that this research can provide more specific and relevant insights to support the development of MSMEs in this area, as well as making a real contribution to regional economic development.

Financial Technology (Financial Technology or Fintech) refers to the use of technology to create, manage and provide financial services innovatively (Fauzan N I, 2019). Fintech encompasses a wide range of technological applications, including artificial intelligence, data analysis, mobile technology, and internet-based platforms, to change the traditional way of providing financial products and services. The main goal of Fintech is to improve efficiency, accessibility and user experience in a financial context.

Based on a poll conducted by the Asian Development Bank (ADB), more than 50% of micro, small and medium enterprises (MSMEs) temporarily stopped their activities when the pandemic began in 2020. This situation illustrates the lack of efficient governance of the Micro sector. , Small and Medium Enterprises (MSMEs) in Indonesia, which may worsen the existing MSME crisis. Rinaldo and Puspita (2018) found that micro, small and medium enterprises (MSMEs) without adequate governance require improvement and are vulnerable to collapse. Jaswadi et al. (2015) identified a relationship between the size of Micro, Small and Medium Enterprises (MSMEs) and the need for governance. The core principles of outstanding corporate governance are transparency, answerability, duty, autonomy and equality. This idea is mostly embraced by large companies. These two findings show that MSMEs need strong and effective governance. Better governance can improve the performance of micro, small and medium enterprises (MSMEs), thereby encouraging their further expansion. This is supported by various studies conducted by Van Den Berghe et al. (2011), Mariani & Panaro (2012), Htay & Salman (2013), Sarah (2017), Hussain & Hadi (2018), Sakhdari et al. (2020), La Rosa & Bernini (2018), Usman et al. (2020), Daw (2020), and Kurniawati et al. (2018) as cited in Rinaldo et al. (2023). Corporate governance investigations have emerged as an important field of study due to their correlation with several global failures [Aguilera, RV; Marano, V.; Haxhi, I., 2019]. Corporate governance refers to the process of considering the interests of all stakeholders, including society and the environment, while making choices [Chandrakant, R.; Rajesh, R.(2022), Husted, BW, (2019)].

Micro, Small and Medium Enterprises (MSMEs) in Indonesia have a major impact on the country's economic development, job creation and income distribution (Data and Information Center of the Ministry of Cooperatives and SMEs, 2020). MSMEs that implement sustainable governance practices tend to demonstrate higher resource efficiency in terms of energy and raw material utilization. J. Smith et al. (2017) stated that improving a company's reputation can grow consumer trust. S. Johnson et al. (2015) may be better prepared to comply with increasingly stringent environmental standards. A study conducted by A. Brown et al. in 2019 found that increased innovation could lead to the development of goods or services that focus more on environmental sustainability. R. Chen et al. (2018). Micro, Small and Medium Enterprises (MSMEs) have obstacles both in terms of financial and human resources in implementing environmentally friendly practices which require large initial investments. R. Chen and colleagues (2018).

Micro, Small and Medium Enterprises (MSMEs) as one of the business units with potential in driving the nation's economic growth, are also affected by this business development and financial innovation (Wasilu et al., 2022). However, a number of MSMEs are still shackled by various limitations that prevent them from taking business leaps in today's modern world.

In reality, MSMEs are often faced with significant challenges, such as limited ability to innovate. Limited human resources and limitations in financial management capabilities are the main obstacles in facing continuously developing business dynamics (Irawati et al., 2021). A limited level of innovation can hamper

the competitiveness of MSMEs in the global market, while low human resource capabilities can hamper the potential for developing superior products or services. Apart from that, constraints in financial management capabilities can also be a limiting factor in managing finances efficiently and sustainably. MSMEs often face challenges in planning and managing their finances properly, resulting in the risk of failure or inability to develop further.

Therefore, supporting MSMEs to overcome these limitations is essential in ensuring that they can contribute maximally to economic growth. Steps such as increasing financial literacy, innovation training and management guidance can help MSMEs overcome these challenges and open new opportunities for sustainable growth in this competitive business era.

Along with global development and digital transformation, the involvement of MSMEs in financial technology innovation is expected to improve operational efficiency, access to financial resources and risk management capabilities. Therefore, the background of this research aims to explore how the application of financial technology can be a catalyst for increasing the financial literacy of MSMEs, as well as identifying the factors that influence the successful implementation of this innovation. Through a deeper understanding of this phenomenon, it is hoped that concrete solutions can be found to improve the welfare and resilience of MSMEs in facing today's economic challenges. By detailing the analysis, it is hoped that this research can provide a deeper understanding of the challenges and opportunities faced by MSMEs in increasing financial literacy through the application of financial technology. Thus, it is hoped that the results of this research can provide policy recommendations and practical guidance to support the growth of MSMEs while making a positive contribution to overall economic development.

METHOD

The research method for developing a systematic literature review is called Systematic Literature Review (SLR). SLR follows clear steps, which go through three phases: (1) planning, (2) implementation, and (3) reporting (Martins et al., 2022). The Systematic Literature Review (SLR) method is used in this research to identify, review and evaluate research that is related and relevant in answering questions. SLR increases the transparency of the literature review process when compared to traditional literature reviews. SLR transparency in study selection can minimize subjectivity and enable structured/systematic literature identification and selection (Martins et al., 2022).

This systematic literature review consists of several stages: article selection method. Article obtained from online journal. The search was carried out using the keywords "Financial Technology and Financial Literacy" selecting articles that were accessible and relevant to the research.

RESULTS AND DISCUSSION

1. Financial Technology

Financial Technology (Financial Technology or Fintech) refers to the use of technology to create, manage and provide financial services innovatively (Fauzan N I, 2019). Fintech encompasses a wide range of technological applications, including artificial intelligence, data analysis, mobile technology, and internet-based platforms, to change the traditional way of providing financial products and services. The main goal of Fintech is to improve efficiency, accessibility and user experience in a financial context.

Financial innovation is a crucial paradigm in facing the dynamics of the continuously developing business environment. This concept includes the introduction, adoption and implementation of new practices in corporate financial management, including the adoption of new patterns from other organizations, with the aim of bringing change and progress. By integrating new ideas, financial innovation acts as a catalyst in encouraging the development of sectors, especially in corporate financial management, involving the creation of new financial instruments, technological development, the establishment of financial institutions, and the formation of new markets (Shy, 2019), (Mustikowati & Tysari, 2015).

Financial innovation has become a strategic instrument to respond to dynamic market demands and intense competition. Companies that are able to implement financial innovation effectively can take advantage of new opportunities, increase operational efficiency, and achieve resilience to economic uncertainty. In a business context that continues to change rapidly, a deep understanding of the concept and implementation of financial innovation is the key to company success.

Technology adoption by individuals and companies is now inevitable, driven by the expanding reach and presence of wireless phones, computers, the internet, and other gadgets. In developing countries with low levels of technology, the use of technology has become a pillar of individual and corporate success. The connection between technology and financial products offers an important bond in increasing financial literacy (Servon and R. Kaestner, 2008).

0. Financial Literacy

Financial literacy includes an individual's ability to understand financial concepts and principles that include financial products and services, including those based on financial principles. This not only involves understanding basic financial concepts, but also involves a comprehensive understanding of various financial products such as savings, investments, and insurance. Financial literacy provides the ability to understand the financial principles underlying those products and services, enabling individuals to make choices that are consistent with their financial values and principles.

A study by (Nasution & Nasution, 2019) emphasizes that financial literacy is not only important for financial management in general but also in particular in understanding and utilizing financial products effectively. By understanding financial principles, individuals can optimize the use of financial products that suit their needs while adhering to Islamic ethical principles in financial activities.

Many people try to define financial literacy on a personal level. Jump\$tart simply defines financial literacy as the ability to use knowledge and skills to manage one's financial resources effectively. At the company level, financial literacy emphasizes the ability of owners/managers to be able to deploy their financial skills and knowledge into company operations. The concept of financial literacy for SMEs arises from the small nature and small number of SME owners which creates opportunities to easily transfer their skills into corporate ventures. The World Bank Association in South Africa has attempted to define financially literate SME managers as having the following qualifications: having an adequate level of entrepreneurial competence, personal skills, and business management skills, having an appropriate level of understanding of functional financial management systems, having a level of appropriate. understanding of SME life cycle funding and other financial requirements, understanding the legal, regulatory and taxation issues relating to financial matters and understanding the various legal resources that can be selected when necessary, in the event of bankruptcy or other situations of financial difficulty (F.-A. Messy and C. Monticone, 2012).

0. MSMEs

Micro, Small and Medium Enterprises (MSMEs) are a business sector that has its own characteristics, especially in terms of operational scale and number of employees. MSMEs cover various types of businesses, ranging from small-scale family businesses to larger businesses with more employees (Afriani et al., 2022). These characteristics reflect a significant role in economic growth, job creation and increased prosperity at the local to national levels.

Tanzania's SME Policy defines SMEs as micro, small and medium enterprises. These organizations consist of non-agricultural activities mainly manufacturing, mining, trade and services. A micro organization is an organization that employs up to 4 people with a capital limit of Tanzanian shillings 5.0 million. Small businesses are considered to employ 5 to 49 human resources with capital investment ranging from Tsh 5 million to 200 million. Medium-sized companies are companies that employ between 50 to 99 people with a capital range of Tsh.200 to 800 million (URT,2003).

In Indonesia, provisions regarding MSMEs are regulated in Government Regulation Number 7 of 2021. This regulation regulates the convenience, protection and empowerment of cooperatives and MSMEs. Law Number 11 of 2020 (Job Creation Law) was issued on February 16 2020 along with 48 other government regulations. The existence of the UMKM PP has brought several changes to the provisions in Law number 20 of 2008 concerning micro, small and medium enterprises that were previously in force.

Table 1. Implementasi of Fintech and Financial Literacy

N o	Researcher	Tittle	Applied
1	K.M.M.C.B. Kulathunga. Jianmu Ye Saurabh Sharma P.R. Weerathunga	How Does Technological and Financial Literacy Influence SME Performance: Mediating Role of ERM Practices	Research on SMEs in Sri Lanka
2	Juma-Buhimila -Mabula	Use of Technology and Financial Literacy on SMEs Practices and Performance in Developing Economies	SMEs in developing countries
3	Mamik Nur Farida*, Yoyok Soesatyo, Tony Seno Aji	Influence of Financial Literacy and Use of Financial Technology on Financial Satisfaction through Financial Behavior. International Journal of Education & Literacy Studies	The research results show that financial literacy has no effect on finances behavior, but the use of financial technology influences financial behavior, financial literacy and the use of financial technology influences financial satisfaction
4	Nur Hamidah, Rida Prihatni, IGKA Ulupui	The Effect Of Financial Literacy, Fintech (Financial Technology) and Intellectual Capital On The Performance Of MSMEs In Depok City, West Java	Research on MSMEs in Depok City, West Java
5	Novia Utami	Analysis of the Use of Financial Technology and Financial Literacy Among MSMEs	The sample used was 125 business owners in Indonesia

Source: Secondary Data, processed, 2024

Kulathunga et al (2020) stated that the knowledge-based view (KBV) in the development of small and medium enterprises (SMEs) is still a topic of debate in the current literature. Although the convergence of technological and financial literacy (techno-finance literacy) is an important knowledge-based tool to overcome the rapid digitalization of business, the influence of techno-finance literacy in SME development has not been adequately researched. By utilizing KBV, we develop a single mediator structural model with the aim of exploring the influence of financial-technological literacy and enterprise risk management

(ERM) practices (applications) on SME performance. A self-administered structured questionnaire was used to collect data from 319 chief financial officers (CFOs) in Sri Lankan SMEs. Our research results highlight that techno-financial literacy is a significant determinant of two endogenous constructs, namely SME performance and ERM practices. Apart from that, ERM practices in SMEs also have a positive impact on SME performance. In addition, ERM practices were observed to have partial mediation on the relationship between financial literacy and SME performance. These findings form the basis for theories in techno-financial literacy and SME performance, as well as providing managerial implications for improving SME performance.

Juma et al (2018) stated that Micro, Small and Medium Enterprises (SMEs) in developing countries experience a series of unique challenges to achieve success. With the aim of analyzing the dual impact of SMEs' financial literacy and technology use on record-keeping and risk management practices as applied to company performance, least partial structural equation modeling was used to configure the perceived impact of these variables. The results show a significant relationship between a company's use of technology on recording practices and its performance, as well as a significant positive relationship between financial literacy and the company's risk management practices. However, this study found an insignificant relationship between financial literacy and company bookkeeping practices; this offers a dual practical role, namely financial literacy and the use of technology to improve the financial practices of SMEs in developing countries.

Mamik Nur Farida, Yoyok Soesatyo, Tony Seno Aji. (2021) with the results of this research show that financial literacy has no effect on financial behavior, but the use of financial technology has an effect on financial behavior, then financial literacy and the use of financial technology have an effect on financial satisfaction. It was also found that financial literacy and use of financial technology were mediated by financial behavior. Finally, the use of financial technology has no effect on financial satisfaction through financial behavior as an intervening variable.

Nur Hamidah, Rida Prihatni, IGKA Ulupui (2020) stated that MSMEs are increasingly developing and competing in an ever-changing business environment like today in the digital era, so it is necessary to monitor and understand company performance to achieve a better business level than before, and to find out the extent of the business being run. out on target. This research aims to analyze and test the influence of financial literacy, fintech (financial technology), and intellectual capital on the performance of MSMEs in Depok City. Determination of the sample uses probability sampling with proportional random sampling technique rather than simple random sampling. The number of samples used was 286 samples. Primary data sources were taken using a survey method with a questionnaire. The research design uses descriptive and parametric statistical analysis methods with instrument tests and multiple linear regression analysis. The results of this research are that financial literacy, fintech (financial technology) and intellectual capital have a positive and significant effect on the performance of MSMEs in Depok City.

Novia Utami (2023) stated that it is not only the huge impact of the Covid-19 pandemic and continuous technological innovation that is changing people's lives; The world is now experiencing the emergence of FinTech. FinTech is a technology-based financial service that allows financial transactions to be carried out quickly, anywhere and at any time. FinTech has provided advantages for MSMEs, starting from capital financing to ease of transaction processes to boost MSME growth. This research aims to see the influence of FinTech adoption and financial literacy on the development of Indonesian MSMEs. The data used an online questionnaire while the sample was selected using a convenience sampling technique with 125 business owners participating in this research. The data was then analyzed using the OLS regression method. The research results show that FinTech and financial literacy have a positive and significant effect on the development of MSMEs.

Based on several studies above, it shows that the use of FinTech influences the financial performance of Indonesian MSMEs because it provides convenience and efficiency in technology-based financial management which includes digital financial management, payment technology and online-based loans. The emergence of FinTech has helped MSMEs by enabling customers to make payments online, so that transactions become faster and more efficient. Apart from that, FinTech helps MSMEs get a certain amount of capital easily, even without collateral. They no longer need to take out bank loans and, therefore, can avoid the lengthy lending process that often requires them to provide collateral. FinTech can help business owners who do not have access to banks to expand markets and reach new customers through practical and easy digital financial transaction services. FinTech offers alternative financing solutions to people who demand more democratic and transparent alternatives to help people who fail to access traditional banking services due to strict banking regulations and limited services in certain areas. FinTech innovation aims to provide alternative solutions to society and increase financial inclusivity. The emergence of FinTech has changed all parts of the financial system, from the role of technology to consumer behavior, from regulation to production of financial instruments. The trend driving the current FinTech scenario is digital transformation in digital financial services and FinTech startups.

Most SMEs feel ineffective in monitoring current developments in information technology and updating them to new versions of information technology that are currently being developed. In addressing these challenges, it is important to understand the relative impact of financial literacy and information technology on corporate practices as exemplified in this research. Putting the financial knowledge and skills of SME owners/managers together with the adoption of appropriate technology has a series of operational enhancements that if properly understood and utilized will definitely enhance the company's effective practices ultimately improving performance.

CONCLUSION

It is hoped that the results of this research can help business people see financial technology not as a threat but as a tool that makes it easier to provide

loans, finance capital, pay bills, check payments, and market MSME products. This goal is similar to the Financial Services Authority (OJK) program to increase financial literacy and encourage financial inclusivity. MSMEs are also expected to have better knowledge about financial products and financial management with the presence of financial technology as a tool that makes everything easier.

Recommendations for further research include adding more variables to find out other factors that influence the development of MSMEs besides financial technology and financial literacy, as well as increasing the sample size to ensure equal distribution of data.

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