

## Transformation and Digitalization of MSMEs to Increase Productivity, Added Value and Downstreaming of Strategic Food and Industry

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### ABSTRACT

The aim of the research is to describe and provide a written explanation of the variables using a literature review of various scientific articles related to the scientific article. The research results of digitization transformation with significant productivity, transformation with significant added value, transformation with significant downstream research use qualitative methods. Suggestions for the future with the current limitations of researchers in searching for literature reviews, the results of this study can add characteristics and knowledge in digitalization transformation in general. The novelty of this study is that there is a significant relationship between variables and can be made in the latest framework.

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## INTRODUCTION

Rapid technological progress, increasingly accelerated by the Covid-19 pandemic, is facilitating interaction and various activities in the digital space, and the presence of digital technology as part of social life has accelerated. It highlights the current era of digital transformation. The digitization of MSMEs is an attempt to transform the business actors who use technology to market and sell their products. What is umkm Digital Transformation Rapid advances in technology facilitate interactions and activities in the digital space. In the business world, umkm represents the existence of digital transformation, an attempt to use technology to transform the business person in marketing and selling products. (He et al., 2020); (Xie & Wang, 2023); (Chen & Kim, 2023); (W. Liu et al., 2020); (Pop et al., 2023)

Thousands of MSMEs are using Internet-based technologies to conduct their business. For example, marketing through social media, e-commerce and building his website for businesses. This is due to the presence of fairly intense corporate competition. In fact, digital transformation undertaken by MSMEs has significant benefits, including: (1). Increased range, Digital transformation is the process of transforming an organization's or institution's operations into a fully digital system. This is done to better meet the needs of brands and customers. Until now, product marketing has remained traditional, but digital transformation has expanded marketing to remote areas in Japan and even overseas. In addition, small businesses can also reach target markets using smartphones. This is inseparable from the lifestyle of people who prefer online shopping to traditional shopping. This allows the MSME to create his website for the company and use the mobile application as a means of promoting the company and products. (2). Increase sales A second advantage of digitization for MSMEs is that it opens up opportunities for earning more income. Because the greater your marketing reach, the more revenue you will earn. Especially when MSME business players use multiple social media to market their products. (3). Simplify transactions, umkm's digital transformation also extends to payment methods for purchase transactions. There are countless payment methods you can offer your buyers. For example, pay using mobile banking, internet banking, or a digital wallet that you can download for free from the Google Play store. This digital payment eliminates the need for MSME business associates to provide change, which is very helpful. (4). Evolve with trends The presence of digitization allows MSMEs to adapt to people's habits and become more up-to-date. Examples of digital MSMEs evolving with social trends include opening an online shop, becoming a YouTuber, creating digital content, taking online courses, selling online using a dropshipper or reseller system, graphic We also provide design services. (Feliciano-Cestero et al., 2023); (Sui & Yao, 2023); (Philipp et al., 2023); (Buck et al., 2023)

Digitization Tips for MSMEs Here are some tips to keep in mind when digitizing MSMEs: (1). Identify technology needs The first tip is to identify the right technology needs for your business. Because every MSME has unique challenges and needs. (2). Choosing the Right Software To stay ahead of the competition, MSME players must be able to choose the right software. This is

because your technology deployment plan should align with your previously identified goals and technology needs. (3). Create a business plan The next tip for a successful digitization of MSMEs is to carefully prepare a business plan. For example, through short, medium and long term planning. (4). Putting customers and employees first Another commitment MSMEs need to make their digital transformation work is to prioritize their customers and employees even more. These are the various advantages and also the necessary efforts to enable MSME business players to be ready for the era of the digital age. (M. Liu et al., 2023); (Xin & Du, 2022); (Trincado-Munoz et al., 2023); (Sucupira Furtado et al., 2023).

Micro, Small and Medium Enterprises (MSMEs) contribute to the Indonesian economy and contribute to the Gross Domestic Product (GDP). In this case, the government continues to support the development of SMEs in Indonesia, including through the digitization of SMEs. Basically the majority of Indonesian entrepreneurs fall into his MSME category, so SMEs themselves are very much in the spotlight. In Indonesia, MSMEs are regulated by Law No. 20/2008. One of the most important things to understand about a small business is sales or business assets. A micro enterprise has a maximum asset of IDR 50 million and an annual turnover of IDR 300 million. On the other hand, SMEs have assets of IDR 50 million to IDR 500 million and an annual turnover of IDR 300 million to IDR 2.5 billion. Secondly, medium-sized companies have assets of 500-10 billion rubles and an annual turnover of 2.5-10 billion rubles. The growth of SMEs in Indonesia is relatively fast. According to the Ministry of Cooperatives and SMEs, the number of SMEs in Indonesia is currently 64.2 million, with a share of GDP of 61.07% or IDR 8,573 trillion. Another factor related to Indonesia's economic contribution is its ability to absorb 97% of the total labor force and attract 60.4% of the total investment.

## THEORETICAL REVIEW

Table 1. Theoretical Review

No	Title	Name Journal & Author	Result
1	An overview on the use of AI/ML in Manufacturing MSMEs: solved issues, limits, and challenges	(De Simone et al., 2023)	<b>Significants</b>
2	Building resilience for sustainability of MSMEs post COVID-19 outbreak: An Indian handicraft industry outlook	(Agarwal et al., 2022)	<b>Not Significants</b>
3	Digital transformation in business and management research: An overview of the current status quo	(Kraus et al., 2022)	<b>Significants</b>
4	From intuitive to data-driven decision-making in digital transformation: A framework of prevalent managerial archetypes	(Korherr et al., 2022)	<b>Significants</b>
5	A Roadmap for Quality of the Digital	(Bas et al., 2022)	<b>Not</b>

	Human Model in the Textile and Apparel Industry enabled by Digital Transformation		<b>Significants</b>
<b>6</b>	Digitalization and strategic transformation of retail chain stores: Trends, impacts, prospects	(Malenkov et al., 2021)	<b>Significants</b>
<b>7</b>	Lean Production Systems 4.0: The Impact of the Digital Transformation on Production System Levels	(Schumacher et al., 2021)	<b>Significants</b>
<b>8</b>	Digital transformation of healthcare sector. What is impeding adoption and continued usage of technology-driven innovations by end-users?	(Iyanna et al., 2022)	<b>Significants</b>
<b>9</b>	Discussion On The Transformation Of Financial Personnel In The Digital Economy Era	(Li et al., 2022)	<b>Significants</b>
<b>10</b>	Impact of digital transformation on the automotive industry	(Llopis-Albert et al., 2021)	<b>Significants</b>

## METHODOLOGY

Literature research is used to research and understand company documents, theoretical underpinnings, and information relevant to the issue under investigation to obtain material that serves as the theoretical basis for compiling this research. This study was conducted by collecting data from textbooks, international journals, Internet sources, and other studies relevant to this study. The data collected are prepared, analyzed, and further processed using developed rationales so that conclusions can be drawn from the data. Data gathered from the reading outcomes are then assessed by choosing the relevant materials or ones that are still relevant to the investigation. Based on the findings of further data analysis, a conclusion from the topic under study has been summarized and reached. This process of analysis uses content analysis, i.e., a detailed explanation stage, a data analysis technique that analyzes the nature, characteristics, content and context of the data, interprets them theoretically, and draws conclusions using reasons is executed as.

## RESEARCH RESULT

MSME development efforts show important progress. Progress of commercialization Business development of MSMEs has taken place in many regions, It has produced the best replicable cluster business models, like the Chilean cluster in. Replicable business models such as Sleman pepper clusters and Malang horticulture clusters. and Malang horticultural cluster. optimization of Using digitization to enhance the performance of It will also be implemented to improve the capacity of MSMEs. Innovation and Quality of Products and Services, Corporate Governance Management, human resources, financial management, market access. market entry. Digitalization of business processes in agriculture Business processes in the agricultural sector apply from on-farm to off-farm. From the courtyard side. use of technology based on

Technologies based on the Internet of Things (IoT) are being implemented on the production and marketing side of products. and marketing in many agricultural clusters Java, Sumatra, Kalimantan and Nusa Tenggara supported by digital farming platforms. Southeast with digital farming platform. Continued efforts to expand access to MSME finance Funded by providing technical assistance, including Facilitate business negotiations between banks and SMEs, Developing business models for access to finance MSMEs will fund the development of access business models as they do for beef cattle clusters. A cluster in the Tuban Regency. various development efforts MSMEs run by synergies that continue to exist strengthened between Bank Indonesia and the government, and Affiliates.

MSME development also supports structural reforms Structural reforms to strengthen priority sectors. structural reform policy based on priority sectors, including manufacturing and tourism; aiming for Indonesia Diversified country with high added value A diverse and inclusive source of growth. It contains. With the high contribution of MSME, Combination of MSME and Priority Sectors

Promote successful reforms and maintain external resilience. external resilience. Development policy Specifically targeted MSME development policies in manufacturing About the different subsectors of the creative industries increase added value. The Role of MSMEs in Creative Industries Creative industries run in subsectors with the largest share The largest share, namely food and beverages, fashion and handicrafts. Handicraft. Strengthening tourism support SMEs, Including those near sightseeing spots, Adjusted to help strengthen tourism As a source of new economic growth foreign currency income. In addition, the development of MSME Development also takes place in the manufacturing sector strategic food.

## DISCUSSION

The transformation of MSMEs important to support stability and growth A strong and inclusive economy. MSMEs play a strategic role In the domestic economy, Reflected in many business areas number of business units, high employment A significant contribution to employment and GDP. to GDP. MSMEs Highly resilient resilience for different people Crisis of the past, crisis of the present The current Covid-19 crisis has begun A lot of pressure. High resilience of MSMEs it acted as an economic cushion economy in his capacity survive a period of stress can regrow faster, Faster, higher pressure. in this strategic role SMEs certainly play an important role Bank Indonesia support Policy mix of Bank Indonesia maintain macroeconomic stability financial sector too Support national efforts economic change Advanced Indonesia. various initiatives Strengthening MSMEs (continued) end-to-end including from Bank of Indonesia. post-pandemic Covid-19, Small Business Transformation need to strengthen Optimizing the use of digital technology technology to draw benefit from one of the most important lessons health crisis, i.e. Use of digital technology for everyday activities.

End-to-end development MSME development in progress political pillars of corporatization, development and Fundraising to make it happen Productive and Innovative MSMEs and adaptable. Strengthen be incorporated Institutional aspects of MSMEs encourage creativity Integrated business ecosystem Facilitate ecosystems and growth the economic scale of the company; in the meantime On the other hand, capacity building focus on increasing Productivity through innovation Digitalization of business processes encourage improvement SME competitiveness. Improvement capacity is implemented in an integrated manner, including Strengthening corporate governance, product quality, market access, financial capacity and human resources, including the acquisition of digital technology. adaptation to Digital technology development is one of Key for MSME to upgrade Become stronger and more advanced. And Aspects of fundraising, expansion Access will continue to be facilitated Ease of business expansion Funding for more MSMEs sound funding. MSME development See MSME Roadmap productive, innovative adapt at four levels, In other words, production and Institutional activities, increasing market share markets, digitization, fundraising, Access to export markets.

Future optimization of the role of SMEs as the backbone of the economy The backbone of the economy will continue to be targeted Efforts to improve productivity such as Inclusive economic growth and adjustment digital change. The role of SMEs as a new force in increasingly relevant to the national economy Today many countries are starting to rely on it Sources of domestic economic growth, including: Also by MSME. MSME development Development is designed to maintain and support resilience short-term recovery of the national economy, Encourage increased contributions of MSMEs economic stimulus. in the meantime Meanwhile, MSMEs are also increasingly involved apply digitization keep looking for opportunities Opportunities from digitization and adoption, Digital-based business model Get taller. Development of the digital ecosystem different ecosystems From upstream to digital business model downstream. MSMEs. Digitization offer Opportunity for MSMEs Customize and Transform survive, soar, grow taller As corporateization progresses, capacity and funds. For example, Bank Indonesia facilitate the use of Internet-based technology of Things (IoT)-based technology to production and number of marketing promoted agricultural clusters in the region. Java, Sumatra, Kalimantan, Collaboration with Nusa Tenggara on a digital farming platform. Digitalization of business processes Business processes applied in agriculture From the courtyard side (upstream side) With the use of weather sensors, To the off-farm side (downstream), facilitate access to Agricultural e-commerce.

## CONCLUSIONS AND RECOMMENDATIO

In order to accelerate the recovery of the national economy dominated by small and medium enterprises (MSMEs), the government is promoting the onboarding of digitized or offline MSMEs and MSMEs are digitized. Digitization of MSMEs is the transition from traditional systems to digital systems in order to increase the effectiveness and efficiency of MSME business

processes and operations. The digitization of MSMEs has forced MSME business stakeholders to shift corporate governance from traditional practices to modern practices. Going digital for MSMEs is more than just using technology to sell products. In addition, digitization of MSMEs will enable them to manage their finances, monitor business cash flow, and procure raw materials online. Thus, digitization plays an important role in the overall flow of MSME business processes.

#### **ADVANCED RESEARCH**

In addition to the shortcomings of this study, we hope that further studies will conduct questionnaires and process data using path analysis to maintain the accuracy of the significance of variable relationships.

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## REFERENCES

- Agarwal, V., Mathiyazhagan, K., Malhotra, S., & Pimpunchat, B. (2022). Building resilience for sustainability of MSMEs post COVID-19 outbreak: An Indian handicraft industry outlook. *Socio-Economic Planning Sciences*, 85(February 2022), 101443. <https://doi.org/10.1016/j.seps.2022.101443>
- Bas, G., Dönmezer, S., & Durakbaşa, M. N. (2022). A Roadmap for Quality of the Digital Human Model in the Textile and Apparel Industry enabled by Digital Transformation. *IFAC-PapersOnLine*, 55(39), 319–324. <https://doi.org/10.1016/j.ifacol.2022.12.043>
- Buck, C., Clarke, J., Torres de Oliveira, R., Desouza, K. C., & Maroufkhani, P. (2023). Digital transformation in asset-intensive organisations: The light and the dark side. *Journal of Innovation and Knowledge*, 8(2), 100335. <https://doi.org/10.1016/j.jik.2023.100335>
- Chen, P., & Kim, S. (2023). The impact of digital transformation on innovation performance - The mediating role of innovation factors. *Heliyon*, 9(3), e13916. <https://doi.org/10.1016/j.heliyon.2023.e13916>
- De Simone, V., Pasquale, V. Di, & Miranda, S. (2023). An overview on the use of AI/ML in Manufacturing MSMEs: solved issues, limits, and challenges. *Procedia Computer Science*, 217(2022), 1820–1829. <https://doi.org/10.1016/j.procs.2022.12.382>
- Feliciano-Cestero, M. M., Ameen, N., Kotabe, M., Paul, J., & Signoret, M. (2023). Is digital transformation threatened? A systematic literature review of the factors influencing firms' digital transformation and internationalization. *Journal of Business Research*, 157(January 2022), 113546. <https://doi.org/10.1016/j.jbusres.2022.113546>
- He, J., Wan, Y., & Zhou, W. (2020). Digital Transformation as a Catalyst for Sustainability and Open Innovation. *Journal of Hazardous Materials*, 124199. <https://doi.org/10.1016/j.joitmc.2023.100017>
- Iyanna, S., Kaur, P., Ractham, P., Talwar, S., & Najmul Islam, A. K. M. (2022). Digital transformation of healthcare sector. What is impeding adoption and continued usage of technology-driven innovations by end-users? *Journal of Business Research*, 153(February), 150–161. <https://doi.org/10.1016/j.jbusres.2022.08.007>
- Korherr, P., Kanbach, D. K., Kraus, S., & Mikalef, P. (2022). From intuitive to data-driven decision-making in digital transformation: A framework of prevalent managerial archetypes. *Digital Business*, 2(2), 100045. <https://doi.org/10.1016/j.digbus.2022.100045>
- Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A. (2022). Digital transformation in business and management research: An overview of the current status quo. *International Journal of Information Management*, 63(December 2021). <https://doi.org/10.1016/j.ijinfomgt.2021.102466>
- Li, F., Zhang, A., Xu, C., Hao, Y., & Kuang, S. (2022). Discussion On The Transformation Of Financial Personnel In The Digital Economy Era. *Procedia Computer Science*, 214(C), 538–543. <https://doi.org/10.1016/j.procs.2022.11.209>

- Liu, M., Li, C., Wang, S., & Li, Q. (2023). Digital transformation, risk-taking, and innovation: Evidence from data on listed enterprises in China. *Journal of Innovation and Knowledge*, 8(1), 100332. <https://doi.org/10.1016/j.jik.2023.100332>
- Liu, W., Ke, H., Xie, J., Tan, H., Luo, G., Xu, B., & Abakari, G. (2020). Digital government transformation as an organizational response to the COVID-19 pandemic. *Geoderma Regional*, e00484. <https://doi.org/10.1016/j.giq.2023.101815>
- Llopis-Albert, C., Rubio, F., & Valero, F. (2021). Impact of digital transformation on the automotive industry. *Technological Forecasting and Social Change*, 162(June 2020), 120343. <https://doi.org/10.1016/j.techfore.2020.120343>
- Malenkov, Y., Kapustina, I., Kudryavtseva, G., Shishkin, V. V., & Shishkin, V. I. (2021). Digitalization and strategic transformation of retail chain stores: Trends, impacts, prospects. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2), 108. <https://doi.org/10.3390/joitmc7020108>
- Philipp, M., Baiyere, A., & Salmela, H. (2023). Digital workplace transformation: Subtraction logic as deinstitutionalising the taken-for-granted. *Journal of Strategic Information Systems*, 32(1), 101757. <https://doi.org/10.1016/j.jsis.2023.101757>
- Pop, R. A., Hlédik, E., & Dabija, D. C. (2023). Predicting consumers' purchase intention through fast fashion mobile apps: The mediating role of attitude and the moderating role of COVID-19. *Technological Forecasting and Social Change*, 186(March 2022). <https://doi.org/10.1016/j.techfore.2022.122111>
- Schumacher, S., Schmid, F. A., Bildstein, A., & Bauernhansl, T. (2021). Lean Production Systems 4.0: The Impact of the Digital Transformation on Production System Levels. *Procedia CIRP*, 104, 259–264. <https://doi.org/10.1016/j.procir.2021.11.044>
- Sucupira Furtado, L., da Silva, T. L. C., Ferreira, M. G. F., de Macedo, J. A. F., & de Melo Lima Cavalcanti Moreira, J. K. (2023). A framework for Digital Transformation towards Smart Governance: using big data tools to target SDGs in Ceará, Brazil. *Journal of Urban Management*, 12(February), 74–87. <https://doi.org/10.1016/j.jum.2023.01.003>
- Sui, B., & Yao, L. (2023). The impact of digital transformation on corporate financialization: The mediating effect of green technology innovation. *Innovation and Green Development*, 2(1), 100032. <https://doi.org/10.1016/j.igd.2022.100032>
- Trincado-Munoz, F., van Meeteren, M., Rubin, T. H., & Vorley, T. (2023). Digital transformation in the world city networks' advanced producer services complex: A technology space analysis. *Geoforum*, February, 103721. <https://doi.org/10.1016/j.geoforum.2023.103721>
- Xie, X., & Wang, S. (2023). China Economic Quarterly International Digital transformation of commercial banks in China : Measurement , progress and impact ☆ , ☆☆☆. *China Economic Quarterly International*, 3(1), 35–45. <https://doi.org/10.1016/j.ceqi.2023.03.002>

Xin, L., & Du, C. (2022). The Effect of Digital Economy on Industrial Total Factor Productivity. *Conference Proceedings of the 10th International Symposium on Project Management, China, ISPM 2022*, 85(February), 771-776. <https://doi.org/10.52202/065147-0105>