



THE EFFECT OF FINANCIAL LITERACY ON FINANCIAL MANAGEMENT BEHAVIOR WITH FINANCIAL RISK ATTITUDE AND FINANCIAL TECHNOLOGY AS MEDIATING VARIABLES

PENGARUH LITERASI KEUANGAN TERHADAP PERILAKU PENGELOLAAN KEUANGAN DENGAN SIKAP RISIKO KEUANGAN DAN TEKNOLOGI KEUANGAN SEBAGAI VARIABEL MEDIASI

Siti Robihah Al Maliyah ^{1*}, Hamidah ², Umi Widyastuti ³

¹ Master of Management, State University of Jakarta, Email: sitirobihah09@gmail.com

² Master of Management, State University of Jakarta, Email : hamidah@unj.ac.id

³ Master of Management, State University of Jakarta, Email : umiwidyastuti_feunj@unj.ac.id

*email Koresponden: sitirobihah09@gmail.com

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Abstract

This study aims to determine the extent to which financial literacy affects the financial management behavior of MSME actors in DKI Jakarta, by considering the role of attitudes towards financial risk and the use of financial technology as mediating variables. The background of this study comes from the fact that there are still many MSME players who are not able to manage their finances optimally, even though access to information and digital financial services is quite widespread. Using a quantitative approach, data were collected from 156 individual business owners and analyzed through the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The results showed that financial literacy did not have a significant direct effect on financial management behavior. However, financial literacy has a positive and significant effect on financial risk attitudes and financial technology. These two variables directly influence financial management behavior, and act as mediators in the relationship between financial literacy and financial management behavior. These findings emphasize the importance of a financial literacy approach that not only focuses on increasing knowledge, but also includes the formation of rational risk attitudes and the practical use of financial technology. This kind of literacy strategy is considered more relevant and effective in improving the financial management of MSME actors, especially in the current digital era.

Keywords: Financial Literacy, Financial Risk Attitude, Financial Technology, Financial Behavior, MSMEs.

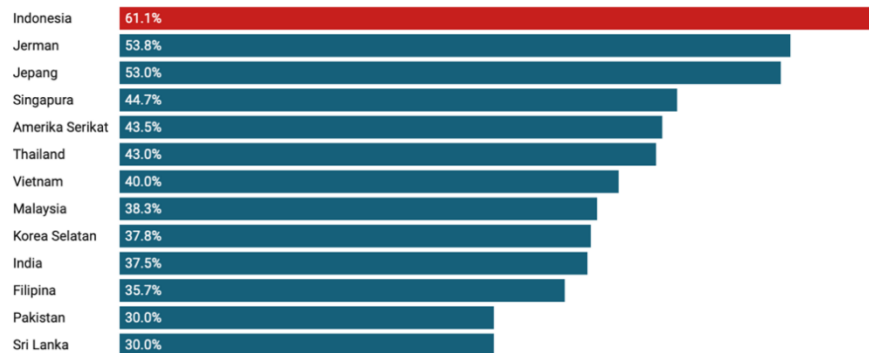
1. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are business activities that play an important and strategic role in national economic development, contributing significantly to Gross Domestic Product (GDP). The presence of MSMEs greatly supports job creation, particularly in smaller regions. Sri Mulyani has indicated that MSME performance plays a



substantial role in Indonesia's economic growth an impact that is even more pronounced when compared to countries within the ASEAN region and the G20.

Kontribusi UMKM Terhadap PDB Suatu Negara



Source: CNBC Indonesia Research (2024)

Figure 1. The Contribution of MSMEs to National GDP

It is important to note that, despite the substantial contributions of Micro, Small, and Medium Enterprises (MSMEs) to the Indonesian economy including significant roles in employment absorption and GDP contribution many MSMEs still face challenges in financial and administrative management, particularly in the area of bookkeeping. Many MSME actors in Indonesia have not yet established sound financial management habits. They frequently fail to separate personal and business finances, resulting in imbalances in cash flow. Without proper management, MSMEs find it difficult to plan and monitor their finances effectively.

This statement is supported by data from Statistics Indonesia (BPS) in 2020, which revealed that 98% of micro and small enterprises in Indonesia do not maintain organized bookkeeping, and only 2% utilize proper financial recording systems. Preliminary research indicates that MSME actors typically only separate private funds from business funds, but many do not keep systematic financial records. As a result, many MSMEs are unable to accurately monitor their income and expenditures, despite having adequate access to financial information and resources. This is further corroborated by data from the Financial Services Authority (OJK) in 2024 as presented in the following figure.



Source: Otoritas Jasa Keuangan 2024

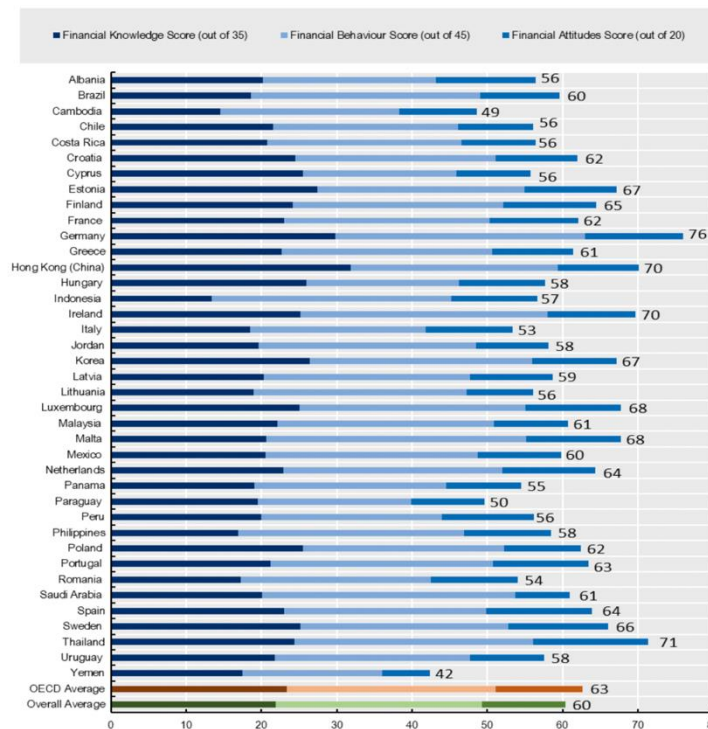
Figure 2. National Financial Literacy and Inclusion Survey

Without sound financial management, micro, small, and medium enterprises (MSMEs) often face issues such as accumulating debt, difficulties in fulfilling tax obligations, and delays in payments to suppliers, which may ultimately disrupt their business operations. The lack of financial management skills is believed to be partly caused by insufficient financial literacy. According to the Financial Services Authority (OJK), financial literacy is an essential factor that can drive effective financial management behavior.

The Organization for Economic Cooperation and Development (OECD) defines financial literacy as the knowledge individuals possess regarding financial concepts and risks, along with the skills to apply this knowledge when making financial decisions that promote individual well-being and prevent financial problems. According to the data OECD (2023) Indonesia's financial literacy score of 57 remains below the global average, which stands at 60.

Based on Figure 2, it can be concluded that Indonesia's financial literacy rate remains significantly lower than that of neighboring countries. This indicates that the proportion of financially aware individuals in Indonesia lags behind those in other countries in the region. This finding is further supported by the preliminary research in this study, which shows that MSME actors generally possess only basic financial knowledge, lacking depth and specificity.

Sound financial management begins with foundational knowledge, one of which is financial literacy. Financial literacy can be defined as an individual's ability to interpret financial concepts and to effectively manage personal finances, including making accurate financial decisions, engaging in long-term financial planning, and the capacity to analyze economic events and conditions. Such capabilities are essential for improving living standards and achieving overall financial well-being (Amida et al., 2022). Financial literacy is closely related to an individual's ability to manage finances; thus, the role of financial literacy can encourage individuals to overcome difficulties in financial management. Andarsari & Ningtyas (2019) analyzing the role of financial literacy on financial behavior reveals that financial literacy has a positive and significant influence on financial behavior. Sound financial behavior is essential for achieving long-term financial stability (Griffin & Sibilang, 2022).



Source: (OECD, 2023)

Figure 3. Level of Financial Literacy

Preliminary research findings indicate that 6 out of 10 individuals exercise greater caution when applying for loans, with some explicitly preferring to avoid incurring debt altogether. Another challenge faced by MSME actors is the prevalence of risk attitudes that are either uncontrolled or excessively conservative when confronted with financial opportunities. Some entrepreneurs are overly risk-averse, making them reluctant to take necessary financial steps, while others display overconfidence without adequately accounting for potential losses.

According to the 2020 World Bank Report, approximately 40% of MSMEs in Indonesia refrain from seeking loans due to concerns over repayment failure or excessive anxiety regarding debt risk. On the other hand, a substantial number of MSMEs utilize credit for operational expenses without proper planning, which often results in debt servicing difficulties. This imbalance in risk attitudes impedes MSME development both excessive risk aversion, which stifles business growth, and overconfidence, which can lead to significant financial losses.

A survey on credit card usage was conducted to gather insights into the respondents' financial conditions. In essence, financial behavior shapes how individuals organize and make optimal financial decisions, as reflected in both their mentality and actual financial management practices.

As illustrated in Figure 4 below, 61.0% of Generation Z or youth respondents indicated using credit to purchase products such as fashion and accessories (Katadata Insight Center, 2024).



| | TOTAL | Generasi Y/Milenial | Generasi Z |
|---|-------|---------------------|------------|
| <i>Jumlah Responden</i> | 997 | 653 | 205 |
| Fashion & aksesoris (baju, celana, sepatu, dll) | 48.5% | 46.4% | 61.0% |
| Pulsa | 45.5% | 42.6% | 56.6% |
| Gadget | 44.8% | 49.0% | 24.4% |
| Elektronik rumah tangga | 40.6% | 44.0% | 22.0% |
| Makanan | 27.1% | 27.7% | 23.9% |
| Lainnya | 9.0% | 9.6% | 4.9% |

Source: Katadata (2024)

Figure 4. Credit Utilization Survey

Individuals with a more aggressive financial risk attitude and a lack of financial management awareness tend to avoid more realistic financial risks. They often perceive installment plans or credit card use as short-term solutions, without considering their long-term debt implications. Such behavior can increase the likelihood of credit default, as individuals eventually struggle to repay their installments and debts, potentially exacerbating personal financial problems.

Currently, Indonesia, as a developing country, still faces numerous issues in the financial sector. The increasing complexity of financial products and Financial Technology (Fintech), exemplified by the emergence of services such as e-wallets, peer-to-peer (P2P) lending, and digital investment platforms, provides society with a wide array of financial management options. However, the lack of financial literacy renders many individuals vulnerable to financial risks, including fraud, consumptive debt, and fraudulent investments.

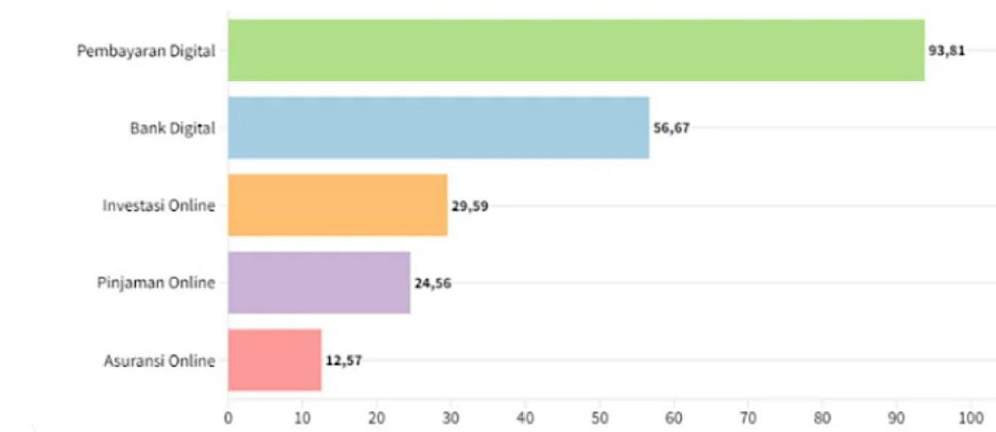
According to data from the Financial Services Authority (Otoritas Jasa Keuangan, OJK) in 2024, 57.3 percent of the total national non-performing individual online loans are dominated by individuals aged 19-34 years. Indeed, the data Pusat Pelaporan dan Analisis Transaksi Keuangan (PPATK) (2024) as of July 2024, there are approximately 4 million players and 168 million online gambling transactions in Indonesia. These figures increasingly demonstrate that the knowledge, skills, and attitudes of Indonesian society regarding financial management still require significant improvement. Therefore, it is crucial for every individual to possess expertise in financial management, particularly concerning financial literacy, financial risk attitude, and financial technology.

Previously, exchanges had to be carried out face-to-face and required the use of cash. Today, transactions must be able to be conducted remotely and can take place within minutes or even seconds. According to the Financial Services Authority (OJK) website, the advent of fintech offers several benefits. For instance, fintech can foster innovation within the technology start-up sector, contribute to job creation, and optimize growth in financial management.

Currently, payment systems are no longer dependent on credit cards although they are still in use today especially with the emergence of diverse monetary innovations. Financial innovation, commonly referred to as financial technology (fintech), according to the Financial Services Authority (OJK), is the development within the financial administration industry that leverages the use of technology (Saragih & Lestari, 2022). Payment systems, crowdfunding, peer-to-peer (P2P) lending, digital banking, and online or digital insurance are examples of fintech present in Indonesia. Study Saragih & Lestari (2022), fintech can also be defined as the convergence of financial administration and development that transforms the financial



management playbook from conventional to transparent practices. Research by DataIndonesia.id indicates that the use of financial technology (FinTech) companies has become increasingly widespread across society. Access to financial technology, particularly digital payment systems, has positively impacted financial management behavior by enhancing efficiency, convenience, and financial inclusion. Nevertheless, challenges such as the risk of overspending and the need for financial-digital literacy must still be addressed through targeted education and policy development (Budiasih, 2024; Sukma et al., 2024).



Source: DataIndonesia.id (2023)

Figure 5. Survey on the Utilization of Financial Technology (FinTech)

The figure above is consistent with preliminary research findings among several MSME actors who have chosen to utilize digital financial services such as QRIS, mobile banking, and similar platforms. The primary reason for adopting digital payment methods is the increased convenience in monitoring and controlling income and expenditures. Public dependence on digital services continues to rise in line with behavioral shifts in financial transactions.

Another factor influencing individuals' financial management behavior is Financial Technology (FinTech). The more frequently an individual uses and takes advantage of FinTech, the more proficient they become in managing their finances. This statement is corroborated by various studies conducted by researchers in this field Azzahraa & Kartini (2022), Ferdiansyah & Triwahyuningtyas (2021), Khofifah et al. (2022), with Rahma & Susanti (2022) it is stated that fintech has an influence on financial management, where individuals can leverage the convenience provided by fintech to conduct payment transactions and other financial management activities such as saving, investing, and so forth. In this context, fintech specifically digital payment affects financial management behavior both positively and negatively. On the one hand, the ease of access and use of financial technology encourages better financial management practices, particularly when supported by adequate financial and digital literacy (Aisyah et al., 2023; Fadiyah & Widodo, 2024; Song & Valencia, 2024; Sukma et al., 2024).

On the other hand, the ease of conducting digital transactions may increase the risk of overspending behavior, as explained through the perspective of mental accounting, in which digital payments tend to make individuals spend money more easily compared to cash payments (Shah et al., 2024; Wiranti, 2022). However, different findings were obtained by Solikhatusun & Ridlwan (2022) and Wiranti (2022) Financial management cannot be influenced



by financial technology (fintech). This is because the public has not been actively using fintech to manage their finances; rather, they use it solely as a means of conducting financial transactions.

Based on the above problem background, this study formulates several research questions: Does financial literacy have a direct effect on financial management behavior, risk attitude, and financial technology usage. Do risk attitude and financial technology usage directly affect financial management behavior. Does financial literacy have an indirect effect on financial management behavior through the mediating roles of risk attitude and financial technology usage.

2. RESEARCH METHOD

This study will analyze the effect of financial literacy on financial management behavior, with financial risk attitude and financial technology as mediating variables. It explicates the reciprocal influences among the variables under investigation. A quantitative approach is employed; quantitative research is characterized by a systematic, planned, and organized structure from the beginning to the end of the project. In other words, quantitative research typically uses numerical data for collection, interpretation, and reporting of results (Tuerah et al., 2023; Santoso et al., 2022).

The research is scheduled to take place over a period of six to seven months, from early January 2025 to late July 2025. The specific timeline is as follows: submission of the title and preparation of the proposal between January and April 2025; literature review and preliminary observation in May 2025; proposal seminar in May 2025; data collection and analysis in June–July 2025; and reporting of results in July 2025. The fieldwork will be conducted in the Special Capital Region of Jakarta, focusing on urban areas with high access to digital financial services, due to the population's active use of financial technology and the wide variation in financial literacy levels. The study population comprises individual micro, small, and medium enterprises (MSMEs) that are members of the Sahabat UMKM Indonesia Community in DKI Jakarta, with a sub-population of individual MSME operators residing and conducting business in Central Jakarta. A sample of 156 respondents was determined using Slovin's formula with a 5% margin of error, supported by a minimum of 150–200 respondents in accordance with the "10-times rule." (Hair, 2011). For the PLS-SEM analysis, primary data were collected using a 5-point Likert-scale questionnaire. The instrument items were measured according to the operationalization of the following variables: financial literacy, financial risk attitude, financial technology, and financial management behavior. Quantitative data analysis will be conducted using Partial Least Squares (PLS) and will include: assessment of construct validity via Pearson's correlation; reliability testing using Cronbach's Alpha; cross-tabulation analysis; Common Method Bias examination through Harman's Single-Factor Test; evaluation of the SEM outer (measurement) model and inner (structural) model; and hypothesis testing for direct and indirect effects employing bootstrapping in SmartPLS.

3. RESULTS AND DISCUSSION

An analysis of 156 MSME operators in DKI Jakarta reveals several noteworthy characteristics reflecting the profile of micro, small, and medium-sized enterprises in the metropolitan area. By gender distribution, women predominate with 83 respondents (53.2%) compared to 73 men (46.8%). This phenomenon underscores the significant role of women in the MSME sector in DKI Jakarta, which may be attributed to entrepreneurial flexibility in



accommodating domestic responsibilities and the aspiration to achieve economic independence.

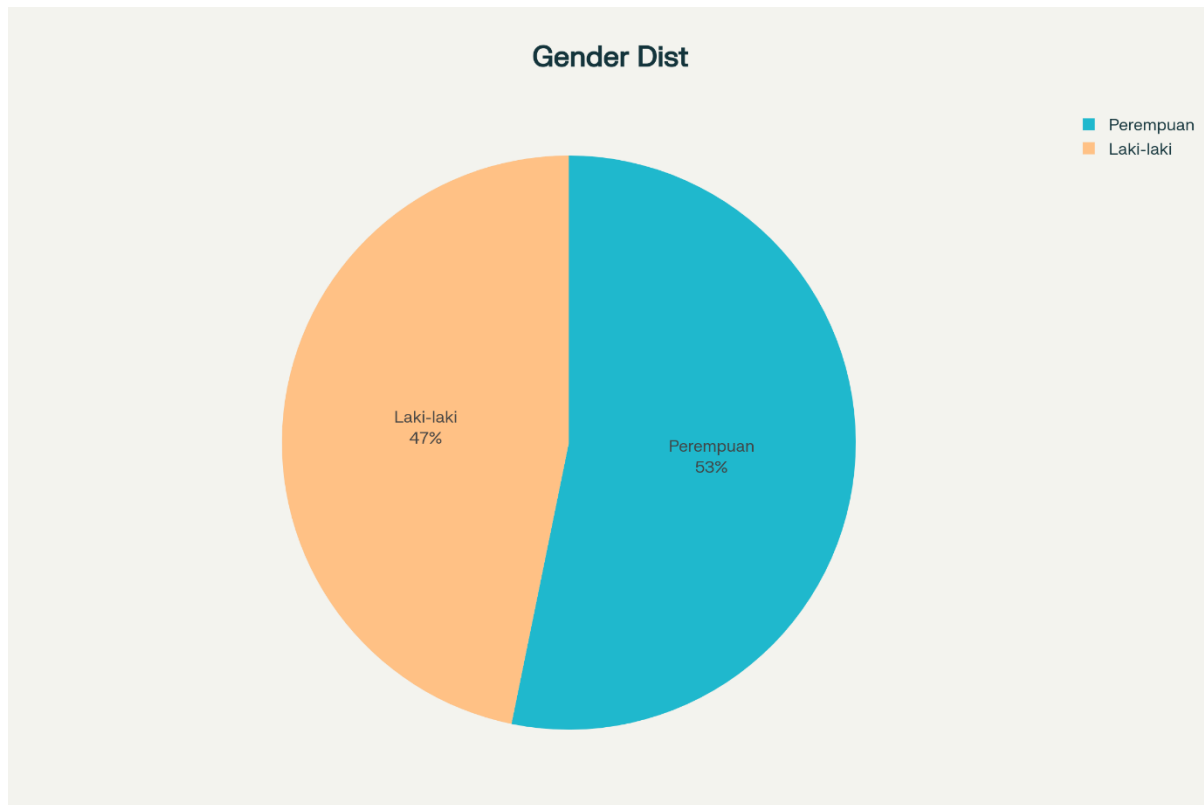


Figure 6. Gender Distribution of Respondents

From an age perspective, the majority of respondents fall within the productive age brackets of 31–40 years (37.8%) and 21–30 years (32.1%). The predominance of these productive-age cohorts indicates that MSMEs in DKI Jakarta are driven by individuals who possess a mature blend of experience and vitality optimal for business development. This age group typically combines life experience, access to technology, and an entrepreneurial spirit necessary to confront business challenges in the digital era.

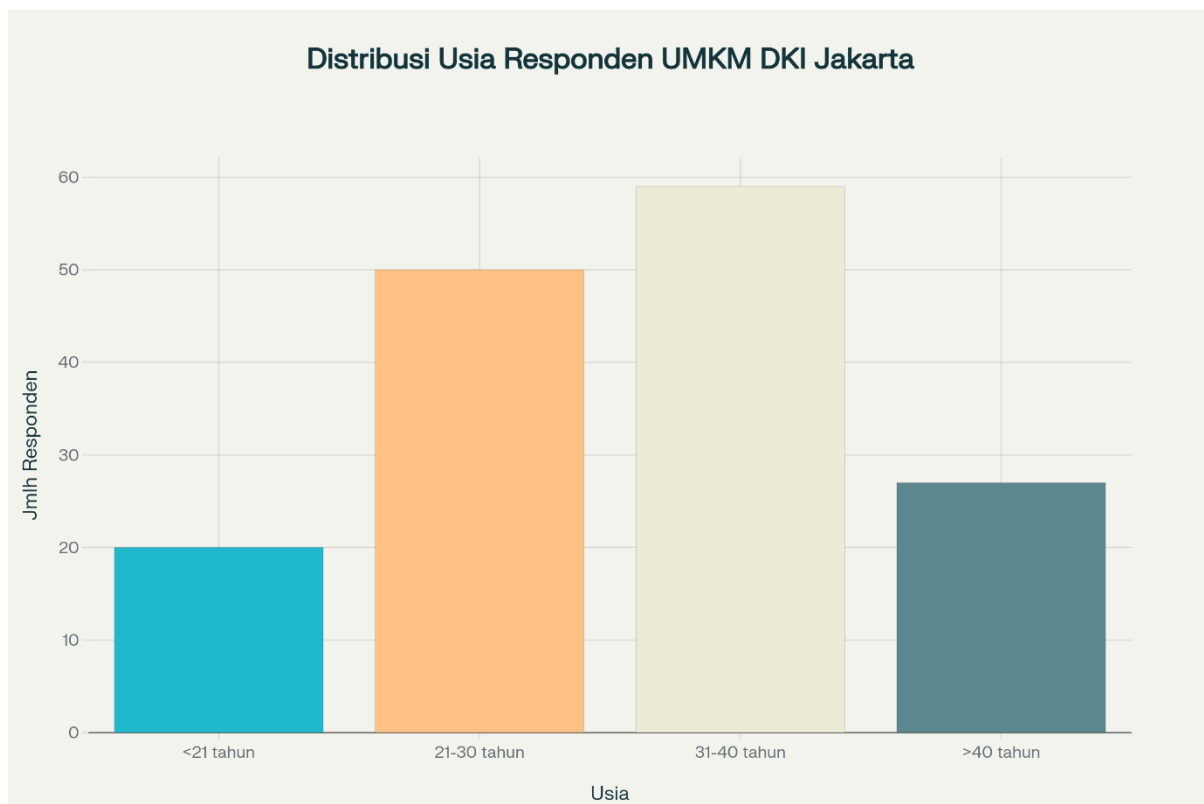


Figure 7. Age Distribution of MSME Respondents in the Special Capital Region of Jakarta

The respondents' educational attainment indicates a relatively high qualification level, with a predominance of bachelor's degree holders or equivalents (70 respondents; 44.9%), followed by high school graduates or equivalents (42 respondents; 26.9%). These findings suggest that micro, small, and medium enterprises (MSMEs) in DKI Jakarta are chosen not merely out of economic necessity but also as a strategic opportunity by educated individuals who recognize business potential. This higher educational background may facilitate technological adaptation and the systematic implementation of business strategies.

In terms of income, the majority of MSME operators earn a monthly revenue of IDR 1,000,000–IDR 5,000,000 (46.2%) or IDR 5,000,001–IDR 10,000,000 (34.0%). This income distribution shows that approximately 80% of MSMEs remain within the low-to-middle income bracket, reflecting the survival or early growth stage in the business cycle.

Analysis of Instrument Validity and Reliability

The evaluation of the research instrument's quality yielded highly satisfactory results across all testing parameters. The outer loading outcomes demonstrated that every indicator exceeded a value of 0.70, indicating strong convergent validity. Moreover, both Cronbach's Alpha and Composite Reliability for all variables surpassed thresholds of 0.60 and even 0.70 reflecting a high level of internal consistency.

**Table 1. Validity and Reliability of the Instrument**

| Parameter | Criteria | Result | Status |
|-----------------------|---|----------|----------|
| Outer Loading | >0,7 | All >0,7 | Valid |
| Cronbach Alpha | >0,6 (exploratory), >0,7 (confirmatory) | All >0,6 | Reliabel |
| AVE | >0,5 | All >0,5 | Valid |
| Composite Reliability | >0,7 | All >0,7 | Reliabel |
| Cross Loading | Construct value > other loadings | Met | Valid |

The Average Variance Extracted (AVE) for all variables exceeds 0.5, indicating that the variance captured by the constructs is greater than the measurement error. This finding provides assurance that the research instrument can measure the intended constructs accurately and consistently.

Descriptive Analysis of the Research Variable

Financial Literacy

The financial literacy variable shows a mean value of 3.85, with the majority of respondents selecting the “Agree” category (49.68%). The statement with the highest score pertains to the ability to assess a company’s prospects (3.94), whereas the lowest score relates to participation in bookkeeping training (3.80). These findings indicate that MSME actors possess a solid conceptual understanding of finance but still require improvements in practical aspects such as recordkeeping and bookkeeping.

Financial Management Behavior

The behavioral variable of financial management recorded a mean score of 3.85, with the majority of respondents selecting “Agree” (50.1%). The highest scores were observed for avoiding excessive credit-card use (3.95) and timely bill payment (3.94), indicating strong financial discipline. The lowest score pertained to holding health insurance (3.75), suggesting limited awareness of the importance of long-term financial protection.

Financial Risk Attitude

With an average of 3.95, the financial risk-attitude variable indicates that MSME actors exhibit a positive tendency toward risk-taking. The highest score, 4.05, on the risk–return relationship demonstrates a solid understanding of investment principles. However, the lowest score, 3.85, on willingness to invest for greater returns suggests that practical implementation still involves caution.

Financial Technology

The financial technology variable recorded a mean of 3.94, with the “Agree” category prevailing (52.2%). Digital payment efficiency scored the highest (4.18), indicating strong technology adoption. The lowest score was on understanding how digital payments work (3.71), revealing a remaining digital literacy gap that must be addressed.



Hypothesis Testing Results

Analysis using PLS-SEM yielded compelling insights into the interrelationships among the variables. Of the seven hypotheses proposed, six were supported and one was rejected.

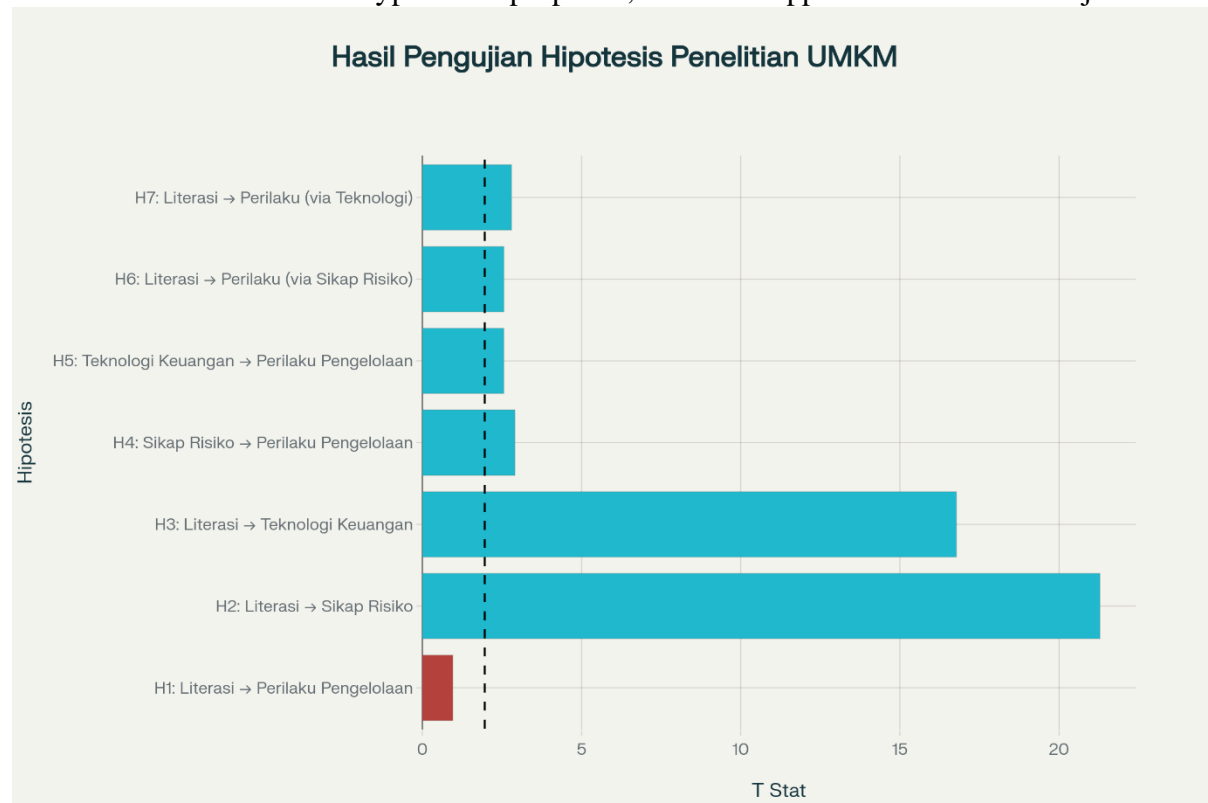


Figure 8. Results of Hypothesis Testing in SME Research

The hypothesis tests indicate that six out of seven hypotheses were supported at a t-statistic threshold of 1.96. Hypothesis 1 (H1) the direct effect of financial literacy on financial management behavior was not supported (original sample = 0.147; $t = 0.958$; $p = 0.338$). This finding suggests that financial literacy does not directly influence financial management behavior but rather operates through one or more mediating variables.

Hypothesis 2 (H2) the effect of financial literacy on financial risk attitude was very strongly supported (original sample = 0.801; $t = 21.290$; $p = 0.000$). These results demonstrate that higher financial literacy significantly enhances the maturity of individuals' attitudes toward financial risk.

Hypothesis 3 (H3) the effect of financial literacy on financial technology adoption was also strongly supported (original sample = 0.722; $t = 16.778$; $p = 0.000$). This confirms that robust financial literacy encourages more optimal adoption of financial technologies.

Hypotheses 4 and 5 (H4 and H5) the effects of financial risk attitude and financial technology adoption on financial management behavior were both supported, with coefficients of 0.429 and 0.284, respectively. These findings indicate that both mediators play a crucial role in shaping financial management behavior.

Hypotheses 6 and 7 (H6 and H7) the indirect effects of financial literacy on financial management behavior via financial risk attitude and financial technology adoption were likewise supported. The indirect effect through financial technology adoption (0.343) was



stronger than that through financial risk attitude (0.205), underscoring the strategic role of technology in transforming financial behavior.

Evaluation of Structural Models

The Adjusted R-Square values indicate strong predictive power of the model for all endogenous variables. Financial risk attitude has the highest value (0.639), followed by financial management behavior (0.613) and financial technology (0.518). These results demonstrate that the model is able to explain the variance of the dependent variable effectively.

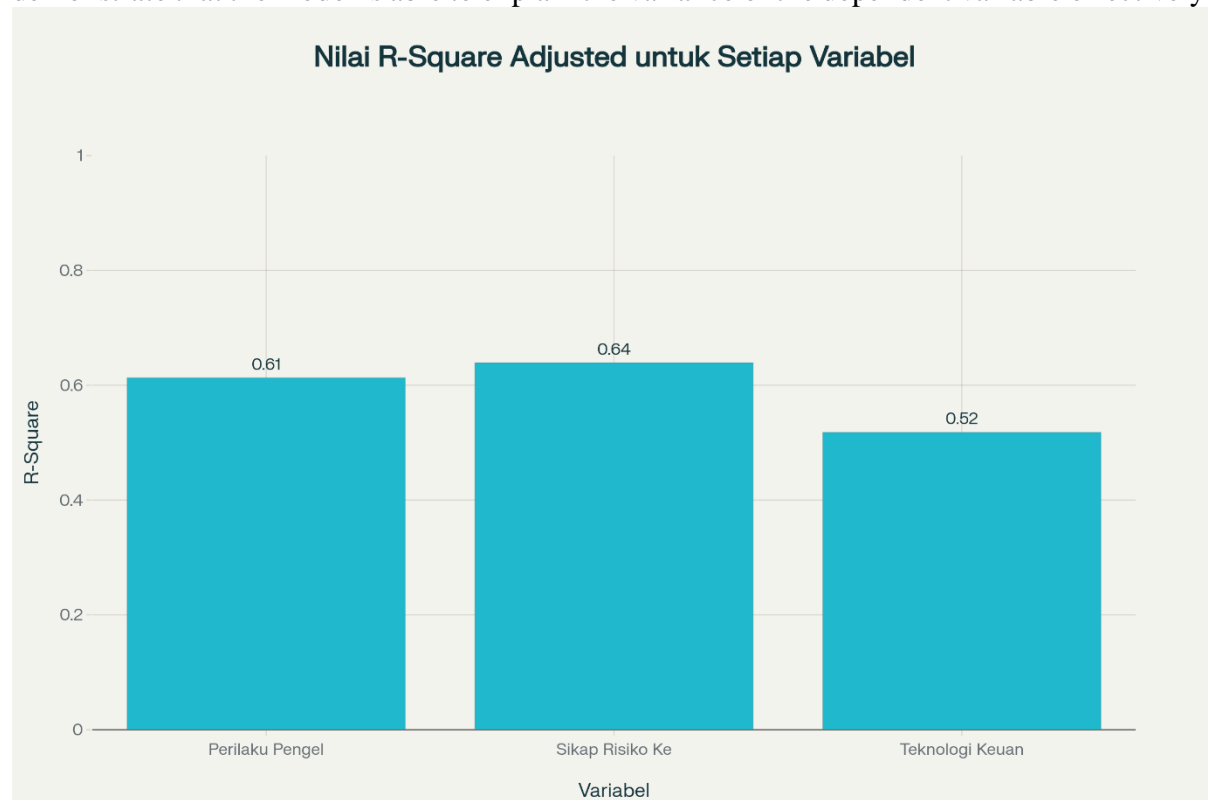


Figure 9. Adjusted R-squared value for each variable

The Adjusted R-Square value indicates strong predictive power of the model, with the highest value observed for Financial Risk Attitude (0.639). The Common Method Bias test shows all VIF values ranging from 1.000 to 3.214, well below the maximum threshold of 5.01. These results confirm that the model is not subject to significant common method bias, ensuring the credibility of the study's findings.

Theoretical and Practical Implications

The findings of this study make a significant contribution to both theory and practice in the financial management of micro, small, and medium enterprises (MSMEs). The mediating roles of financial risk attitude and financial technology in the relationship between financial literacy and financial behavior underscore the importance of adopting a holistic approach to building MSME financial capacity.

The predominance of women among MSME owners in Jakarta and their relatively high educational attainment suggest substantial potential for implementing more sophisticated,



technology-based financial literacy programs. MSME development initiatives should take these demographic characteristics into account when designing interventions.

The high level of financial technology adoption among Jakarta's MSMEs indicates readiness for a more comprehensive digital transformation. However, technical knowledge gaps must be addressed through more practical, application-oriented training.

This research confirms that financial literacy is not the sole determinant of financial management behavior; rather, it operates through a complex mediating mechanism. Effective MSME development strategies should therefore integrate enhancements in financial literacy with the cultivation of a mature risk attitude and the optimal adoption of financial technology.

Discussion

Financial Literacy and Financial Management Behavior

The test results indicate that the original sample value was 0.147, with a t-statistic of 0.958 and a p-value of 0.338. Although the path coefficient is positive, the p-value exceeding 0.05 and the t-value below 1.96 demonstrate that this relationship is not statistically significant. In other words, an increase in financial literacy does not, in this model, directly explain an improvement in financial management behaviors. Conceptually, this suggests that understanding financial concepts does not automatically translate into their application in everyday practice. Other factors such as attitudes toward risk or technological proficiency may play a more decisive role in bridging knowledge and action. In the context of individual micro, small, and medium enterprises (MSMEs) in the Special Capital Region of Jakarta, these findings are important because they indicate that financial literacy training alone is insufficient. Additional support such as motivation, practical skills training, and access to technology is required for financial understanding to be effectively applied in business activities.

These findings are consistent with the research results Mustika et al., (2022) dan Pratama et al., (2024) the results indicate that financial literacy does not have a significant direct effect on financial behavior, except when mediated by other variables such as attitude or technology. However, these findings differ from those of Lusardi & Mitchell (2014), who concluded that financial literacy exerts a significant direct influence.

The hypothesis test results are reinforced by the descriptive statistics for the financial literacy and financial management behavior variables. The questionnaire data show that the mean scores for both financial literacy and financial management behavior are identical, at 3.85. Although both scores fall within a favorable range, no strong causal relationship was found between them. Therefore, the hypothesis regarding a direct effect is not statistically supported.

Financial Literacy and Risk Attitudes

The relationship between financial literacy and risk attitude exhibits an original sample value of 0.801, a t-statistic of 21.290, and a p-value of 0.000. This indicates a very strong and statistically significant relationship, demonstrating a positive and significant impact on risk attitude.

These findings support the research of Masdupi et al. (2024), Roshan et al. (2020), and Yulfiswandi et al. (2022), which established that financial literacy influences the formation of a more rational risk mindset. However, some local studies suggest that high levels of financial literacy do not necessarily coincide with a willingness to take risks, due to the influence of conservative cultural factors.



The results of the hypothesis test are reinforced by the descriptive statistics for the financial literacy and financial risk attitude variables. The mean score for risk attitude from the questionnaire is 3.95 the highest among all variables. This suggests that enhanced financial understanding contributes significantly to a more measured and courageous mindset when confronting financial risks. The high t-value underscores the strength of this relationship. Individuals with high financial literacy tend to be more rational and composed in the face of uncertainty. They are able to analyze risks and consider the financial implications of each decision. For MSME actors in DKI Jakarta, this signifies that financial knowledge makes them more confident and astute in business decision-making, enabling them to perceive opportunities and challenges more wisely based on risk calculations.

Literacy in Finance and Financial Technology

Financial literacy also has a positive and significant effect on the use of financial technology. The analysis yielded an original sample estimate of 0.722, a t-statistic of 16.778, and a p-value of 0.000. This indicates a strong and significant relationship between financial literacy and the utilization of financial technology. In other words, the more knowledgeable an individual is about finance, the more likely they are to adopt various financial technologies such as digital banking applications, e-wallets, and digital record-keeping systems. For micro, small, and medium enterprises (MSMEs) in Jakarta, this finding is highly relevant. With a solid level of financial literacy, business actors can adapt more readily to digital technologies and leverage modern financial tools more effectively.

Research conducted by Frimpong et al., (2022) dan Sukma et al., (2024) demonstrates that financial literacy influences financial technology adoption. These findings are consistent with those of Wardhani & Santoso (2021) and with the OECD report (2019), all of which assert that financial understanding serves as a crucial foundation for the adoption of digital financial technologies. However, some studies in remote regions reveal that, despite high literacy levels, access to technology remains a barrier.

The hypothesis test results are further supported by descriptive statistics for the variables of financial literacy and financial technology. The mean value for the financial technology variable is 3.94, reflecting respondents' comfort with and ability to use digital services such as e-wallets and digital banking. Therefore, this hypothesis is accepted at a significant level.

Risk Attitude and Financial Management Behavior

The analysis yielded an original sample value of 0.429, a t-statistic of 2.909, and a p-value of 0.004. This indicates a positive and statistically significant relationship between risk attitude and financial management behavior. Individuals with a healthy risk attitude are more likely to manage their finances effectively for example, by creating budgets, saving for emergencies, and investing prudently. For micro, small, and medium enterprises (MSMEs) in Jakarta, such an attitude is essential to navigate market dynamics with a planned strategy rather than relying solely on intuition.

These findings reinforce the results of Widyastuti et al. (2020), which concluded that an individual's risk-management capability contributes to superior financial behavior. However, this contrasts with studies in rural areas, where reliance on intuition over formal risk calculation



remains prevalent and disagrees with the negative significant impact of risk attitude on financial management behavior reported by Anis (2021) and Nurlela et al. (2025).

Descriptive statistics further support the hypothesis test: the mean risk-attitude score is 3.95, while the mean financial-behavior score is 3.85, suggesting that greater willingness to assume risk contributes to a more strategic and responsible financial-management pattern.

Financial Technology and Financial Management Behavior

With an original sample value of 0.338, a t-statistic of 3.031, and a p-value of 0.002, the analysis demonstrates that the use of financial technology significantly aids financial management. Financial applications, lending platforms, and digital cash-management features help business owners record transactions, manage cash flow, and make data-driven decisions. Digitally enabled MSMEs in Jakarta can reap numerous benefits from adopting these technologies, from operational efficiencies to enhanced accountability.

These results align with Fadiyah and Widodo (2024) and Sukma et al. (2024), who found that financial technology influences financial management behavior, and are further supported by Hasanah (2022), who reported that technologies such as QRIS and e-wallets improve cash-flow management for MSMEs. Conversely, some studies note resistance to technology adoption due to digital privacy concerns, consistent with Wahyudi et al. (2020), who observed a negative and non-significant effect of financial technology.

The hypothesis test is corroborated by descriptive statistics: the mean score for financial-technology usage is 3.94, indicating that respondents are sufficiently accustomed to using technology in their financial activities, and confirming statistical support for this hypothesis.

Financial Literacy and Financial Management Behavior Through Risk Attitude

The analysis shows that risk attitude serves as a significant mediator between financial literacy and financial management behavior. The indirect effect is 0.205, with a t-statistic of 2.561 and a p-value of 0.011. Although financial literacy alone does not exert a significant direct effect, its influence becomes meaningful when mediated by risk attitude. For MSMEs in Jakarta, this implies that financial-literacy training should be paired with the development of sound managerial risk attitudes without such an attitude, knowledge alone is insufficient to change financial behavior.

This finding is consistent with Zhang et al. (2020), who argued that financial literacy strengthens financial decision-making by fostering more rational risk attitudes. Therefore, despite the lack of a direct effect, the mediation pathway renders the overall relationship significant.

Descriptive statistics reinforce the mediation test: the mean scores for financial literacy and risk attitude are 3.85 and 3.95, respectively, supporting the validity of risk attitude as a mediator in this model.



Financial Literacy and Financial Management Behavior Through Financial Technology

The indirect effect of financial literacy on financial management behavior via financial technology is 0.343, with a t-statistic of 2.804 and a p-value of 0.005, demonstrating that financial technology is a significant mediator. In other words, individuals with higher financial literacy are more likely to adopt financial technologies, which in turn positively influence their financial-management behavior. In Jakarta's increasingly digitalized MSME sector, leveraging financial technology can expedite the transition toward more accurate and controlled financial practices.

This result is supported by Akhmadi et al. (2021), who showed that digital transformation mediates the link between financial understanding and disciplined financial practice. Nonetheless, some literature warns that technology adoption can become consumptive if not accompanied by proper financial controls.

Descriptive statistics for this mediation model show mean scores of 3.94 for financial-technology usage and 3.85 for financial-management behavior, indicating that technology utilization is a key factor in amplifying the effect of financial literacy. This mediation pathway is significant both statistically and practically.

4. CONCLUSION

Based on the data analysis, it can be concluded that financial literacy does not exert a direct and statistically significant influence on the financial management behavior of SMEs, although the relationship is positive yet weak. In contrast, financial literacy has been shown to have a significant and positive effect on both financial risk attitude and the use of financial technology. Enhanced financial literacy strengthens entrepreneurs' capacity to manage risks and to utilize digital financial services. Moreover, risk attitude and fintech adoption mediate the effect of financial literacy, suggesting that improvements in these two dimensions have the potential to foster more effective and efficient financial management behaviors.

This study makes an important contribution to the financial behavior literature particularly for academic audiences by highlighting the mediating roles of risk attitude and financial technology in optimizing the impact of financial literacy on practical financial outcomes. Practically, financial literacy programs should not only impart knowledge but also cultivate positive attitudes and habits through digital technology. For government bodies and SME support institutions in the Special Capital Region of Jakarta, these findings can inform the design of educational strategies and policies aimed at sustainably strengthening the financial resilience of microenterprises.

The research identifies several areas for improvement, including SMEs' limited understanding of bank loan application documents, insufficient awareness of the importance of health insurance, hesitation to undertake investment risks, and technical challenges in comprehending digital payment systems. SME operators are advised to actively participate in financial and digital literacy training that is tailored to the microenterprise context. Regional governments and financial institutions are encouraged to expand outreach efforts, provide technical training, and create a conducive, secure environment in which entrepreneurs can experiment, manage risk, and optimally adopt financial technologies.



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