

14th ISCA 2024**The Role of Human Capital and Financial Technology
in Improving MSME Performance in Banyumas Regency**Chandra Suparno¹, Sulistyandari², Weni Novandari³, Ekaningtyas Widiastuti^{4*}¹Universitas Jenderal Soedirman, chandra.suparno@unsoed.ac.id, Indonesia²Yunlin University of Science and Technology, D10824006@yuntech.ac.tw, Taiwan³Universitas Jenderal Soedirman, weni_novandari@yahoo.co.id, Indonesia^{4*}Universitas Jenderal Soedirman, widtyas@gmail.com, Indonesia

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ABSTRACT

The existence of Micro, Small, and Medium Enterprises (MSMEs) plays an important role in contributing to the economic growth of a country. MSMEs must optimize their resources, especially non-physical resources, and utilize existing financial technology (Fintech) to continue to compete and grow at all times. This study aims to test the role of human capital and financial technology on MSME performance. The method used is multiple regression analysis. The sample was measured using convenience sampling techniques totaling 45 respondents. The results of the study indicate that human capital does not affect MSME performance. In contrast, financial technology has a positive effect on MSME performance. The implication of this study is that human capital and financial technology that are utilized optimally can maintain the stability of competitive performance and excel in achieving company goals.

Keywords: Human capital, financial technology, MSME performance.

1. Introduction

At present, the business world has experienced a change in the economy based on production (traditional) to a knowledge-based economy. Different from past conditions, which traditionally companies only measured and created company value based on physical resource assets or tangible assets rather than building their knowledge which is a non-physical resource or intangible asset. According to Ernst & Young (2006), in developed countries such as the US, 60% of workers are knowledge workers. It is proven that by increasing this knowledge capability, companies can carry out activities more effectively and efficiently (Vargaz and Nurozi, 2010).

Indonesia has good MSME development. Almost evenly distributed in every district has MSMEs whose number of units increases every year and the income generated increases every year. Based on data from the Manpower, Cooperatives and Small and Medium Enterprises Office of Banyumas Regency, the number of MSMEs continues to increase in 2020 by 5,754 units until 2023 reaching 8,555 MSME units. Based on these data, it can be indicated that MSMEs have great potential to be developed to encourage Indonesia's economic growth.

However, looking at the condition of MSMEs in Banyumas Regency, it seems that not many are aware of the importance of knowledge-based business. Human capital is intellectual capital in the form of knowledge capital which is a strategic asset to create competitive advantage and improve MSME performance. Human capital as the main resource that adds value in the business process, such as skills, knowledge, expertise, competence, attitude, and dexterity (Khalique, et al., 2011). Human capital is a human resource that is creative, innovative and has competence that plays an important role in producing a company's performance with the competence inherent in employees because they can provide the best solutions to their business problems. Human capital is considered to be able to improve the company's business performance and maintain the stability of competition with other companies (Shiddiq, 2013). That way, MSMEs will be able to maintain their existence in providing the greatest contribution to the country's economic growth.

This research is based on Resource Base View (RBV), is a theory that discusses tangible and intangible resources as values or potentials owned by each company or organization to support the business process to achieve high competitive advantage. This theory is used because IC as one of the company's intangible assets is an important element to create excellence and drive business performance growth. In his study, Bontis (2004) strengthened human capital as the main source of intellectual capital and found that the emphasis on human capital is allowed to better understand the hidden values of intellectual property. Human capital can interact with other intellectual capital elements such as organizational capital in creating, obtaining, and producing customer capital which will then achieve high financial prosperity and company success.

The use of technology-based finance, known as Fintech (financial technology), emerged as part of the facilities to support MSME business activities. Fintech aims to provide convenience to MSMEs in accessing financial products, facilitating transactions and increasing financial literacy (Finansialku.com). The use of fintech in the form of payment systems or capital through the use of technology will provide convenience and efficiency for its users. Fintech for MSMEs plays an important role in increasing operational efficiency in improving MSME business performance (Rahardjo, et al., 2019).

Considering the importance of human capital and financial technology in producing more creative, innovative products that have competitive advantages, this study focuses on improving business performance through the role of human capital and financial technology on MSME performance in Banyumas Regency. This paper aims to explore and discuss the role of human capital on MSME financial performance that leads to increasing sustainable competitiveness. Specifically, this relates to how to produce a model of the relationship between human capital and fintech in MSMEs that can be used to develop good business performance so that it can increase the competitiveness of MSMEs.

2. Literature Review

2.1. Resource Based Theory

The theory was first presented by Wernefelt in 1984 in the study "A Resource-based View of the Firm", namely resources as a component in a company that has strengths and weaknesses. This theory focuses on resources and capabilities (Hariyati & Nuswantara, 2023). Maximizing

company resources needs to be done to increase the value of the company's products and services, so that they can have a highly competitive advantage. Resource-based theory is a theory that discusses resources, both tangible and intangible, as values or potentials owned by each company or organization to support the business process of achieving high competitive advantages.

2.2. MSME Business Performance

According to Suyudi (1999) performance is the result of work that can be achieved by a person or group of people in an organization according to their respective authorities and responsibilities in order to achieve organizational goals. Performance is basically determined by three things: ability, desire and environment. In order to perform well, a person must have a high desire to do and know his job. Especially for MSMEs, according to Baswir (1995), there are four factors causing the low performance of Small and Medium Enterprises in Indonesia, including: 1) almost 60% of small and medium enterprises in Indonesia use traditional technology 2) market share tends to decline due to lack of capital, weak technology and managerial 3) most small and medium enterprises are unable to meet administrative requirements to obtain assistance from banks 4) the level of dependence on government facilities is still very high.

2.3. Human Capital

Nasih (2011) explains that human capital is a critical resource that exists in every personnel because of the ability to leverage, direct, manage, and transform resources to create value and profit for the company. The value of employees is determined by their ability to apply their skills and expertise (Maddocks and Beaney, 2002). Human capital can be increased and developed by the company by optimizing the knowledge of its employees through training, development or scholarships to continue their studies to a higher level. Human capital must be managed well in order to improve performance and generate company value. The importance of human capital is because there is a source of innovation and strategic renewal that comes from each individual in it.

2.4. Financial Technology

The development of technology has changed most of human life, including business. Financial technology innovation started from the banking world with the emergence of the Core Banking System (CBS), an application that is the heart of the banking system. The development of financial technology has spread to clients with the emergence of start-up and high-tech companies that create financial technology innovations. The financial services sector with information technology known as Financial Technology (Fintech) synergizes to achieve the goal of maximizing the use of technology in accelerating financial services. Financial Technology (Fintech) is the result of a combination of financial services with technology that ultimately changes the business model from conventional to moderate, helping problems in buying and selling transactions and payment systems to be more efficient and economical but still effective.

3. Research Methodology

This research is a quantitative research that aims to test the role of human capital and financial technology on the performance of MSMEs. Data collection was conducted using a questionnaire. The target population was MSMEs in Banyumas Regency. Sample determination was determined by convenience sampling technique.

In this study, nine items were used to measure human capital construction, and ten items were used to measure MSME performance. The research variables were measured by indicators using the Likert Scale: 1 (strongly disagree) - 5 (strongly agree).

Data analysis was carried out by validity and reliability tests, then processed and analyzed using a descriptive statistical approach, classical assumption tests, and hypothesis tests. To analyze and test the hypothesis, a multiple regression analysis tool was used using SPSS software. The partial influence significance test (t-test) is carried out with the following test criteria: the hypothesis is accepted if $t_{count} > t_{table}$, or the level of significance $< \alpha$ (0.05) and the hypothesis is rejected if $t_{count} < t_{table}$, or the level of significance $> \alpha$ (0.05).

4. Results

4.1. 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 45 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	36	80%
	Man	9	20%
	Total	45	100%
Type of business	Culinary (Food/Drinks)	36	80%
	Services/Trade	7	16%
	Creative Industry	2	4%
	Total	45	100%
Business Income per month	< Rp. 1,000,000	15	33%
	Rp. 1,000,000 – Rp. 3,000,000	14	31%
	Rp. 3,000,001 – Rp. 5,000,000	8	18%
	Rp. 5,000,001 – Rp. 10,000,000	4	9%
	>Rp. 10,000,000	4	9%
Total	45	100%	
Length of Business	< 1 Year	36	80%
	15 years	26	58%
	6 – 10 Years	9	20%
	>10 Years	6	13%
	Total	45	100%

In table 1, it can be seen that out of 45 respondents, most of them are female, 36 (80%) respondents. Respondents with culinary (food/drink) businesses dominate, 36 (80%) respondents. Most of them earn an average monthly income of < Rp 1,000,000 – Rp 3,000,000. The results of these data show that the distribution of questionnaires is more in micro and small businesses, so the distribution is considered uneven.

4.2. Analysis Results

4.2.1. Validity Test

Table 2. Validity Test Results

Item	Significance	Information
Y1	0.00	Valid
Y2	0.00	Valid
Y3	0.00	Valid
Y4	0.00	Valid
Y5	0.00	Valid
HC_1	0.00	Valid
HC_2	0.00	Valid
HC_3	0.00	Valid
HC_4	0.00	Valid
HC_5	0.00	Valid
Fintech_1	0.00	Valid
Fintech_2	0.00	Valid
Fintech_3	0.00	Valid
Fintech_4	0.00	Valid
Fintech_5	0.00	Valid
Fintech_6	0.00	Valid

Based on the results of the validity test in Table 2, it is explained that all questions on the MSME Performance, human capital and financial technology variables are valid because the significance value of each question item is < alpha 0.05.

4.2.2. Reliability Test

The reliability test of the questionnaire was measured using the Cronbach Alpha statistical test. The following are the results of the reliability test:

Table 3. Reliability Test Results

Variables	Cronbach Alpha Coefficient	Acceptance Criteria	Information
MSME Performance	0.787	Tall	Reliable
Human Capital	0.957	Very high	Reliable
Financial Technology	0.947	Very high	Reliable

Based on the results of the reliability test, it is explained that the Cronbach alpha coefficient value for the UMKM performance variable (Y) is 0.787 with high reliability acceptance criteria, the human capital variable (X₁) is 0.957 with high reliability acceptance criteria and financial technology (X₂) of 0.947 with very high reliability acceptance criteria. The results of the reliability test concluded that the performance of MSMEs, human capital and financial technology has good reliability. Therefore, the results in this study are reliable because they are consistent and stable.

4.3. Multiple Regression Analysis

Table 4. Results of Multiple Linear Regression Processing

Variables	Coefficient β	T	Significant
Constant	9,970	5.204	0.000
Human Capital	-0.032	-0.149	0.882

Financial Technology	0.352	2.023	0.049
R Square	0.315		
Adjusted R Square	0.283		
F count			0,000
F table	3.22		

The regression equation model produced based on the following tests:

$$Y = 9,970 - 0.032X_1 + 0.352X_2$$

4.4. Coefficient of Determination (R^2)

The magnitude of the coefficient of determination or goodness of fit (R^2) based on table 4 is 0.315 and indicates that the model is suitable. This value can be interpreted that the regression equation model in this study is able to explain the relationship between independent variables (human capital and financial technology) with the dependent variable (MSME performance) of 31.5%. While 68.5% is explained by other factors not tested in this study.

4.5. Simultaneous Testing (F Test)

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

4.6. Partial Testing (t -Test)

Table 4 shows the results of the partial test that the significance value of the human capital variable has a calculated t value (-0.149) < t table value (-2.018) and the significance value of the human capital variable (0.882) > (0.05) so it is concluded that human capital has no effect on MSME performance (Hypothesis 1 is rejected). Meanwhile, the financial technology variable has a calculated t value (2.023) > t table value (2.018) and a significance value of the financial technology variable (0.049) < (0.05) so it is concluded that financial technology has a significant positive effect on MSME performance (Hypothesis 2 is accepted).

5. Discussion

5.1. The Influence of Human Capital on MSME Performance

The results of the hypothesis test found that human capital had no effect on the MSME Performance variable. Human capital which includes knowledge and experience, creativity, ability in work, understanding target markets and customers, and knowledge as a strategic asset did not affect MSME performance such as increasing product sales, increasing profits every year, increasing the number of employees every month, a business that continues to grow, and business capital that continues to increase every year. This finding is not in line with the results of Sari's research (2020) which states that human capital can improve MSME performance.

5.2. The Influence of Financial Technology on MSME Performance

The results of testing the second hypothesis, it can be concluded that financial technology has a positive and significant effect on the performance variables of MSMEs. It can be concluded that the better a person's financial technology which includes the benefits of financial technology, the ease of financial technology, the ability of financial technology to increase business income, the ability of financial technology in easy transactions, and the ability of financial technology in reaching consumers and increasing customers, the better the performance of their MSMEs. The performance of MSMEs in question includes increasing product sales, increasing profits every year, increasing the number of employees every month, a business that continues to grow, and

business capital that continues to increase every year. This finding is in line with the research results of Daulay, et al (2023), that the use of fintech has a positive and significant impact on the performance of MSME companies. Likewise, research supports the findings Rahardjo et al (2019), that Fintech plays an important role in improving the performance of MSMEs, namely in the form of increasing operational efficiency and efficiency enjoyed by its members, however, the implementation of Fintech in MSMEs also has its own challenges.

6. Conclusion

- Human capital does not affect MSME performance.
- Financial Technology has a positive effect on MSME performance. Optimal use of financial technology can improve MSME performance.

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