



The Influence Of Financial Literacy On Managerial Efficiency And Business Outcome

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ABSTRACT

The current volatile economic environment needs more than just intuition and experience to navigate through successfully; a solid diet of financial literacy is needed to give strategic direction and provide enterprise sustenance. This paper examines the role of financial literacy in determining the effectiveness of management and consequently the business performance among the small and medium scale enterprises (SMEs). Financial literacy is proposed according to a resource-based theoretical framework as an adaptive skill, which enhances efficiency of decision-making and operations. Cross sectional survey design was used to obtain data of 379 SME owners and senior managers representing multi-industrial sector companies. The direct and mediated correlation of financial literacy, managerial efficiency, and business outcomes was evaluated through the Structural Equation Modeling (SEM) with the utilization of AMOS. The measurement model had good fit statistics (RMSEA = 0.045; CFI = 0.958; TLI = 0.944) and thus shows that the hypothesized structure is valid. The findings indicated that financial literacy boosted the efficiency of managers ($b = 0.61$, $p < 0.001$) that exerted a favorable impact on business performance ($b = 0.53$, $p < 0.001$). Whereas the direct relation, between financial literacy and performance, was also significant ($p < 0.05$, 0.27), the indirect effect, via efficacy at managerial performance, was stronger. These discoveries further validate financial literacy as a strategic capability needed to effectively practice as a manager and continuously achieve balance enterprise success goals. The study recommends the integration of formal and full financial education programs in SME development programs and the need of future follow-up and technologically oriented studies to enhance the existing knowledge of financial capability in dynamic business world.

Keywords: Financial Literacy, Managerial Efficiency, Business Outcome, SMEs, Structural Equation Modeling, Decision-Making Capability

1. INTRODUCTION

In the fast-changing and ever more unstable business environment of the 21st century, managers' capacity to make effective financial decisions determines organizational success. As companies battle to navigate intricate challenges spanning from economic shocks to technological advance financial acumen has become a critical managerial skill that has a direct impact on efficiency, strategic vision, and long-term viability. Financial literacy, defined broadly as proficiency in grasping and applying financial principles to make sound decisions, goes beyond rudimentary numerical competence; it encompasses budgeting, financial planning, investment choices, risk management, and understanding financial technologies. (Ferawati et al. 2024). In the case of small and medium-sized enterprises (SMEs) and micro-enterprises major drivers of economic growth financial literacy is especially significant due to their restricted access to financial advisors and vulnerability to financial mismanagement.

Evidence increasingly points to a robust relationship between company success and financial literacy. Managerial decisions rooted in sound financial knowledge foster operational efficiency, resource optimization, innovation, and strategic agility (Duréndez et al. 2023). Financial technologies' (FinTech) ascent and digital finance has further underscored the urgency of equipping business leaders with financial acumen. The relationship among business performance, managerial effectiveness, and financial literacy has thus become a focal point in both scholarly inquiry and policy discussions.

Extensive studies affirm the importance of financial literacy in enhancing managerial functions and driving business success. Alshebami and Murad (2022) emphasized that sustainable performance is greatly influenced by financial knowledge. when moderated by entrepreneurial resilience, illustrating the psychological and behavioral dimensions of financially sound leadership. Similarly, Bharathithasan and Srinivasan

(2024) found that financial literacy positively influences small business growth by enabling owners to better interpret financial data, reduce waste, and invest judiciously.

The literature also explores how financial knowledge enhances specific organizational competencies. Bawono et al. (2022) highlighted that financial knowledge, alongside problem-solving abilities and knowledge management, collectively uplifts SME performance. Kulathunga et al. (2020) proposed a model in which technology and financial literacy improve firm performance through enterprise risk management (ERM) practices. Furthermore, Duréndez et al. (2023) illustrated how CEOs with high financial literacy are more inclined toward technological innovation, enabled by strong internal control systems and calculated risk-taking.

Several regional and sector-specific studies have confirmed these relationships. Beureukat & Setyawati (2023) revealed that in the Indonesian context, higher financial literacy among MSMEs significantly improves financial management practices. Heryanto & Leng (2021) demonstrated similar findings in Surabaya, linking managerial experience and financial literacy to financial management performance. Kartini and Wijaya (2023) corroborated these effects in the Pantura area of Indonesia, suggesting a broad geographic relevance.

Studies introduce mediating variables that strengthen the literacy performance link. Hidayat-ur-Rehman (2024) argued that the impact of financial literacy is mediated by the adoption of fintech. on sustainable performance, offering a more nuanced understanding of technology's role in translating knowledge into outcomes. Kurniasari et al. (2025) proposed a serial mediation model where financial literacy leads to FinTech acceptance and better financial accessibility, culminating in enhanced sustainability and performance.

On the empirical front, Beltran (2024) examined the impact of financial literacy education initiatives for staff and found substantial performance improvements among small businesses in Texas. Ishtiaq et al. (2020) highlighted the role of government support as a moderating factor in resource acquisition and financial performance, further emphasizing the systemic nature of financial capability. Haleem (2022) offered insights from Sri Lanka, showing that financial literacy is a determinant of sustainable performance, especially when contextualized within the constraints and opportunities faced by SMEs. Collectively, these studies underscore a compelling argument the concept of financial literacy is not just a desirable trait but a foundational asset that enables managerial efficiency and fosters superior business outcomes.

Despite growing awareness and policy emphasis, a significant number of business managers especially within SMEs and micro-enterprises continue to operate with limited financial literacy. This knowledge gap hampers their ability to engage in strategic decision-making, efficiently manage resources, and adapt to technological shifts such as FinTech. While previous studies have established correlations between company

success and financial literacy, there remains a paucity of integrated models that link financial literacy with managerial efficiency and its downstream effects on business outcomes. Moreover, regional disparities and sectoral variations are often underexplored, limiting the generalizability of findings and the development of universal strategies for capability building.

The study focuses on examining how financial literacy influences managerial efficiency and, in turn, affects business outcomes, particularly in the context of SMEs and micro-enterprises. It considers both direct and mediated relationships, incorporating dimensions such as financial management, innovation, sustainability, and digital finance adoption. The study draws on empirical findings from diverse geographic and organizational settings but is especially attentive to the role of managerial capacity as a linking mechanism between knowledge and performance.

The findings of the study hold considerable significance for multiple stakeholders. For business owners and managers, the research underscores the criticality of enhancing financial literacy as a means of enhancing judgment and performance. For policymakers and educators, the results provide evidence to support targeted training programs, financial education curricula, and support mechanisms for SMEs. For researchers, this study fills an important gap by integrating financial literacy, managerial efficiency, and business outcomes into a coherent analytical framework. It also opens avenues for future research into digital literacy, psychological resilience, and systemic support structures that enhance financial capability

Research Objectives

- To examine the influence of financial literacy on managerial efficiency within SMEs and micro-enterprises
- To evaluate the relationship between managerial efficiency and overall business outcomes, including performance, growth, and sustainability
- To investigate the mediating and moderating factors such as FinTech adoption and resilience that shape the link between financial literacy and business success

2. METHODOLOGY

2.1 Research Design

The study was conducted using a quantitative, cross-sectional framework to measure the role that the impact of financial literacy on managerial effectiveness and company outcomes. This method of study allowed investigating measurable relations between variables with the help of the numerical data obtained on a distinct sample on a certain moment of time. It brought in flexibility in the analysis of the trends, correlations, and structural strength of relationships amongst key constructs important to the performance of SMEs.

2.2 Data Collection Method

The primary data was gathered using a standardized questionnaire, which aims to get a similar response out of a broad category of participants. The interview

questionnaire covered four important sections namely, demography, financial literacy, managerial efficiency and the measures of business performance. Most of the items were quantified using a five-point response version of a likert scale that deals with the measurement of attitudes, behaviors and perceptions.

The tool was prepared based on already validated constructs and pilot tested to ensure that it is clear and reliable. After being refined, the survey was conducted in computerized form through secure online medium. The form was open to the respondents within three weeks and thereafter, reminders were sent out in an effort to increase the rate of participation.

2.3 Population and Sampling

The owners, founders, and senior supervisors of small and medium-sized businesses (SMEs) belonging to different fields such as the target demographics were technology, manufacturing, services, and retail. The participants who participated in this study were chosen upon their engagement in the financial decision-making processes in their companies.

Purposive sampling technique was applied to make sure that of respondents with relevant roles and experience. Eligibility criteria required participants to have held a managerial role for at least two years and to be actively engaged in financial planning or operational control. Out of 412 distributed questionnaires, 379 complete and valid responses were retained after screening for completeness and consistency. The final sample offered a broad representation across industries and business sizes.

2.4 Data Analysis Technique

Results, which were derived after 379 responses made valid, were analyzed using Statistical Package of Social Sciences (SPSS, Version 22) and Analysis of Moment Structures (AMOS) in order to form a robust analysis of proposed relationships. To summarize demographic profiles and main variables were conducted using descriptive statistics, and reliability testing was conducted to establish the internal consistency of the scales of measurement. SEM was employed to investigate the structural association among financial literacy, managerial effectiveness and business performance. The technique enabled analyzing multiple interrelated constructs simultaneously. Overall model fit was checked

using indices that have come to be widely used, including the Root Mean Square Error of Approximation (RMSEA), which should be less than or equal to 0.08, and the Comparative Fit Index (CFI) and Tucker Lewis Index (TLI), which were also expected to be at least 0.90. These fit indices provided an overall summary of the goodness of the envisioned model in representing data observed structure.

2.5 Ethical Consideration

All ethical requirements were observed in the study. At the onset of the survey, informed consent was sought in all the participants. Open communication was made on the study's goal, data confidentiality, and the voluntary nature of participation. Respondents had the right to leave at any time without facing any repercussions. Every response was anonymised, and no personal information was gathered. The data were stored securely and used solely for academic analysis. The relevant institutional review committee granted ethical approval, guaranteeing that the study always complied with academic and professional ethical standards.

3. RESULTS

The data analysis results from 379 valid responses from SME owners and managers are shown in this section. In order to assess the connections between financial literacy, managerial effectiveness, and business outcomes, the analysis proceeded as described in the methodology, starting with the demographic profile of the respondents and moving on to descriptive statistics and reliability analysis, model fit evaluation, and structural equation modeling.

3.1 Respondent Profile

Table 1 displays the 379 responders' demographic profile who participated in the study. The sample consisted of 65% male and 35% female SME owners or managers. Most participants were aged between 25–44 years, accounting for 78.1% of the total, reflecting a young to mid-career managerial base. Business sectors were well represented, with retail (30.1%) and services (25.1%) comprising the largest groups. In terms of operational tenure, most businesses had been in existence for 2–5 years (42%), followed by 6–10 years (33%), indicating a strong representation of emerging and mid-growth enterprises.

Table 1: Demographic Profile of Respondents (n = 379)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	246	65.0%
	Female	133	35.0%
Age Group	25–34 years	152	40.1%
	35–44 years	144	38.0%
	45 years and above	83	21.9%
Business Sector	Retail	114	30.1%
	Services	95	25.1%
	Manufacturing	76	20.1%
	Technology	94	24.8%

Years in Operation	2–5 years	159	42.0%
	6–10 years	125	33.0%
	More than 10 years	95	25.0%

3.2 Descriptive Statistics and Reliability Analysis

The reliability and descriptive statistics are shown in Table 2 coefficients for the key constructs measured in the study. Financial literacy recorded the highest mean score ($M = 4.12$), indicating a generally strong level of financial understanding among respondents. Managerial efficiency and business outcome also demonstrated high average scores ($M = 3.95$ and $M = 4.08$, respectively),

suggesting positive perceptions of managerial capability and performance. Standard deviations ranged between 0.56 and 0.63, reflecting moderate response variability. All three constructs exhibited outstanding internal consistency, as seen by Cronbach's alpha values above 0.85, which support the durability and dependability of the employed measurement scales.

Table 2: Descriptive Statistics and Reliability of Constructs

Construct	Mean (M)	Standard Deviation (SD)	Cronbach's Alpha (α)
Financial Literacy	4.12	0.56	0.87
Managerial Efficiency	3.95	0.63	0.85
Business Outcome	4.08	0.59	0.88

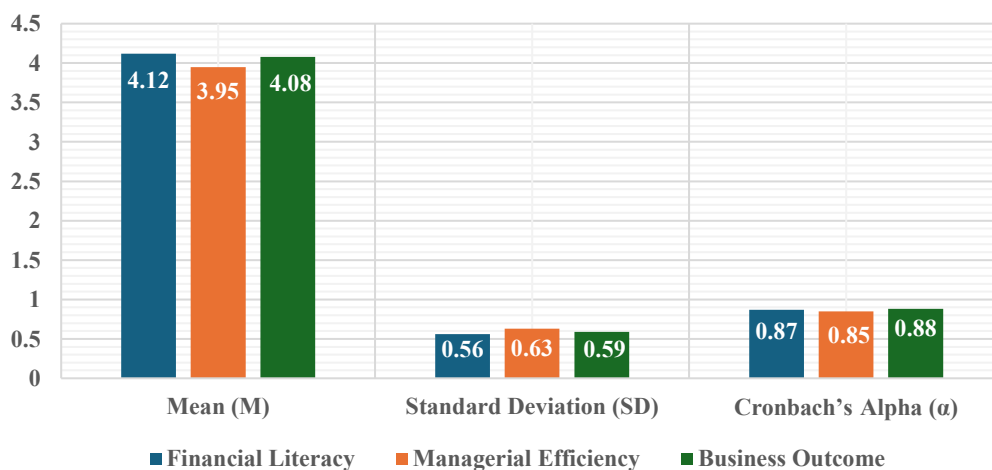


Figure 1: Descriptive Overview and Reliability of Constructs

The visualized bar chart in Figure 1 illustrates cronbach's alpha values, standard deviations, and mean scores for the three key constructs: Financial Literacy, Managerial Efficiency, and Business Outcome. Financial literacy has the highest mean (4.12), business outcome (4.08) and managerial efficiency (3.95) and they all have high internal reliability with Cronbach alpha values exceeding 0.85. These parameters validate the consistency and reliability of measurements of the data.

3.3 Model Fit Assessment

Table 3 provides a summary of the structural equation modeling (SEM) analysis's model fit indices. The value of RMSEA, 0.045 shows that there is an outstanding fit between the observed data and the proposed model. On the same note, the CFI (0.958) is higher than 0.90, which indicates an excellent comparative fit. The TLI value of 0.944 also meets the standard for a good model fit. Lastly, the chi-square to degrees of freedom ratio (1.97) falls well below the acceptable limit of 3.00, further supporting the model's overall adequacy. Collectively, these indices confirm the robustness and validity of the structural model.

Table 3: Model Fit Indices from Structural Equation Modeling

Fit Index	Observed Value	Threshold Criteria	Interpretation
RMSEA	0.045	≤ 0.08	Excellent Fit
CFI	0.958	≥ 0.90	Excellent Fit
TLI	0.944	≥ 0.90	Good Fit
Chi-square/df (CMIN/df)	1.97	< 3.00	Acceptable Fit

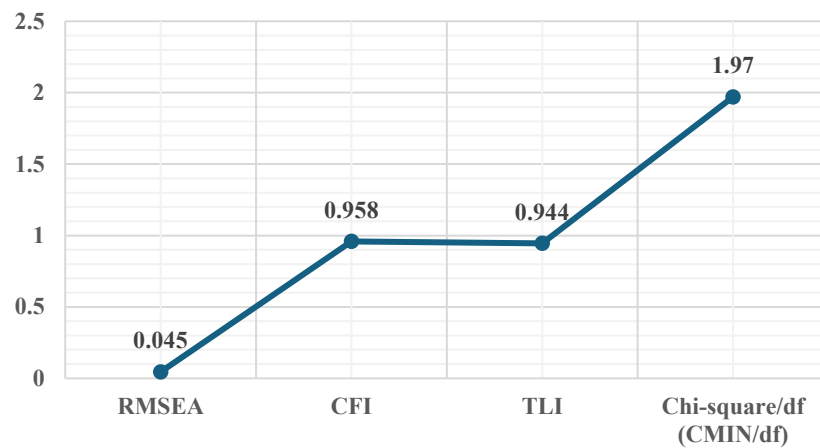


Figure 2: Model Fit Indices from Structural Equation Modeling

Figure 2 displays the graphical representation of model fit indices obtained through SEM. The RMSEA (0.045), CFI (0.958), TLI (0.944), and Chi-square/df ratio (1.97) all meet or exceed established thresholds, confirming a well-fitting structural model. The plotted values validate both the statistical soundness and interpretive strength of the proposed model.

3.4 Structural Equation Modeling Results

Table 4 displays the structural path estimates derived from the SEM analysis. Financial literacy had a strong

and highly significant positive effect on managerial efficiency ($\beta = 0.61$, $p < 0.001$), indicating that higher financial knowledge enhances managerial capabilities. Managerial efficiency, in turn, significantly influenced business outcomes ($\beta = 0.53$, $p < 0.001$), emphasizing its central role in performance improvement. Additionally, financial literacy also showed a direct but weaker effect on business outcomes ($\beta = 0.27$, $p < 0.05$), which was statistically significant. These results confirm both the direct and mediated impact of financial literacy on business success.

Table 4: Structural Equation Modeling Path Estimates

Path	Standardized Coefficient (β)	Standard Error (SE)	p-value	Significance Level
Financial Literacy Managerial Efficiency	0.61	0.05	< 0.001	Highly Significant
Managerial Efficiency Business Outcome	0.53	0.06	< 0.001	Highly Significant
Financial Literacy Business Outcome (direct)	0.27	0.04	< 0.05	Significant

4. DISCUSSION

One of the most interesting things about this study is the high correlation between efficiency and financial literacy of the manager. One of the most prominent aspects of the results is that the relationship between managerial effectiveness and financial literacy is very strong. The findings were that the standardized coefficient (0.61) was significant, meaning that managers with better financial literacy will yield better results in operational decisions, resource optimization, and complexities of running a business. This concurs with past claims that financial competency is a preliminary skill to the sustainable enterprise development (Kyeyune & Ntayi, 2025). The implication of the indirect route that the impact of financial literacy on company success (through managerial efficiency) shows the importance of effective decision-makers in converting knowledge into actual performance improvement.

Managerial efficiency, in its turn, had a thick impact on business outcomes (0.53), which confirms the opinion that leadership efficiency is a performance multiplier.

Financial literacy's direct effect on company performance (0.27) was one thing, but the main value was expressed by the enhanced managerial functioning. This two-path impact proves the stratified influence of financial literacy as an independent asset and as a facilitator of an improved management practice (Sajuyigbe et al., 2024; Tian et al., 2022).

The results resonate with a growing body of empirical studies. For example, Tuffour et al. (2022) highlighted the need of financial literacy for managers of small businesses significantly predicts organizational success, mirroring the patterns observed in the present research. Similarly, Napu et al. (2025) argued that financial literacy fosters sound financial behavior, which in turn shapes effective management offering parallel support for the mediating role of managerial efficiency found here.

The findings extend the conclusions drawn by Yakob et al. (2021), who observed that SMEs with higher financial literacy levels reported stronger revenue growth and risk resilience. This study reinforces that argument but advances it further by quantifying the strength of the

relationship through structural modeling. Orbaningsih et al. (2024) noted that financial literacy, when embedded within organizational culture, fosters innovation and market responsiveness an effect mirrored in the present study through improved managerial decisions.

The significant yet comparatively weaker direct connection between business and financial literacy outcome supports previous findings that fundamental financial knowledge positively influences budgeting, investment decisions, and pricing strategies (Payne, 2022; Sudewi & Dewi, 2022). However, this research adds a critical nuance: the presence of managerial efficiency as a key intermediary strengthens the effect. This observation echoes the work of Sajuyigbe et al. (2024), who argued that organizational performance cannot be dissociated from leadership behavior shaped by financial literacy.

Despite its robust findings, the study is not without limitations. First, it is more difficult to determine causality when cross-sectional data is used. Even though structural equation modeling enables testing of directional relationships, longitudinal data would more accurately represent the changing effect of financial literacy through time. Second, the sample was limited to the SMEs, which complicates the generalization to bigger corporations or informal business. Third, although the research took into consideration the efficiency of the managers as the mediating factor, other factors like the entrepreneurial spirit, the ability to innovate, or external financial shocks were not incorporated in the model.

The self-reported data creates a possibility of bias. Because of social desirability effects, managers can exaggerate their financial abilities or the performance of their businesses, which is what Wazdi et al. (2024) and Owino (2023) have previously described in their studies. In addition, the geographic and sectoral diversity was noted, yet regional economic situation or financial issues peculiar to a certain sphere were not investigated in the context to the full extent.

A practical perspective, the results emphasize how important it is to include financial knowledge training in the SME development programs. The policymakers, the financial institutions and the business support organizations must focus on the specialized financial training of the enterprise managers especially in the rapidly developing sectors. In the context of the increased popularity of fintech platforms and digital banking services, digital financial literacy has become an inevitable part of efficient financial-related decision-making (Zaimovic et al., 2025).

Managerial efficiency as the mediator implies that financial literacy interventions should not only be content based but also should develop the applied skills including cash flow forecasting, pricing strategy, and financial risk assessment. This is in concurrence with the propositions of Siddik et al. (2023) that access to finance is optimized through a combination of financial knowledge and high operational leadership.

A financial learning culture might be a strategic asset at an organizational level. Companies with financial

training incorporated in their managerial development program have higher chances of realizing long-term performance growth as reported by Tanko et al. (2021) and Tóth et al. (2021), who placed an emphasis on the importance of the board-level financial competence as a driver of governance performance.

Longitudinal or experimental designs in future studies should be based on these findings, which can demonstrate better causal relationships. The researchers could test the impact of time-varying financial literacy and whether it affects management style, strategic agility, and survival rates of firms. The introduction of digital financial tools in future models would also be advantageous, especially since the use of fintech would be more common in SMEs (Zaimovic et al., 2025).

Contextualized research, including those in the agribusiness (Napu et al., 2025) or social enterprise, may reveal the specific dynamics that drive financial literacy to exhibit itself in various managerial contexts. The inclusion of additional mediators/moderators, e.g. access to credit, market orientation, or financial technology experience, would help to further enrich the knowledge regarding mechanisms involved. Lastly, the cross-country analysis of the evidence in developing and developed economies would assist in determining whether institutional and cultural difference influences the financial literacy performance nexus, as proposed by Kyeyune & Ntayi (2025). Knowing these international discrepancies would assist in the design of financial education to suit the various business environments.

4. CONCLUSION

The research contributes to the theoretical and empirical debate on the strategic value of financial knowledge in increasing the efficiency of managers and the eventual performance of businesses. Relying on the statistical data of 379 SME leaders, the structural model proved that financial literacy is not only direct power, but also mediated power, i.e., it has both the independent effects on business outcomes and the stronger effects on better business outcomes through contributing to better managerial decision-making. Financial savvy managers are better at distributing resources, evaluating risk, and implementing the strategy, which contributes to increasing the effectiveness of the organization. Such results have immensely practical and policy implications. Financial literacy must cease being a peripheral talent but as a fundamental managerial skill. Financial education needs to be integrated into the national SME policies, financial sector outreach programs, and entrepreneurial training programs and it should not just be designed with the aim of enhancing knowledge, but also the development of decision-oriented skills. This comprises modular training on capital structuring, cash flow management and fintech integration, enterprise-scale-adjusted, industry-adjusted and maturity stage-adjusted. Though the study is very critical, it provides new directions on scholarly studies. The future research must embrace longitudinal designs to capture the compound effects of financial literacy over time and understand

sectoral heterogeneity to determine how the contextual forces influence financial behavior. In addition to that, it is possible to consider the incorporation of constructs like digital financial literacy, innovation orientation, and cognitive biases that could supplement the knowledge about the interaction between financial capability and the larger organizational mechanisms. Cross-institutional comparative research could also demonstrate how national financial ecosystems adjust these relationships. To sum up, this study does not only support the instrumental role of financial literacy in the determination of enterprise outcomes but also defines financial literacy as a primary instrument of development of resilient, agile, and high-performing organizations in the environment of a rapidly changing economy.

REFERENCES

1. Alshebami, A. S., & Murad, M. (2022). The moderation effect of entrepreneurial resilience on the relationship between financial literacy and sustainable performance. *Frontiers in Psychology*, 13, 954841.
2. Bawono, I., Maulina, E., Rizal, M., & Purnomo, M. (2022). The role of knowledge management capability, financial literacy, and problem-solving skills on organizational performance for SMEs. *Frontiers in Psychology*, 13, 930742.
3. Beltran, B. (2024). Investigating the Relationship Between Employee Financial Literacy Education and Small Business Performance in the Southwest Region of Texas.
4. Beurekat, B., & Setyawati, I. (2023). The effect of financial literacy on msme financial management in Tanjungsari District, Sumedang Regency. *Jurnal Ekonomi*, 12(01), 684-689.
5. Bharathithasan, S., & Srinivasan, K. S. (2024). Profit and prosperity: the impact of financial literacy on small business growth. *International Journal of Work Innovation*, 5(3), 270-291.
6. Duréndez, A., Dieguez-Soto, J., & Madrid-Guijarro, A. (2023). The influence of CEO's financial literacy on SMEs technological innovation: the mediating effects of MCS and risk-taking. *Financial Innovation*, 9(1), 15.
7. Ferawati, I. W., Fadah, I., & Paramu, H. (2024). Literature Review: Financial Literacy in The Context of Micro Enterprise Development and The Methods Used. *Jurnal Pendidikan Akuntansi & Keuangan*, 12(2), 189-202.
8. Haleem, A. T. H. A. M. B. A. W. A. (2022). Exploring the critical effect of financial literacy on sustainable business performance in the context of firm performance of SMEs in Sri Lanka. *Research Explorer X* (35), 56-88.
9. Heryanto, O. A., & Leng, P. (2021). Influence of financial literacy, managerial experience on financial management performance of SMES in surabaya. *International Journal of Financial and Investment Studies (IJFIS)*, 2(2), 83-91.
10. Hidayat-ur-Rehman, I. (2024). The role of financial literacy in enhancing firm's sustainable performance through Fintech adoption: a moderated mediation analysis. *International Journal of Innovation Science*.
11. Ishtiaq, M., Songling, Y., Hassan, A., & Hayat, A. (2020). The role of financial literacy in resource acquisition and financial performance; moderating role of government support. *International Journal of Business and Economics Research*, 9(1), 29.
12. Kartini, T., & Wijaya, J. H. (2023). The Effect of Financial Literacy on Financial Management of Msmes in the Pantura Area, Subang Regency. *Jurnal Informatika Ekonomi Bisnis*, 550-553.
13. Kulathunga, K. M. M. C. B., Ye, J., Sharma, S., & Weerathunga, P. R. (2020). How does technological and financial literacy influence SME performance: Mediating role of ERM practices. *Information*, 11(6), 297.
14. Kurniasari, F., Abd Hamid, N., & Lestari, E. D. (2025). Unraveling the impact of financial literacy, financial technology adoption, and access to finance on small medium enterprises business performance and sustainability: a serial mediation model. *Cogent Business & Management*, 12(1), 2487837.
15. Kyeyune, G. N., & Ntayi, J. M. (2025). Empowering rural communities: the role of financial literacy and management in sustainable development. *Frontiers in Human Dynamics*, 6, 1424126.
16. Napu, F., Syaifuddin, D. T., Wawo, A. B., & Zaid, S. (2025). Study of Financial Management Behavior Based on Financial Self-Efficacy and Financial Literacy in Small-Scale Agribusiness Development. *Journal of Global Innovations in Agricultural Sciences*, 319-331.
17. Orbaningsih, D., Pakaja, F., Handhajani, S. B. P., & Nursiswati, A. (2024). The influence of organizational climate and market orientation on business performance with financial literacy and csr as mediation in MSMES in Malang City. *Revista De Gestão Social E Ambiental*, 18(6), 1-16.
18. Owino, t. O. (2023). Moderating role of financial literacy on the relationship between cash management practices and financial performance of micro, small and medium enterprises in eldoret town, kenya (doctoral dissertation, university of eldoret).
19. Payne, Z. A. (2022). *Financial Literacy and the Business Performance of Grenadian Small Business Owners: A Non-Experimental Correlational Study* (Doctoral dissertation, Northcentral University).
20. Sajuyigbe, A. S., Oyedele, O., Oke, O. D., Sodeinde, G. M., Ayo-Oyebiyi, G. T., & Adeyemi, M. A. (2024). Financial Behavior and SMEs Performance: The Mediating Influence of Financial Literacy and Organizational Culture. *Journal of Business and Technology*, 8(2).

21. Siddik, A. B., Rahman, M. N., & Yong, L. (2023). Do fintech adoption and financial literacy improve corporate sustainability performance? The mediating role of access to finance. *Journal of Cleaner Production*, 421, 137658.
22. Sudewi, N. N. D., & Dewi, S. K. S. (2022). The Effect of Financial Literacy and Intellectual Capital on Financial Performance. *International Journal of Business Management and Economic Review*, 5(4), 240-251.
23. Tanko, U. M., Siyanbola, A. A., Bako, P. M., & Dotun, O. V. (2021). Capital structure and firm financial performance: Moderating effect of board financial literacy in Nigerian listed non-financial companies. *Journal of Accounting Research, Organization and Economics*, 4(1), 48-66.
24. Tian, G., Zhou, S., & Qi, Y. (2022). Executive financial literacy and corporate performance: evidence from small and medium-sized enterprises in china. *Asia-Pacific Journal of Financial Studies*, 51(6), 797-827.
25. Tóth, R., Zéman, Z., Túróczi, I., Kása, R., Popp, J., & Oláh, J. (2021). The system of relationships between sustainable corporate governance and corporate financial literacy. *Polish Journal of Management Studies*, 23.
26. Tuffour, J. K., Amoako, A. A., & Amartey, E. O. (2022). Assessing the effect of financial literacy among managers on the performance of small-scale enterprises. *Global Business Review*, 23(5), 1200-1217.
27. Wazdi, B. P., Yuliawati, A. K., Rofaida, R., & Sari, M. (2024). Financial literacy, job satisfaction, job performance and organizational performance: new evidence. *Jhss (Journal of Humanities and Social Studies)*, 4(1), 069-074.
28. Yakob, S., Yakob, R., BAM, H. S., & Rusli, R. Z. A. (2021). Financial literacy and financial performance of small and medium-sized enterprises. *The South East Asian Journal of Management*, 15(1), 5.
29. Zaimovic, A., Omanovic, A., Dedovic, L., & Zaimovic, T. (2025). The effect of business experience on fintech behavioural adoption among MSME managers: the mediating role of digital financial literacy and its components. *Future Business Journal*, 11(1), 26.