THE IMPACT OF LOW DIGITAL AND FINANCIAL LITERACY ON THE USE OF FINTECH INVESTMENTS BY MSME BUSINESS ACTORS

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Article Info	Abstract
	The development of financial technology (fintech) offers significant opportunities for Micro, Small, and Medium Enterprises (MSMEs) to access financial services, particularly in the investment sector. However, low levels of digital and financial literacy remain major challenges affecting the safe and optimal use of fintech investment services. This study aims to analyze the levels of digital and financial literacy among MSMEs and their impact on fintech investment use in the Tembilahan area. This study used a qualitative approach using in-depth interviews with three business and community informants with varying experiences in using fintech investment services. The research results show that understanding and utilization of fintech investment in the Tembilahan community has begun to grow, particularly among individuals with better digital and financial literacy. Ease of use of the application, trust in the platform, which is supervised by the Financial Services Authority (OJK), and perceived security are the main drivers of interest in using fintech investment. However, low financial literacy and a lack of education still hinder some residents from making rational investment decisions. This study concludes that financial and digital literacy play a crucial role in shaping interest and behavior in using fintech investment, and contribute to improving the performance and sustainability of MSMEs. Therefore, ongoing and contextual efforts to improve financial and digital literacy education are needed to encourage the safe, inclusive, and sustainable use of fintech investment in the Tembilahan area.

1. INTRODUCTION

Background Problem

Financial literacy plays a crucial role in the sustainability of MSMEs in Indonesia. Currently, many MSMEs still face challenges in financial management, which ultimately impacts their ability to survive and thrive. According to data from the Financial Services Authority (OJK, 2021), only around 30% of MSMEs have adequate financial literacy, while the remainder often struggle to understand basic concepts such as budget planning, cash flow management, and separating personal and business finances. This low level of financial literacy results in many MSMEs sub optimally allocating capital, making them vulnerable to financial problems when facing economic changes. According to Maulana and Suyono (2023), MSMEs often struggle to prepare emergency funds or choose appropriate financing options, resulting in them relying on high-interest debt when they need additional capital. Furthermore, low financial literacy makes it difficult for business owners to properly evaluate investments or make purchasing decisions, which risks burdening their business finances in the long term (Bank Indonesia, 2022) [1].

One of the main factors exacerbating this risk is the public's low digital and financial literacy. Digital literacy refers to an individual's ability to access, evaluate, and use digital information safely, while financial literacy involves understanding basic concepts such as risk, return, and asset management (Eshet Alkalai), 2004; Chen & Volpe, 1998). In Indonesia, a 2022 survey by the Financial Services Authority (OJK) showed the national financial literacy index was only 49.68%, with higher digital literacy levels remaining minimal in the context of cybersecurity, such as identifying phishing or verifying investment platforms (OJK, 2022)[2].

The low level of both literacy levels directly influence risk fintech investment practices, where people are trapped in unsafe behavior such as investing in illegal platforms with promises of high returns without risk analysis, or sharing personal data on unverified applications (Firdaus & Lestari, 2021). Previous research, such as that conducted by Putri et al. (2024), identified eight challenges to digital financial literacy in Indonesia, including delays in seeking new information and financial issues, relevant to rural contexts like Tembilahan (Putri et al., 2024).

Therefore, this qualitative research is essential to delve deeper into the experiences and understanding of the Tembilahan community regarding the impact of low digital and financial literacy on risky fintech investment practices. Using a qualitative approach, this study aims to understand the psychological, social, and behavioral mechanisms underlying risky decisions, as well as identify types of risky practices such as impulsive investment or data breaches. The research findings are expected to contribute to regulators such as the Financial Services Authority (OJK), local fintech providers, and educational institutions in Riau, in designing evidence-based interventions, such as digital-financial literacy programs tailored to the Tembilahan context, to minimize financial losses and promote safe financial inclusion (OJK, 2023; Ministry of Finance, 2023).

Previous research by Sari and Nugroho (2021) showed that low digital literacy leads people to use fintech services without adequately understanding the features, risks, and investment mechanisms. Furthermore, research by Putri et al. (2022) found that easy access to fintech encourages risky investment behavior, particularly among people with low financial literacy. This aligns with the Financial Services Authority (OJK) findings that low financial literacy increases people's vulnerability to risky and illegal investments.

Formulation of The Problem

1. What is the level of digital literacy among MSME business actors in using fintech investment?
2. What is the level of financial literacy of MSME business actors in understanding the risks and benefits of fintech investment?
3. To what extent does digital literacy influence the use of fintech investment by MSME business actors?
4. To what extent does financial literacy influence the use of fintech investment by MSME business actors?

Research Purposes

1. To determine the level of digital literacy of MSME business actors in using fintech investment.

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2. To determine the level of financial literacy of MSME business actors regarding investment decision making through fintech.
3. To analyze the influence of digital literacy on the use of fintech investment among MSME business actors.
4. To analyze the influence of financial literacy on the use of fintech investment among MSME business actors.

2. LITERATURE REVIEW

Financial technology (fintech)

Financial technology is the integration of financial systems with technology that enables the purchase and sale of products or services at different times and in different market spaces (Freedman, 2006 in Sari & Kautsar, 2020). Ehrentraud et al. (2020) in Lu et al. (2020) explain the taxonomy of the fintech environment in an illustration of a "Fintech Tree." The fintech tree distinguishes three categories: fintech activities, connecting technologies, and policy support. At the top of the tree are various forms of fintech activities (or the provision of technology-based financial services), which can be divided into the following financial service categories: (i) deposits and loans; (ii) capital raising and alternative funding sources; (iii) asset management, trading, and related services; (iv) payment, clearing, and settlement services; (v) insurance; and (vi) crypto assets. These activities also include AT, cryptocurrency, crowdfunding, P2P lending, and fintech lenders. The tree trunk consists of a number of technologies that present new opportunities for the financial industry. These include AI, application programming interfaces (APIs), machine learning (ML), biometric-based identification and authentication (biometrics), cloud computing (CC), quantum computing (QC), and DLT. These technologies interact with and mutually reinforce fintech services. At the root of the fintech tree are policies that create the foundation of the digital infrastructure needed to provide these services. For example, broadband networks, digital IDs, data protection and cybersecurity frameworks, and other financial innovations[3].

Financial literacy

Financial literacy is a combination of knowledge, skills, and attitudes regarding financial management (Cohen & Nelson, 2011 in Sari & Kautsar, 2020). According to the Financial Services Authority (2017), financial literacy is the knowledge, skills, and beliefs that influence attitudes and behavior to improve the quality of decision-making and financial management in order to achieve prosperity. Carpena et.al (2011) in the Financial Services Authority (2017) stated that there are 3 (three) dimensions of financial literacy: (1) calculation skills, (2) understanding of basic finance, and (3) attitudes towards financial decisions. Meanwhile, Willis (2008) stated that knowledge in the context of financial literacy includes knowledge, education, and information regarding finance and its sources, banking, deposits, credit, insurance, and taxes [4].

If someone understands financial knowledge, they will be interested in utilizing the various financial products and services available more effectively (OECD, 2016; OJK, 2017 in Sari & Kautsar, 2020). This is because people with high levels of financial literacy will use financial products and services that suit their needs. They typically have better financial planning, avoid investing in unclear financial instruments, and understand the benefits and risks of financial products and services (Noor, Fourqoniah, & Aransyah, 2020). Conversely, people with low levels of financial literacy are easily deceived when using financial products.

Interest

Interest is a person's situation before taking action that can be used as a basis for predicting behavior or action (Kotler & Amstrong, 2002) Interest arises when an individual is attracted to something because it suits his needs or feels that something to be learned is meaningful to him. According to Rosyidah in (Susanto, 2013),

the emergence of interest in a person can be divided into two, namely: 1) Interest that comes from nature, is an interest that arises by itself from each individual, and is usually influenced by hereditary factors or scientific talents. 2) Interest that arises due to external influences on the individual, is an interest that is influenced by the environment, parental encouragement, and habits or customs.

3. FRAMEWORK THINKING

The development of financial technology (Fintech) has facilitated financial services such as digital payments, online loans, investments, and financial management. However, fintech adoption is influenced not only by the availability of technology but also by the public's level of financial literacy.

Financial literacy encompasses knowledge, skills, and attitudes in managing finances. Individuals with good financial literacy tend to understand the benefits, risks, and how to use digital financial products wisely. This understanding will influence someone's interest in using fintech[5].

Meanwhile, interest is an individual's tendency or attraction to use a product or service. Interest arises when someone perceives fintech as useful, suitable for their needs, and easy to use. Therefore, the higher a person's financial literacy, the greater their interest in using fintech.

Based on this description, financial literacy has an important role in encouraging interest in using fintech in society.

Figure 1. Research Framework
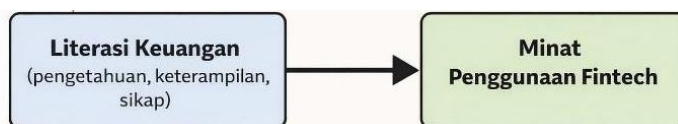
Sorurce: Processed By Researchers, 2025

RESEARCH PROPOSITION

Based on the framework of thought and literature review regarding financial literacy and financial technology (fintech), the hypothesis in this study is formulated as a working hypothesis which functions as the direction of research analysis, namely as follows:

As an affirmation of the relationship between the framework of thought and the literature review, research propositions are formulated as following:

Proposition 1

The better an individual's financial knowledge, the higher their interest in using fintech.

Proposition 2

Good financial skills will increase an individual's interest in using fintech.

Proposition 3

A positive financial attitude shapes interest in using fintech sustainably.

5. RESULTS AND DISCUSSION
Result

Based on interviews with three sources in the Tembilahan area, it can be concluded that understanding and utilization of fintech investment among the public has begun to develop, but levels of literacy and understanding vary among individuals. This indicates that despite the increasing popularity of financial technology, not everyone fully understands its functions and benefits in the investment sector.

From the interview results, source person First, Mr. Adam, has been actively using two fintech investment applications, namely Bibit and A manHe explained that the reason for choosing this application was because its features are easy for beginners to use and it has a large user base, fostering trust in the platform. Furthermore, he believes that applications directly supervised by the Financial Services Authority (OJK) are safer and more secure from the risk of fraud or fraudulent investments. This view demonstrates that ease of access, trust, and guaranteed security are important factors that encourage people to start investing digitally[6].

Meanwhile, the second source, Mr. Toni, also uses the application Indosat for their investment activities. While the reason for choosing the app wasn't explained in detail, it demonstrates that the Tembilahan community is becoming more open to digital technology-based investment. The use of this app signals a shift in community behavior from conventional investment to more modern and practical online platforms.

Unlike the previous two sources, Mr. Zidan, the third source, admitted to not having used a fintech investment app. He cited a lack of knowledge about how fintech investment works and its benefits. However, he expressed interest in trying it after learning that investing through fintech apps is easy.
and safe. This shows that public interest in fintech investment is actually quite high, but is still hampered by a lack of education and outreach within the community [7].

Overall, the interview results indicate that the Tembilahan community has begun to recognize and utilize fintech investment, especially those more familiar with digital technology. Factors such as ease of use, a sense of security due to OJK supervision, and trust in the platform are key reasons why people are attracted to these services. However, some still don't understand the concept and workings of digital investment due to a lack of financial literacy and limited information.

Thus, it can be concluded that the potential for fintech investment development in Tembilahan is enormous, especially if accompanied by increased education, digital literacy, and outreach from the government and financial institutions. As the public increasingly understands the benefits and workings of fintech investment, interest in digital investment will increase and can stimulate broader economic growth.

Discussion

MSMEs in Indonesia make a significant contribution to the national economy, yet low financial literacy remains a fundamental issue. Recent studies have shown that the majority of MSMEs face challenges in cash flow management, financial record-keeping, and the use of digital financial products. In the digital era, these challenges are exacerbated by a lack of understanding of online transaction security, fintech-based debt management, and working capital management through digital platforms[8].

Financial literacy influence performance SMEs This can be achieved through several mechanisms. First, the ability to manage a budget helps entrepreneurs predict cash needs and avoid bankruptcy. Second, understanding financial instruments increases access to external capital, both through banking and fintech. Third, the ability to evaluate investments encourages entrepreneurs to choose appropriate expansion strategies. Studies show that MSMEs with high financial literacy experience more stable revenue growth, better cost efficiency, and higher profitability[9].

The digital era has given rise to a new need: digital financial literacy. The use of e-wallets, mobile banking, and digital payment systems facilitates transactions, but also requires an understanding of data security. Digital financial literacy helps MSMEs capitalize on the opportunities of digitalization while avoiding the risks of cybercrime. The combination of traditional and digital financial literacy has been shown to increase business resilience.distortion market.

Several factors act as moderators and mediators in the relationship between financial literacy and MSME performance, including:
a) Financial inclusion: access to financial institutions strengthens the effects of financial literacy.
b) Locus of control: entrepreneurs with strong internal control are better able to utilize financial literacy.
c) Technology: adoption of digital technology accelerates the impact of financial literacy on productivity.
d) Managerial competencies: managerial skills enhance the implementation of good financial practices.

Research in Indonesia, Malaysia, and other ASEAN countries shows a consistent pattern: financial literacy has a significant impact on MSME performance. However, the degree of influence varies depending on the digital infrastructure and financial culture in each country. In Indonesia, digital literacy is a crucial factor due to the high penetration of fintech.

Based on the literature review, a conceptual model can be formulated that explains the relationship between financial literacy and MSME performance in the digital era influence performance, both directly and indirectly, with digital literacy, financial inclusion, and managerial competence as moderating and mediating variables. This model can be used as a basis for formulating policies to strengthen the capacity of MSMEs.

Policy implications include the need for a financial literacy curriculum tailored to the characteristics of digital MSMEs. The government, financial institutions, and fintech platforms need to provide applicable educational programs. Practically, MSMEs are encouraged to use simple, digital-app-based bookkeeping systems, implement cash flow planning, and adopt electronic payment methods with security in mind.

Although financial literacy has been proven to be important, its implementation remains limited. Many MSMEs still face barriers to accessing education and technology. Furthermore, most research is survey-based, so causal relationships remain untested. Further research using longitudinal and experimental approaches is needed to strengthen empirical evidence.

A synthesis of articles from 2020-2025 reveals a consistent pattern, where financial literacy (F) is positively associated with MSME (MSME) performance, both through direct and indirect channels. Most quantitative studies based on regression/PLS-SEM report a significant positive coefficient for the FFS relationship, while qualitative studies confirm the practical mechanisms of improved record-keeping, budgeting, cost control, and financing evaluation (Fauzi & Iramani, 2018; Culebro Martinez et al., 2024; Abdallah et al., 2024). However, the strength of the effect varies across contexts and performance indicators (profitability, sales growth, cost efficiency, cash flow stability). This variation can be explained by differences in the quality of FFS measurements, sector heterogeneity, the intensity of digitalization, and local institutional oversights[10].

Low financial literacy has a significant impact on the sustainable management of MSMEs. Some of the impacts: 1). Difficulty in financial planning. MSMEs with low literacy struggle to develop business financial plans such as capital budgeting, cash flow, and financial reports. As a result, business operations lack direction. 2). Poor financial management. Lack of understanding of accounting and financial management concepts makes it difficult for MSMEs to record financial transactions. This increases the risk of errors in calculating the cost of production, profit/loss, and early detection of financial problems. 3). Low access to external funding. MSMEs with low literacy generally have minimal financial records. This makes it difficult for MSMEs to provide data when accessing bank credit or online loans. This reduces the opportunity to obtain external funding. Improving financial literacy is important so that MSMEs can run their businesses in a more focused, well-managed manner, and access broad funding for business development.

6. CONCLUSION

Based on the research results and discussion outlined above, it can be concluded that the understanding and utilization of fintech investment in the Tembilahan community has begun to develop, but differences in digital and financial literacy levels remain. Some residents have been able to utilize fintech investment applications effectively due to their ease of use, trust in the platforms, and security assurances through supervision by the Financial Services Authority (OJK). However, some residents remain unused to fintech investment due to limited knowledge and a lack of education regarding the concept, benefits, and risks of digital investment.

Interview results indicate that public interest in fintech investment is actually quite high, but low financial and digital literacy are key inhibiting factors in investment decision-making. This finding aligns with literature studies that show financial literacy has a significant impact on financial behavior and economic performance, including in the context of MSMEs.

In the context of MSMEs, low financial literacy results in weak financial planning, poor cash flow management and financial record keeping, and limited access to external funding. Financial and digital literacy

have been shown to play a crucial role in improving MSME performance through more rational financial decision-making, optimal use of financial technology, and increased business efficiency and sustainability. Therefore, it can be concluded that improving financial and digital literacy is a key factor in encouraging the use of fintech investment and strengthening MSME performance in the digital era. The potential for fintech investment development in the Tembilahan region is significant if supported by ongoing education and inclusive policies.

7. SUGGESTION

1. For the Government and Related Authorities

Regional governments and the Financial Services Authority (OJK) are expected to continuously enhance financial and digital literacy education and outreach programs, particularly regarding safe and legal fintech investments. These programs need to be tailored to the characteristics of local communities and MSMEs.

2. For Financial Institutions and Fintech Platforms

Financial institutions and fintech service providers are expected to provide educational features that are easy for the public to understand and improve consumer protection to further increase trust in fintech investment.

3. For MSMEs

MSMEs are advised to improve their understanding of financial and digital literacy, including financial record-keeping, cash flow planning, and the use of financial technology. This is crucial for supporting business sustainability and expanding access to funding.

4. For Further Researchers

Further research is recommended to use a larger number of respondents and quantitative or mixed methods research methods so that the research results are more general and able to explain the causal relationship between financial literacy, digital literacy, and the use of fintech investment in more depth.

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