

# **A Holistic Review of MSME Entrepreneurship in Indonesia: The Role of Innovation, Sustainability, and the Impact of Digital Transformation**

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## **ABSTRACT**

This study conducts a comprehensive examination of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia, focusing on their role in the economy, challenges in innovation, sustainability, and digital transformation. With over 97% of the local labor force employed by MSMEs, their significance is undeniable. However, obstacles, exacerbated by the COVID-19 pandemic, include a financing gap, innovation difficulties, and limited resources hindering digitalization. The research, based on a sample of 250 MSMEs, utilizes Partial Least Square-Structural Equation Modeling (PLS-SEM) to reveal the positive and significant impact of innovation, sustainability, and digital transformation on MSME entrepreneurship. Practical implications suggest prioritizing innovation, integrating sustainable practices, and recognizing the importance of digitalization for MSMEs' success, with broader implications for socio-economic and environmental goals.

## **Keywords:**

Micro, Small, and Medium Enterprises (MSMEs), Indonesia, Innovation, Sustainability

## **INTRODUCTION**

MSMEs dominate domestic economic activities in Indonesia, with the majority of them being micro-enterprises (MIEs) (T. T. H. Tambunan, 2023). MSMEs employed more than 97% of the labor force locally and made up 99.98% of business units in this nation, contributing 57% of Indonesia's GDP. With 62.1 million entities as of 2018, micro, small, and medium-sized companies (MSMEs) account for the majority of Indonesia's enterprise landscape (Anatan & Nur, 2023). MSMEs are the backbone of the government's ability to endure a variety of challenges and meet the demands of the nation (Suminah et al., 2022; UNDP, 2015).

Apart from their significant role in the economy, MSMEs also face challenges, especially in relation to innovation, sustainability and digitalization. There is a large financing gap in the micro, small, and medium-sized enterprise (MSME) sector, which has contributed to Indonesia's low productivity and competitiveness (Mahfouz et al., 2002). Innovation is indeed a challenge for Micro, Small, and Medium Enterprises (MSMEs) in Indonesia. The COVID-19 pandemic has further exacerbated this challenge, as it has affected the innovation of MSMEs in the country (Sudjatmoko et al., 2023).

Although this sector can contribute to reducing poverty and eliminating hunger by creating job and business opportunities, especially for women and youths, and generating GDP (T. Tambunan, 2019). They face challenges in achieving sustainability due to the constantly changing business environment and vulnerability to environmental changes (Muafi & Roostika, 2022). The challenges related to sustainability that they face are also

caused by limited access to capital, lack of business skills, and limited market access (Ridwan Maksum et al., 2020).

Apart from the two components above, digitalization is also a big challenge for them, especially those who operate at the micro level and operate traditionally, which is the majority of MSMEs in Indonesia. MSMEs in the country face obstacles in fully reaping the benefits of digitalization, and Indonesia ranks low in the World Economic Forum's Network Readiness Index, indicating a lack of sufficient digital enablement (IMF). The limited resources of Indonesia's MSMEs make digitalization particularly challenging (Sijabat, 2022).

This research is intended to conduct a comprehensive review of the impacts of innovation, sustainability and digitalization on entrepreneurship and entrepreneurial success, especially those at the MSME level. Thus, this research can be used as consideration for MSMEs and the government in improving the performance of MSMEs as the main pillar of the Indonesian economy.

## **Literature Review And Hypothesis Development**

### **a. MSME Entrepreneurship**

MSME entrepreneurship in the context of innovation, sustainability, and digitalization can be understood as the process of creating and implementing new, sustainable, and digital business models that drive growth and value creation for customers, firms, and the environment. This approach is influenced by sustainable entrepreneurship, innovation, and digitalization (Avelar et al., 2024). Sustainable entrepreneurship involves creating value for customers, firms, and the environment by addressing social and environmental challenges while ensuring long-term success. Sustainable entrepreneurship is influenced by business environment, firm strategy, sustainability, innovation, and digitalization (Avelar et al., 2024). Innovation is about creating new, useful, and conscious value impact for customers, firms, and the environment. In the context of MSME entrepreneurship, innovation involves developing new products, services, and business models that address sustainability and digitalization challenges while creating value for customers (Gavrila & Ancillo, 2021). Meanwhile, digitalization refers to the process of integrating digital technologies into a firm's operations, marketing, and business models (Costa Melo et al., 2023). In MSME entrepreneurship, digitalization enables firms to create new opportunities for growth, improve efficiency, and enhance customer experiences (Gavrila & Ancillo, 2021). MSME entrepreneurship in the context of innovation, sustainability, and digitalization involves creating and implementing new, sustainable, and digital business models that drive growth and value creation for customers, firms, and the environment. This approach requires a focus on sustainable entrepreneurship, innovation, and digitalization, as well as addressing the barriers that hinder sustainable digital transformation in MSMEs.

### **b. Innovation**

In the context of entrepreneurship, innovation refers to the creation of new products, services, or processes that drive economic change and create value. Innovative entrepreneurship involves the development and use of new ideas to establish and grow ventures. It is a cornerstone of entrepreneurial activity, as innovative ventures not only create economic impact but also contribute to job creation, shared prosperity, and competitiveness, particularly in developing and emerging markets (Amini Sedeh et al., 2022). Innovation and entrepreneurship are closely related, and successful entrepreneurship often involves innovation. According to (Drucker, 1986) successful innovation requires a systematic search for opportunities within a company, industry, and larger social

context. Purposeful innovation involves a disciplined effort to improve a business's potential, and knowledge-based innovations require long lead times and the convergence of different kinds of knowledge. A study conducted by (Chaves-Maza & Fedriani, 2022) aimed to assess the level of success achieved by entrepreneurs and found that it is crucial to understand the most important factors that determine survival, growth, and success during the early years of a new company's existence.

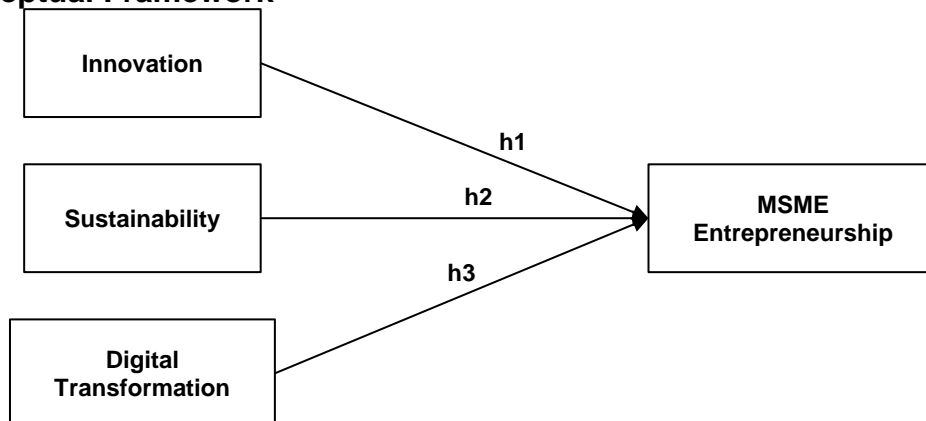
**c. Sustainability**

Sustainability in the context of MSMEs (Micro, Small, and Medium Enterprises) refers to the practice of conducting business in a socially responsible manner, addressing local and global social, environmental, and economic issues. This concept embraces long-term commitment to maintaining equilibrium between these concerns rather than short-term profits and ad hoc practices (Murphy, 2013). The sustainability of Micro, Small, and Medium Enterprises (MSMEs) is a crucial concern in the current business landscape, as they face various challenges such as uncertainties in supply and demand, stronger competition, and the impact of the COVID-19 pandemic (Afdal et al., 2021).

**d. Digital Transformation**

Digital transformation is an organizational transformation that integrates digital technologies and business processes in a digital economy (Kraus et al., 2021). It involves the strategic use of digital technologies to create new or modify existing products, services, and operations, with the aim of enhancing customer experiences, streamlining processes, and driving innovation (Plekhanov et al., 2022). The digital transformation of Micro, Small, and Medium Enterprises (MSMEs) has been the subject of several studies in academic journals. A study conducted in Indonesia examined the readiness of MSMEs for digital transformation and found that digital literacy plays a significant role as an intervening variable in the revitalization of MSMEs during the pandemic (Anatan, 2021). Another study focused on European SMEs and highlighted that digital transformation is profoundly transforming their business activities, bringing about comparative advantages and associated risks (Skare et al., 2023). A study conducted by (Costa Melo et al., 2023) discussed the barriers to sustainable digital transformation in MSMEs and emphasized the importance of digital orientation and digital capability in driving digital transformation, particularly during the COVID-19 pandemic.

**e. Conceptual Framework**



**Figure 1. Conceptual Framework**

Source: Literature Review, 2023

## METHOD

### a. Sample and Population

This research used 250 samples consisting of various scales of MSMEs with fairly proportional numbers. This figure is in accordance with the minimum sample criteria set by (Hair) which requires research samples for analysis using the PLS SEM method to be at least 6-10 times the total number of indicators. These 250 samples were taken from various regions in Indonesia in order to make the samples collected representative enough to represent the MSME population from all regions in Indonesia.

### b. Measurement

This research consists of four variables which respectively consist of three independent variables and one dependent variable. The first independent variable is innovation which will be measured by five questionnaire statements. The second independent variable is the sustainability variable which is represented by four questionnaire items. The third independent variable is the digital transformation variable which will be represented by five questionnaire items. Meanwhile, the dependent variable in this research is MSME entrepreneurship, which is represented by five questionnaire items. Table 1 shows the questionnaires of this study.

**Table 1. Questionnaire of Study**

Variabel	Code	Item
<b>Innovation</b>	INV.1	1. Innovation is essential for the success of our organization.
	INV.2	2. I believe that trying new and creative approaches is crucial for personal and professional growth.
	INV.3	3. I feel comfortable suggesting innovative ideas to my colleagues and superiors.
	INV.4	4. Our organization actively encourages and supports employees in taking risks to explore new opportunities.
	INV.5	5. Employees in our organization are given sufficient time and resources to explore and implement innovative ideas.
<b>Sustainability</b>	SST.1	1. I believe that incorporating sustainable practices is important for the long-term success of our organization.
	SST.2	2. Our organization actively seeks ways to reduce its environmental impact.
	SST.3	3. I feel a personal responsibility to contribute to sustainability efforts in our workplace.
	SST.4	4. Sustainability initiatives, such as recycling and energy conservation, are well-supported in our organization
<b>Digital Transformation</b>	DGT.1	1. I believe that digital transformation is crucial for the future success of our organization.
	DGT.2	2. Our organization actively embraces new digital technologies to enhance its operations.
	DGT.3	3. I feel comfortable adapting to and using new digital tools and platforms in my role.
	DGT.4	4. Digital transformation initiatives in our organization are well-communicated and understood by employees.
	DGT.5	5. Our organization invests in ongoing training and development to enhance digital skills among employees.
<b>MSME Entrepreneurship</b>	ME.1	I believe that MSMEs play a vital role in fostering economic growth and job creation.
	ME.2	

Variabel	Code	Item
	ME.3	I feel encouraged to pursue entrepreneurial opportunities within the MSME sector.
	ME.4	Our community values and supports local MSMEs and entrepreneurship.
	ME.5	There are sufficient networking and collaboration opportunities for MSMEs in our business community.
	ME.5	MSMEs in our region have access to adequate training and development programs.

Source: Literature Review, 2023

**Table 2.** Construct Validity and Reliability

Code of Item	Loading Factor	CA	CR	AVE
INV.1	0,839			
INV.2	0,892			
INV.3	0,870	0,867	0,906	0,662
INV.4	0,826			
INV.5	0,811			
SST.1	0,882			
SST.2	0,858	0,833	0,890	0,670
SST.3	0,809			
SST.4	0,714			
DGT.1	0,753			
DGT.2	0,701			
DGT.3	0,840	0,835	0,883	0,603
DGT.4	0,805			
DGT.5	0,779			
ME.1	0,787			
ME.2	0,801			
ME.3	0,714	0,836	0,883	0,601
ME.4	0,793			
ME.5	0,778			

Source: Analysis Test, 2023

The table provides a comprehensive overview of construct validity and reliability for different items within a measurement instrument. The "Code of Item" column identifies each item, while the "Loading Factor" reveals the strength of the relationship between items and their underlying constructs. In the "CA (Composite Reliability)" and "CR (Construct Reliability)" columns, higher values are indicative of better internal consistency, showcasing the reliability of the constructs. The "AVE (Average Variance Extracted)" values, though moderate, suggest reasonable convergent validity. For the Innovation (INV), Sustainability (SST), Digital Transformation (DGT), and MSME Entrepreneurship (ME) categories, loading factors are consistently high, affirming robust relationships with their respective constructs. Overall, the results signify that the measurement instrument exhibits strong construct validity and reliability, with items effectively capturing their intended constructs and demonstrating good internal consistency. The moderate AVE values indicate acceptable convergent validity, supporting the instrument's overall quality and suitability for measurement purposes.

### c. Data Collection

After successfully determining how to measure properly and correctly, data was collected using a survey by distributing questionnaires offline and online to more than 270 potential respondents in various regions in Indonesia. A total of 254

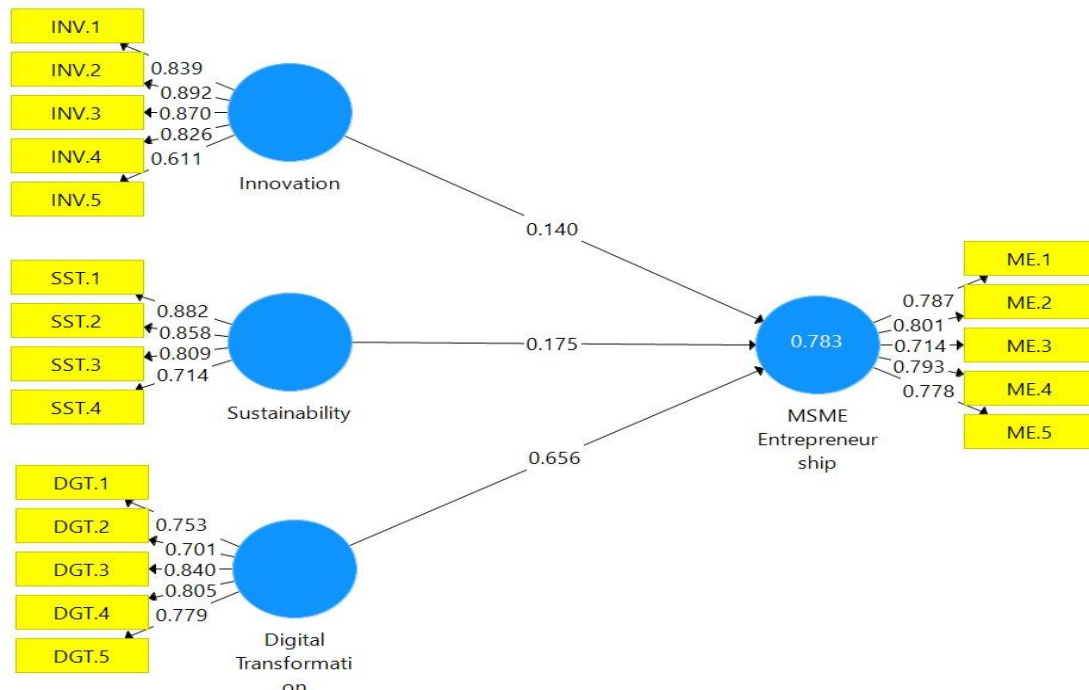


questionnaires were successfully recovered and taking into account the completeness of filling in, 250 questionnaires were decided to be processed and analyzed to produce answers to the objectives of the research. Researchers needed at least a full month to successfully retrieve the questionnaires which had previously been distributed online via various platforms such as email and social media. Meanwhile, for offline surveys, questionnaires are obtained quickly because the process of filling out the questionnaire by respondents is accompanied by surveyors.

**d. Data Analysis**

Data were analyzed using the Partial Least Square-Structural Equation Modeling (PLS-SEM) method using an analysis application in the form of Smart PLS. This method is believed to be suitable for this research because of its ability to handle complex models with small sample sizes, which is often the case in social science research. PLS-SEM is particularly well-suited for exploratory research that seeks to uncover relationships between latent variables, such as innovation, sustainability, and digital transformation, which are the focus of the study. Additionally, PLS-SEM allows for the incorporation of formative indicators, which is beneficial when the measurement model is not well-established, as may be the case when studying emerging phenomena such as digital transformation in the context of MSME entrepreneurship in Indonesia.

According to Hair et al. (2017), PLS-SEM is especially useful when the research objective is prediction or explanation, the theory is not well-developed, the focus is on complex models, the sample size is small, and the measurement model is not well-established. Given that the study aims to understand the relationship between innovation, sustainability, and the impact of digital transformation on MSME entrepreneurship in Indonesia, and that the context is characterized by emerging phenomena and limited data, PLS-SEM is a suitable choice for the analysis.



**Figure 2. Research Model**  
 Source: Data Analysis Result, 2023

## RESULTS AND DISCUSSION

### Result

#### a. VIF Values

**Table 3.** VIF Values

	Inner VIF	Outer VIF
Innovation	2,093	INV.1 = 2,454
		INV.2 = 2,193
		INV.3 = 2,716
		INV.4 = 2,210
		INV.5 = 1,237
Sustainability	2,075	SST.1 = 2,735
		SST.2 = 2,547
		SST.3 = 2,084
		SST.4 = 1,309
Digital Transformation	2,079	DGT.1 = 1,714
		DGT.2 = 1,575
		DGT.3 = 2,042
		DGT.4 = 1,882
		DGT.5 = 1,772
MSME Entrepreneurship		ME.1 = 1,774
		ME.2 = 2,209
		ME.3 = 1,990
		ME.4 = 1,895
		ME.5 = 1,703

Resource: Data Analysis Result, 2023

Table 3 presents Variance Inflation Factor (VIF) values for different constructs, providing insights into the degree of multicollinearity among variables within each category. The Innovation construct exhibits a moderate level of multicollinearity with an inner VIF of 2.093. Individual items within Innovation, represented by INV.1 to INV.5, show acceptable outer VIF values, ranging from 1.237 to 2.716. Similarly, the Sustainability construct demonstrates moderate multicollinearity with an inner VIF of 2.075. Outer VIF values for items SST.1 to SST.4 are all below the commonly considered threshold of 5. The Digital Transformation construct also displays a moderate level of multicollinearity (inner VIF = 2.079), with individual items (DGT.1 to DGT.5) having acceptable outer VIF values. Unfortunately, the inner VIF for the MSME Entrepreneurship construct is not explicitly provided, but outer VIF values for items ME.1 to ME.5 are all within acceptable ranges. Overall, the VIF values suggest that multicollinearity is generally not a significant concern for the model, ensuring the reliability of the regression analysis. It's important to consider specific thresholds and statistical guidelines relevant to the analysis at hand.

#### b. Model Fit

**Table 4.** Research on GoF

	Saturated Model	Estimated Model
SRMR	0,107	0,107
d_ULS	2,195	2,195

Source: Data Analysis Result, 2023

The table presents statistics comparing a Saturated Model, which perfectly fits observed data, and an Estimated Model, likely representing real relationships. The SRMR (Standardized Root Mean Square Residual) measures the fit between observed and model-implied data, and both models show a good fit with an SRMR of

0.107. The term "d\_ULS" may indicate a discrepancy related to the Unweighted Least Squares method, possibly measuring differences between observed and model-implied covariance matrices. Overall, the similarity in SRMR values suggests the Estimated Model fits the data well, though comprehensive interpretation requires considering other fit indices and model assumptions.

**c. R Square Measurement**

**Table 5. R Square**

	R Square	R Square Adjusted
MSME Entrepreneurship	0,783	0,780

Source: Data Analysis Result, 2023

The table shows that about 78.3% of the variation in MSME Entrepreneurship can be explained by the factors in the model, as indicated by the R Square value. The R Square Adjusted, accounting for the number of predictors, is slightly lower at 78.0%. In simple terms, the regression model seems reasonably good at explaining and predicting MSME Entrepreneurship, with a substantial portion of its variability accounted for by the included factors.

**d. Hypothesis Testing**

**Table 6. Hypothesis Test**

	Original Sample	Sample Mean	STD DEV	T Statistics	P Values	Result
INV -> ME	0,140	0,142	0,059	2,347	0,019	Support
SST -> ME	0,175	0,177	0,048	3,646	0,000	Support
DGT -> ME	0,656	0,653	0,047	14,050	0,000	Support

Source: Data Analysis Result, 2023

The table presents the results of hypothesis tests for three different samples: INV -> ME, SST -> ME, and DGT -> ME. For the INV -> ME sample, the calculated t-statistic is 2.347 with a corresponding p-value of 0.019, indicating statistical significance at a conventional threshold of 0.05. The result is supportive of the hypothesis being tested. In the case of the SST -> ME sample, the t-statistic is 3.646, and the p-value is 0.000, demonstrating strong evidence against the null hypothesis and strong support for the tested hypothesis. Similarly, for the DGT -> ME sample, a t-statistic of 14.050 and a p-value of 0.000 signify robust evidence against the null hypothesis, providing substantial support for the hypothesis being examined. In summary, all three tests yield statistically significant results, with low p-values suggesting strong support for the respective hypotheses under consideration.

**Discussion**

***Innovation on MSME Entrepreneurship***

The research results show that the first hypothesis (h1) in this research is acceptable and means that MSME entrepreneurship will increase along with increased innovation from these MSMEs. These findings require that MSMEs need to boost and increase their innovation power in order to become strong and resilient business units in facing various challenges. These findings are in line with and also support several previous studies.

Several studies have highlighted the significant positive relationship between innovation and SME performance. For instance, research has indicated the positive impact of innovation capabilities on SME performance, as well as the role of innovative practices in SME survival. These findings emphasize the importance of innovation for



the success and sustainability of MSMEs (Adam & Alarifi, 2021). Additionally, a literature review of highly cited papers has examined the adoption of open innovation practices by innovative small and medium-sized enterprises, further underlining the relevance of innovation in the context of MSMEs (Dambiski Gomes de Carvalho et al., 2021). A study conducted by (Sari & Kusumawati, 2022) discusses the role of entrepreneurial marketing and innovation capability in the performance of SMEs during the COVID-19 pandemic, providing evidence of the importance of innovation for the resilience and success of MSMEs, particularly in challenging times.

In the context of Indonesia, a research by (Kurniawati et al., 2021) emphasizes the need for an innovation strategy in Indonesian MSMEs during the COVID-19 pandemic to reduce various business risks and help businesses find new challenges. They stress the role of MSMEs as a source of production and technological innovation. Furthermore, a study investigates the quality of entrepreneurship, including the significance of innovation, in relation to the financial performance of MSMEs in Indonesia. The study suggests that innovation is significant for the financial performance of MSMEs, especially during the current challenges, such as the COVID-19 pandemic (HANGGRAENI & SINAMO, 2021). The importance of innovation for MSMEs in Indonesia is also highlighted in a research by (Maksum) which advocates for innovative methods, including social entrepreneurship, to empower MSMEs.

Innovation plays a crucial role in the growth and success of Micro, Small, and Medium Enterprises (MSMEs). It is emphasized that MSMEs are essential for achieving connectivity and digital transformation, making them the engine of today's digital economy. Governments around the world have established various regulatory frameworks and policies to support MSME development through innovation, such as providing funding for innovation projects and promoting university-MSME cooperation networks (Lan H. Phan. Hiem M. Tu, 2016). Inculcating innovativeness in employees and building a culture of innovation within MSMEs are highlighted as key factors for their success, as innovation has the potential to lead to higher efficiency, improved profitability, and long-term viability. Research also supports a significant positive relationship between innovation and the performance and survival of small and medium enterprises (SMEs) (Adam & Alarifi, 2021). Therefore, fostering innovation is essential for the growth, competitiveness, and sustainability of MSMEs.

### ***Sustainability on MSME Entrepreneurship***

The results of testing the second hypothesis (h2) also show that this hypothesis is acceptable, thus supporting the opinion that the more MSMEs show good sustainability, the better the MSME entrepreneurship will be among the MSME leaders. These findings then underline the importance of sustainability in managing MSMEs in order to create a long-term medium business ecosystem in Indonesia. The influence of sustainability on Micro-, Small, and Medium-sized Enterprises (MSMEs) entrepreneurship is significant, as these enterprises play a crucial role in achieving the Sustainable Development Goals (SDGs). MSMEs contribute to sustainable development through job creation, economic growth, and entrepreneurship, particularly for women and youth. Sustainability has a significant impact on entrepreneurs and their ventures. By incorporating sustainability into their business practices, entrepreneurs can experience increased innovation, better quality of life, and stronger communities. Sustainable entrepreneurship involves creating value in a responsible and ethical manner, considering the impact of business decisions on people and the environment. Moreover, sustainability initiatives can contribute to an

organization's overall success and profitability, as the most sustainable companies are also the most profitable (Leung et al., 2019). Therefore, prioritizing sustainability is essential for entrepreneurs to ensure long-term success and make a positive impact on the environment and society.

The impact of sustainability on entrepreneurs in Indonesia is a topic of growing interest. A study conducted in an Indonesian university examined the impact of sustainable entrepreneurship on non-financial business performance for start-up business owners. The research found that the implementation of sustainable business practices was generally agreed upon by the respondents, and that sustainable entrepreneurship significantly influenced non-financial business performance, including its sub-dimensions such as relationships with suppliers, net fluctuation of employees, and customer complaints (Klein & Todesco, 2021).

### ***Digital Transformation on MSME Entrepreneurship***

The test results show that there is a positive and significant influence between digital transformation on MSME entrepreneurship. These findings support and are in line with several previous studies. The digital transformation of micro, small, and medium-sized enterprises (MSMEs) has been a subject of interest in academic journals. Several studies have explored various aspects of this transformation, including technology adoption, entrepreneurial mindset, value creation, and the barriers to sustainable digital transformation. For example, a study in the *Journal of Small Business & Entrepreneurship* discusses the adoption of digital technology by MSMEs and its impact on value creation and entrepreneurial orientation (Valle et al., 2022). Another study investigates the main barriers to MSMEs' sustainable digital transformation, emphasizing the global importance of this issue (Cunningham & Rowley, 2010). These studies provide valuable insights into the role of digital transformation in MSME entrepreneurship, offering a comprehensive understanding of the challenges and opportunities associated with this process.

The digital transformation of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia has been a topic of interest in recent research. Several studies have focused on the impact of digitalization on MSMEs during the COVID-19 pandemic and their readiness for digital transformation. For example, a study aimed to identify the innovation priorities of MSMEs during the pandemic and their acceptance of e-commerce (Kurniawati et al., 2021). Another study investigated the readiness of Indonesian MSMEs for digital transformation and identified problems and types of knowledge transfer activities (Anatan & Nur, 2023). Additionally, the government of Indonesia has been actively encouraging the digital transformation of MSMEs to strengthen the national economic foundation. These researches provide valuable insights into the ongoing digital transformation of MSMEs in Indonesia, highlighting the importance of this process for the country's economic development.

The research findings underscore the positive and significant impact of innovation, sustainability, and digital transformation on Micro, Small, and Medium Enterprises (MSME) entrepreneurship. The study reveals that heightened innovation is associated with increased MSME entrepreneurship, emphasizing the need for businesses to enhance their innovation capabilities to navigate challenges effectively. This aligns with previous research highlighting

the positive relationship between innovation and SME performance, including innovative practices' role in survival. In Indonesia, the emphasis on innovation strategy during the COVID-19 pandemic underscores its importance in reducing business risks

and addressing emerging challenges. The second hypothesis supporting the importance of sustainability in MSME management is validated, indicating that strong sustainability practices contribute to better MSME entrepreneurship. MSMEs play a pivotal role in achieving Sustainable Development Goals (SDGs) through job creation, economic growth, and entrepreneurship. Sustainable entrepreneurship is shown to positively influence non-financial business performance in areas such as supplier relationships, employee stability, and customer satisfaction. Additionally, the study establishes a positive and significant influence of digital transformation on MSME entrepreneurship, with global and Indonesian research exploring technology adoption, barriers to sustainable digital transformation, and government initiatives promoting MSMEs' digital evolution for economic development. In conclusion, fostering innovation, prioritizing sustainability, and embracing digital transformation emerge as integral strategies for the growth, competitiveness, and enduring success of MSMEs, with far-reaching implications for broader socio-economic and environmental goals.

### ***Implication***

Several practical implication points that can be learned from this research are that Businesses, especially MSMEs, should strategically prioritize and invest in innovation to enhance their entrepreneurial endeavors. In addition, Governments, industry associations, and support organizations should encourage and facilitate innovation through policies, funding initiatives, and collaboration platforms. Sustainability practices are not only ethical but also directly contribute to the long-term success of MSMEs. Entrepreneurs and business owners need to integrate sustainable business practices into their operations, as it positively influences non-financial performance indicators. Additionally, MSMEs should recognize the imperative of digital transformation for their survival and growth, especially in the context of ongoing global technological advancements. Government bodies and stakeholders should continue supporting digitalization initiatives for MSMEs, ensuring they have the resources and knowledge needed for successful transformation.

### ***Limitation***

Entrepreneurship and MSMEs are a combination of two complex disciplines. Existing research, both research in previous years and current research, certainly has limitations that make other research opportunities in the future wide open. As in this research, limitations in sample size and geographic area were the main obstacles we faced in completing this research. We can suggest further research to mobilize more resources to be able to collect samples in larger numbers and from more diverse areas. Future research can also be directed to specifically and in-depth discussion of an area.

## **CONCLUSION**

The findings suggest that businesses, especially MSMEs, should prioritize innovation, integrate sustainable practices, and recognize the importance of digitalization for their growth. Governments and support organizations are encouraged to provide policies and funding to facilitate innovation and digital initiatives. Despite some limitations, the study concludes that these strategies are essential for the success and long-term viability of MSMEs in Indonesia, aligning with broader socio-economic and environmental goals.

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