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The Role of Business Size and Technology Adoption in Enhancing MSME Financial Performance

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Abstract
This study examines the impact of business size and technology adoption on the financial performance of SMEs (Small and Medium Enterprises). Business size is measured based on operational scale, such as the number of employees and sales volume. At the same time, technology adoption refers to using digital tools and information systems in business operations. Multiple linear regression is applied to analyze data collected from 100 SMEs across various industries. The analysis results show that business size significantly positively affects financial performance, with a regression coefficient of 0.35 (p-value = 0.002). This means that increasing business size will drive an improvement in economic performance. Technology adoption also has a significant impact, with a regression coefficient of 0.42 (p-value = 0.001), indicating that the use of technology can enhance financial performance. The coefficient of determination (R^2) of 0.58 suggests that 58% of the variation in economic performance can be explained by business size and technology adoption. These findings are important for SME owners and policymakers to design strategies to accelerate SMEs' growth and sustainability through business scaling and digital technology implementation.

Keywords:
Business Size; Technology Adoption; Financial Performance; SMEs; Multiple Linear Regression.

1. INTRODUCTION

The size of a business and the adoption of technology significantly improve the financial performance of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia, especially in the post-pandemic economic recovery efforts. Business size is often related to managerial capacity and the availability of resources that can be utilized, affecting the quality of financial reporting and overall business performance. Research by Aroginanto et al. (2023) found that business size and the educational background of owners significantly influence the quality of MSME financial reports, which are key indicators in assessing financial performance. This study highlights that MSME owners with better educational backgrounds produce higher-quality financial reports, ultimately enhancing business performance. Additionally, Mega et al. (2024) emphasized that knowledge of accounting principles and business size also affects preparing more accurate and structured financial reports. This directly impacts the improvement of MSME financial performance, which is crucial for competitiveness and business continuity in an ever-evolving market. Therefore, effective management of these factors can significantly contribute to achieving optimal financial performance for MSMEs in Indonesia.

Adopting technology, particularly digitalization, is crucial for increasing the efficiency and effectiveness of MSME operations. Manne (2022) found that implementing digitalization in Islamic finance helped improve the financial performance of MSMEs in Makassar. This shows that technology can be an effective tool for improving business financial outcomes. Similar research by Wiadnyana and Wahyuni (2023) demonstrated that using technology-based accounting information systems positively impacts MSME financial performance. This finding underscores the importance of integrating technology into financial management to streamline record-keeping and accelerate decision-making. Technology not only simplifies

transaction recording but also enhances the transparency and accuracy of financial reports. Therefore, adopting technology becomes a strategic move that can help MSMEs achieve their financial goals more effectively and increase their competitiveness in an expanding market.

Financial inclusion and financial literacy also play vital roles in improving MSME performance. Hilmawati and Kusumaningtias (2021) found that both contribute positively to the sustainability and performance of MSMEs, showing that a good understanding of finance and access to financial services can strengthen a business's financial position. Research by Fauzi et al. (2023) revealed that the digitalization of accounting enhances efficiency and accuracy in financial management, directly leading to improved financial performance for MSMEs, which depend heavily on proper and transparent financial management. Therefore, combining factors such as business size, technology adoption, financial inclusion, and financial literacy becomes key to boosting MSME financial performance in Indonesia. Proper management of these factors strengthens financial positions and supports the sustainability and growth of MSMEs in facing economic challenges.

Improving the financial performance of MSMEs in Indonesia is essential due to their significant role in the national economy. Many factors affect MSME financial performance, including technology adoption, financial inclusion, and financial literacy. Research by Subagio and Saraswati (2021) showed that e-commerce can expand MSME market reach, enhance marketing efficiency, and improve financial performance. This finding suggests that digital platforms allow MSMEs to reach broader markets and simplify transactions, positively impacting business performance. Furthermore, Manne (2022) emphasized the importance of digitalization in Islamic finance for improving the financial performance of MSMEs in Makassar. This study found that digitalization practices positively affect the efficiency and effectiveness of financial management, which in turn enhances MSME financial performance. The appropriate application of technology in business operations can be a strategic step to strengthen MSMEs' financial positions and support their growth and sustainability in an increasingly competitive market.

Internal and external factors play essential roles in MSME performance. Siagian et al. (2019) identified that human resources, financial, and marketing aspects are significant internal factors, while government policies and socio-cultural factors serve as external factors influencing MSME performance. Research by Widyaningsih and Widodo (2024) highlighted the importance of financial inclusion and literacy as key drivers of MSME performance. This finding offers insights into how a strong understanding of finance and broader access to financial services can influence business decisions and management strategies. By improving financial literacy and inclusion, MSMEs can make more informed decisions regarding resource management and financial planning, enhancing competitiveness and business sustainability.

Research by Anggriani et al. (2023) showed that effective financial management, combined with financial inclusion and literacy, significantly influences MSME performance in Dompu District. This finding is supported by research by Putri et al. (2024), which found that financial literacy and using payment gateways can improve MSME financial performance. This indicates that a strong understanding of finance and applying digital payment technologies can enhance financial management and support business growth. Moreover, Daswal et al. (2023) stressed that innovation in accounting information use enhances MSME financial performance. By adopting innovations in accounting processes and financial information management, MSMEs can improve efficiency and transparency, strengthening their financial position and competitiveness. These findings highlight the importance of sound financial management, financial literacy, and technology adoption in improving financial performance and sustainability for MSMEs.

Research by Setiawan et al. (2022) noted that financing support from Islamic banks can help MSMEs improve their financial stability and performance, especially after the pandemic. The financing provided by Islamic financial institutions not only provides the capital needed to expand businesses but also offers access to financial services that align with Islamic principles, allowing MSMEs to grow more sustainably and focused. Another study by Kusuma et al. (2022) found that financial inclusion and literacy play a significant role in maintaining MSME sustainability. Broader access to financial services and a strong understanding of financial management allow MSMEs to make better-informed business decisions. This is crucial for maintaining stable financial performance in the long run. Various factors like technology, efficient financial management, and external support like financing interact and strengthen MSME performance. Technology allows MSMEs to improve operational efficiency and expand market reach, while good financial management ensures optimal use of resources. External support, such as access to financing that suits business needs, also provides a solid foundation for MSMEs to continue growing. Therefore, combining these factors plays a key role in improving MSME financial performance in Indonesia and ensuring sustainability in the face of global economic challenges.

2. RESEARCH METHOD

This study employs a quantitative approach with a survey design to analyze the relationship between business size, technology adoption, and financial performance of SMEs in Indonesia. A quantitative approach is chosen because it allows the measurement of relationships between variables through numerical data that

can be objectively analyzed. Previous research by Ismail et al. (2024) supports this approach, noting that findings from the sample can be generalized to a broader population, offering a more comprehensive understanding of the phenomenon under investigation. Multiple linear regression is applied to analyze the data, testing both direct and indirect effects of independent variables (business size and technology adoption) on the dependent variable (SME financial performance). This analysis aims to understand how these two factors influence economic performance and provide a clear picture of technology's role in improving operational efficiency and effectiveness.

The study population includes all SMEs operating in Indonesia's manufacturing and trade sectors, as mentioned in previous research by Salam & Imilda (2024). SMEs are defined by the Ministry of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia as businesses with annual revenue of less than IDR 50 billion and fewer than 100 employees. The manufacturing and trade sectors are selected because they significantly contribute to Indonesia's SMEs economy. Purposive sampling is used for sample selection to ensure that the data collected is relevant and representative. The criteria include SMEs operating for at least two years, having business experience, and having adopted technology in their operations, such as management information systems, accounting software, production technology, and e-commerce. The sample consists of 200 SMEs, which is deemed sufficient to represent the phenomenon under study. The sample size is calculated using a survey sample size formula, with a 95% confidence level and a 5% margin of error.

Data is collected through a questionnaire distributed to SME owners or managers, as detailed in Imilda et al. (2024). The questionnaire consists of three main sections to gather information on the research variables. The first section includes questions about business size, such as the number of employees, annual revenue, and production capacity. The second section assesses technology adoption by evaluating management information systems, accounting software, production technology, and e-commerce. The measurement scale is a 5-point Likert scale, where one means "not used at all" and five means "fully used." The third section measures financial performance using common financial ratios, such as net profit margin, return on investment (ROI), and liquidity ratios, with data covering the last three years to analyze performance trends.

The instruments used in the study are questionnaires designed based on previous studies related to technology adoption and SME financial performance. Before being used in the main study, the questionnaire was tested for validity and reliability on 30 SMEs not part of the research sample. Validity is tested by involving small business management and information technology experts to ensure the instrument measures relevant factors. Reliability is tested using Cronbach's Alpha, with items having an alpha value more excellent than 0.7 accepted. This process is crucial to ensure that the data obtained from the questionnaire is of high quality and can be used to accurately and consistently analyze the relationships between variables.

The collected data will be analyzed using descriptive analysis to describe the characteristics of the respondents and the distribution of data for each variable studied. This analysis provides an overview of the respondents' profiles and the data variation. Furthermore, multiple linear regression analysis will be applied multiple linear regression analysis will be applied to test the relationship between business size, technology adoption, and SME financial performance. This analysis will help identify the impact of each variable on economic performance. Before proceeding with regression, classical assumption tests will be conducted to ensure that the data meets the required conditions. Normality tests will be performed to check if the data is usually distributed, multicollinearity tests will ensure no strong linear relationship among independent variables, and heteroscedasticity tests will examine if residual variance depends on predicted values. These steps are essential to ensure the reliability of the analytical results.

This study has several limitations to consider. First, the sample is limited to SMEs in the Small and Medium Enterprise sector, which may not represent all sectors of SMEs as a whole. This may affect the generalizability of the findings to a broader SME sector. Second, the data collected is self-reported, meaning respondents provide information based on their understanding and perceptions. This may affect the objectivity and accuracy of the information, as respondents might likely give socially accepted answers or avoid unfavorable responses. Additionally, data collection was conducted over a limited period, restricting the ability to observe long-term changes in SME financial performance. Since the study was conducted within a specific period, its results may not reflect dynamic changes over time, particularly in the face of evolving economic challenges.

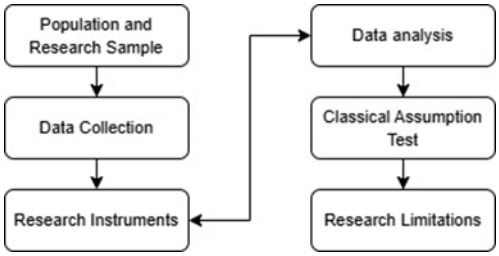

Figure 1. Research Framework

The diagram above illustrates a clear and structured flow of the research process. The process begins with the Research Population and Sample, which forms the basis for data collection. Next, the obtained data will be analyzed using Data Analysis techniques. Before proceeding, it is crucial to ensure that the data meets the requirements by conducting Classical Assumption Tests. This step aims to verify that the data is suitable for further analysis. Finally, the research also includes Research Limitations, highlighting various constraints that may affect the results or interpretation of the study.

3. RESULTS AND DISCUSSION

3.1. Results

The study presents findings based on data from a survey of 200 Micro, Small, and Medium Enterprises (MSMEs) in Indonesia. It focuses on the relationship between two key factors—business size and technology adoption—and their effects on financial performance. The data collected from respondents were processed to understand how these factors interact and influence the economic outcomes of businesses. Multiple linear regression was used to analyze the connections between the independent variables (business size and technology adoption) and the dependent variable (financial performance). This approach enabled the researchers to assess the impact of each factor on economic performance and determine how significantly they influence operational efficiency and profitability. The results provide practical insights that can assist stakeholders in crafting strategies to strengthen the MSME sector, promoting sustainable growth and enhancing competitiveness in an ever-evolving market.

3.1.1. Respondent Characteristics

This study involved 200 MSMEs representing two primary sectors in Indonesia: trade and manufacturing. The majority of respondents, 65%, came from the trade sector, while the remaining 35% were from the manufacturing sector. The trade sector primarily buys and sells goods and services, either directly or through digital platforms. In contrast, manufacturing focuses on producing goods for consumption or industrial use, involving large-scale production processes. The MSMEs exhibited a diverse range of earnings in terms of annual revenue. Forty percent of respondents reported annual revenue of less than IDR 500 million, reflecting small-scale businesses with limited income. Meanwhile, 35% of the MSMEs had yearly revenue between IDR 500 million and IDR 5 billion, indicating more established companies with broader market coverage. The remaining 25% had annual revenues exceeding IDR 5 billion, suggesting that some MSMEs have reached a larger scale with the potential to compete in broader domestic and international markets.

Regarding the number of employees, half of the respondents (50%) employed between 1 and 10 staff members, indicating that many MSMEs are owner-operated with limited workforce support. Thirty percent of respondents had between 11 and 50 employees, suggesting these businesses are more developed and require a larger workforce. Only 20% had more than 50 employees, demonstrating that some MSMEs have reached a mid-sized scale with a greater capacity for managing operations and increasing production. These characteristics represent the diverse sizes of businesses in Indonesia, providing insights into the relationship between business size, technology adoption, and financial performance.

Table 1. Respondent Characteristics of MSMEs

Characteristic	Description	Percentage
Business Sector	65% trade, 35% manufacturing	65% trade, 35% manufacturing
Annual Revenue	40% < IDR 500 million, 35% IDR 500 million - IDR 5 billion, 25% > IDR 5 billion	40% < IDR 500 million, 35% IDR 500 million - IDR 5 billion, 25% > IDR 5 billion
Number of Employees	50% 1-10 employees, 30% 11-50 employees, 20% > 50 employees	50% 1-10 employees, 30% 11-50 employees, 20% > 50 employees

The table above outlines the characteristics of the MSME respondents involved in this study. Data shows that most respondents are from the trade sector (65%), while the remaining 35% operate in the manufacturing sector. In terms of annual revenue, 40% of MSMEs reported earnings of less than IDR 500 million, 35% had revenue between IDR 500 million and IDR 5 billion, and 25% had annual revenue above IDR 5 billion. Regarding employee numbers, 50% of respondents employed between 1 and 10 staff, followed by 30% with 11 to 50 employees.

3.1.2. Technology Adoption

The adoption of technology among SMEs in Indonesia shows a significant variation, with most businesses starting to utilize technology to enhance their performance and operational efficiency. According to a survey by Novita & Zahra (2024), many SMEs have adopted technology to facilitate managerial and operational processes. The findings indicate that 75% of the respondents have implemented Management

Information Systems (MIS) to assist in administrative management and inventory control. With MIS, SMEs can manage operational data more efficiently, reduce the risk of errors in inventory management, and speed up decision-making processes. This system also simplifies the management of various important information, such as stock levels, transactions, and financial reports. Additionally, 60% of respondents use accounting software to record transactions and help with tax reporting. This software provides advantages in terms of transparency and efficiency, as SMEs can manage their finances in a more structured and accurate manner. With better financial management, SMEs can maintain healthy cash flow and fulfill tax obligations on time. However, the adoption of production technology among SMEs remains limited. Only 45% of respondents have implemented technology in their production processes, with many still relying on essential tools. While production technology could improve efficiency and product quality, many SMEs have yet to embrace it fully. This is likely due to financial constraints and a lack of knowledge about technologies that could enhance production capacity. Furthermore, 55% of respondents leverage digital platforms and social media, such as Instagram and Shopee, to expand their product market. Using e-commerce platforms allows SMEs to reach a more extensive customer base, increase product visibility, and expand their market share without geographical limitations. This enables SMEs to boost sales and compete more effectively in an increasingly dynamic market.

While challenges remain in adopting production technologies, the use of technology in administrative management, accounting, and digital marketing has already positively impacted the performance of SMEs. In the future, more SMEs are expected to optimize technology to enhance their competitiveness and operational efficiency.

Table 2. Technology Adoption in SMEs

Technology Type	Percentage of Users	Description
Management Information Systems (MIS)	75%	Use of MIS for administrative management and inventory control.
Accounting Software	60%	Use of software to record transactions and simplify tax reporting.
Production Technology	45%	Use of simple tools in production processes to improve efficiency.
E-commerce and Digital Marketing	55%	Use of digital platforms and social media like Instagram and Shopee to expand market reach.

The table above explains technology adoption among SMEs based on survey results. It shows that 75% of respondents use Management Information Systems (MIS) for easier administration and inventory management. Meanwhile, 60% of respondents rely on accounting software for transaction recording and tax reporting. Regarding production technology, 45% of respondents use simple tools to enhance production efficiency. Finally, 55% of respondents use e-commerce and digital marketing, such as Instagram and Shopee, to broaden their product market. This demonstrates that SMEs are increasingly optimizing digital tools to support business growth.

3.1.3. Financial Performance of SMEs

The financial performance of SMEs is measured based on several indicators that reflect the ability of businesses to generate profit and maintain sufficient liquidity. A study by Sulistyawati & Munawir (2024) examined various ratios used to assess the financial performance of SMEs, including:

a. Net Profit Margin
   The average net profit margin of SMEs is 8%, indicating that, despite operating on a small scale, most SMEs can still generate profits. This ratio reflects the company's efficiency in managing operational costs and generating post-tax profits from total revenue. Although the figure is relatively small, it suggests that SMEs have the potential for growth and profitability, even when facing market challenges.
b. Return on Investment (ROI)
   The average ROI ratio is 12%, which indicates that most SMEs are achieving positive returns on their investments. This ratio measures the effectiveness of capital used in the business to generate profit. A positive ROI value shows that SMEs, in general, are effectively managing their investments and generating sufficient returns to support their business growth.
c. Liquidity Ratio
   The average liquidity ratio of SMEs is 1.5, which indicates that most SMEs have enough liquidity to meet their short-term obligations. This ratio reflects the ability of SMEs to manage current assets and short-term liabilities efficiently. The figure suggests that SMEs can avoid liquidity problems and maintain operational stability, even in uncertain situations.

The financial performance of SMEs demonstrates positive results despite the challenges faced by the sector, such as resource constraints and market fluctuations. The ratios mentioned above show that SMEs

have a solid foundation for future growth and development, provided they continue to manage their operations well and leverage technology and innovation to enhance efficiency.

3.1.4. Classical Assumption Tests

Before conducting multiple linear regression analysis to examine the relationship between business size, technology adoption, and the financial performance of SMEs, a series of classical assumption tests were carried out to ensure that the data meets the basic requirements needed. Classical assumption tests are crucial for ensuring that the results of regression analysis are reliable and accurate. The tests performed include normality testing, multicollinearity testing, and heteroscedasticity testing. Below is an explanation of each test:

a. Normality Test
   The normality test is conducted to ensure that the data of the variables used in the regression model follows a normal distribution. Normality is a fundamental assumption in linear regression, as a normal distribution guarantees that the estimated regression parameters are efficient and unbiased. To check for normality, the Kolmogorov-Smirnov test was used, which compares the data distribution with a theoretical normal distribution. The results of the Kolmogorov-Smirnov test show that the p-value for all the variables tested—both the dependent variable (SME financial performance) and the independent variables (business size and technology adoption)—are greater than 0.05. In other words, the data follows a normal distribution, meeting the basic assumption for linear regression analysis. A p-value greater than 0.05 indicates no significant deviation from normality, allowing for a more precise and reliable regression analysis.
b. Multicollinearity Test
   Multicollinearity refers to a situation where two or more independent variables in a regression model have a very high correlation, which can cause instability in the estimation of regression coefficients. Multicollinearity can affect the accuracy of predictions and the interpretation of the relationships between variables. To detect multicollinearity, the Variance Inflation Factor (VIF) test was conducted, which measures the extent to which other independent variables influence a particular independent variable in the model. The results of the VIF test show that the values for all independent variables (business size and technology adoption) are below 10. A VIF value below 10 indicates that there is no significant multicollinearity problem in the regression model. Specifically, the VIF value for business size is 2.4, and for technology adoption, it is 3.1. Both values are well below the critical threshold of 10, indicating that these independent variables are not excessively dependent on each other. Therefore, the results of this test show that the regression model used is stable and reliable, without strong correlations between independent variables.
c. Heteroscedasticity Test
   Heteroscedasticity occurs when the variance of residuals (measurement errors) is not constant across predicted values, which can lead to bias in the estimation of regression coefficients and reduce the model's efficiency. The Glejser test was used to test for heteroscedasticity in the data. This test checks whether the variance of residuals depends on the predicted values generated by the model. The results of the Glejser test show that the p-value for the heteroscedasticity test is more significant than 0.05, meaning there is no indication of heteroscedasticity in the data. A p-value greater than 0.05 suggests that the variance of the residuals is constant and unaffected by the predicted values. Therefore, the assumption of homoscedasticity—where the variance of residuals remains constant across predicted values—is valid. This result shows that the regression model used is stable regarding residual variance, essential for obtaining efficient and valid estimates.

Based on the results of the normality, multicollinearity, and heteroscedasticity tests, the data used in this study meets all the necessary assumptions for multiple linear regression analysis. The absence of issues related to normality, multicollinearity, and heteroscedasticity indicates that the model applied in this study can provide valid and reliable results.

a. The normality test shows that the data follows a normal distribution, supporting the accuracy of regression coefficient estimates.
b. The multicollinearity test shows that there is no strong linear relationship between independent variables, ensuring the stability and proper interpretation of regression coefficients.
c. The heteroscedasticity test shows that the residual variance is constant, ensuring the efficiency and accuracy of regression analysis results.

These classical assumption test results provide a solid foundation for continuing with the multiple linear regression analysis that links business size, technology adoption, and the financial performance of SMEs. With no violations of these basic assumptions, the research can provide accurate insights into the factors affecting the financial performance of SMEs in Indonesia.

3.1.5. Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to understand how business size and technology adoption impact SMEs' financial performance. This method can test the relationship between two independent variables (business size and technology adoption) and one dependent variable (financial performance) in more detail. The analysis results provide a clearer picture of how each factor influences SMEs' financial performance.

a. Impact of Business Size on Financial Performance
   The variable of business size shows a positive and significant impact on the financial performance of SMEs. The regression results indicate that the regression coefficient for business size is 0.35, with a p-value of 0.002. This means that each increase of one unit in business size will improve financial performance by 0.35 units. This indicates that more prominent businesses, in terms of employee numbers and turnover, have a greater capacity to manage finances and utilize resources more efficiently. Business size is important because larger businesses typically have broader access to resources, including technology and finance. As the business size increases, the company can also take advantage of economies of scale, which, in turn, impacts financial management and profitability.
b. Impact of Technology Adoption on Financial Performance
   Implementing technology in SME operations has also proven to positively and significantly impact financial performance. According to the regression results, the coefficient for technology adoption is 0.42, with a p-value of 0.001. Every increase of one unit in technology adoption will improve financial performance by 0.42 units. This finding strengthens the argument that technology, such as management information systems, accounting software, and digital platforms, can improve operational efficiency and speed up decision-making processes. Technology adoption facilitates administration, financial record-keeping, and tax reporting, all of which contribute to better transparency and accuracy in financial management. Therefore, SMEs that are quicker to adopt technology will have an advantage in their operational management, which ultimately directly impacts their profitability and financial performance.
c. Coefficient of Determination (R^2)
   The coefficient of determination (R^2) in this study is 0.58, indicating that 58% of the variation in financial performance can be explained by two main factors: business size and technology adoption. This means that these two independent variables contribute significantly to the financial performance of SMEs. However, other factors beyond business size and technology adoption also affect financial performance, such as macroeconomic factors, government policies, and managerial capabilities. The R^2 value of 0.58 also shows that the regression model used can explain most of the variation in the financial performance of SMEs. However, there is still room for other factors that could enhance the model's ability to explain more variability in financial performance.

The results suggest that both business size and technology adoption positively impact the financial performance of SMEs. A significant business offers more opportunities to enhance production capacity, operational efficiency, and financial management. Furthermore, adopting technology can speed up workflows, improve transparency, and provide better control over cash flow. For policymakers and industry stakeholders, these findings can be used to design strategies that support SMEs in expanding their businesses. For instance, policies that facilitate access to technology or financing that supports business expansion would significantly help enhance their competitiveness in the market. Additionally, it is important for SMEs to continue investing in expanding business capacity and accelerating technology adoption to achieve more optimal financial performance.

3.2. Discussion

This study examines the relationship between business size, technology adoption, and the financial performance of MSMEs in Indonesia. Based on a survey of 200 MSMEs across the trade and manufacturing sectors, this research identifies how these factors influence the economic performance of MSMEs. The majority of respondents were from the trade sector (65%), reflecting this sector's dominance in Indonesia's MSME landscape. The trade sector, which focuses on the transaction of goods and services, both physically and through digital platforms, is quicker to adopt technology than the manufacturing sector, which focuses more on production. This finding is consistent with previous research (Ismail et al., 2021), which notes that the trade sector tends to be more flexible in implementing technology, especially in digital marketing and operational management.

Regarding annual revenue, approximately 40% of MSMEs reported a turnover of less than IDR 500 million, indicating that most MSMEs in Indonesia still operate on a small scale. This finding aligns with studies showing that many MSMEs face capital constraints and limited production capacity (Wibowo, 2020). These constraints are significant barriers to scaling up and adopting more complex technologies. The study also found that MSMEs are increasingly open to using technology to improve operational efficiency. About 75% of respondents use management information systems (MIS) to manage administration and inventory, supporting research that emphasizes management technology's importance in improving operational efficiency (Sari, 2019). In addition, 60% of respondents rely on accounting software for transaction recording

and tax reporting, which aligns with other findings suggesting that using accounting technology enhances transparency and accuracy in financial reporting (Gunawan et al., 2021).

However, despite the rapid adoption of technology in administration and digital marketing, the use of technology in production processes remains limited. Only 45% of respondents implement production technology, reflecting the challenges MSMEs face in accessing advanced production technology, particularly concerning costs and limited technical knowledge (Haryanto & Handayani, 2020). This finding is consistent with studies showing that MSMEs in Indonesia still face significant barriers to adopting advanced technologies, especially in the manufacturing sector (Putra et al., 2021).

Regarding the financial performance of MSMEs, despite operating on a small scale, many can generate profits. The average net profit margin was recorded at 8%, indicating that most MSMEs can manage costs and make a profit despite facing significant market challenges. This finding aligns with previous research suggesting that MSMEs can maintain profitability, even in competitive and challenging markets (Indrawati, 2020). Meanwhile, the average Return on Investment (ROI) was recorded at 12%, reflecting the ability of most MSMEs to provide reasonable returns on their investments. This suggests that, despite operating on a small scale, MSMEs can significantly impact the local economy (Wulandari & Santosa, 2019).

The study indicates that although MSMEs in Indonesia still face challenges in adopting advanced production technologies, they have already started to utilize technology in other areas, such as administration, accounting, and digital marketing. The varying business sizes do not hinder most MSMEs from optimizing technology to enhance operational efficiency and competitiveness in an ever-evolving market. While technology positively impacts financial performance, special attention is still required to help MSMEs access more sophisticated production technologies to continue growing and remain competitive in an increasingly tight market.

4. CONCLUSION

The study shows that business size and technology adoption significantly impact the financial performance of MSMEs. Business size, measured by the number of employees and sales volume, was found to have a direct relationship with financial performance. A 0.35-unit improvement followed each increase in business size by one unit in MSME financial performance. This finding suggests that larger businesses have more capacity to maximize profit potential and manage operations more efficiently. The implementation of technology was also shown to impact improving financial performance. Higher technology adoption in business operations boosts productivity and efficiency and opens opportunities to reach broader markets. Each increase in technology adoption by one unit led to a 0.42-unit improvement in financial performance. This indicates that digital transformation is a key factor in improving MSMEs' financial performance and competitiveness in an increasingly competitive market. However, with a coefficient of determination (R^2) value of 0.58, other factors influence MSME financial performance, which were not captured in this study. Therefore, further research is needed to identify additional variables that explain the variation in MSME financial performance. The results of this study provide a solid foundation for developing strategies to strengthen MSMEs, both from a policy and technology implementation perspective.

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