



The Influence Between Social Capital and Technology Use in Increasing the Competitiveness of MSMEs in Bojonegoro District

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Abstract

This study aims to examine the influence of social capital and technology use on increasing the competitiveness of Micro, Small, and Medium Enterprises (MSMEs) in Bojonegoro District. Using a quantitative survey-based approach, data were collected from 30 MSME respondents. The results of the analysis show that both social capital and technology use have a significant positive influence on MSME competitiveness. Social capital supports network development, information access, and collaboration, while digital technology improves operational efficiency and market reach. The synergy between these two factors provides a substantial competitive advantage. This study recommends training and strategic policies to improve both aspects to support MSME competitiveness.

Keywords: Bojonegoro, Competitiveness of MSMEs, Social Capital, Use of Technology.

1. INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) are one of the development priorities in every country. This is due to the large contribution of MSMEs to the country, especially in the economic and social fields. In addition to increasing the country's economic growth, MSMEs play a very important role in absorbing informal sector labor and equalizing community income, especially in the regions. Therefore, various policies and supporting programs have been formulated and implemented by the central and regional governments to support MSME empowerment and sustainable MSME growth. These policies and supporting programs aim to protect and develop MSMEs through the creation of a conducive business climate. The role of MSMEs is not only felt by developing countries. Developed countries have also experienced significant economic growth due to the growth of MSMEs. For example, developed countries in Europe have a proportion of MSMEs above 90% (Johnson, 2007). Several countries in the Asia Pacific have also experienced the same thing as countries in Europe. For example, Taiwan and Korea have also experienced significant economic growth due to the growth of their MSMEs. Even Japan has issued a policy to continue to increase MSME innovation. (Gunawan, 2014)

MSMEs have an important role in maintaining economic stability in Indonesia and locally (Farisi al Salman, Fasa IM & Suharto, 2022). In addition, MSMEs can provide new jobs for the surrounding community, increase income and strengthen the local economy

(Harahap et al. 2023). In the regional scope, MSMEs originate from the utilization of natural resources, talents and traditional artwork from the local area (Halim, 2020), which can not only meet the needs of the surrounding community but can also be used as superior regional products that can be marketed more widely. MSMEs contribute to the country's economy by absorbing 45% of the total employment and contributing up to 33% to GDP in the country (Zaman & Andritanty, 2022). Although MSMEs have an important role in the local and global economy, MSMEs still face major challenges in the current era of globalization. There are several factors that hinder the development of MSMEs, including access to capital, digitalization and financial management (Budiwitjaksono Setyo G. 2023). From these challenges, the role of the government, MSME actors and the surrounding community is needed. Micro, Small and Medium Enterprises (MSMEs) as a business that is of interest to be pioneered by the majority of entrepreneurs in Indonesia. MSMEs are perceived as easy to start for new entrepreneurs because they do not require large capital. MSMEs in Indonesia have clearly supported the growth of the country's economy, so that MSMEs are expected to be able to increase in terms of quantity and achievement of their level of success.

According to the Central Statistics Agency (2023), in terms of output contribution, MSMEs are still dominant in the culinary sector, which is around 97% of the total workforce in Indonesia. In addition, the culinary sector contributes to 61% of the national Gross Domestic Product (GDP), which shows the importance of the role of MSMEs in supporting economic growth.

Based on the Global Competitiveness Index Report delivered by the international institute for management development (IMD), Indonesia has successfully risen in ranking from 44 to 34, an increase of 10 positions in global competitiveness. This ranking reflects progress in several aspects, including economic performance, government efficiency, business efficiency, and infrastructure.

Increasing the competitiveness of Micro, Small, and Medium Enterprises (MSMEs) is one of the main keys in supporting the economic growth of a region. MSMEs have a very important role in creating jobs, increasing community income, and supporting economic equality. In Bojonegoro District, MSMEs also have a significant role in the local economy. However, MSMEs in Bojonegoro District face various challenges in increasing their competitiveness. One of the main obstacles is limited access to capital and minimal technological support. According to data from the Bojonegoro Trade, Cooperatives, and Micro Enterprises Service, the number of MSMEs in June 2024 reached 91,621 businesses, showing an increase every year. However, this growth is accompanied by problems such as

limited access to capital, minimal technological support, and limited marketing. In addition, social capital is an important factor in increasing the competitiveness of MSMEs. Studies show that access to technology is a significant factor influencing the competitiveness and performance of MSMEs in the digital era, offering new opportunities for innovation, operational efficiency, and wider market access. However, there has not been much research examining the relationship between social capital, technology use, and the competitiveness of MSMEs in Bojonegoro District. Therefore, further research is needed to understand how social capital and technology adoption can play a role in increasing the competitiveness of MSMEs in this region. □

Micro, Small, and Medium Enterprises (MSMEs) play an important role in the Indonesian economy, including in Bojonegoro Regency. In facing the challenges of the era of globalization and digitalization, strengthening the competitiveness of MSMEs is a top agenda. Two important elements that support each other in this process are social capital and the adoption of digital technology. Social capital, which includes networks of relationships, norms, and trust in society, has a significant role in encouraging collaboration, information sharing, and innovation between MSME actors. A study by the Ministry of Cooperatives and SMEs (2022) noted that MSME actors who have extensive social networks are better able to access market information, skills training, and funding opportunities. The benefits of social capital include three main things: access to information, moral support, and strengthening collaboration.

Meanwhile, the use of digital technology is a crucial aspect in supporting the sustainability and competitiveness of MSMEs. Technologies such as social media, e-commerce, and mobile applications enable MSMEs to reach wider markets, increase operational efficiency, and provide better customer service. Based on the report of the Bojonegoro Trade, Cooperatives, and MSMEs Service (2023), more than 60% of MSMEs have participated in digital training programs, which have contributed to an increase in the adoption of digital platforms by up to 45% in the last two years. Digital technology provides three main benefits for MSMEs, namely efficiency in marketing, access to global markets, and improved quality of customer service.

Social capital and digital technology complement each other in increasing the competitiveness of MSMEs. Strong social capital creates an environment that supports the implementation of new technologies, while digital technology strengthens social networks through easy communication and interaction between business actors. In Bojonegoro, the digital marketing training program organized by the local government is a real example of

this synergy. The training not only improves the technical skills of MSME actors but also strengthens social networks through collaboration between participants. Data from the Bojonegoro Industry and Manpower Office (2023) shows that digital training initiatives have succeeded in increasing technological capabilities and expanding the social networks of MSME actors by up to 35%.

However, challenges remain, including limited technological infrastructure and low digital literacy of most MSMEs. Therefore, integrated efforts are needed from the government, non-governmental organizations (NGOs), and business actors to overcome these obstacles. This approach will ensure that investments in social capital and digital technology have a sustainable positive impact on the competitiveness of MSMEs in Bojonegoro.

The relationship between social capital and technology usesuspected to have a significant influencein improving the competitiveness of MSMEs in Bojonegoro District. By building strong social capital and utilizing technology effectively, MSMEs can better face market challenges and adapt to changing consumer needs. Therefore, it is important for stakeholders to continue to support the development of these two aspects through training programs, mentoring, and policies that support innovation in the MSME sector.

Hypothesis Development

Micro, Small, and Medium Enterprises (MSMEs) are important pillars in the economy, especially in areas such as Bojonegoro District. However, the competitiveness of MSMEs is often hampered by various challenges, including limited access to resources, technology, and information. In this context, two main factors that can contribute to increasing the competitiveness of MSMEs are social capital and the use of technology.

Social CapitalSocial capital refers to networks, relationships, and norms that facilitate collaboration and support within a community. In the context of MSMEs, social capital can include relationships with customers, suppliers, and community networks and business associations. Strong social capital can help MSMEs gain access to information, enhance their reputation, and build trust among stakeholders.

- **Hypothesis 1 (H1)**

There is a positive influence between social capital and the competitiveness of MSMEs in Bojonegoro District.Explanation: MSMEs that have extensive social networks tend to be better able to obtain valuable information and support from the community, which can increase their competitiveness.

Use of TechnologyThe use of technology, especially digital technology, has been proven to increase the efficiency and effectiveness of MSME operations. Adoption of

technology such as social media, e-commerce platforms, and business management applications allows MSMEs to increase productivity, reach wider markets, and improve the quality of products or services.

- **Hypothesis 2 (H2)**

There is a positive influence between the use of technology on the competitiveness of MSMEs in Bojonegoro District. Explanation: MSMEs that adopt digital technology can improve their operations, expand market access, and provide better services, thereby increasing their competitiveness.

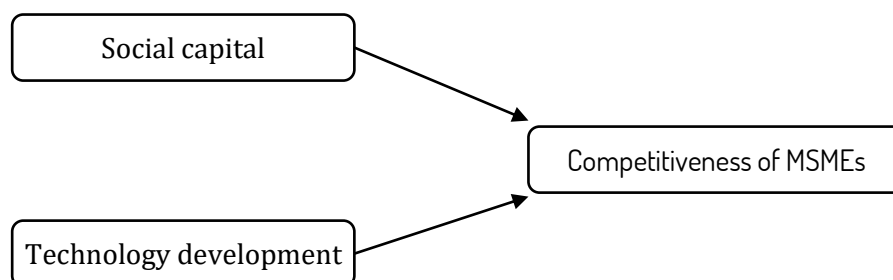
Interaction Between Social Capital and Technology Use In addition to the direct influence of each variable, it is possible that social capital and technology use influence each other in increasing the competitiveness of MSMEs. Strong social networks can facilitate technology adoption, and conversely, technology use can strengthen existing social networks.

- **Hypothesis 3 (H3)**

There is an interactive influence between social capital and the use of technology on the competitiveness of MSMEs in Bojonegoro District. Explanation: The combination of strong social capital with effective use of technology can have a greater impact on increasing the competitiveness of MSMEs compared to the influence of each variable separately.

The development of this hypothesis aims to empirically test how social capital and the use of technology contribute to the competitiveness of MSMEs in Bojonegoro District. By understanding the relationship between these three variables, it is hoped that this study can provide valuable insights for the development of strategies to increase the competitiveness of MSMEs in the region.

Conceptual framework of the research



2. METHOD

Samples and Data Collection

This study uses a quantitative approach with a cross-sectional survey design. Data were collected at a certain time from a sample of MSMEs in Bojonegoro District. Data collection was carried out through questionnaires distributed to 30 MSME actors.

The population in this study were all active and registered MSMEs in Bojonegoro District, with a sample of 30 respondents taken using purposive sampling technique. This technique is used to select respondents who meet certain criteria, namely: businesses that have been running for more than one year, have used technology in operational activities, and have active social capital in the business community. The selection of respondents with these criteria is expected to provide relevant and in-depth data regarding the dynamics and development of MSMEs in Bojonegoro District.

Research Variables

The variables in this study consist of dependent and independent variables. The dependent variable is the competitiveness of MSMEs, which is measured based on increased turnover, market reach, and brand recognition. Meanwhile, the independent variables consist of social capital, which is measured by the intensity of community interaction, trust between members, and involvement in business networks, and the use of technology, which is measured by the level of utilization of digital technology in business operations and marketing. These variables are expected to provide a comprehensive picture of the factors that influence the competitiveness of MSMEs in Bojonegoro District.

Data analysis

The collected data were analyzed using multiple linear regression to test the effect of each independent variable on the dependent variable. Before the analysis, validity and reliability tests were conducted to ensure data quality.

This research questionnaire uses a 5-point Likert scale, with the following answer options:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree.

Data processing was carried out using the SPSS application.

3. RESULTS AND DISCUSSION

Results

Respondent Demographics

The following table summarizes the demographic characteristics of the study respondents:

Table 1.

Description	N	%
Type of business		
Small business	8	26.67%
Medium Business	15	50%
Big Business	7	23.33%
Business Experience		
1-2 Years	12	40%
>2 Years	18	60%
Owner Age		
20-40 Years	20	66.67%
>40 Years	10	33.33%
Turnover/Month		
1-3 Million	16	53.33%
>3 Million	14	46.67%

Model Feasibility Test

Table 2. Validity Test Results

VARIABLES	INDICATOR	SIG VALUE		R TABLE	INFORMATION
Social capital	X1	0.05	0.811		Valid
	X2	0.05	0.784		Valid
	X3	0.05	0.752	0.361	Valid
	X4	0.05	0.767	0.361	Valid
Use of technology	X5	0.05	0.850	0.361	Valid
	X6	0.05	0.895	0.361	Valid

Table 3. Reliability Test Results

Variables	Cronbach Alpha	Information
Social capital	0.856	Realizable
Use of technology	0.825	Reliable

Table 4. Multiple Linear Regression Test Results

Variables	Sig coefficient	(p-value)
Social capital	0.45	0.001
Technology users	0.52	0.000

Interpretation of Results

Validity Test: All indicators of social capital variables and use of technology have R count > R table (0.361), so they are declared valid.

Reliability Test: Cronbach's Alpha value for both variables > 0.7, so the research instrument is declared reliable.

Regression Analysis: The regression results show that both independent variables, social capital and use of technology, have a significant effect on the competitiveness of MSMEs ($p < 0.05$).

4. DISCUSSION

The results of the study showing that social capital and the use of technology have a positive influence on the competitiveness of MSMEs can be compared and analyzed based on various previous literature. Some discussion points include:

1. The Influence of Social Capital on the Competitiveness of MSMEs

Social capital has been shown to be an important factor in the development of MSMEs, as expressed by Laurina et al. (2024), who stated that networks, norms, and social trust can strengthen collaboration between business actors and support innovation. In the context of Bojonegoro, social capital helps MSMEs expand their markets through collaboration with other business actors and customers. However, this study shows that the role of social capital will be more effective if integrated with technology, which provides wider access to the digital market.

2. The Importance of Using Digital Technology

Kusuma et al. (2023) stated that digital marketing is a powerful tool to increase the competitiveness of MSMEs, allowing small businesses to reach a wider market at a low cost. Abdullah (2024) also emphasized the role of the millennial generation in utilizing digital technology to revive local MSMEs. This study supports this view by showing that the adoption of technology, such as e-commerce and social media, has had a significant impact on increasing the efficiency and income of MSMEs in Bojonegoro.

Based on the research results obtained, it can be concluded that social capital and the use of technology have a significant influence on the competitiveness of MSMEs in Bojonegoro District. Social capital with indicators of the intensity of community interaction, trust between members, and involvement in business networks shows an important role in supporting the competitiveness of MSMEs. This is in line with previous studies which emphasize that strong social relationships in the business community create more effective trust and collaboration, thus facilitating the exchange of information, access to resources, and increasing business capacity. MSME actors with active social capital can more easily obtain support from the community and build wider business networks, which ultimately contribute to increasing turnover and market reach.

Meanwhile, the use of technology in business operations also has a significant contribution to increasing competitiveness. The use of digital technology, both in the production process, operational management, and marketing strategies, has been proven to accelerate business efficiency and reach a wider market. For example, the use of social media and e-commerce platforms has helped MSMEs promote their products more effectively at a lower cost. These results support the view that technology is a key factor in increasing productivity and innovation in the MSME sector. However, the use of technology also requires adequate skills and knowledge so that business actors can maximize the benefits of the technology.

The regression results show that the variable of technology use has a greater influence compared to social capital, as seen in the regression coefficient of 0.52 for technology and 0.45 for social capital. This shows that in the context of MSMEs in Bojonegoro, technology adoption has a more significant impact on competitiveness compared to social capital. However, the role of social capital cannot be ignored, because this factor functions as a supporter of collaboration and partnership, which ultimately also strengthens the application of technology.

5. CONCLUSION

This study concludes that both social capital and the use of technology significantly affect the competitiveness of MSMEs in Bojonegoro District. Social capital, which is reflected in trust between members of the business community, the intensity of interaction, and involvement in business networks, can strengthen the capacity of MSMEs in building effective cooperation. With strong social relationships, MSME actors can more easily access information, share experiences, and obtain the support needed to develop their businesses. On

the other hand, the use of technology is a major factor contributing to operational efficiency and market expansion. Digital technology allows MSMEs to reach a wider market through online marketing and increase productivity by automating operational processes.

Furthermore, the regression analysis shows that the use of technology has a stronger influence on the competitiveness of MSMEs than social capital. This indicates that in the current digital era, technology adoption is an urgent need for MSMEs to remain competitive. By utilizing technology, MSMEs can increase innovation, optimize resources, and respond to market changes more quickly. However, the existence of social capital remains important as a foundation in supporting the implementation of technology through partnerships, communication, and collaboration between business actors. Therefore, increasing the competitiveness of MSMEs requires synergy between strengthening social capital and optimizing the use of technology.

6. LIMITATION

Although this study provides useful findings, there are some limitations that need to be considered. First, this study used a relatively small sample, namely only 30 MSME respondents in Bojonegoro District. The limited sample size can affect the generalization of the research results to a wider MSME population, both at the regional and national levels. Therefore, further research is recommended to involve a larger sample size and cover various regions to obtain a more comprehensive picture.

Second, this study uses a cross-sectional method, where data is collected at a certain point in time. This approach does not allow for observing changes in the dynamics of social capital variables, technology use, and MSME competitiveness in the long term. Research with a longitudinal design would be better for understanding the development of relationships between variables over time and identifying trends and patterns that may emerge.

Third, the measurement of variables in this study only relies on a questionnaire with a Likert scale, which is subjective based on the respondents' perceptions. Although the questionnaire has been tested for validity and reliability, this approach still has the potential for bias, such as the bias of social answers desired by respondents. In the future, more objective measurements, such as real turnover data or measurable levels of technology adoption, need to be considered to improve the accuracy of the research results.

Finally, this study only focuses on two independent variables, namely social capital and technology use. Other factors, such as financial access, government policies, education levels of entrepreneurs, and product innovation, can also affect the competitiveness of

MSMEs. Further research is recommended to add these variables in order to provide a more complete understanding of the factors that determine the competitiveness of MSMEs.

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