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THE STRATEGIC ROLE OF INTELLECTUAL CAPITAL

AND FINANCIAL TECHNOLOGY IN IMPROVING MSME PERFORMANCE

IN BANYUMAS REGENCY

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Abstract

The existence of Micro, Small and Medium Enterprises (MSMEs) plays a significant role in contributing to the growth of the Indonesian economy. MSMEs are required to optimize their resources, especially non-physical resources, and utilize existing financial technology (Fintech) in order to be able to compete and develop at all times. Intellectual capital is increasingly recognized as a strategic asset that is considered important for sustainable profits. Business support by utilizing financial technology will improve business performance. The goal of this research is to investigate the impact of intellectual capital and financial technology components on the performance of MSMEs. The resulting sample was 66 respondents who were MSME business actors. The method used was Multiple Regression analysis. The results of the study found that customer capital and structural capital, which are elements of intellectual capital, affect MSME performance, while human capital, social capital, spiritual capital and financial technology do not affect MSME performance. Thus, the elements of intellectual capital owned by MSMEs need to be utilized optimally to achieve competitive advantage and maintain business existence.

Keywords: Intellectual Capital, Financial Technology, MSME Performance

**INTRODUCTION** 

Indonesia has good MSME development. Almost evenly distributed in every district has MSME which every year increases the number of units and the income generated increases every year. Based on data from the Department of Manpower, Cooperatives and Small and Medium Enterprises of Banyumas Regency, the development of MSME in Banyumas Regency from year to year is increasing. Although the dynamics are very high, some only stand for a short time, replaced by other businesses that emerge but tend to experience an increase in the number of MSME. Intellectual capital and financial technology play a crucial role in enhancing the performance of MSME in Banyumas Regency.

Currently, small and medium enterprises must possess the ability to adjust to shifting conditions in the business landscape, particularly the transition from a manufacturing-focused economy to one centered around knowledge and information. Past conditions of

companies only measured and created company value based on physical resource assets rather than building non-physical resource knowledge. In fact, the role of intangible assets can improve MSME performance. Intangible assets are said to be intellectual capital. According to Prahalad and Hamel (1990), intellectual capital is a valuable, difficult to imitate and irreplaceable resource that produces lasting competitive advantage and improves company performance. This study refers to the Resource Base View (RBV) theory, discussing tangible and intangible resources to achieve a company's competitive advantage. This theory is used because IC as a company's intangible asset is very important for creating excellence and improving business performance. According to Hariyati et al. (2023), this theory focuses on capabilities and resources. Companies can use their internal resources and capabilities to develop strategies in the external environment, such as customers, suppliers, new customers, products or services, and competition between companies (Kim et al., 2007).

Intellectual Capital refers to the expertise, information, and tools utilized to establish a strategic edge for a company (Bataineh & Al Zoabi, 2011). Intellectual capital (IC) is viewed as crucial for organizations to enhance their worth and long-term earnings. Recognized as a strategic advantage that enhances a company's competitive edge, it is imperative for small and medium-sized enterprises (MSMEs) to grasp their handling tactics. Small businesses require access to knowledge and information in order to enhance their operational efficiency and remain competitive in the modern market. Harianto and Syafruddin (2013) explained that owning intellectual capital management within a company can led to a competitive edge and offer insights into the company's capacity to enhance its existing knowledge resources.

However, looking at the condition of MSMEs in Banyumas Regency, many people do not seem to understand the significance of businesses that rely on knowledge. Through the role of intellectual capital they have, MSMEs can improve their performance. That way, MSMEs will be able to maintain their existence in providing the greatest contribution to the growth of the country's economy. It is expected that by leveraging their current intellectual resources, MSMEs will be able to effectively compete and continuously grow in tandem with advancements in science and technology.

Intellectual Capital is made up of the essential components of a company, such as human capital, structural capital, and relational capital, all of which play a vital role in enhancing the company's operational efficiency and ensuring its competitive edge in the market (Shiddiq & Yuyetta, 2013). Several intellectual capital studies have been conducted by Bejinaru (2017); Khalique et al. (2018); Khalique and Pablos (2015); Zhang et al. (2017),

and implement a holistic IC framework consisting of six aspects: human, customer, structural, social, technological, and spiritual capital. This makes intellectual capital a unique competitive edge, enhancing the company's value and financial success in a way that is hard for rivals to replicate.

The use of technology-based finance, or Fintech, has emerged as part of the facilities that help MSMEs. Fintech aims to make it easier for these businesses to access financial products, simplify transactions, and improve financial literacy (Finansialku.com). The use of fintech in the form of payment and capital systems through the use of technology will make business easier and more efficient.

The main objective of this research is to investigate how intellectual capital influences the financial success of small and medium-sized enterprises in Banyumas Regency, ultimately enhancing their long-term competitiveness. The approach involves evaluating and combining various types of assets such as human, structural, customer, social, technological, and spiritual capital along with financial performance, in order to enhance the competitiveness of MSMEs.

#### RESEARCH METHODS

This study utilizes quantitative methods to examine the impact of intellectual capital and financial technology on the success of small and medium enterprises. Surveys and interviews were used to gather data on the issues being studied. The focus of the research is on small and medium enterprises in Banyumas Regency. The sample was selected using convenience sampling.

This research utilized a variety of items to assess different aspects of capital such as human, customer, structural, social, technological, and spiritual. The performance of MSMEs was evaluated using ten different items. The Likert Scale was used to measure the research variables, ranging from strongly disagree to strongly agree.

Validity and reliability tests were conducted for the data analysis, followed by a thorough examination of descriptive statistics, classical assumption tests, and hypothesis testing. To analyze and test the hypothesis, a multiple regression analysis tool was used using SPSS software. The t-test is used to determine the significance of partial influence, with specific criteria for accepting or rejecting the hypothesis. If the t count is greater than the t table, or the level of significance is less than  $\alpha$  (0.05), the hypothesis is accepted. On the other hand, if the t count is less than the t table, or the level of significance is greater than  $\alpha$  (0.05), the hypothesis is rejected.

## RESULT AND DISCUSSION

#### Respondent Profile

The respondents who were the samples in this study were MSMEs in Banyumas Regency. Data collection using a questionnaire and obtained data of 66 respondents. Characteristics in the respondent profile are seen based on gender, type of business, length of business and income.

Table 1. Respondent Profile

Respondent Profile	Information	Total	Percentage
Gender	Woman	48	73%
	Man	18	27%
	Total	66	100%
	Culinary (Food/Drinks)	48	73%
Type of business	Services/Trade	12	18%
	Agriculture/Livestock/Fisheries/Plantation	1	2%
	Creative Industry	5	8%
	Total	66	100%
Business Income per month	< Rp. 1,000,000	20	30%
	Rp. 1,000,000 – Rp. 3,000,000	23	35%
	Rp. 3,000,001 – Rp. 5,000,000	12	18%
	Rp. 5,000,001 – Rp. 10,000,000	6	9%
	>Rp. 10,000,000	5	8%
	Total	66	100%
Length of Business	< 1 Year	4	6%
	15 years	34	52%
	6 – 10 Years	15	23%
	>10 Years	13	20%
	Total	66	100%

In table 1, it can be seen that out of 66 respondents, most of them are female, as many as 48 (73%) respondents. Respondents with culinary business types dominate as many as 48 (73%) respondents. Most of them generate an average monthly income of IDR 1,000,000 - IDR 3,000,000. The results of the data show that the distribution of questionnaires is more in micro and small businesses, so the distribution is considered uneven.

## **Analysis Results**

# 1. Multiple Regression Analysis

Table 2. Results of Multiple Linear Regression Processing

Variables		Coefficient β	Т	Significant
Constant		5.791	4.379	0.000
Human Capital		-0.147	-0.773	0.443
Customer Capital		0.342	2.017	0.048
Structural Capital		0.323	3.389	0.001
Social Capital		0.032	0.205	0.838
Spiritual Capital		-0.165	-1.158	0.252
Financial Technology		-0.013	-0.073	0.942
R Square	0.518			
Adjusted R Square	0.469			
F count	10.551			0,000
F table	2.26			0,000

The regression equation model produced based on the following tests:

$$Y = 5.791 - 0.147X1 + 0.342X2 + 0.323X3 + 0.032X4 - 0.165X5 - 0.013X6$$

### a) Coefficient of Determination (R<sup>2</sup>)

The magnitude of the coefficient of determination or goodness of fit (R<sup>2</sup>) based on table 2 is 0.518 and indicates that the model is suitable. The value indicates that the regression model used in this research can clarify how intellectual capital and financial technology impact MSME performance by 51.8%. The remaining 48.2% is influenced by factors not included in the study.

### b) Simultaneous Testing (F Test)

The significance value F  $(0.000) \le \alpha$  (0.05), means that the independent variable (intellectual capital and financial technology) simultaneously influences MSME performance.

#### c) Partial Testing (t-Test)

Table 2 shows the results of partial tests that partially Human Capital has a significance value (0.443) > (0.05) which means that Human Capital does not affect MSME Performance. The significance level of the Customer Capital variable is 0.048, which is less than 0.05, indicating that it has a positive influence on MSME Performance. Similarly, the Structural Capital variable has a significance level of 0.001, also less than 0.05, suggesting it has a significant positive impact on MSME Performance. The Social Capital variable has a significance value (0.838) > (0.05) so it is concluded that Social Capital does not affect MSME Performance. The Spiritual Capital variable has a significance value (0.252) > (0.05) so it is

concluded that Spiritual Capital does not affect MSME Performance. Meanwhile, the Financial Technology variable has a significance value (0.942) < (0.05) so it is concluded that Financial Technology does not affect MSME Performance.

#### Discussion

## The Influence of Intellectual Capital on MSME Performance

The results of hypothesis testing indicate that the various components of intellectual capital, such as human capital, customer capital, structural capital, social capital, and driverinitial capital, do not have an impact on MSME Performance. Knowledge and experience, ability in work, understanding target markets and customers, and recognizing knowledge as a strategic asset owned by most MSMEs do not affect the increase in product sales, increase in profits every year, business that continues to grow, and business capital that continues to increase every year. Customer capital and structural capital factors positively impact the performance of small and medium enterprises. Business owners in Banyumas grasp the needs of their target market, effectively communicate with their customers, and prioritize customer satisfaction, thereby enhancing the overall success of their enterprises. Likewise, supporting factors such as the availability of a combination of computers, applications and data that support work, the existence of a clear organizational structure in the division of tasks, the existence of a corporate culture, implementing business strategies, having technology that supports employee productivity, and providing opportunities to improve employee skills can improve MSME performance.

Furthermore, the findings of the analysis of social capital Spiritual Capital do not affect the performance variables of MSMEs. Social capital which includes considering environmental health and social and other benefits, as well as spiritual capital which includes the main values of religion such as honesty, commitment, concern, respect for customers, sincerity and honesty in carrying out duties, and practicing business ethics have not been optimized so that they have not been able to improve MSME performance. Moreover, the variable of Financial Technology has no impact on the performance of MSMEs in Banyumas Regency. This includes the advantages, convenience, revenue-boosting potential, transaction simplicity, and customer reach provided by financial technology. The research findings align with the results of the study by Chu et al. (2006), that intellectual assets play a crucial role in the process of creating value and are essential for R&D organizations to strategically build up. According to the findings of Khalique et al. (2018) demonstrate that organizational performance is correlated with the essential elements of intellectual capital, including human

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capital, customer capital, structural capital, social capital, technological capital, and spiritual capital.

#### **CONCLUSION**

The research findings indicate that there is no significant impact on the performance of MSMEs from Human Capital and Social Capital. In contrast, Customer Capital and Structural Capital have a significant positive impact, meaning that improvements in customer and structural capital can enhance MSME performance. Spiritual Capital and Financial Technology, however, do not have a measurable effect on MSME performance.

The study used an online survey sent out through Google Form to gather responses from participants with diverse backgrounds, taking into account the restrictions that come with this method, such as differing business experience and income levels, which may influence the application of intellectual capital and fintech. Future studies could group respondents based on business duration and income to provide more specific insights. Additionally, this research focused solely on the Banyumas area, and further research could expand to include other regions, such as Central Java Province. The findings also suggest areas for future exploration, including the impact of specific technologies, like e-commerce or financial applications, and the role of education in fostering human resources that are adaptive to technological advancements. The objective of this research is to enhance existing knowledge and provide further insights into the growth of small and medium-sized enterprises in Indonesia.

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