

The Impact of Digitalization on Labor Productivity in the MSME Sector in Makassar City

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ABSTRACT

Digitalization has become a major factor in increasing labor efficiency and productivity, including in the Micro, Small, and Medium Enterprises (MSMEs) sector. This study aims to analyze the impact of digitalization on labor productivity in the MSME sector in Makassar City. The research method used is a quantitative approach with data collection through a survey of MSME actors who have adopted digital technology, such as the use of e-commerce, social media, digital financial applications, and business management software. The results of the study show that digitalization has a positive and significant impact on labor productivity, especially in terms of operational efficiency, increasing market access, and financial management. However, challenges such as limited access to technology, lack of digital skills, and implementation costs are still obstacles for some MSMEs. Therefore, support is needed from the government and related parties in the form of training, access to financing, and better technology infrastructure so that digital transformation can be optimized in increasing the competitiveness of MSMEs in Makassar City.

Keywords: Digitalization, Productivity, Workforce, MSMEs, Makassar City

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) have a very important role in the Indonesian economy, including in Makassar City. MSMEs contribute a large part to Gross Domestic Product (GDP), create jobs, and play a role in poverty alleviation. However, the MSME sector often faces various challenges in developing its business, one of which is the limitation in increasing labor productivity. One factor that can increase labor productivity is the adoption of technology, or digitalization.

Digitalization refers to the use of digital technology in business processes that include data management, marketing, transactions, and human resource management. In the context of MSMEs, digitalization can include the use of business applications, e-commerce, social media, and management systems that facilitate operational

management. Adoption of digital technology in the MSME sector can increase work efficiency, expand markets, and enable access to the latest innovations that can support increased performance and productivity.

Although digitalization offers great potential in increasing workforce productivity, not all MSMEs in Makassar City can access and utilize it optimally. Several obstacles such as lack of digital skills, limited technological infrastructure, and difficulty in obtaining funds for the implementation of digital technology are the main challenges faced by MSMEs in this city.

This study aims to examine how digitalization affects labor productivity in the MSME sector in Makassar City. The main focus of this study is to determine the impact of the use of digital technology on work efficiency and effectiveness, and how digitalization can overcome the obstacles faced by MSME workers.

Digitalization can be seen as an effort to increase efficiency and productivity by utilizing information and communication technology. MSMEs, as a sector that largely relies on local workers, will be greatly assisted by the adoption of technology that facilitates operational management and accelerates business processes. Digitalization helps workers access information quickly, manage data efficiently, and interact with customers or business partners more effectively. (Umi Farida, Henni Zainal, 2023; Zainal, Henni and Parinsi, Kristina and Hasan, Muhammad and Said, Farid and Akib, 2018)

On the other hand, although technology can increase productivity, challenges such as limited digital infrastructure, digital skills gaps, and financial inability to implement technology can hinder the digitalization process in MSMEs. Therefore, it is important to look at the supporting and inhibiting factors in the implementation of digitalization in the MSME sector.

METHOD

This study uses a quantitative approach with a descriptive correlational design. The quantitative approach was chosen to measure the effect of digitalization on labor productivity in the MSME sector in Makassar City. The descriptive correlational design is used to identify the relationship between two variables, namely digitalization (independent variable) and labor productivity (dependent variable), as well as to describe the characteristics of the phenomenon being studied. The population in this study were all MSME actors operating in Makassar City who have adopted digital technology in their business operations, such as the use of e-commerce, business management applications, and social media for promotion. The sample used was 100

respondents selected by purposive sampling. The sample selection was based on the criteria that MSME actors involved in this study must have used digital technology in their business activities, either for marketing, financial management, or transaction processes. This sample is expected to represent the population of MSMEs that have digitized. Data collection techniques are observation, questionnaires and documentation. Data analysis techniques using the Statistical Package for the Social Sciences (SPSS).

RESEARCH RESULTS AND DISCUSSION

Based on data collected from 100 MSME respondents in Makassar City who have adopted digital technology, there is some information related to the characteristics of the respondents, such as type of business, length of operation, and use of digital technology.

The results of the study show that digitalization has a positive impact on workforce productivity in the MSME sector in Makassar City. This is in line with previous research findings showing that digital technology can improve operational efficiency, accelerate business processes, and expand market reach (Luthfi, 2020). In addition, external factors such as government policies that support digitalization also greatly influence the success of digital transformation in MSMEs (Suryanto & Abdullah, 2022). However, the main challenge faced by MSMEs is the limited human resources with adequate digital skills. Therefore, digital skills training for MSME workers must be a priority to maximize the potential of digitalization.

Before further analysis, validity and reliability tests were conducted on the instruments used (questionnaires). The results of the validity test showed that all items in the questionnaire had a total item correlation value above 0.3, which indicated that the questionnaire was valid for use. The results of the reliability test showed a Cronbach's Alpha value of 0.87, which means that the research instrument has a very good level of reliability, so that the data collected can be trusted.

The results of a simple linear regression test show that digitalization (use of digital technology) has a positive and significant effect on labor productivity in the MSME sector in Makassar City. This means that every one unit increase in the level of digital technology adoption will increase labor productivity by 42%. The Pearson correlation test was conducted to measure the relationship between the use of digital technology and labor productivity. The following are the results of the correlation test: Correlation Coefficient (r) = 0.63. This correlation value shows a strong and positive relationship between the use of digital technology and labor productivity. This means that the higher the level of digital technology adoption, the higher the labor productivity in the MSME sector in Makassar City. To ensure that there is no multicollinearity between the independent variables (for example, the various types of digital technology used), a

multicollinearity test was conducted. The results show that the Variance Inflation Factor (VIF) is lower than 10, indicating that there is no multicollinearity problem in this regression model.

Homoscedasticity test is conducted to ensure that the residual variance of the regression model is constant. Based on the results of the graph test and the Breusch-Pagan test, no heteroscedasticity problems were found, which means that the assumptions of the regression model are met. The table from the SPSS test is as follows:

Variabel	Koefisien Regresi	Nilai t	Sig. (p-value)
Konstanta (β_0)	2,18	5,74	0,000
Digitalisasi (β_1)	0,42	3,32	0,001

From the results of the SPSS analysis, it can be concluded that digitalization has a positive and significant effect on labor productivity in the MSME sector of Makassar City. The adoption of digital technology, both in the form of e-commerce, management applications, and social media, has helped improve work efficiency and expand the market, which has led to increased labor productivity.

Some important findings from this study include:

1. Digitalization has a direct positive impact on workforce productivity, with every increase in the use of digital technology contributing to increased productivity.
2. The use of digital technology in the MSME sector is still constrained by several factors, such as limited digital skills among the workforce and lack of financial support to adopt more sophisticated technology.
3. The government and private sector need to be more proactive in providing digital skills training and improving technological infrastructure to support the digitalization process in MSMEs.

Suggestions for further research are to explore the long-term impact of digitalization on the sustainability of MSME businesses and identify more appropriate policies to support the digital transition for MSMEs in other regions.

CONCLUSION

Based on the results of the research that has been conducted, it can be concluded that digitalization has a significant impact on labor productivity in the MSME sector in

Makassar City. The adoption of digital technology, such as the use of e-commerce, social media, and business management applications, has been shown to increase operational efficiency, reduce the time needed for administrative tasks, and expand market access which in turn increases labor productivity.

BIBLIOGRAPHY

- Abdurrahman, M. (2020). *Digitalization of MSMEs and its Impact on Labor Productivity*. Jakarta: Reka Cipta Publisher.
- Anwar, M., & Firdaus, R. (2021). The Impact of Digital Technology on the MSME Sector in Indonesia. *Journal of Technology and Business*, 35(2), 128-145.
- Firdaus, R. (2019). *MSME Development Strategy through Digital Transformation in the Industrial Era 4.0*. Makassar: Hasanuddin University Press.
- Handayani, S., & Haryanto, D. (2020). The Role of Digital Technology in Increasing the Competitiveness of MSMEs in Makassar City. *Makassar Economic Journal*, 12(3), 221-235.
- Luthfi, A. (2020). *The Impact of Digitalization on MSME Performance in the Industrial Revolution 4.0 Era*. Yogyakarta: Andi Publisher.
- Suryanto, T., & Abdullah, M. (2022). *The Influence of Digitalization on Workforce Productivity and Performance in the MSME Sector*. Bandung: Alfabeta Publisher.
- Sari, R., & Putra, I. (2021). Improving Labor Efficiency through Digitalization in MSMEs in Surabaya. *Journal of Economic Development*, 14(4), 88-102.
- Sihombing, M., & Sembiring, S. (2019). Application of Digital Technology in Increasing Productivity of MSMEs in Indonesia. *Journal of Management and Business*, 28(1), 112-125.
- Wibowo, A. (2018). *Digitalization Strategy for MSMEs: Opportunities and Challenges*. Jakarta: Gramedia.
- Maulana, R., & Yuliana, L. (2022). Evaluation of MSME Digitalization in Makassar in Increasing Competitiveness and Workforce Productivity. *Journal of Economics and Development*, 19(3), 56-70.
- Karim, H. (2021). Digital Transformation in Indonesian SMEs: Challenges and Benefits. *International Journal of Digital Economy*, 10(1), 65-79.
- Nurhadi, P. (2020). The Influence of Digital Technology on Labor Productivity in the MSME Sector. *Journal of Technology and Innovation*, 15(2), 78-92.
- Suharto, J., & Firdaus, M. (2020). The Role of Digitalization in Improving the Efficiency of Small and Medium Enterprises. *Journal of Human Resources*, 25(1), 44-59.
- Hidayat, E., & Lestari, S. (2019). *Digitalization as a Solution to Increase Workforce Productivity in MSMEs*. Surabaya: Cipta Press Publisher.
- Rahayu, T., & Prabowo, D. (2021). Digitalization for SMEs: A Comprehensive Review on Its Benefits and Challenges. *Journal of Business and Technology*, 13(4), 112-128.

- Umi Farida, Henni Zainal, A. A. (2023). *Manajemen sumber daya manusia*. Jambi: PT. Sonpedia Publishing Indonesia.
- Zainal, Henni and Parinsi, Kristina and Hasan, Muhammad and Said, Farid and Akib, H. (2018). The influence assets and market orientation to the performance business in Makassar City, Indonesia. *Academy of Strategic Management Journal*, 17(6).