

# The Behavioral Finance Perspective on MSMEs: Impact of Digital Finance, Financial Literacy, and Financial Inclusion

Raeesah Shalsabila Anjani Prameswary<sup>1)</sup>; Muslimin<sup>2)</sup>

<sup>1)</sup>*Raeesahshalsabila@gmail.com, Department of Management, Faculty of Economics and Business, Universitas Lampung, Indonesia*

<sup>2)</sup>*muslimin@feb.unila.ac.id, Department of Management, Faculty of Economics and Business, Universitas Lampung, Indonesia*

Article Information:	Abstract in English
<p><b>Keywords:</b>            Keyword 1; Digital Finance            Keyword 2; Financial Literacy            Keyword 3; Financial Inclusion            Keyword 4; Behavioral Finance            Keyword 5; MSME</p> <p><b>Article History:</b>            Received : February 08, 2025            Revised : March 12, 2025            Accepted : March 24, 2025</p> <p><b>Cite This Article:</b>            Prameswary, R. S. A., &amp; Muslimin. (2025). The behavioral finance perspective on MSMEs: Impact of digital finance, financial literacy, and financial inclusion. <i>Indikator: Jurnal Ilmiah Manajemen dan Bisnis</i>, 9(2), 1-11            doi:<a href="https://doi.org/10.22441/indikator.v9i2.32979">https://doi.org/10.22441/indikator.v9i2.32979</a></p>	<p><i>This study aims to analyze the influence of Digital Finance, Financial Literacy, and Financial Inclusion on the behavioral finance of MSME actors in Bandar Lampung City. The research method used is quantitative, with data collected through surveys using questionnaires as the research instrument. The population in this study includes all MSMEs in Bandar Lampung City, with a sample of 105 MSME actors who meet the criteria as recipients of People's Business Credit (KUR) or members of savings and loan cooperatives, have been operating for at least one year, and reside in Bandar Lampung City. The sample was determined using Hair's formula, with a sampling technique based on purposive sampling, which is part of Non-Probability Sampling. Data analysis was conducted using Partial Least Square (PLS). The results indicate that Digital Finance, Financial Literacy, and Financial Inclusion positively influence Behavioral Finance. Digital Finance enhances transaction efficiency and financial recording accuracy, Financial Literacy assists in budget management and investment planning, while Financial Inclusion expands access to formal financial services. The implications of this study emphasize the importance of financial education and broader access to digital financial services to enhance the sustainability of MSMEs.</i></p>

## INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are a crucial role in country's economic activities (Risman et al., 2023; Lestari et al., 2022; Klein & Todesco, 2021). MSMEs contribute significantly to the economy by absorbing a large workforce, including those affected by challenges in the formal business sector. Micro and Small Enterprises (MSEs), in particular, are highly adaptable to various types of businesses and require relatively low capital. As a result, MSEs possess distinct characteristics compared to other economic actors, especially large corporations.

Micro, Small, and Medium Enterprises (MSMEs) exhibit unique financial management characteristics due to their transitional nature between personal and corporate finance structures (Risman et al., 2023). Notably, while most micro and small businesses operate without formal legal entity status, the majority of medium-sized enterprises have established proper legal incorporation. This legal distinction creates an interesting duality in financial management practices that has attracted significant research attention. On one level, MSME financial management remains deeply personal, with business finances often indistinguishable from the owner's personal finances, reflecting individual financial behaviors and decision-making patterns (Risman et al., 2023). Simultaneously, as these enterprises grow, they increasingly

adopt elements of corporate financial management, demonstrating characteristics of organizational financial behavior. This hybrid financial approach presents a compelling research area for scholars examining the intersection of behavioral finance and enterprise development, particularly in understanding how financial management practices evolve along the MSME growth continuum.

Given the critical role of MSMEs in national economic development and their distinct financial management challenges, it is essential to examine these issues at the regional level. Bandar Lampung, as the capital city of Lampung Province, hosts 62.099 micro and small enterprises (MSEs), making it a vital hub for local economic development (Diskop UKM Bandar Lampung, 2024). These businesses operate across various sectors, including culinary, fashion, handicrafts, and agribusiness. However, despite their rapid growth, many MSMEs exhibit irrational financial behaviors, such as poor cash flow planning, inadequate record-keeping, and undisciplined financial decision-making, which threaten their sustainability (Rahayu et al., 2023).

There are several factors related to MSME management that can affect MSME financial behavior, one of which is the adoption of Digital Finance—which includes digital payments, mobile banking, and online financial services—has been promoted as a solution to improve behavioral finance MSMEs (Risman et al., 2021). However, the effectiveness of these digital financial tools is closely tied to the level of Financial Literacy and Financial Inclusion among business owners. Many MSME entrepreneurs in Bandar Lampung still lack financial knowledge, making them prone to poor financial decisions and inefficiencies in managing business capital (Andriyani & Sulistyowati, 2021). Additionally, limited access to formal financial services further restricts their ability to optimize financial management and expand their businesses (OJK, 2024).

Research on the influence of digital finance on behavioral finance remains limited, although several studies have specifically examined the impact of fintech on Behavioral Finance. These studies can be considered representative of digital finance since fintech constitutes a component of digital finance (Risman, 2024).

While several studies have explored the impact of financial literacy and digital finance on behavioral finance of MSME, findings remain inconsistent and fragmented. Moreover, research that integrates Digital Finance, Financial Literacy, and Financial Inclusion into a single framework remains scarce, particularly in the context of MSMEs in Bandar Lampung. This study aims to fill this gap by analyzing the combined influence of these three factors on the behavioral finance of MSME.

## **LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### **Behavioral Finance of MSMEs**

Behavioral finance is one of the most important aspects of finance. Harjito (2019) explains that behavioral finance includes forecasting, collecting, spending, investing, and cash planning needed for companies to operate efficiently. Meanwhile, Humaira (2018) states that the purpose of behavioral finance is to determine, acquire, allocate, and utilize financial resources while considering the main objectives in decision making.

Behavioral finance in MSEs includes several important aspects that need attention, as outlined by Risman (2024): First, financial planning is a fundamental element that helps MSEs achieve short-term and long-term goals. This process involves creating realistic budgets and income projections. Next, financing or capital decisions are important aspects that affect business continuity, where managers must consider the most suitable funding sources to support business growth. In addition, investment decisions including budgeting play an important role

in determining resource allocation for projects that can increase business value. Finally, financial control ensures all financial activities run according to plan and can minimize potential risks.

As a relatively new discipline, behavioral finance aims to integrate behavioral psychology theory with conventional economics and finance to explain why individuals often make irrational financial decisions. Risman et al. (2023) state MSMEs have unique financial management characteristics, as a transition from personal financial management to corporate financial management. This is an interesting phenomenon for researchers in the field of financial management. On the one hand, MSME financial management is handled personally by the business owner so that the behavioral finance of MSMEs cannot be separated from the business owner's behavioral personal finance. On the other hand, MSME financial management is also a corporate financial management that cannot be separated from the behavioral corporate finance. Because MSMEs have unique financial management characteristics, as a transition from personal financial management to corporate financial management, the behavioral finance of MSMEs includes two perspectives: behavioral personal finance and behavioral corporate finance.

### **Digital Finance**

Digital Finance refers to financial services that utilize digital technology, such as mobile phones, personal computers, and the internet (Risman et al., 2021). The emergence of Digital Finance originates from the concept of digital payments, which serve as the foundation for the development of other digital financial services. The development of digital finance began with the emergence of digital payments, which then rapidly evolved into various, more complex forms of digital financial services. Risman et al. (2021) explain that Digital Finance can be categorized into several main types. First, card-based services, which include credit cards for online and offline transactions with credit facilities, debit cards for transactions based on account balance, and electronic money (e-money). Second, mobile banking, which provides banking services through smartphones, allowing users to check balances, transfer funds, and make various payments integrated with banks. Third, digital wallets (e-wallets), which enable users to conduct various online transactions more flexibly.

According to Davis et al. (1989) in the Technology Acceptance Model (TAM), the adoption of digital finance depends on the perception of usefulness and ease of use. When SMEs feel that digital finance is easy to use, they tend to integrate it into their financial management practices, thereby improving financial tracking, efficiency, and transparency. According to Risman (2025), the use of digital finance can be considered as an intention to change financial behavior to be better (effective & efficient) so that the increasing use of digital finance, the better the financial behavior of SMEs. Based on these theories, opinions and explanations, we propose the first hypothesis as follows:

H1: Digital finance has a positive effect on behavioral finance of MSME.

### **Financial Literacy**

Financial literacy is the ability to understand and apply financial concepts, including budgeting, risk management, and investment decisions (OECD, 2022). Financial Literacy is influenced by an individual's ability to analyze their financial condition. This ability plays a crucial role in the decision-making process, enabling wiser financial choices and more effective financial management (Waty et al., 2021).

According to Ajzen (1991) in the Theory of Planned Behavior (TPB), behavioral changes are influenced by intentions, then Risman (2025) argues that efforts to improve financial literacy are the intention to change financial behavior for the better. According to Rahayu et al. (2023), MSME owners with higher financial literacy tend to carry out structured financial management, track expenses, and optimize business investments. Therefore, the higher the financial literacy of MSMEs, the better the financial management behavior of MSMEs. Based on these theories, opinions and explanations, the second hypothesis is formulated as follows:

H2: Financial literacy has a positive effect on behavioral finance of MSME.

### **Financial Inclusion**

Financial Inclusion is defined as the availability of access to various financial institutions, products, and services tailored to the needs and capabilities of the public to improve overall well-being. Financial Inclusion is a financial system designed to meet the diverse needs of individuals by offering products such as savings, credit, payments, and risk management (Demirgüç-Kunt & Singer, 2017). According to Risman (2025), the dimensions and indicators of financial inclusion are aspects related to ease of access, these dimensions and indicators include the following:

1. Perception of ease of access, some indicators of this ease are simple administration, light requirements, and online.
2. Low cost
3. Safe
4. Completeness of services/products
5. Quality of services/products

Financial inclusion is a deliberate pre-condition as an antecedent (intention) of changing financial behavior. That the higher the financial inclusion, the better the financial management will be (Risman, 2025). MSMEs that have easier access to financial services tend to have more responsible financial behavior. Increased financial inclusion will have a positive impact on financial management behavior, because it allows MSMEs to optimize financial resources effectively and efficiently. Based on this argument, the third hypothesis is formulated as follows:

According to TPB, individuals with easier access to financial services are more likely to engage in responsible financial behavior. Empirical studies, such as those by Andriyani & Sulistyowati (2021) and Pinem & Mardiatmi (2021), found that higher financial inclusion positively affects financial management behavior, allowing MSEs to optimize financial resources effectively. Based on this argument, the third hypothesis is formulated as follows:

H3: Financial inclusion has a positive effect on behavioral finance of MSME

### **RESEARCH METHOD**

This study employs a causal research design to analyze the impact of digital finance, financial literacy, and financial inclusion on behavioral finance in Micro and Small Enterprises (MSEs) in Bandar Lampung. Causal research is chosen as it aims to determine the cause-and-effect relationships between independent variables (digital finance, financial literacy, and financial inclusion) and the dependent variable (behavioral finance of MSME).

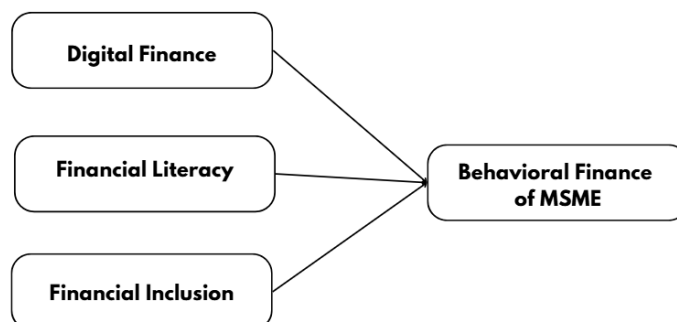
The research population consists of MSE owners operating in Bandar Lampung. The sample is selected using a purposive sampling technique, with criteria that include MSE owners who have been in business for at least one year and are actively involved in managing their business finances. This study refers to the formula proposed by Hair et al. (2014), which suggests that the ideal sample size ranges from 5 to 10 times the number of indicators used. There are 21 indicators to be measured in this study, thus the sample size is calculated as follows:

$$\begin{aligned}\text{Sample} &= \text{Number of Indicators} \times 5 \\ &= 21 \times 5 \\ &= 105\end{aligned}$$

Based on this calculation, the sample size used in this study is 105 respondents.

Data collection is carried out by distributing questionnaires, both manually and online using Google Forms, and is measured using a 5-point Likert scale. Data collection is carried out directly by the researcher to protect the privacy of the respondents and reduce the doubts of the respondents when answering questions. Data processing is carried out using Partial Least Square (PLS) software. The following is a research framework as a conceptual model.

**Figure 1. Framework**

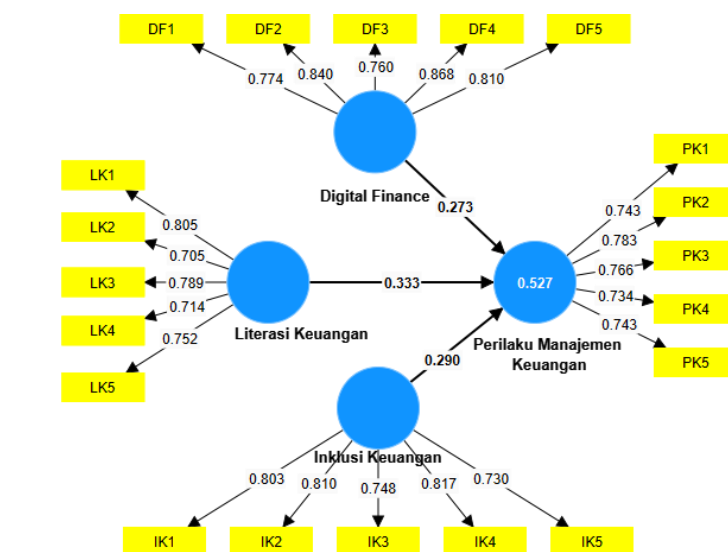


## RESULTS AND DISCUSSION

### Convergent Validity

This study conducted the convergent validity test twice. The first test resulted in one invalid indicator being removed. In the second test, all indicators were validated as they demonstrated loading factor values exceeding 0.70.

**Figure 2. Output Algoritma PLS**



Source: Data Processed Smartpls



**Table 2. Table Formatting**

Variable	Indikator	Outer Loading	Information
Digital Finance	DF1	0,774	Valid
	DF2	0,840	Valid
	DF3	0,760	Valid
	DF4	0,868	Valid
	DF5	0,810	Valid
Financial literacy	LK1	0,805	Valid
	LK2	0,705	Valid
	Lk3	0,789	Valid
	LK4	0,714	Valid
	LK5	0,752	Valid
Financial inclusion	IK1	0,803	Valid
	IK2	0,810	Valid
	Ik3	0,748	Valid
	IK4	0,817	Valid
	IK5	0,730	Valid
Behavioral Finance of MSME	PK1	0,743	Valid
	PK2	0,783	Valid
	PK3	0,766	Valid
	PK4	0,734	Valid
	PK5	0,743	Valid

Source: Data Processed Smartpls

### Discriminant Validity

The testing of discriminant validity for reflective indicators can be conducted through Fornell-Larcker analysis. The Fornell-Larcker Criterion compares the square root of AVE of each latent variable with the correlations between other latent variables. A latent variable is considered to have good discriminant validity if its square root of AVE is greater than its correlations with other latent variables in the model. If the square root of AVE value is smaller than the correlation between latent variables, discriminant validity is not achieved.

**Table 3 Fornell-Larcker analysis**

Variabel	Digital Finance	Financial Literacy	Financial Inclusion	Behavioral Finance
Digital Finance	0,811			
Financial Literacy	0,539	0,754		
Financial Inclusion	0,485	0,501	0,783	
Behavioral Finance	0,593	0,625	0,589	0,754

Source: Data Processed Smartpls

Table 2 shows that the square root of AVE for each latent variable is greater than its correlations with other latent variables in the model. This confirms that each latent variable demonstrates good discriminant validity.

### Reliability Test

The Reliability Test examines instrument reliability in the research model using two methods: Cronbach's Alpha and Composite Reliability. Cronbach's Alpha evaluates indicator consistency within a latent variable, requiring values  $>0.70$  for reliability. Composite Reliability assesses overall latent variable reliability, also using the  $>0.70$  threshold.

**Table 4. Cronbach's Alpha and Composite Reliability**

Variabel	Cronbach's Alpha	Composite Reliability	Information
Digital Finance	0.906	0.870	Reliable
Financial Literacy	0.868	0.812	Reliable
Financial Inclusion	0.887	0.841	Reliable
Behavioral Finance	0.868	0.811	Reliable

Source: Data Processed Smartpls

Table 4 shows all variables in this research model have Cronbach's Alpha values above 0.70, indicating good internal consistency among each latent variable's indicators. Composite Reliability values also exceed 0.70, confirming high measurement reliability for each latent variable. These results confirm all variables meet reliability requirements, ensuring the instruments' dependability.

### Coefficient of Determination (Adjusted R-Square)

The Coefficient of Determination (Adjusted R-Square) is used to measure how well the independent variables can explain the dependent variable in the research model, considering the number of independent variables used.

**Table 5. Coefficient of Determination (Adjusted R-Square)**

Variable	Adjusted R-Square
Behavioral Finance	0.527

Source: Data Processed Smartpls

Based on Table 4.15, the Adjusted R-Square value for the Financial Management Behavior variable is 0.527. This means that approximately 52.7% of the variation in Financial Management Behavior can be explained by the independent variables in the research model, while the remaining 47.3% is influenced by other factors outside the model. This value indicates that the research model has a moderate level of usefulness and a fairly good ability to explain the dependent variable.

### The Effect Size ( $f^2$ ) test

The Effect Size ( $f^2$ ) test is used to measure the extent of the influence of each independent variable on the dependent variable in the research model. This test complements the Adjusted R-Square analysis by helping assess the significance of each independent variable's contribution to explaining the dependent variable.

**Table 6. The Effect Size ( $f^2$ ) test**

Variable	Effect Size ( $f^2$ )	Description
Digital Finance → Behavioral Finance	0.105	Small
Financial Literacy → Behavioral Finance	0.154	Medium
Financial Inclusion → Behavioral Finance	0.125	Small

Source: Data Processed Smartpls

Based on the Effect Size ( $f^2$ ) test results in the table above, it can be seen that each independent variable has a different level of influence on Behavioral Finance. Financial Literacy has the largest influence with an  $f^2$  value of 0.154, which falls into the medium category. Meanwhile, Financial Inclusion ( $f^2 = 0.125$ ) and Digital Finance ( $f^2 = 0.105$ ) fall into the small influence category. Thus, all independent variables in this research model have a relatively small to moderate influence on Financial Management Behavior but still contribute significantly to explaining the dependent variable.

### Hypothesis Testing

**Table 7. Hypothesis Testing**

Variable	Original Sample	Standard Deviation	T-statistics	P values	Information
Digital Finance → Behavioral Finance	0,273	0,095	2,878	0,004	Positive and significant
Financial Literacy → Behavioral Finance	0,333	0,074	4,491	0,000	Positive and significant
Financial Inclusion → Behavioral Finance	0,290	0,078	3,700	0,000	Positive and significant

Source: Data Processed Smartpls

Based on the hypothesis testing presented in Table 7 of this study, the original sample value was found to be 0.273, the T-Statistic was 2.878, and the P-Value was 0.004. Thus, it can be stated that Digital Finance has a positive and significant influence on Behavioral Finance. This finding supports the opinion of Risman (2025), who stated that individuals striving to use digital finance demonstrate an intention to improve their financial behavior. This also aligns with Ajzen's (1991) Theory of Planned Behavior (TPB), which posits that intention is a predictor of the emergence or change in individual behavior.

This study also supports the argument of Davis et al. (1989) in the Technology Acceptance Model (TAM), which states that technology acceptance is influenced by two main factors: ease of use and usefulness. The findings are consistent with previous research, including the study conducted by Risman (2024), which stated that Digital Finance positively influences MSME Behavioral Finance. The utilization of Digital Finance allows MSMEs to conduct financial transactions more quickly and accurately while reducing the risk of errors in record-keeping. MSMEs that adopt Digital Finance are also more capable of accessing financial information in real-time, enabling them to make better and faster decisions. Additionally, the use of digital platforms in financial management can help MSMEs in budgeting, monitoring cash flow, and



managing debt more effectively. These findings are also in line with the studies conducted by Saputra & Dahmini (2022), Angeles (2022), and Erlangga & Krisnawati (2020).

In the indirect relationship hypothesis test in table 7 the original sample value was found to be 0.333, the T-Statistic was 4.491, and the P-Value was 0.000, indicating that Financial Literacy has a positive and significant influence on Behavioral Finance. This result supports Ajzen's (1991) Theory of Planned Behavior (TPB) and Risman's (2025) argument that individuals who strive to improve their financial literacy already have the intention to enhance their financial behavior.

These findings indicate that the higher the level of Financial Literacy possessed by MSME actors, the better their behavioral finance in running their businesses. A strong understanding of financial aspects, such as record-keeping, budgeting, credit management, investment, and risk mitigation, enables MSME actors to make more rational and strategic financial decisions. A high level of Financial Literacy allows business owners to maintain stable cash flow, allocate capital effectively, and take advantage of investment opportunities for business growth. Additionally, wiser debt management can reduce the risk of default, which could negatively impact business sustainability.

This study also supports previous research findings that Financial Literacy positively influences MSME financial behavior. For example, the study by Rahayu et al. (2023) stated that MSME entrepreneurs with good financial literacy tend to make more appropriate financial decisions. These findings are also consistent with research conducted by Angeles (2022), Andriyani & Sulistyowati (2021), and Gunawan & Aziz (2021).

Based on the hypothesis testing presented in Table 7 of this study, the original sample value was found to be 0.290, the T-Statistic was 3.700, and the P-Value was 0.000. Thus, it can be stated that Financial Inclusion has a positive and significant influence on Behavioral Finance. This finding supports Ajzen's (1991) Theory of Planned Behavior (TPB) and Risman's (2025) argument that financial inclusion serves as a precondition and antecedent (intention) for changes in financial behavior. The higher the level of financial inclusion, the better the financial management practices.

These findings indicate that the easier it is for MSME actors to access formal financial services, the better their Behavioral Finance. Conversely, limited access to financial services, such as banking, business credit, and digital payment systems, may hinder the effectiveness of their financial management. Greater access to formal financial services allows MSME actors to save money, obtain loans, and utilize various financial services to plan and manage their finances more efficiently. Financial inclusion enables MSME actors to create more structured budgets, record income and expenses with discipline, and manage cash flow and debt more effectively.

This study supports previous empirical findings that Financial Inclusion positively influences MSME Behavioral Finance. For example, the study conducted by Risman et al. (2023) demonstrated that Financial Inclusion has a significant positive impact on MSME Behavioral Finance. This research revealed that broader access to formal financial services enables business owners to manage their finances more effectively, improve financial planning, and optimize financial resource allocation. These findings are also consistent with studies conducted by Andriyani & Sulistyowati (2021) and Pinem & Mardiatmi (2021).

## CONCLUSION

This study aims to prove the effect of Digital Finance, Financial Literacy, and Financial Inclusion on the financial behavior of MSMEs. The financial management of MSMEs has

unique characteristics, as it represents a transition from personal financial management to corporate financial management. Therefore, MSME financial behavior encompasses two perspectives: personal financial behavior and corporate financial behavior. Based on the theories of personal financial behavior and corporate financial behavior, technological advancements impact the financial behavior of MSMEs.

The results of this study indicate that Digital Finance has a positive effect on the financial behavior of MSMEs. Digital Finance contributes to improving the effectiveness of MSME financial management by providing faster and more accurate access to financial transactions, record-keeping, and financial planning. The utilization of financial technology enables MSME actors to optimize cash flow management, budgeting, and financial decision-making.

The findings also show that Financial Literacy has a positive effect on the financial behavior of MSMEs. Financial Literacy plays a crucial role in shaping more rational and strategic financial behavior. The higher the level of financial literacy, the better MSMEs understand financial record-keeping, budgeting, credit management, investment, and risk mitigation.

Additionally, the results indicate that Financial Inclusion has a positive effect on the financial behavior of MSMEs. Financial Inclusion provides easier access to formal financial services, supporting better financial management for MSMEs. With broader access to banking services, business credit, and digital payment systems, MSMEs can manage capital more effectively, structure their budgeting more efficiently, and reduce financial risks.

These findings align with the Theory of Planned Behavior (TPB), which states that an individual's intention to access financial services and improve financial understanding is a key factor in changing financial behavior. Furthermore, the study also supports the Technology Acceptance Model (TAM), which suggests that the adoption of financial technology is influenced by the perception of ease of use and its benefits in MSME financial management.

## REFERENCE

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Andriyani, P., & Sulistyowati, A. (2021). Analisis pengaruh literasi keuangan, inklusi keuangan, dan tingkat pendidikan terhadap perilaku keuangan pelaku UMKM kedai/warung makanan di Desa Bahagia Kabupaten Bekasi. *Aliansi: Jurnal Manajemen Dan Bisnis*, 16(2), 61–70.
- Angeles, I. T. (2022). The moderating effect of digital and financial literacy on the digital financial services and financial behavior of MSMEs. Available at SSRN 5055949.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319–340.
- Demirgüç-Kunt, A., & Singer, D. (2017). Financial inclusion and inclusive growth: A review of recent empirical evidence. *World Bank Policy Research Working Paper*, 8040.
- Dinas Koperasi dan UKM Kota Bandar Lampung. (2024). Jumlah UMK di Kota Bandar Lampung pada tahun 2024.
- Erlangga, M. Y., & Krisnawati, A. (2020). Pengaruh fintech payment terhadap perilaku manajemen keuangan mahasiswa. *Jurnal Riset Manajemen Dan Bisnis*, 15(1), 53–62.
- Gunawan, A. C., & Aziz, A. (2021). Analysis Of Financial Technology, Financial Inclusion, Financial Literation, And Income To Financial Behaviour on SMEs East Jakarta. *Jurnal Akuntansi dan Auditing*, 18(2), 128–146.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. SAGE Publications.

- Klein, V. B., & Todesco, J. L. (2021). COVID-19 Crisis and SMEs Responses: The Role of Digital Transformation. *Knowledge and Process Management*, 28(2), 117–133.
- Lestari, N., Levyta, F., Rosman, D., Zainal, V., & Affini, D. (2022). Technology is a Solution for MSMEs Sustainability. *Indikator: Jurnal Ilmiah Manajemen dan Bisnis*, 6(2), 71–80.
- OECD. (2012). *Measuring Financial Literacy: Results of the OECD/INFE Pilot Study*. OECD Publishing.
- OJK. (2024). Survei Nasional Literasi dan Inklusi Keuangan (SNLIK) 2024. [https://ojk.go.id/id/berita-dan-kegiatan/publikasi/Pages/Survei-Nasional-Literasi-dan-Inklusi-Kuangan-\(SNLIK\)-2024.aspx](https://ojk.go.id/id/berita-dan-kegiatan/publikasi/Pages/Survei-Nasional-Literasi-dan-Inklusi-Kuangan-(SNLIK)-2024.aspx)
- Pinem, D., & Mardiatmi, B. D. (2021). Analisis literasi keuangan, inklusi keuangan dan pendapatan terhadap perilaku pelaku UMKM di Depok Jawa Barat. *Syntax Literate; Jurnal Ilmiah Indonesia*, 6(1), 104–120.
- Rahayu, F. S., Risman, A., Firdaus, I., & Haningsih, L. (2023). The Behavioral Finance of MSME in Indonesia: Financial Literacy, Financial Technology (Fintech), and Financial Attitudes. *International Journal of Digital Entrepreneurship and Business*, 4(2), 95–107.
- Risman, A. (2024). The Behavioral Finance of MSME: Digital Finance, Managerial Biases, Financial Literacy. *Dinasti International Journal of Economics, Finance & Accounting (DIJEFA)*, 5(2).
- Risman, A. (2025). Perilaku Keuangan Personal. In Sepriano Efitra. *Manajemen Keuangan: Teori dan Praktik dalam Mencapai Financial Freedom* (pp. 102–120). Sonpedia Publishing Indonesia.
- Risman, A., Ali, A. J., Soelton, M., & Siswanti, I. (2023). The behavioral finance of MSMEs in the advancement of financial inclusion and financial technology (Fintech). *The Indonesian Accounting Review*, 13(1), 91–101. <https://doi.org/10.14414/tiar.v13i1.3213>
- Risman, A., Mulyana, B., Silvatika, B., & Sulaeman, A. (2021). The effect of digital finance on financial stability. *Management Science Letters*, 11(7), 1979–1984.
- Saputra, R., & Dahmiri, D. (2022). Pengaruh Financial Technology Terhadap Perilaku Keuangan Melalui Niat Berperilaku Sebagai Variabel Mediasi Pada Usaha Kecil Menengah Di Kabupaten Tebo. *Jurnal Manajemen Terapan Dan Keuangan*, 11(03), 755–768.
- Waty, N. Q., Triwahyuningtyas, N., & Warman, E. (2021). Analisis perilaku manajemen keuangan mahasiswa dimasa pandemi covid-19. *Konferensi Riset Nasional Ekonomi Manajemen Dan Akuntansi*, 2(1), 477–495.