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Business Digitization Strategy Determinants of MSMEs' Sustainability in Malaysia

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Abstract

This study examines the factors that affect the long-term viability of micro, small, and medium enterprises (MSMEs) in Malaysia. The strategic integration of digital technologies receives particular emphasis. Previous studies have examined the relationship between financial performance, innovation, and competitiveness, as well as the economic performance of SMEs. This study, however, makes a different contribution by focusing on the importance of corporate digitization as a critical factor affecting the sustainability of MSMEs in the Malaysian context. This empirical study collected data from 200 randomly selected MSMEs in Malaysia through a structured questionnaire. This study employs a two-stage quantitative methodology, first conducting an exploratory factor analysis and then using AMOS software version 18 to analyze the confirmatory factors of the items under investigation. This study found that implementing a business digitization strategy clearly impacts the innovation and competitiveness of MSMEs in Malaysia. This research also shows that effective digital integration can significantly contribute to the sustainability of MSMEs. Furthermore, the most essential thing in this study is demonstrating how innovation and digital competitiveness affect MSMEs' sustainability. The research findings presented in this study provide essential guidance to MSMEs in Malaysia by suggesting strategic directions to improve sustainability through the smart integration of digital technology. By adapting these findings, entrepreneurs can enhance the market position of their products and services, foster ingenuity, and effectively navigate the challenges of the current digital era.

Keywords: Business Digitization, Innovation and competitiveness, MSMEs' Sustainability, Malaysia

INTRODUCTION

In a rapidly changing business environment, micro, small, and medium enterprises (MSMEs) need digital technology to survive (Kumar et al., 2022). We cannot separate Malaysia's rapid development from this trend. Consequently, we present this study as a determinant of the sustainability of Malaysian SMEs, with a particular focus on the strategic incorporation of digital technology. The study used a simple random sample of 200 SMEs to complete a structured questionnaire. We conducted a two-phase quantitative study to investigate the impact of business digitization on the competitiveness and sustainability of this organization. Research findings demonstrate the ability of Malaysian SMEs to enhance their competitiveness and surmount these digital challenges (Teoh et al., 2022).

Digitizing business operations is essential in Malaysia. Malaysian firms, particularly MSMEs, are realizing they need to adopt digital technology to stay competitive in a digital economy (Nor Khasimah Aliman et al., 2021). The Malaysian government has promoted digital technology through many projects and programs (Nasidi et al., 2022). These initiatives provide MSMEs with the resources and expertise to successfully adopt digital technologies. Despite the growing importance of business digitization, MSMEs that have successfully integrated digital technologies into their operations differ significantly from those that have not. This context helps explain the factors that affect Malaysian MSMEs' sustainability and the role of business digitalization (Bilali, 2022).

MSMEs' long-term stability and profitability depend on sustainability, making it an important insight. If seen, Malaysia's economic growth depends on SMEs' ability to adapt and thrive in the ever-changing business landscape (Ruslaini, 2021). SMEs can drive growth and profits by adopting sustainable practices to reduce environmental, social, and economic impacts. MSMEs can build brand trust and loyalty by implementing sustainability initiatives like waste reduction, energy conservation, and socially responsible business practices. Sustainability activities may also appeal to investors who value environmentally and socially responsible companies. Therefore, Malaysian MSMEs should adopt sustainable practices for moral and economic reasons.

This study examines how Malaysian SMEs strive to use digital technology with the right digital corporate communication strategy. This study also contributes to our understanding of how small and medium-sized businesses can enhance sustainability in the rapidly expanding realm of digital commerce (Koch & Petit, 2023). This research aims to demonstrate the impact of digital integration on the innovation and competitiveness of MSMEs, providing Malaysian entrepreneurs with valuable insights into the global economy. The results of this study will provide strategic guidance on how MSMEs can use digital technologies to innovate, improve their current market position, and overcome digital challenges. This study also emphasizes how vital business digitization is for Malaysian MSMEs regarding business sustainability.

LITERATURE REVIEW

Definition and Components of the Business Digitization Strategy

According to Rupeika-Apoga & Petrovska (2022), corporate digitization plans aim to incorporate digital technology into various aspects of a company's operations. It entails utilizing digital tools, systems, and platforms to improve the company's efficiency, productivity, and competitiveness (Rupeika-Apoga et al., 2022).

The digitization process of this business also encompasses the digitization of internal operations, including inventory, supply chain management, and customer relationship management, among others. It also involves digitizing external activities such as online marketing, e-commerce, and customer support fees (Ahmad, 2022). To implement this approach successfully, a business must plan, invest in appropriate technology, and develop the digital skills of its stakeholders. Digital technology should be able to increase work agility, responsiveness, and innovation to increase business growth and sustainability (Rupeika-Apoga et al., 2022).

Determinants of Sustainability for MSMEs

MSMEs can outperform their competitors and ensure long-term viability by placing a business digitalization agenda in their operations. According to Chen et al. (2022), the strategic integration of technology in business can enhance the sustainability of MSMEs in Malaysia. The study randomly selected 200 Malaysian SMEs and distributed a standardized questionnaire. Findings show that digitizing company operations increases MSMEs' innovation and competitiveness (Amornkitvikai et al., 2022). Researchers highlight the importance of digital technology for long-term viability. Research also shows that digital innovation and competitiveness moderate the impact of corporate digitization on MSME sustainability (Mahmud et al., 2021). This vision advises Malaysian MSMEs on how to use digital technology to improve sustainability.

i. Financial performance

Malaysian MSMEs' financial performance is crucial for long-term viability in the ever-changing business landscape. These businesses' long-term sustainability depends on their ability to generate revenue, manage expenses, and distribute resources (Tandel, 2023). MSMEs should implement a digitalization plan to optimize financial processes, improve reporting, and make informed financial decisions. MSMEs can improve their economic performance, innovation, and market competitiveness using digital technologies like cloud computing, data analytics, and online payment systems. Strong digital integration can also provide immediate financial analysis, helping MSMEs improve and capitalize on new opportunities, boosting their durability.

H1: Financial performance significantly impacts SMEs' sustainability

ii. Innovation and competitiveness

Contemporary companies view competitiveness and innovation as interrelated. Malaysian MSMEs have been working in their operations to use digital technology as a critical driver for innovation and competitiveness. According to Abdul et al. (2020), business digitization has the potential to enhance their market success. They can obtain various advantages by implementing digitization in their operations; it promotes the sale of innovative products, services, and business processes that can meet the changing needs of consumers. Using digital technology will enable MSMEs to maximize innovation and competitiveness by increasing productivity and saving money. Therefore, SMEs must change and actively use digital technology to succeed in the digital business landscape.

H2: Financial performance significantly impacts innovation and competitiveness

H3: Innovation and competitiveness significantly impact SMEs' sustainability

iii. Market positioning

Katya and Saraswati (2021) stated that market position is essential to determine the survival of MSMEs in Malaysia. MSMEs may gain a competitive advantage, strengthening their position in the market. This can happen with the help of digital technology. MSMEs can differentiate themselves from competitors and meet changing customer demands by carefully integrating digital technologies into their operations. This has the potential to increase customer satisfaction and loyalty and promote MSMEs' long-term growth. Malaysian MSMEs must strategically use digital technology to increase their market presence to ensure their long-term viability.

H4: Innovation and competitiveness mediate the impact of market positioning on SMEs' sustainability

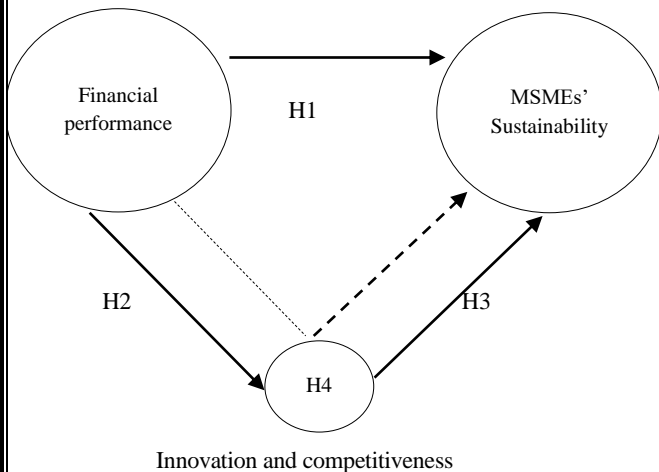


Figure 1: Theoretical Framework

Source: Author

Role of Digital Technologies in Enhancing Sustainability

MSMEs can innovate creatively and compete by strategically integrating digital technology into their business operations in the face of a rapidly changing digital landscape. These advantages help companies innovate, strengthen their market position, and overcome digital challenges. Digitization strategies affect the long-term sustainability of Malaysian MSMEs. Digital technology enhances innovation and competitiveness, which MSMEs require to survive and thrive (Wiliandri, 2020). Digital innovation and competitiveness also affect the sustainability of firm digitization, emphasizing the need for MSMEs to adopt digital technologies to succeed in the current business environment.

METHODOLOGY

This study involves a quantitative research process carried out in two stages. The study employed a simple, random, structured questionnaire with 200 Malaysian MSMEs. This is to ensure that the country's small and medium business sample accurately and appropriately reflects the population. Exploratory factor analysis is an effective way to identify important components that affect MSMEs' sustainability. Confirmatory factor analysis using Amos version 18 was able to confirm the appropriateness of the model and the structure of the studied components. The study's findings are reliable because the statistical procedure is based on high accuracy and reliability.

Data Collection Process

For this research, we administered a structured questionnaire to a randomly selected sample of 200 Malaysian MSMEs. We use a

two-phase quantitative method, starting with exploratory factor analysis, to identify the main factors. We performed confirmatory factor analysis using AMOS version 18 to examine the association of variables more precisely. This research collects extensive and reliable data on sustainability factors in Malaysian MSMEs. However, this study's primary focus is integrating digital technology into MSMEs' operations.

Sample Selection and Size

The researcher conducted an empirical study to complete the structured questionnaire by randomly selecting 200 Malaysian MSMEs. The sample chosen is representative of the entire SME sector in the country, taking into account diversity and inclusion. The two-phase quantitative methodology begins with an exploratory factor analysis to identify MSMEs' business digitization strategies and sustainability foundations in Malaysia. This confirmatory factor analysis using AMOS version 18 confirmed the components and their correlations. An empirical study of 200 SMEs is sufficient to directly assess the factors that affect the sustainability of SMEs in Malaysia.

EXPLORATORY FACTOR ANALYSIS

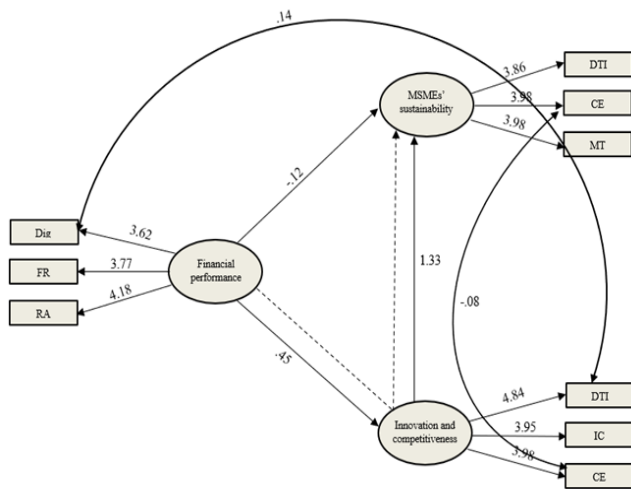
The primary objective of this study's exploratory factor analysis was to identify the foundational components that influence the sustainability of MSMEs in Malaysia. This statistical technique could extract latent variables from observable data, providing valuable insights into the complex interrelationships between variables. Exploratory factor analysis aims to identify critical determinants that can influence the sustainability of MSMEs by examining the relationship between the various aspects of digitization in an organization, competitiveness and innovation, and sustainability. We see this study as a basis for further research and confirmatory factor analysis, enabling a more comprehensive understanding of the sustainability determinants for MSMEs in Malaysia.

CONFIRMATORY FACTOR ANALYSIS USING AMOS

As mentioned before, this study used AMOS version 18 to conduct confirmatory factor analysis (CFA). The researcher successfully validated the measurement model using confirmatory factor analysis (CFA), a sophisticated statistical method that yielded the desired results. We used confirmatory factor analysis (CFA) to examine the relationship between the components of exploratory factor analysis (EFA) and to assess the fit of the overall theoretical model with the analyzed data. The researcher verifies the accuracy and consistency of the measurement model using the confirmatory factor analysis (CFA) process. This ensures that the constructs and indicators accurately and appropriately represent the theoretical concepts. Thus, through this study, the researchers have drawn meaningful conclusions about the relationship between company digitization, innovation, competitiveness, and the sustainability of MSMEs in Malaysia.

The investigation lasted two periods. First, EFA tests are performed. In the second phase, use AMOS version 18 for CFA. This study verifies data, investigates various aspects, and maintains strong indications (Allen & Bennett, 2010). A construction is reliable if it has a Cronbach (α) score of 0.6 or higher (Hair et al., 2010). Second, use AMOS version 18 for CFA. An excellent fit model must meet many criteria and cut-off values, including a p-value greater than 0.5 (Andrade, 2019). Additionally, CMIN/DF must be less than 2 (Tabachnick & Fidell, 2019), CFI must be greater than 0.95 (Fournier et al., 2008), and RMSEA must be less than 0.05.

Out of 20 components examined, SMEs' sustainability (3), financial performance (12), and innovation and competitiveness (5) had loading factors ranging from 0.647 to 0.891. These variables had Cronbach's alpha coefficients of 0.818–0.798. The Structural Equation Model (SEM) evaluated the theoretical framework and fitted models. The probability is 0.079, CMIN/DF is 1,501, CFI is 0.899, FMIN is 0.201, and RMSEA is 0.050.



Financial performance:

Digitalization Financial Reporting

Immediate Analysis

Innovation and competitiveness

Digital Technology Integration

Innovation Catalyst

Competitive Edge

Market positioning

Digital Technology Integration

Competitive Edge

Market Presence

Figure 2: Results of the Structural Equation Model

Table 1: Result Summary of Hypotheses testing

			C.R.	P	Result
H ₁	F.P.	MS	-1.104	0.279	Insignificant
H ₂	FP	I&C	6.373	***	Significant
H ₃	I&C	MS	4.919	***	Significant
H ₄	Indirect effect FP > < MS = b	score 0.609			Significant

Based on the results of the SEM test presented in Table 1, it appears that H1 and H3 demonstrate noteworthy outcomes, as indicated by their respective C.R. values of 6.373 and 4.919. Hair Jr. et al. (2014) deem a significance level of 1.89 adequate for the C.R. value of each hypothesis. Furthermore, the statistical significance of H4 is apparent from Table 1, as indicated by the coefficient value b = 0.609 (Hair Jr. et al., 2017). On the contrary, H2 is considered negligible because its C.R. value is only -1.104.

FINDINGS AND ANALYSIS

Putting a plan to digitize business operations into action significantly affects the innovation and competitiveness of Malaysia's MSMEs. MSMEs who use digital technology in their businesses may be able to come up with new ideas and be more competitive in the market. The study demonstrates that effectively incorporating digital technologies is critical for making MSMEs more sustainable by giving them new ideas and making them more competitive (Kaserwa, 2022). MSMEs need to embrace digital transformation to secure their long-term viability proactively. However, the study also shows that digital innovation and competitiveness help moderate corporate digitalization's effects on the long-term viability of MSMEs. MSMEs can only stay in business if they can use digital technology to edge over their competitors. So, to remain relevant and grow in today's changing business world, MSMEs need to use digital tools and methods.

Impact of Business Digitization Strategy on Innovation and Competitiveness

This study demonstrates that implementing corporate digitalization strategies enhances the innovation and competitiveness of MSMEs in Malaysia. MSMEs need to embrace digital technologies to remain competitive. By leveraging digital tools and platforms, MSMEs can strengthen their market position, operational efficiency, innovation, and competitiveness. Corporate digitalization enables MSMEs to streamline operations, mechanize procedures, and obtain up-to-date information. This enhances efficiency and reduces expenses. These advantages improve the competitiveness of MSMEs in the rapidly evolving digital landscape. Therefore, to endure in the digital era, MSMEs must implement a company digitalization strategy (de Lucas Ancillo & Gavrila Gavrila, 2023).

Influence of Innovation and Competitiveness on MSMEs' Sustainability

The study shows innovation and competitiveness are crucial to Malaysian MSMEs' sustainability. MSMEs can gain a competitive edge and improve their long-term viability and success by strategically integrating digital technology into their operations. The research shows that digital innovation and competitiveness, achieved through effective digitization, improve MSMEs' sustainability in Malaysia. Digital technology enhances market positioning, boosts innovation, and assists MSMEs in overcoming digital challenges. This study helps Malaysian MSMEs strengthen their market position and thrive in the digital economy (BarNir et al., 2003).

Moderating Effect of Digital Innovation and Competitiveness on Sustainability

The report also stresses the importance of digital innovation and competitiveness for Malaysian MSMEs' long-term viability. A digital competitive edge strengthens the link between company digitization and sustainability (Fawad Sharif et al., 2022). MSMEs that successfully integrate digital technology into their operations and strategies will likely gain a competitive edge and survive. This discovery emphasizes embracing and strategically utilizing digital technologies to innovate and compete. This approach allows MSMEs to position themselves for digital success and strategically address digitization issues.

DISCUSSION

This study demonstrates that using digitization methods in business can improve MSMEs' innovation and competitiveness

characteristics. This supports previous studies that highlight the importance of digital technology in ensuring the long-term survival of a business. The results of the study show that MSMEs need effective digital technology to be able to maintain competitiveness and foster company innovation. The study also discovered that digital innovation and competitiveness associated with corporate digitization significantly impact the sustainability of micro, small, and medium-sized firms. Malaysian MSMEs should strategically leverage all digital technologies to improve their market position, stimulate innovation, and overcome challenges in today's digital era.

Implications for MSMEs in Malaysia

It is believed that this study will benefit Malaysian MSMEs greatly. MSMEs can differentiate themselves from their competitors by implementing a comprehensive digitalization strategy. Efficient digital technology has enormous potential to facilitate MSMEs' growth and increase their ability to attract more consumers. Small and medium-sized enterprises also can increase their sales and income with operational digitalization. As a result, the study emphasizes the importance of integrating digital technology to ensure MSMEs' long-term viability and propel their progress. Digital technology can help SMEs improve their operations, efficiency, and market responsiveness. This study emphasizes the importance of digital innovation, competitiveness in the corporate digitization process, and MSMEs' long-term viability. MSMEs must improve their digital skills to remain competitive, creative, and viable in the digital age.

Strategic direction for enhancing sustainability

Digital technology integration is essential for Malaysian MSMEs to become more sustainable. This study emphasizes the need for business digitalization strategies to influence MSMEs' innovation and competitiveness. MSMEs can innovate and compete in the ever-changing business environment by efficiently integrating digital technology. Thus, this factor dramatically improves these businesses' long-term viability. The research also shows that digital innovation and competitiveness moderate the impact of company digitalization on sustainability. These insights offer Malaysian MSMEs a strategic roadmap to improve their market position, promote innovation, and overcome digital age challenges.

Leveraging digital technologies for market positioning

Digital technology can help Malaysian MSMEs survive by establishing a solid market position. MSMEs must use digital technology to succeed and survive in today's competitive business environment. MSMEs can gain a competitive edge using social media, e-commerce, and data analytics. These technologies increase MSMEs' consumer reach, brand exposure, and customer engagement. Digital technologies also allow MSMEs to collect and analyze customer data to customize their products and services to meet customer needs. MSMEs can differentiate themselves and establish a strong market position. In conclusion, MSMEs must use digital technology to establish a market position to succeed and survive in the fast-changing business environment.

Fostering innovation through business digitization

Business digitalization boosts innovation in MSMEs. Digital technology allows MSMEs to actively seek new expansion opportunities and diversify their product and service offerings. Digitization will enable MSMEs to use cutting-edge technologies and platforms to optimize operations, collect consumer data, and adapt to changing market needs. Digital technologies also enable collaboration and knowledge-sharing, making it easier to share

ideas and innovate. Digitizing their operations can help Malaysian MSMEs innovate, gain a competitive edge, and exploit new digital opportunities.

Challenges and Limitations of the Business Digitization Strategy

Technology adoption and use are costly, making corporate digitization difficult. MSMEs' financial constraints make investing in digital technologies and infrastructure challenging. MSMEs lack the technical skills to manage digital systems (Darmo et al., 2021). This can cause system failures, security breaches, and inefficient resource use. Employee reluctance to adopt new technology is another constraint. This may prevent MSMEs from fully leveraging digitalization and executing a digital strategy. MSMEs must also keep up with the ever-changing technological environment and the need for upgrades and modifications to stay competitive.

CONCLUSION

Based on this research, it is evident that Malaysian small and medium enterprises (MSMEs) must implement a strategy for digitalizing their company operations to ensure their survival. The study demonstrates that using digital technology can enhance the innovation and competitiveness of MSMEs, hence impacting their long-term viability. Innovation and robust digital competitiveness enhance market positioning, facilitating flexibility and innovation in the digital era (Barrett et al., 2015). The study indicates that Malaysian MSMEs must possess the capability to incorporate digital technology to enhance their organizational sustainability strategically. Entrepreneurs can improve their businesses and establish a strong foundation for long-term success by making well-informed decisions based on this information. The study's primary findings demonstrate that digitizing corporate processes stimulates innovation and enhances Malaysian MSMEs' competitiveness. The study highlights the indispensability of digital technology for the long-term viability of micro, small, and medium firms. Utilizing digital technology strategically fosters innovation and competitiveness, impacting MSMEs' sustainability through digitizing their operations. These findings assist Malaysian MSMEs in incorporating digital technology to enhance their sustainability. The discoveries can help entrepreneurs enhance their market position, foster innovation, and surmount the obstacles of the digital era. This study emphasizes the importance of digitizing business operations for the long-term viability of Malaysian MSMEs. This study emphasizes the significance of digitizing business activities to ensure the long-term viability of Malaysian MSMEs. To be competitive in the constantly evolving digital landscape, MSMEs must strategically incorporate digital technology into their business processes. The study indicates that the process of digitizing businesses promotes innovation and enhances the competitiveness of MSMEs. The sustainability of MSMEs relies heavily on innovation and competition. The research indicates that the presence of digital innovation and competitiveness influences the effect of company digitalization on sustainability. These findings emphasize the necessity for MSMEs to utilize digital technology in order to enhance their market position, foster innovation, and surmount the obstacles of the digital era. Malaysian MSMEs must adhere to these requirements in order to incorporate digital technology into their sustainability efforts. MSMEs should prioritize investing in digital infrastructure and technology that align with their objectives. This encompasses enhancing both the physical components and the programs,

including cloud-based remedies, and employing data analytics to make well-informed choices. MSMEs should develop user-friendly websites and actively participate on social media platforms to enhance their online visibility. MSMEs should place a high value on providing training and enhancing their employees' skills to ensure they possess the necessary digital competencies required for success with digital technologies. Finally, collaborating with technology suppliers and professionals can assist MSMEs in adopting digital solutions and maintaining competitiveness in the digital age.

FUTURE RESEARCH DIRECTIONS

Future researchers can study how companies' digitization strategies and MSME sustainability can interact. Firstly, to enhance the competitiveness and sustainability of Malaysian MSMEs, we should expand research on technology and digital tools. This involves examining how AI, blockchain, and IoT can affect MSMEs (Mohanta et al., 2020). Furthermore, we advise them to investigate the impact of industry-specific variables on a company's digitization strategy. We can also explore the benefits and adaptations of digital integration in Malaysia's manufacturing, retail, and service sectors. Finally, a longitudinal study can assess the long-term sustainability impact of digital transformation on MSMEs and track their performance levels. Thus, this research can benefit future academics and communication practitioners in Malaysia. They may be able to help create digital strategies and policies that will empower Malaysian MSMEs to remain competitive.

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