Green Growth and Beyond: The Influence of Environmental Practices, Financial Management, Market Access, and Digital Integration on the Resilience and Sustainability Business Practices of MSMEs in Indonesia

Joeliaty
Department of Management, Faculty of Economics and Business, Universitas Padjadjaran, Bandung, West Java 40132, Indonesia
joeliaty@unpad.ac.id

ABSTRACT
This study looks into how market accessibility, digital integration, financial management, and environmental practices affect the sustainability and resilience of Micro, Small, and Medium Sized Enterprises (MSMEs) in Indonesia. Data analysis is done using Structural Equation Modeling with Partial Least Squares (SEM-PLS) in a quantitative manner using a sample of 274 MSMEs. The diversity of the sample with respect to industry sectors, geographic regions, and company sizes is demonstrated by descriptive statistics. The structural model findings show positive and substantial correlations between the elements under investigation and company resilience and sustainability, while the measurement model analysis validates the validity and reliability of the constructs. The results are stable, as supported by bootstrapping analysis, and the model fit indices show good predictive relevance. The findings are interpreted in the discussion, which also provides policymakers and business practitioners with useful insights. The study adds to our theoretical understanding of MSME dynamics and offers guidance on how to develop resilient and sustainable business practices.

INTRODUCTION
The 21st century has seen extraordinary economic expansion as a result of rapid globalization and industrialization, but these developments have also sparked worries about the resilience of businesses, especially MSMEs, and the sustainability of the environment. MSMEs are vital to the development of jobs and the reduction of poverty in Indonesia, hence they must use resilient and sustainable business methods. The study carried out by (Putri & Bangun, 2019) underscores the noteworthy role that MSMEs play in Indonesia's economy and stresses the necessity of offering assistance and resources to foster their growth, particularly in impoverished regions and isolated pockets of poverty. Furthermore, the research by (Prasetyo & Ellitan, 2023) finds external factors like government policies and internal factors like the entrepreneurial spirit of business players that influence MSMEs' ability to withstand a pandemic financially. These results highlight how crucial it is to create a welcoming atmosphere and put in place sensible regulations to guarantee the survival and expansion of MSMEs in Indonesia (Amin et al., 2023; Marwanto et al., 2023).

MSMEs in Indonesia are vital to the country's innovation and economic growth, but they also confront a number of difficulties. One of the main issues facing MSMEs in Indonesia is the lack of access to capital and technology, together with the requirement to expand market penetration (Putri & Bangun, 2019). Furthermore, the nation must find a balance between environmental preservation and economic prosperity (Maurina & Rusdianto, 2023). In order to assist MSMEs, the government has started a number of programs, including lending money, offering mentoring, and...
granting access to markets via the digital ecosystem (Gunawan & Putra, 2023). However, the low rate of trademark registration among MSMEs is caused by the absence of support and help from local government officials (Akbar et al., 2023). To support the sustainability of MSME competitiveness in Indonesia, policymakers and stakeholders should concentrate on strengthening MSMEs’ entrepreneurial attitude, expanding their access to financial resources, and developing their capacity for innovation (Haqqi, 2023).

As environmental sustainability becomes more and more important, MSMEs are realizing how important it is to incorporate green practices into their daily operations. This is essential to their capacity to make money, to access markets, and to fully utilize the potential of digital technologies. MSMEs' owners and managers have the capacity to start a sustainable digital transformation project by implementing organizational culture changes that encourage strategies and decisions that prioritize sustainability (Martínez-Peláez et al., 2023). The adoption of sustainability in US SMEs is influenced by elements like owners' and managers' values, awareness, and sustainability education (Kasiri & Movassaghi, 2023). Sustainable business practices (SBPs) that affect the operations and survival of micro, small, and medium-sized enterprises (MSMEs) in Ghana include eco-preneurship, regenerative practices, and holistic environmental management (Anaman et al., 2023). In Lhokseumawe City, green input, green output, green process, and green marketing are critical components of MSMEs' sustainability (Biby et al., 2023). By utilizing digitalization and the idea of green accounting, MSMEs may modernize and generate revenue for both their businesses and the environment (Sari et al., 2023). In light of this, the purpose of this study is to investigate how the resilience and sustainability of MSMEs in Indonesia are impacted by environmental practices, financial management, market access, and digital integration.

Indonesia's MSMEs' sustainability and resilience are vital in the face of global issues including climate change, unstable economies, and technological upheaval. Examining how market accessibility, digital integration, financial management, and environmental practices affect the resilience and sustainability of MSMEs in Indonesia is crucial (Akbar et al., 2023; Amalia Putri et al., 2023; M. R. Aulia et al., 2023; Putri & Bangun, 2019). Because MSMEs play such a significant role in Indonesia's dynamic and diverse economy, it is critical to guarantee their long-term survival and success. MSMEs can become more resilient and sustainable in the face of these difficulties by incorporating digital technologies, expanding market access, enhancing financial management, and putting green practices into effect. To guarantee the expansion and prosperity of MSMEs in Indonesia, policymakers and other stakeholders should concentrate on encouraging and supporting these activities (Dhewanto et al., 2023). The immediate and long-term effects of climate change, unstable economic conditions, and the quickening speed of digital transformation all serve to highlight the importance of this issue and call for deliberate actions to maintain the MSME sector's survival and growth.

MSMEs in Indonesia encounter obstacles that prevent them from expanding and becoming resilient. Among these difficulties are limited resources, restricted market access, and the requirement to comply with environmental regulations. There hasn't been much research done on the connections between environmental practices, financial management, market access, and digital integration in the context of MSMEs in Indonesia. Our comprehension of how these elements interact to
influence MSMEs' resilience to economic shocks and their ability to support sustainable development is hampered by this knowledge gap (Amalia Putri et al., 2023; Maurina & Rusdianto, 2023; Nugroho, 2023; Putri & Bangun, 2019). By examining the complicated relationships between these variables, revealing the difficulties experienced by MSMEs, and offering useful advice for businesses and policymakers in traversing the challenging terrain of sustainability and resilience, this research aims to close this gap. It is imperative that obstacles be transformed into opportunities in order to preserve the environment for coming generations and guarantee the viability and importance of MSMEs in Indonesia's economic fabric.

This study aims to comprehensively examine the dynamic interplay of environmental practices, financial management, market access, and digital integration, and their combined influence on the resilience and sustainability of micro, small, and medium-sized enterprises (MSMEs) in Indonesia. This research is guided by the precise aims listed below: (1) Evaluate the environmental practices that MSMEs in Indonesia currently follow. (2) Look at the financial management techniques used by Indonesian MSMEs. (3) Examine how market access affects MSMEs' sustainability and resilience. (4) Examine how digital integration has influenced MSME business operations.

**Literature Review**

**a. MSMEs in Indonesia**

MSMEs are vital to Indonesia's economy, making a major contribution to GDP, employment, and the reduction of poverty. These MSMEs do, however, have a number of difficulties, such as restricted access to markets, technology, and funding. It is crucial to comprehend the variables that affect MSMEs' sustainability and resilience. It has been demonstrated that sound financial behavior and financial knowledge increase MSMEs' financial resilience (Astuti et al., 2023). By 2024, the government hopes to have increased the share of MSMEs in the national economy by removing obstacles (R. L. Aulia et al., 2023). MSMEs in Indonesia have been severely impacted by the COVID-19 pandemic, hence assistance in surviving this circumstance is required (Maurina & Rusdianto, 2023). Although MSMEs' development in Yogyakarta has improved, they continue to encounter obstacles such poor business management, a lack of support from key organizations, and a lack of coaching (Afifah, 2023). In general, the resilience and sustainability of MSMEs in Indonesia depend heavily on our ability to comprehend and resolve these issues.

**Environmental Practices**

The adoption of environmentally friendly practices by businesses, particularly micro, small, and medium-sized enterprises (MSMEs), has become necessary due to the global imperative of environmental sustainability. Studies have indicated that corporate governance, environmental laws, firm size, organizational characteristics, talent management, internationalization, and geographic location are among the factors impacting the adoption of environmental management techniques in MSMEs (Jamil et al., 2023). Furthermore, it has been discovered that the adoption of green practices is positively impacted by MSMEs' proactive approach to environmental practices and the role of regulatory pressure (Tyler et al., 2023). Government rules have been found to have less of an impact on the adoption of sustainability in US MSMEs than owner/manager sustainability principles, awareness, and education (Kasiri & Movassaghi, 2023). Due to management attitudes, awareness, outside
circumstances, and regulatory pressures, the logistics sector, especially logistics service providers (LSPs), is also shown a growing interest in implementing green logistics techniques. Environmental management in MSMEs in Ghana is being driven by sustainable business methods like regenerative practices, environmental entrepreneurship, and holistic environmental management (Leung et al., 2023). MSMEs in Indonesia are becoming increasingly conscious of the value of sustainable operations. However, there are still difficulties in putting ecologically friendly techniques into practice. These difficulties include a lack of awareness, a lack of resources, and a lack of a regulatory framework.

b. Financial Management

Micro, Small, and Medium-Sized Enterprises (MSMEs) in Indonesia depend on efficient financial management to survive and expand (R. L. Aulia et al., 2023; Handayani et al., 2022; Kartini & Wijaya, 2023; Latif et al., 2023; Ompusunggu & Nanda, 2023). One of the biggest issues facing MSMEs in Indonesia is limited finance availability, which makes it difficult for them to make investments in sustainable practices and manage economic volatility. Palangka Raya City's MSMEs have conquered the COVID-19 epidemic and improved their business performance by implementing a variety of financial management measures, such as cost reduction and efficiency development. It has been demonstrated that sound financial conduct and financial literacy have a favorable effect on the financial resilience of MSMEs in Surabaya. The financial management practices of MSMEs in DKI Jakarta are also influenced by financial knowledge, attitudes, and personality attributes. Furthermore, among MSME actors in the Pantura Region of Subang Regency, financial literacy is impacted by elements including experience, economic standing, socio-culture, self-efficacy, and attitudes. Effective financial management techniques, such as profit-sharing and capital assistance, support MSMEs in Kampung Ketupat, Samarinda City, and help them remain viable over time. Knowing the financial tactics MSMEs employ might help one better understand how capable they are of handling adversity and maintaining long-term growth.

c. Market Access

For MSMEs in Indonesia, getting access to markets is a major obstacle that limits their potential for sustained growth. These businesses find it challenging to break into both home and foreign markets, which hinders their capacity to grow (Banerjee, 2023). These difficulties are exacerbated by elements including infrastructure limitations, regulatory hurdles, and the dynamics of the global market (Emran & Hou, 2013). It is essential to investigate methods that can help MSMEs gain access to markets in order to overcome these problems. Access to a variety of markets, such as business-to-business (B2B), business-to-consumer (B2C), and government-regulated markets, can be made possible by sound procedures and helpful public policies (Amalia Putri et al., 2023). Furthermore, it has been determined that financial management, capital availability, and digital marketing all have a favorable impact on product competitiveness, which enhances MSMEs' capacity to penetrate new markets (Prasetyo & Ellitian, 2023). In order to solve the problems associated with market access, more study is required to examine timing and allocation strategies in the context of MSME internationalization (Saptaria et al., 2023). When developing strategies to improve the integration of MSMEs into the larger economic environment, it is imperative to analyze market access challenges.
d. Digital Integration

Digital integration is becoming a driving force behind competitiveness and innovation in business, particularly for Indonesia’s micro, small, and medium-sized firms (MSMEs). These MSMEs have gaps in a variety of areas and are at varying stages of digital adoption. Adoption of digital technology presents chances for increased communication, operational effectiveness, and market expansion. MSMEs can enhance their problem-solving and management skills in the age of digitalization (Dharmanto et al., 2023). On the other hand, the COVID-19 pandemic has significantly impacted the Indonesian economy, particularly MSMEs. MSMEs in Purbalingga Regency have suffered as a result of being unable to pay their staff, which has led to a decline in revenue and layoffs. The government has put e-commerce initiatives into place to help MSMEs, however players in the MSME space have faced difficulties due to restricted internet access and technological limitations (Setyoko, 2023). Adoption of digital marketing can help MSMEs undergo digital transformation by boosting their adaptability and accelerating the process with managers-friendly guidelines (Ananda et al., 2023). MSMEs in Indonesia must make the most of social media and digital technology to promote their goods since these tools can greatly influence their business outlook and assist them in adjusting to the ever-changing demands of the modern world (Wati et al., 2023). It is possible to gain insight into the impact of technology integration on MSMEs' business practices and overall sustainability by analyzing how they use digital tools and technologies.

e. Conceptual Framework

A conceptual framework that emphasizes the connections between environmental practices, financial management, market access, and digital integration is developed based on the literature review. This framework acts as a roadmap for comprehending the complex interactions and how they all work together to affect the sustainability and resilience of MSMEs in Indonesia.

H1: MSMEs' overall business sustainability and their adoption of green practices are positively and significantly correlated.

H2: MSMEs' business resilience is positively and dramatically impacted by effective financial management.

H3: There exists a positive and strong correlation between enhanced company resilience and greater market access for MSMEs.

H4: The overall business sustainability of MSMEs is positively and strongly correlated with improved market access.

H5: Digital technology integration in MSME operations has a major and favorable effect on business resilience.

H6: The sustainability of businesses is positively and significantly impacted by the incorporation of digital technology into MSME operations.

METHOD

In order to thoroughly examine the impact of market accessibility, financial management, environmental practices, and digital integration on the sustainability and resilience of Micro, Small, and Medium-Sized Enterprises (MSMEs) in Indonesia, this study used a quantitative research methodology. To ensure representativeness across all sectors and regions, data from a sample of MSMEs would be gathered using a cross-sectional survey design. The MSMEs in Indonesia that are registered are the
study's target population. By comparing the number of indicators to 10, the sample size was calculated using a stratified random sampling technique in order to obtain a confidence level in SEM-PLS. In order to guarantee a representative and diverse sample, the stratification was based on sector and geographic area. In the end, 274 samples were obtained for this study.

a. Data Collection

Based on the goals of the study, a structured questionnaire will be used to gather primary data. Sections on market access, financial management, digital integration, environmental practices, and general business resilience and sustainability will all be included in the questionnaire. To ensure fast and effective data collection, the survey will be performed electronically. The poll will take place between November 20, 2023, and January 5, 2024, with respondents being assured of the confidentiality and anonymity of their answers.

b. Data Analysis

Structural Equation Modeling with Partial Least Squares (SEM-PLS), a potent statistical method appropriate for examining intricate correlations in small to medium-sized samples, will be used to analyze the data. Because SEM-PLS enables the assessment of numerous variables at once, it is a good fit for our research's multidimensional focus. Based on company size, geography, and industry sector, 274 Micro, Small, and Medium-Sized Enterprises (MSMEs) will undergo a demographic analysis in this study. To give a summary of the sample and make the research setting easier to understand, descriptive statistics like mean and standard deviation will be computed. To perform Structural Equation Modeling - Partial Least Squares (SEM-PLS) analysis, the measurement model's validity and dependability must be evaluated first. The constructs of market access, environmental practices, financial management, digital integration, and business resilience and sustainability will all be validated by confirmatory factor analysis. Cronbach's alpha will be used to measure reliability, while factor loadings and cross-loadings will be used to evaluate convergent and discriminant validity. To investigate the connections between the constructs and test theories from relevant literature, a structural model will be developed. To strengthen the findings' robustness, bootstrapping techniques will be employed to evaluate the route coefficients for the significance and strength of the connections. The structural model's overall fit will be evaluated using fit indices, such as the Goodness-of-Fit Index (GoF), to determine the model's predictive relevance to the observed data.

RESULTS AND DISCUSSION

a. Descriptive Statistics

A basic summary of the sample characteristics is given by descriptive statistics, which also provide light on how Micro, Small, and Medium-Sized Enterprises (MSMEs) are distributed across different industries, regions, and business sizes.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency (n=274)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>95</td>
<td>34.7%</td>
</tr>
<tr>
<td>Services</td>
<td>110</td>
<td>40.1%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>69</td>
<td>25.2%</td>
</tr>
<tr>
<td>Geographic Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>145</td>
<td>52.9%</td>
</tr>
<tr>
<td>Characteristic</td>
<td>Frequency (n=274)</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Rural</td>
<td>129</td>
<td>47.1%</td>
</tr>
<tr>
<td>Company Size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro (1-9 employees)</td>
<td>160</td>
<td>58.4%</td>
</tr>
<tr>
<td>Small (10-49)</td>
<td>92</td>
<td>33.6%</td>
</tr>
<tr>
<td>Medium (50-249)</td>
<td>22</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

Source: Results of data analysis (2024)

These descriptive data capture the representation of MSMEs across industry sectors, geographic areas, and company sizes, revealing the diversity within the sample. The two most important industries are manufacturing and services, which reflects Indonesia's diverse economic environment. The distribution of micro, small, and medium-sized businesses as well as between urban and rural areas shows how inclusive the sample is.

b. Measurement Model Analysis

To ensure the robustness of the instruments used to measure environmental practices, financial management, market access, digital integration, and the results of business resilience and sustainability, the measurement model analysis evaluates the validity and reliability of the constructs under investigation.

Table 2. Measurement Model Results

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Practices</td>
<td>0.826</td>
<td>0.859</td>
<td>0.683</td>
</tr>
<tr>
<td>Financial Management</td>
<td>0.798</td>
<td>0.777</td>
<td>0.521</td>
</tr>
<tr>
<td>Market Access</td>
<td>0.813</td>
<td>0.795</td>
<td>0.624</td>
</tr>
<tr>
<td>Digital Integration</td>
<td>0.831</td>
<td>0.868</td>
<td>0.629</td>
</tr>
<tr>
<td>Business Resilience</td>
<td>0.876</td>
<td>0.884</td>
<td>0.739</td>
</tr>
<tr>
<td>Business Sustainability</td>
<td>0.865</td>
<td>0.875</td>
<td>0.743</td>
</tr>
</tbody>
</table>

Source: Results of data analysis (2024)

Every construct has excellent internal consistency, with Composite Reliability and Cronbach’s alpha values above the suggested cutoff of 0.7. This implies that the fundamental notion is consistently measured by the components inside each construct. Over 50% of the variance in the items is captured by the underlying construct, as indicated by the Average Variance Extracted (AVE) values, which are greater than the minimum requirement of 0.5. Discriminant validity is supported by the fact that each item’s cross-loading values are less than the corresponding factor loadings. Figure 1 below illustrates that the loading factors are consistently >0.70, suggesting that the measures effectively represent diverse components of the construct under consideration. Some items are more strongly connected with their own concept than others.
c. Structural Model Findings

Utilizing Structural Equation Modeling with Partial Least Squares (SEM-PLS), the structural model study investigated the connections between market access, digital integration, financial management, environmental practices, and company resilience and sustainability results. Table 3 presents the standardized coefficients and p-values that elucidate the importance and intensity of these associations. A 5,000-iteration resampling approach called bootstrapping analysis was used to evaluate the stability and dependability of the structural model results. Table 3 displays the path coefficients’ 95% confidence intervals, which shed light on how strong the connections are between market accessibility, digital integration, financial management, environmental practices, and sustainability and company resilience outcomes.

Figure 1. Loading Factor
Table 3. Structural Model Findings

<table>
<thead>
<tr>
<th>Path</th>
<th>Standardized Coefficient</th>
<th>t-statistics</th>
<th>p-values</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Practices → Business Sustainability</td>
<td>0.428</td>
<td>0.038</td>
<td>0.465</td>
<td>&lt;0.001 Significant Positive</td>
</tr>
<tr>
<td>Financial Management → Business Resilience</td>
<td>0.634</td>
<td>0.060</td>
<td>0.667</td>
<td>&lt;0.001 Significant Positive</td>
</tr>
<tr>
<td>Market Access → Business Resilience</td>
<td>0.517</td>
<td>0.049</td>
<td>0.543</td>
<td>&lt;0.001 Significant Positive</td>
</tr>
<tr>
<td>Market Access → Business Sustainability</td>
<td>0.486</td>
<td>0.046</td>
<td>0.515</td>
<td>&lt;0.001 Significant Positive</td>
</tr>
<tr>
<td>Digital Integration → Business Resilience</td>
<td>0.543</td>
<td>0.052</td>
<td>0.576</td>
<td>&lt;0.001 Significant Positive</td>
</tr>
<tr>
<td>Digital Integration → Business Sustainability</td>
<td>0.598</td>
<td>0.057</td>
<td>0.624</td>
<td>&lt;0.001 Significant Positive</td>
</tr>
</tbody>
</table>

Source: Results of data analysis (2024)

The findings validate the stability and importance of the linkages by showing that the 95% confidence intervals for all path coefficients do not include zero. Strong and consistent results support the validity of the structural model. The bootstrap analysis demonstrates the durability and importance of these correlations, which strengthens the validity of the structural model results. With the help of this study, it is certain that the associations that have been identified are not unique to the sample in question and will most likely apply to the larger group of MSMEs in Indonesia.

The study’s conclusions show strong correlations between a range of business variables and important outcomes for Micro, Small, and Medium-Sized Businesses (MSMEs). The overall business sustainability of MSMEs is dramatically increased when they use environmentally sustainable strategies (0.428, p < 0.001). Similarly, proficient financial administration (0.634, p < 0.001) is identified as a critical element that favorably contributes to these businesses’ resilience, enhancing their ability to withstand economic setbacks. Additionally, increased market accessibility (0.517, p < 0.001) not only helps MSMEs manage economic uncertainty better, but it also has a strong positive correlation with business sustainability (0.486, p < 0.001). This emphasizes how market dynamics and sustainability initiatives are intertwined in determining MSMEs’ long-term viability. Furthermore, the incorporation of digital technologies is identified as a critical factor for business sustainability (0.598, p < 0.001) and resilience (0.543, p < 0.001), highlighting the critical role of technology in promoting adaptable practices and long-term business plans for MSMEs operating in dynamic business environments.

d. Model Fit Indices

Indicators of model fit assess how well the proposed structural model fits the observable data. The goodness-of-fit index (GoF) and related metrics demonstrate the model’s appropriateness and predictive power. The model fit indices demonstrate a high degree of goodness-of-fit, with a GoF score of 0.82. Consequently, there is strong evidence that the proposed structural model can adequately explain the relationships among digital integration, market access, financial management, environmental practices, and the outcomes of company sustainability and resilience. This suggests that the observed data can be highly predicted by the suggested structural model. By integrating the explanatory power of the model with the importance of the latent variables, the GoF index supports the value of the structural model in capturing the complex dynamics within the context of Indonesian MSMEs. A GoF value of 0.82
indicates that the model can adequately represent the actual data, supporting the robustness of the found relationships.

Discussion

The study's conclusions are interpreted in the discussion, which also places the results in the larger context of the literature and provides insights into the implications for future research, business practitioners, and policymakers.

a. Environmental Practices and Business Sustainability

The worldwide movement towards sustainable business models is consistent with the strong and positive correlation that exists between environmental practices and corporate sustainability. Green initiatives implemented by MSMEs in Indonesia have a favorable effect on the overall sustainability of their business (Alkhodary, 2023; Anaman et al., 2023; Inthakesone et al., 2023). This emphasizes how crucial it is to incorporate eco-friendly procedures into corporate operations (Inthakesone et al., 2023; Putri & Bangun, 2019). Legislators should think about providing incentives and backing environmentally conscious projects in order to encourage MSMEs to implement sustainable practices that are good for the environment and help ensure the long-term success of their businesses.

b. Financial Management and Business Resilience

The robust and affirmative correlation observed between proficient financial management and business resilience underscores the vital function of prudent financial tactics in augmenting MSMEs' capacity to withstand economic adversities. Credit availability, effective cash flow management, and wise resource allocation are important factors that support these businesses' resilience (Aassouli & Ahmed, 2023; R. L. Aulia et al., 2023; Nguyet, 2023; Ompusunggu & Nanda, 2023; Wijaya & Herwiyanti, 2023). To equip MSMEs with the skills and information necessary to successfully navigate financial issues, policymakers, and financial institutions should investigate ways to raise financial literacy among this population.

c. Market Access and Digital Integration

The interdependence of these elements is shown by the positive correlations found between market access, digital integration, and business resilience and sustainability. Improved market access helps MSMEs be sustainable overall and helps them navigate economic turbulence more skillfully (Amalia Putri et al., 2023; Bolognini et al., 2023; K. Dewi & Mita, 2023; N. G. Dewi et al., 2023; OECD, 2023). Through the provision of instruments for market expansion, operational efficiency, and improved communication, digital integration has emerged as a critical enabler, fostering resilience and sustainability. In order to create an atmosphere that is favorable to the expansion and sustainability of MSME, policymakers may take into account programs to enhance digital literacy and infrastructure.

d. Practical Implications and Recommendations

The study's conclusions have applications for researchers, businesspeople, and legislators. Using the findings, policymakers may create focused interventions that help MSMEs adopt eco-friendly practices, raise their financial literacy, and develop their digital capabilities. Financial institutions could take into account customized financial products to meet the unique requirements of MSMEs and build their resilience.

The results can be used by business professionals to improve their strategy, with a focus on incorporating digital technologies, effective financial management, and
sustainable practices into their operations. The correlation between market access and resilience and sustainability highlights the significance of investigating a range of markets and establishing strong channels for distribution.

e. Limitations and Future Research Directions

Although the study offers insightful information, some limitations should be noted. The study's cross-sectional design provides a snapshot of correlations; causality cannot be conclusively deduced. Longitudinal designs may be used in future studies to capture the dynamics of change across time. Although the study concentrated on MSMEs in Indonesia, similar studies conducted in other areas and industries could offer a more thorough understanding given the range of MSME features.

CONCLUSION

To sum up, this study adds to our knowledge of the complex factors influencing the sustainability and resilience of MSMEs in Indonesia. The results emphasize the beneficial effects on business resilience and sustainability of environmental practices, efficient financial management, enhanced market accessibility, and digital integration. Policymakers may benefit greatly from the study's insightful recommendations, which support the advancement of digital infrastructure, financial literacy campaigns, and ecologically beneficial projects. These findings can be used by business professionals to improve plans that strike a balance between environmental responsibility and economic growth. The research lays the groundwork for future studies on MSME dynamics across various areas and industries, even as it acknowledges the limits of the study, such as its cross-sectional character. All things considered, this study adds to the conversation around resilient and sustainable business practices by providing stakeholders with a road map for navigating the intricacies of the MSME environment in Indonesia.

Reference


Amin, M., Saleh, R., Masitah, M., & Ufayani, N. (2023). MICRO, SMALL, AND MEDIUM ENTERPRISES (MSMES) IN PROSPERITY BUSINESS ACTORS


OECD. (2023). *The role of networks for SME innovation, resilience and sustainability*. 693


