Journal of Economics, Finance and Management Studies

ISSN (print): 2644-0490, ISSN (online): 2644-0504

Volume 08 Issue 11 November 2025

Article DOI: 10.47191/jefms/v8-i11-41, Impact Factor: 8.317

Page No: 7524-7532

Digital Payment Methods Through E-Commerce as a Moderator of Financial Inclusion and Financial Literacy on SME Financial Performance in Palembang City

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ABSTRACT: This study aims to analyze and apply the influence of financial inclusion and financial literacy on the financial performance of Small and Medium Enterprises (SMEs) in Palembang City, with digital payment methods via E-Commerce serving as the moderating variable. The population in this study consists of SME actors in Palembang City who utilize E-Commerce applications, totaling 80,627 SMEs. The sample was drawn using the Slovin formula, resulting in a calculated sample size of 398 SMEs. The analysis technique used is the Structural Equation Modeling (SEM) method based on Partial Least Squares (PLS), assessed through the testing of the outer model and the inner model. The results of the study indicate that financial inclusion and financial literacy have a positive and significant effect on SME financial performance. However, digital payment methods via E-Commerce do not significantly moderate the influence of financial inclusion and financial literacy on SME financial performance.

KEYWORDS: E-Commerce, Financial Inclusion, Financial Literacy, Digital Payment

INTRODUCTION

Data from the Palembang City Government shows that there are over 80,000 active MSME (Micro, Small, and Medium Enterprises) entrepreneurs spread across 18 sub-districts. The majority of these are micro-enterprises that face limitations in terms of capital, market access, and technology. Nevertheless, the high entrepreneurial spirit and broad market potential make MSMEs the backbone for reducing unemployment and improving the welfare of the local community. In recent years, the Palembang City Government has been pushing for the digitalization of MSMEs to accelerate economic transformation. This initiative includes digital skills training, business mentoring, and the utilization of e-commerce platforms for marketing and payment purposes. These efforts are expected to expand the business reach of MSMEs, strengthen their competitiveness, and improve financial performance sustainably.

The financial performance of MSMEs (Micro, Small, and Medium Enterprises) still faces various challenges, ranging from limited access to formal financing, low financial literacy, to the suboptimal utilization of digital technology, particularly in payment systems. Specifically in Palembang City, the adoption of digital payments by MSME entrepreneurs is still considered varied. Most traditional MSMEs still rely on cash transactions or manual transfers, while a small portion who are digitally literate have begun to utilize e-commerce-based payment systems. This raises a crucial question: to what extent are digital payment methods able to moderate (strengthen or weaken) the influence of financial inclusion and financial literacy on the financial performance of MSMEs.

Financial inclusion is a key factor in creating economic growth that is more inclusive, efficient, effective, and sustainable. Equal access to financial services not only encourages an increase in individual welfare but also strengthens national economic stability. In this context, financial innovation through Financial Technology (Fintech) plays a critical role in expanding the scope of financial inclusion, especially in developing countries like Indonesia. Fintech opens up significant opportunities to reach segments of society previously underserved by the formal financial system, such as low-income people, informal workers, and MSME entrepreneurs in remote areas. Services like mobile banking, digital wallets, peer-to-peer lending, and digital payment systems have helped overcome geographical barriers, high costs, and the limitations of conventional financial infrastructure. With easy access to digital financial products and services, people can carry out various economic activities, such as saving, borrowing, investing, and paying for daily transactions more practically and securely. This directly impacts the increase in economic productivity and the reduction of social inequality (Gustriani et al, 2023).

On the other hand, financial literacy refers to the ability of individuals or business actors to understand, manage, and make appropriate decisions regarding financial aspects, including the management of income, expenses, savings, investments, and risk control. In the context of business, particularly MSMEs, financial literacy is an essential foundation for supporting sound, efficient, and sustainable financial management. As time progresses, financial technology (Fintech) has brought fundamental changes to how individuals and businesses access and use financial services. Financial digitalization enables transactions to become faster, safer, and more affordable. Digital finance applications now facilitate real-time financial management, ranging from recording cash flow, preparing financial reports, to planning and evaluating business budgets. A strong understanding of the concepts and practices of digitalization in financial management is crucial, especially for MSMEs who often face limitations in capital, market access, and human resources. With digital financial literacy, MSME entrepreneurs can identify business development opportunities, plan expenditures more wisely, and minimize the risk of business failure due to financial mismanagement (Rahayu & Ali, 2022).

There are several research gaps in previous studies. Some studies indicate that financial inclusion has a positive and significant influence on the performance of MSMEs. For instance, research by (Mutamimah & Indriastuti, 2023) found that increased access to formal financial services can enhance the performance of small and medium enterprises. Financial inclusion improves performance by expanding access to funding, boosting consumption, diversifying risk, increasing operational efficiency through digitalization, and strengthening economic stability by reducing financial inequality (Khatib et al., 2022). Ghassibe et al. (2019) showed that increased access to formal financial services can enhance the productivity and growth of small businesses through expanded financing access and improved operational efficiency. Another study by Jimi et al. (2019) provided evidence that credit access can significantly increase the productivity of the agricultural sector, reflecting the positive potential of financial inclusion on business performance. Financial inclusion improves business performance because it encourages funding, reduces financial uncertainty, supports digitalization, and strengthens economic stability. However, other research by Antwi et al. (2024) shows different results, where financial inclusion has a negative and significant effect on MSME performance in developing countries. Financial inclusion in developing countries can have a negative impact due to weak financial literacy, the risk of overleveraging resulting from poorly managed credit access, an imbalance between increased credit and business capacity, and a lack of supporting infrastructure that makes the use of financial services less effective (Anggriani, 2023). Additionally, Yue et al. (2022) found that the digitalization of financial inclusion in some developing countries can increase the risk of households and business actors falling into a debt trap.

Research by (Lontchi et al., 2023) indicates that financial literacy has a positive and significant influence on the performance of MSME firms. This is because financial literacy enhances MSME performance by aiding in better financial management, sound investment decision-making, more effective access to funding sources, and financial risk mitigation, thereby allowing MSMEs to grow and operate more efficiently. The adoption of e-commerce is considered to expand the market and increase MSME sales. Kurniasari et al. (2023) found that high financial literacy significantly improves MSME performance through the business owners' ability to manage finances, make appropriate investment decisions, and utilize both formal financial services and Financial Technology (FinTech) to broaden financing access. This finding aligns with the study by (Wael Abdallah et al., 2024), which found that financial literacy has a positive and significant influence on business performance. SME owners who possess a good level of financial understanding are able to manage cash flow more effectively, make sound investment decisions, and optimally utilize financial instruments to support business growth.

Based on the description above, the research problem to be discussed in this study is: Can digital payment methods through E-Commerce moderate the influence of financial inclusion and financial literacy on the performance of MSMEs in Palembang City? Based on this problem, the objectives to be achieved are to analyze and determine the influence of financial inclusion and financial literacy on the financial performance of MSMEs in Palembang City, with digital payment methods through E-Commerce as the moderating variable.

LITERATURE REVIEW

E-Commerce dan MSMEs

E-Commerce enables MSMEs to facilitate payment transactions through digital platform applications. The use of e-commerce applications makes it easier for business actors to regulate and control their financial systems, as well as perform financial management. Utilizing e-commerce applications is one way to increase business income by implementing a more practical payment system. The increasingly rapid development of science and technology has created changes toward a more practical and efficient lifestyle (Canover & Kartikasari, 2021).

Financial Inclusion

According to the Financial Services Authority (OJK), Financial Inclusion is the availability of access to various institutions, products, and financial services in accordance with the needs and capabilities of the community in order to improve public welfare (Elouaourti & Ezzahid, 2024). The objectives of financial inclusion, according to the Financial Services Authority Regulation, include: increasing public access to Financial Services Institutions (PUJK) products and services; increasing the provision of financial products and/or services by PUJK in line with community needs and capabilities; increasing the utilization of financial products and/or services in line with community needs and capabilities; and improving the quality of the use of financial products and services in line with community needs and capabilities (Nurohman et al., 2021).

Financial Literacy

According to the Department of Financial Literacy and Education of the Financial Services Authority (OJK, 2021), Financial Literacy is a critical skill for empowering the community, especially vulnerable and underserved populations, including Micro, Small, and Medium Enterprises (MSMEs), as well as supporting welfare, financial inclusion, and consumer protection. The G20 also stated that digital transformation has the potential to increase productivity, strengthen recovery, and contribute to shared prosperity in the era of the COVID-19 pandemic.

Financial Performance of Micro, Small, and Medium Enterprises (MSMEs)

Financial Performance serves as a standard or measure of the success or failure in achieving the established goals of an organization or business. MSME performance is underpinned by several factors that contribute to achieving maximum performance, such as the level of financial literacy, the business owner's education level, the location of the owner's residence, the business location, age, and others. These measures are taken so that MSMEs can generate maximum profit, anticipate losses, and minimize costs incurred. If these aspects can be fulfilled, MSMEs will achieve their business objectives (Pramestiningrum & Iramani, 2019).

Research Conceptual Framework

This conceptual framework suggests that e-commerce can serve as an effective moderator in improving the financial performance of MSMEs through financial inclusion and financial literacy. In this study, the relationships between the variables to be analyzed are illustrated in Figure 1 as follows:

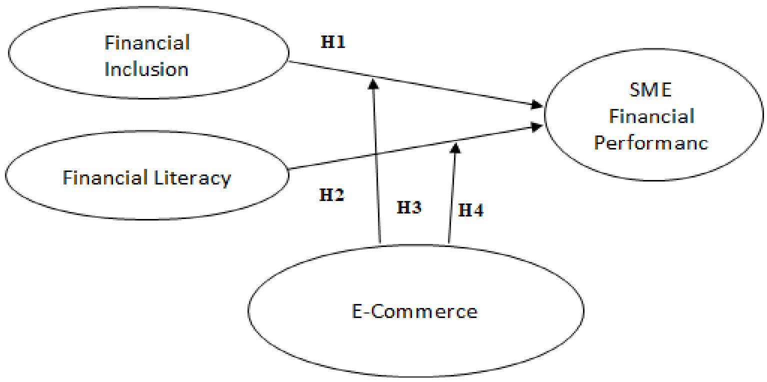

Figure 1. Research Conceptual Framework

Hypothesis

Financial inclusion in developing countries can have a negative impact due to weak financial literacy, the risk of overleveraging resulting from poorly managed credit access, an imbalance between credit increase and business capacity, and a lack of supporting infrastructure that makes the use of financial services less effective (Anggriani, 2023). Conversely, (Masrizal et al., 2024) state that financial inclusion has a significant influence in developing the MSME sector. Research results by (Al-shami et al., 2024) indicate that financial inclusion significantly affects SME performance. Furthermore, a study by (Wahyuni Saskia et al., 2023) shows that financial inclusion partially and simultaneously has a positive and significant effect on MSME financial performance. Research by (Mutamimah & Indriastuti, 2023) found that increased access to formal financial services can improve the performance of small and medium enterprises. Financial inclusion enhances performance by expanding access to funding, boosting consumption, diversifying risk, increasing operational efficiency through digitalization, and strengthening economic stability by reducing financial inequality (Khatib et al., 2022). However, other research by (Antwi et al., 2024) shows different results, where financial inclusion has a significant negative effect on the performance of MSMEs in developing countries.

H_1 : Financial inclusion significantly affects the financial performance of MSMEs in Palembang City

According to (Mutiara et al., 2022), research results show that the utilization of financial literacy has a positive and significant influence on the improvement of MSME performance. Furthermore, research findings from (Sanistasya et al., 2019) indicate that there is a positive and significant influence of financial literacy on the performance of small businesses. Additionally, (Laurensia et al., 2024) demonstrated that financial literacy has a positive and significant effect on the financial performance of MSMEs. The findings from (Mutiara et al., 2022) suggest that financial literacy has a positive and significant effect on improving MSME performance. Research results by (Daulay et al., 2023) show that financial literacy has a positive and significant influence on the business performance of MSMEs. (Otieno et al., 2013) stated that the presence of financial literacy in small-scale businesses has a significant positive impact on the performance of business actors.

H_2 : Financial literacy significantly affects the financial performance of MSMEs in Palembang City

E-Commerce's ability to moderate Financial Inclusion and Financial Literacy on MSME Financial Performance encompasses how effectively the implementation of e-commerce utilizes applications to increase income and achieve more efficient financial management. Based on Institutional Theory, the use of e-commerce platform applications encourages digitalization in MSMEs to increase income and cash flow management through transaction systems and business marketing via digital business services. E-commerce platforms influence financial inclusion by providing digital payments and marketing systems that facilitate MSMEs' digital access to financial services. Furthermore, regarding financial literacy, e-commerce applications assist MSME actors in understanding financial recording by enhancing financial transparency and accuracy, offering automated financial reporting features that help MSMEs make better financial decisions for business sustainability and advancement. Research by (Lontchi et al., 2023) shows that the relationship between fintech and financial literacy is positive and significant, and fintech has a positive and significant effect on the performance of SMEs. According to the research results by (Luo, 2024), the impact of digitalization is positively related to financial inclusion and the productivity of micro, small, and medium enterprises (MSMEs). Research findings by (Cahyawati et al., 2023) state that financial technology and literacy positively influence financial inclusion, and financial technology and literacy positively influence MSME sustainability. Moreover, financial inclusion has a positive effect in mediating the influence of financial technology and literacy on MSME sustainability. Research by (Purba et al., 2021) shows that digital marketing significantly affects business sustainability, e-commerce significantly affects business sustainability, and digital marketing significantly affects financial performance.

H_3 : E-commerce moderates the relationship between financial inclusion and the financial performance of MSMEs in Palembang City

H_4 : E-commerce moderates the relationship between financial literacy and the financial performance of MSMEs in Palembang City

RESEARH METHODOLOGY

The population in this study comprises MSME actors who have used an E-Commerce application for a minimum of 6 months in Palembang City, totaling 80,627 MSMEs. The sample selection was determined using the Slovin formula calculation, resulting in a sample size of 398 MSME actors. This research employs the Structural Equation Modeling (SEM) method based on Partial Least Squares (PLS), operated through the SmartPLS version 4.0 application. This involves testing both the outer model and the inner model.

RESULT AND DISCUSSION

Outer Model

1. Convergent Validity Test

Table 1. Results of the Convergent Validity Test

Indicator(s)	Outer Loadings	Evaluation
Financial Inclusion		
FI1	0.801	Valid
FI2	0.807	Valid
FI3	0.795	Valid
FI4	0.823	Valid
FI5	0.758	Valid
FI6	0.737	Valid
Financial Literacy		

FL1	0.785	Valid
FL2	0.814	Valid
FL3	0.770	Valid
FL4	0.800	Valid
FL5	0.742	Valid
FL6	0.730	Valid
Financial Performance		
FP1	0.740	Valid
FP3	0.715	Valid
FP4	0.776	Valid
FP5	0.739	Valid
FP6	0.711	Valid
E-Commerce		
EC1	0.832	Valid
EC2	0.853	Valid
EC3	0.865	Valid
EC4	0.855	Valid
EC5	0.826	Valid
EC6	0.807	Valid
EC*FI	1.000	Valid
EC*FL	1.000	Valid

Table 1 shows that the outer loading value $\geq$ 0.70 indicates that each indicator has a strong contribution to its respective construct. The indicators for the variables Financial Inclusion, Financial Literacy, and E-commerce have values above 0.70, and are therefore declared valid. In contrast, for the Financial Performance variable, there is 1 indicator that was removed from the model because it had an outer loading value < 0.70, specifically FP 2, while the remaining indicators are declared valid. The outer loading values for the moderation indicators (ECFI and ECFL) are 1.000, which indicates that the interaction results between variables are perfectly formed in the moderation model. Overall, the results of this outer loading test show that all constructs in the research model possess good convergent validity.

2. Reliability Test

Table 2. Results of the Reliability Test

	Cronbach's Alpha	**rho_A**	**Composite Reliability**	**Average Variance Extracted (AVE)**
E-Commerce	0.916	0.925	0.935	0.705
Financial Inclusion	0.877	0.886	0.907	0.620
Financial Performance	0.790	0.796	0.856	0.543
Financial Literacy	0.866	0.867	0.900	0.599

Table 2 presents the results of the reliability and construct validity tests, which include the values for Cronbach's Alpha, rho_A, Composite Reliability, and Average Variance Extracted (AVE) for the variables E-commerce, Financial Inclusion, Financial Performance, and Financial Literacy. The results indicate that all constructs have Cronbach's Alpha and Composite Reliability (rho_A) values of > 0.7, and all AVE values are > 0.5. Therefore, it can be concluded that all the constructs are reliable, signifying that the research instrument meets the criteria for reliability and convergent validity.

Inner Model

1. R-Square Test

Table 3. Results of the R-Square Test

	R Square	**R Square Adjusted**

MSME Financial Performance	0.236	0.227

Table 3 shows that the R-Square value obtained is 0.236 with an R-Square Adjusted value of 0.227 for the MSME Financial Performance construct. This means that 23.6% of the variation or change in MSME financial performance can be explained by the variables Financial Inclusion, Financial Literacy, and E-Commerce (as well as their moderation effects). Both of these values indicate that the model possesses a sufficient explanatory power (moderate) within the context of this research.

2. Uji Effect Size (F – Square)

Table 4. Results of the Effect Size Test

	Financial Performance
Financial Inclusion	0.063
Financial Literacy	0.034
E-Commerce x Financial Inclusion	0.012
E-Commerce x Financial Literacy	0.002
E-Commerce	0.035

Based on Table 4, the results of the effect size (F^2) test analysis indicate that the magnitude of the relative influence of each variable on Financial Performance is as follows: Financial Inclusion (0.063), Financial Literacy (0.034), E-Commerce x Financial Inclusion (0.012), E-Commerce x Financial Literacy (0.002), E-Commerce (0.035). According to Cohen's (1988) interpretation guidelines, an F^2 value of 0.02 indicates a small effect, 0.15 indicates a medium effect, and 0.35 indicates a large effect. Based on these results, it can be concluded that the Financial Inclusion variable has the largest influence on Financial Performance, with an F^2 value of 0.063, which falls into the category of a small-to-medium effect. This reinforces the previous findings in the path coefficient test, which showed that Financial Inclusion positively and significantly affects MSME Financial Performance. This means that access to formal financial services, whether through banks or digital platforms, has a real, albeit relatively small, contribution to improving the financial performance of micro, small, and medium enterprises. Financial Literacy has an F^2 value of 0.034, which also falls into the small effect category. This finding indicates that the ability of MSME actors to understand financial concepts, manage cash flow, and make sound financial decisions also influences their financial performance, although not as large as the influence of Financial Inclusion. Meanwhile, E-Commerce x Financial Inclusion (0.012) and E-Commerce x Financial Literacy (0.002) have very small F^2 values, indicating that the moderating role of E-Commerce on the relationship between both Financial Inclusion and Financial Literacy with Financial Performance has not shown a statistically significant influence. In other words, the use of E-Commerce is not yet strong enough to strengthen or weaken that relationship within the context of this study.

Furthermore, the E-Commerce variable directly has an F^2 value of 0.035, which also falls into the small effect category. This suggests that the utilization of digital platforms in the MSME business process does have a positive impact on improving financial performance, but its influence remains relatively limited. Overall, the results of the effect size test show that the largest influence on Financial Performance comes from Financial Inclusion, followed by Financial Literacy and E-Commerce, while the moderating effect from the E-Commerce interaction variables is still categorized as very small. This confirms that increasing the utilization of digital technology through e-commerce, expanding access to financial services, and strengthening financial literacy are important factors in supporting the improvement of financial performance, whereas the moderating role remains weak and has not been able to exert a significant influence on the relationship between the variables.

3. Hypothesis Testing

Table 5. Results of the Hypothesis Test

	Original Sample (O)	**T statistics (|O/STDEV|)**	**P Values**
Financial Inclusion -> Financial Performance	0.259	4.404	0.000
Financial Literacy -> Financial Performance	0.186	3.323	0.001
E-Commerce x Financial Inclusion -> Financial Performance	0.115	1.956	0.051
E-Commerce x Financial Literacy -> Financial Performance	-0.042	0.784	0.433

The original sample value between Financial Inclusion and Financial Performance is 0.259 with a P-value of 0.000, indicating that the influence is positive and significant at the 5% significance level. The T-statistics value of 4.404 > 1.96 and the P-value of 0.000 < 0.05 signify that this influence is statistically significant. This finding is consistent with financial inclusion theory, which states that access to financial resources can improve business efficiency and capital management capabilities. Within the framework of Institutional Theory, this finding illustrates that the availability of financial infrastructure and government regulatory support plays a crucial role in shaping the behavior of MSME actors. Formal institutions, such as banks, cooperatives, and government financing programs, not only provide capital access but also establish norms, standards, and incentives that encourage MSMEs to manage their businesses more professionally. When rules and regulatory support are aligned, MSMEs tend to respond by increasing financial transparency, improving business governance, and expanding their business networks. This finding aligns with the research by Togun et al. (2022), which showed that financial inclusion is a key factor in driving the growth and sustainability of MSMEs. Adequate access to banking services and formal financing is proven to increase production capacity, expand markets, and improve the capital structure of micro and small enterprises. However, the result of this study differs from the findings of (Ayem & Afrianingrum, 2025), who found that financial inclusion is not always significantly associated with financial performance in regions with low financial literacy. They argue that financial access alone is insufficient; without the ability of business actors to understand risk, manage loans, and allocate funds wisely, the benefits of financial inclusion will not be optimal.

he Original Sample value between Financial Literacy and Financial Performance is 0.186 with a P-value of 0.001. With a T-statistics value of 3.323 > 1.96 and a P-value of 0.001 < 0.05, this result is significant, thus proving that financial literacy affects the improvement of business efficiency and profitability. This result explains that the higher the level of understanding and ability of MSME actors in managing finances, the better the financial performance achieved. Good financial literacy helps business actors in managing cash flow, planning investments, handling debt, assessing risk, and making appropriate financial decisions, allowing the business to run more efficiently and sustainably. The descriptive analysis results, which show a high average financial literacy score, indicate that the majority of respondents have a good financial understanding and are able to manage their business resources effectively. Within the framework of Institutional Theory, financial literacy is a form of cognitive capital that enables MSME actors to interpret, comply with, and utilize formal rules and incentives provided by financial institutions and regulators. When MSME actors understand financial products, credit risk, and the benefits of accounting records, they are better able to follow the standards set by financial institutions, access formal financing, and respond appropriately to government policies. In other words, formal institutions such as banks, cooperatives, and financial authorities not only provide services but also shape business mindset and behavior through mechanisms of education, regulation, and business norms.

The Original Sample value for the relationship between E-Commerce x Financial Inclusion and Financial Performance is 0.115 with a P-value of 0.051. This P-value is slightly above the 0.05 significance threshold, indicating that the moderating effect of E-Commerce on the relationship between Financial Inclusion and Financial Performance is statistically non-significant. Theoretically, within Institutional Theory, this moderation relationship explains how formal institutions, through regulations, digital inclusion policies, and the strengthening of the e-commerce ecosystem, shape and reinforce the technological adoption behavior of MSMEs. Institutions provide the institutional framework (including norms, regulatory pressure, and technical support) that encourages business actors not only to access formal financial services but also to integrate them with digital channels to optimize operational activities and distribution. This finding is consistent with the international study by (Feiqiong Wei et al., 2025), which showed that the level of technological adoption by MSMEs moderates the positive effect of financial inclusion and digital banking on business performance, with a stronger influence on MSMEs that are ready to adapt digital technology more intensively. Conversely, this result aligns with the research findings of Rahman and Suhartini (2021), which explained that the level of digital adoption among MSME actors is still low, thus the role of E-Commerce in strengthening the relationship between financial inclusion and financial performance has not been effective. Similarly, the study by Agyapong and Attram (2019) asserts that the moderating influence of digital technology on the relationship between financial access and business performance will only become significant when business actors possess high digital adaptation capabilities.

The Original Sample value for the relationship between E-Commerce x Financial Literacy and Financial Performance is -0.042 with a P-value of 0.433 and a T-statistics value of 0.784 < 1.96. The P-value, which is much larger than 0.05, indicates that E-Commerce does not have a significant effect in moderating the relationship between Financial Literacy and MSME Financial Performance. This result indicates that the increase in financial literacy is not always followed by an increase in digital capability. In many cases, MSME actors who understand financial management may not necessarily have sufficient technological knowledge to optimize the use of E-Commerce in supporting their business finances. This condition may be the reason why the interaction between Financial Literacy and E-Commerce is not significant in increasing financial performance. These research findings align with the results of a study by Rahman and Suhartini (2021), which found that the role of E-Commerce as a moderator between financial literacy and business performance is still weak due to low digital literacy among MSME actors. Similar results were also presented by Sari and Nugroho (2020), who stated that although MSMEs have good financial management abilities, they are not yet fully capable of utilizing digital technology to expand markets and increase profits.

CONCLUSION, LIMITATIONS, AND SUGGESTIONS

In general, this study concludes that the improvement of Financial Inclusion and Financial Literacy are key factors that can directly and significantly enhance the Financial Performance of MSMEs in Palembang City. This means that the better the MSMEs' access to and understanding of financial products and services, the better the financial performance they achieve. However, the role of Digital Payment Methods through E-Commerce as a moderating variable was found to be non-significant. This suggests that the use of digital payment methods via E-Commerce, while a modern business practice, has not been able to significantly strengthen or weaken the relationship between Financial Inclusion/Literacy and MSME Financial Performance. In other words, the basic influence of Financial Inclusion and Financial Literacy remains dominant and is independent of the level of E-Commerce digital payment usage.

This research focuses solely on MSMEs in Palembang City and only those MSMEs that utilize E-Commerce applications. This limits the ability to generalize the results to other regions outside Palembang or to MSMEs that do not utilize E-Commerce. To enhance the generalizability of the findings, it is suggested that the scope of the research area be expanded to include other cities/districts in the South Sumatra Province, or that the population criteria be broadened by involving MSMEs in non-E-Commerce sectors for comparison.

REFERENCES

1) Al-shami, S. A., Damayanti, R., Adil, H., Farhi, F., & Al mamun, A. (2024). Financial and digital financial literacy through social media use towards financial inclusion among batik small enterprises in Indonesia. Heliyon, 10(15), e34902. https://doi.org/10.1016/j.heliyon.2024.e34902
2) Anggriani, I. et al. (2023). Pengaruh Inklusi Keuangan, Literasi Keuangan, dan Pengelolaan Keuangan terhadap Kinerja UMKM di Kabupaten Dompu. Jurnal Ilmiah Ekonomi Dan Bisnis, 2(3), 119–121.
3) Antwi, F., Kong, Y., & Gyimah, K. N. (2024). Financial inclusion, competition and financial stability: New evidence from developing economies. Heliyon, 10(13), e33723. https://doi.org/10.1016/j.heliyon.2024.e33723
4) Ayem, S., & Afrianingrum, R. W. (2025). Financial inclusion moderates the determinans of SME's financial performance. Jurnal Akademi Akuntansi, 8(3), 415–433. https://doi.org/10.22219/jaa.v8i3.39621
5) Cahyawati, N. E., Nantungga, K. H., & Tumewang, Y. K. (2023). The influence of financial technology & literacy on MSMEs sustainability with financial inclusion as a mediating variable. Journal of Contemporary Accounting, 5(2), 71–82. https://doi.org/10.20885/jca.vol5.iss2.art2
6) Canover, R. S., & Kartikasari, D. (2021). Penetration of Imported Products on E-Commerce Platform in Indonesia and Strategies for Improving Local Product Competitiveness. International Journal of Economics, Business, and Accounting Research (IJEBAR), 5(1), 23–33.
7) Daulay, U. D., Lubis, R., & Gautama, B. (2023). the Influence of Fintech Usage and Financial Literacy on the Performance of Msme With Digital Marketing As the Moderating Variable. Business and Accounting Research (IJEBAR), 7(1), 184–194.
8) Departem Literasi dan Keuangan OJK. (2021). Strategi Nasional Literasi Keuangan Indonesia. Otoritas Jasa Keuangan, 378.
9) Elouaourti, Z., & Ezzahid, E. (2024). Factors of regional financial inclusion in Morocco. Regional Science Policy and Practice, 16(3), 12516. https://doi.org/10.1111/rsp3.12516
10) Feiqiong Wei, Baiwei Xie, & Mingyan Chen. (2025). Digital financial inclusion, e-commerce development and entrepreneurial activity. International Review of Financial Analysis.
11) Ghassibe, M., Appendino, M., & Mahmoudi, S. E. (2019). SME Financial Inclusion for Sustained Growth in the Middle East and Central Asia.
12) Jimi, N. A., Nikolov, P. V., Malek, M. A., & Kumbhakar, S. (2019). The effects of access to credit on productivity: separating technological changes from changes in technical efficiency. Journal of Productivity Analysis, 52(1–3), 37–55. https://doi.org/10.1007/s11123-019-00555-8
13) Khatib, S. F. A., Hendrawaty, E., Bazhair, A. H., Rahma, I. A. A., & Al Amosh, H. (2022). Financial Inclusion and the Performance of Banking Sector in Palestine. Economies, 10(10), 1–15. https://doi.org/10.3390/economies10100247
14) Kurniasari, F., Lestari, E. D., & Tannady, H. (2023). Pursuing Long-Term Business Performance: Investigating the Effects of Financial and Technological Factors on Digital Adoption to Leverage SME Performance and Business Sustainability—

Evidence from Indonesian SMEs in the Traditional Market. Sustainability (Switzerland), 15(16). https://doi.org/10.3390/su151612668

15) Laurensia, Amna, L. S., & Aminah. (2024). Fintech, MSME Digitalization, Financial Literacy and Financial Performance: A Study on MSMEs in Bandar Lampung City. International Journal of Economic, Business and Innovation Reseacrh (IJEBIR), 3(2), 294–311.
16) Lontchi, C. B., Yang, B., & Shuaib, K. M. (2023). Effect of Financial Technology on SMEs Performance in Cameroon amid COVID-19 Recovery: The Mediating Effect of Financial Literacy. Sustainability (Switzerland), 15(3). https://doi.org/10.3390/su15032171
17) Luo, X. (2024). The Impact of Digital Transformation on Enterprises. Advances in Economics, Management and Political Sciences, 106(1), 242–253. https://doi.org/10.54254/2754-1169/106/20241670
18) Masrizal, Sukmana, R., & Trianto, B. (2024). The effect of Islamic financial literacy on business performance with emphasis on the role of Islamic financial inclusion: case study in Indonesia. Journal of Islamic Marketing, 166–192. https://doi.org/10.1108/JIMA-07-2022-0197
19) Mutamimah, M., & Indriastuti, M. (2023). Fintech, financial literacy, and financial inclusion in Indonesian SMEs. International Journal of Entrepreneurship and Innovation Management, 27(1/2), 137. https://doi.org/10.1504/ijeim.2023.10054381
20) Mutiara, M. E., Wiratno, A., & Herwiyanti, E. (2022). The Effect of Payment Gateway, Digitization, and Financial Literacy on MSME Performance. International Conference on Sustainable Competitiveness Advantage, 70.
21) Nurohman, Y. A., Kusuma, M., & Narulitasari, D. (2021). Fin-Tech, Financial Inclusion, and Sustainability: a Quantitative Approach of Muslims SMEs. International Journal of Islamic Business Ethics, 6(1), 54. https://doi.org/10.30659/ijibe.6.1.54-67
22) Otieno, S., Lumumba, M., Nyabwanga, Ojera, P., & Alphonce, J. O. (2013). Effect of provision of micro-finance on the performance of micro-enterprises: A study of youth micro-enterprises under Kenya Rural Enterprise Program (K-REP), Kisii County, Kenya. African Journal of Business Management, 5(20), 8290–8300. https://doi.org/10.5897/ajbm11.1419
23) Pramestiningrum, R. D., & Iramani. (2019). Pengaruh Literasi Keuangan, Financial Capital, dan Kebijakan Pemerintah terhadap Kinerja UMKM di Jawa Timur. STIE Perbanas Press, 9(2), 279–296.
24) Purba, M. I., Simanjutak, D. C. Y., Malau, Y. N., Sholihat, W., & Ahmadi, E. A. (2021). The effect of digital marketing and e-commerce on financial performance and business sustainability of MSMEs during COVID-19 pandemic in Indonesia. International Journal of Data and Network Science, 5(3), 275–282. https://doi.org/10.5267/j.ijdns.2021.6.006
25) Sanistasya, P. A., Raharjo, K., & Iqbal, M. (2019). The Effect of Financial Literacy and Financial Inclusion on Small Enterprises Performance in East Kalimantan. Jurnal Economia, 15(1), 48–59. https://doi.org/10.21831/economia.v15i1.23192
26) Togun, O. R., Ogunrinade, R., Olalekan, O. T., & Jooda, T. D. (2022). Financial Inclusion and SMEs' Performance: Mediating Effect of Financial Literacy under the Creative Common Attribution Non-Commercial 4.0. In Journal of Business and Environmental Management (JBEM) (Vol. 1). https://journals.airsd.org/index.php/jbem
27) Wael Abdallah, Arezou Harraf, Hasan Ghura, & Maryam Abrar. (2024). Financial literacy and small and medium enterprises performance: the moderating role of financial access . Emerald Insight.
28) Wahyuni Saskia, Andi Ainil Putri, Hismawati, H., A.Muh.Nurjalal, Ishak, I., & Linda Razak. (2023). The Influence of Financial Inclusion, Financial Literacy and Financial Behavior on Company Performance in MSMEs in Makassar City. International Journal of Economic Research and Financial Accounting (IJERFA), 1(4), 87–92. https://doi.org/10.55227/ijerfa.v1i4.40
29) Yue, P., Korkmaz, A. G., Yin, Z., & Zhou, H. (2022). The rise of digital finance: Financial inclusion or debt trap? Finance Research Letters, 47. https://doi.org/10.1016/j.frl.2021.102604