

The Role of Intellectual Capital in Improving the Msme's Organizational Performance

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Abstract. This study aims to assess the organizational performance of micro, small, and medium-sized enterprises (MSME) in the Banyumas, Cilacap, and Brebes Regencies by considering human capital and structural capital into account. This study utilized populations and samples of MSME administrators from Banyumas, Cilacap, and Brebes. This investigation utilized SEM-PLS, an analytical instrument that employs the inner model, outer model, and hypothesis testing. The findings of this study suggest that human capital has a positive effect on organizational performance, as MSMEs with competent human resources can attain high organizational performance. The infrastructure and operational efficiency of a micro, small, and medium-sized enterprise will support its organizational performance, so structural capital has a positive effect on organizational performance. The implication of this study is that MSMEs must maximize their business potential, particularly through their intellectual capital resources, in order to enhance their organizational performance.

Keywords: Intellectual capital, Human Capital, Structural Capital, Organizational Performance.

1. Introduction

The condition of MSMEs in Central Java continues to compete, one of which is in the western part of Central Java. Based on information from the Central Java Province's Office of Cooperatives for Small & Medium Enterprises, as shown by the number of MSME units in the province, Banyumas Regency ranks 5th in terms of the number of MSME units followed by Brebes Regency at 6th. However, the area of Cilacap Regency as one of the regions in the western part of

the underdevelopment of the number of MSME units in Cilacap Regency is due to a marketing strategy that is still lacking, this is listed on the website jatengprov.co.id. MSMEs in Cilacap Regency are expected to apply the right strategy to be able to develop their business and face competition. Choosing the appropriate course of action will affect an MSME's ability to achieve organizational performance.[17].

According to Bontis[15], The ability to utilise the company's physical and intangible assets effectively and efficiently is demonstrated by the presence of high organizational performance. This is consistent with the Resources Based Theory (RBT), which examines the resources that businesses control and how those businesses might use their resources to gain competitive advantages.[10]–[11]. If a company has good organizational performance, then the company can develop and take full advantage of its competitive advantage.

In particular, the intellectual capital that MSME firms own is examined in terms of how organizational performance in the MSME sector is influenced by several elements. Human capital and structural capital are the variables considered. Because the MSME products in these three districts have the potential to obtain a competitive edge, this research was undertaken in the MSME sector in the Banyumas, Cilacap, and Brebes regencies[20]. With a variety of products with competitive advantages, this is due to the high organizational performance carried out by MSME actors. With high organizational performance, it can influence the development of an MSME[22]. Based on those explanations, this study propose 1st hypothesis which predicts that human capital has a positive effect on organizational performance.

In order for a firm to outperform its competitors and increase sales, Bontis[15] claims that one of the factors that might foster a favorable market perception for the company is the personal abilities that employees possess. By creating this competitive advantage, employees will try to optimize personal skills consistently to support organizational performance in an MSME[16]. Meanwhile, Structural capital as a knowledge contained within the company. This knowledge consists of organizational routines, procedures, cultural systems, and databases that are legally protected and become intellectual property rights owned by companies[13]. Companies will be able to compete if increasing structural capital in the form of a good management system, supporting facilities and infrastructure, and organizational culture[12]. If these three things continue to be improved and utilized by a company, the organizational performance of the company will increase. Based on those explanations, The second hypothesis put out in this study is that structural capital improves organizational performance.

The contribution of this research is to provide empirical evidence that MSME actors must optimize their business potential, especially through intellectual capital resources, especially human capital and structural capital owned so that they can improve organizational performance in MSMEs, especially in Banyumas, Brebes and Cilacap Regencies.

2. Methods

Population and Sample

This study uses quantitative research using primary data. The population in this study were business actors in Banyumas, Brebes and Cilacap regencies with a sampling technique, namely convenience sampling. The samples obtained in this study were 200 respondents from MSME administrators across Banyumas, Brebes and Cilacap Regencies.

Operational Definition and Variable Measurement

Table 1. Operational Definition and Variable Measurement

Variable	Operational Definition	Indicators
1. Organizational performance	Organizational performance is a description of the level of achievement of the implementation of tasks in an organization, in an effort to realize the goals, objectives, vision and mission of the organization which includes four dimensions, namely a financial perspective, a customer perspective, an internal business process perspective and a learning and growth perspective [13], [14].	<ol style="list-style-type: none"> 1. Financial perspective 2. Customer perspective 3. Internal business process perspective 4. Learning and growth perspective.
2. Human capital	Human capital is generally recognized as an important component of intellectual capital which is based on competence, attitude and intellectual agility [13], [14]	<ol style="list-style-type: none"> 1. Knowledge and skills 2. Attitude 3. Intellectual dexterity.
3. Structural capital	Structural capital is the knowledge capability of an organization that includes all non-human knowledge stores such as systems, procedures, databases, networks, process manuals, and routines [13], [14].	<ol style="list-style-type: none"> 1. Infrastructure and systems 2. policies and procedures.

Data Analysis Technique

The Smart Partial Least Square (Smart PLS), a method for data analysis, employs two models—the inner model and the outer model. The validity, reliability, R-Square, and f-Square tests are performed on the outer model. The PLS Algorithm test is used to test the internal model. Then, bootstrapping testing is used to test the hypothesis.

3. Results And Discussion

Results

1. Characteristics of Respondents

Owners and managers of MSME in the Banyumas, Cilacap, and Brebes Regencies participated in the survey as respondents. Based on the questionnaire, information was obtained regarding the identity of the respondents grouped according to gender, age of business owner, religion, region of origin, business criteria, ownership structure, turnover per month and type of business. The following table summarizes the characteristics of the respondents.

Table 2. Characteristics of Respondents

Type	Characteristic	Percentage
Gender	Female	52%
	Male	48%
Age	<20 year	2,5%
	20 – 40 year	50,5%
	41 – 60 year	45%
	61 – 80 year	2%
Regency	Banyumas	68,9%
	Brebes	17%
	Cilacap	16,5%
Sector	Culinary, Food, and beverages	43%
	Fashion	7,5%
	Beauty	4,5%
	Electronic	2%
	Retail	15,5%
	Automotive	4% %
	Arts and Handicraft	1,5%
	Lain-lain	22%

2. Outer Model

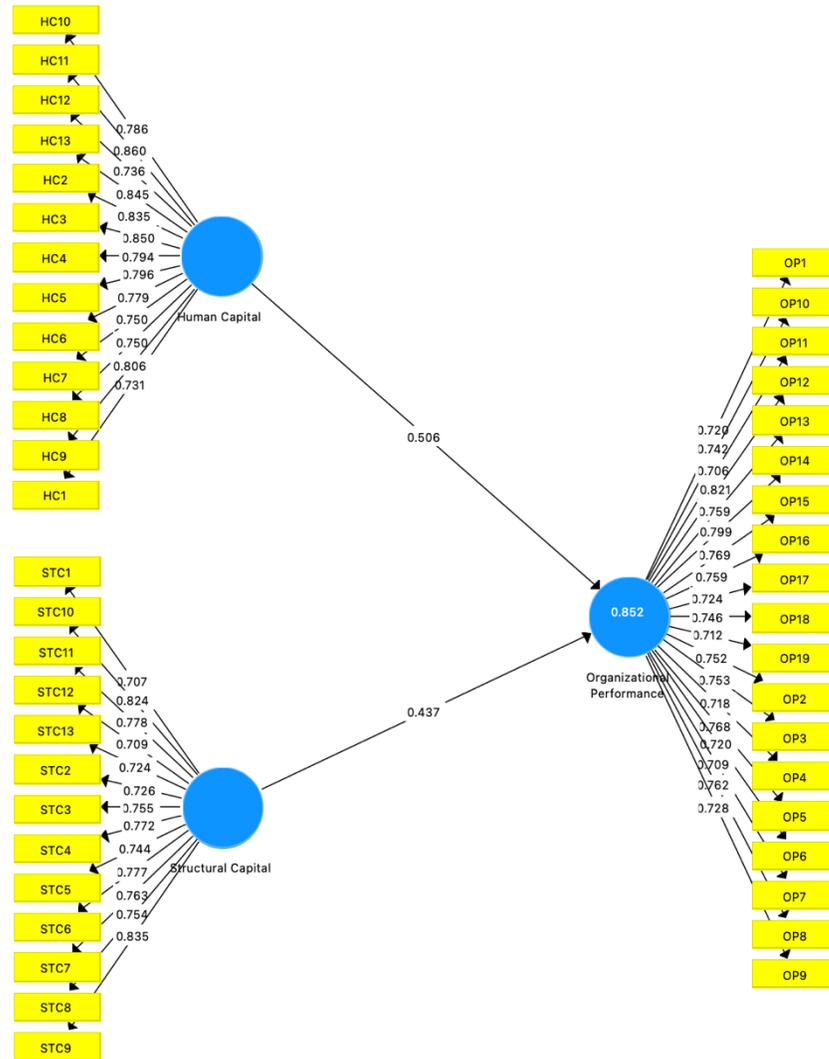


Figure 1. SEM-PLS Model

The Outer Model test used includes:

a. Convergent Validity

Each indicator concept is put to the test for convergent validity. A loading factor of 0.50 to 0.60 can be regarded as adequate, while a number more than 0.70 is deemed to indicate an indicator's good

validity. According to Figure 1 above, all loading factor values for the indicators are valid because they comply with convergent validity's requirements.

b. Discriminant Validity and Composite Reliability

Table 3. Discriminant Validity and Composite Reliability

	Human Capital	Organizational Performance	Structural Capital	Composite Reliability	Average Variance Extracted (AVE)
Human Capital	0.795			0.957	0.632
Organizational Performance	0.906	0.746		0.960	0.557
Structural Capital	0.916	0.901	0.760	0.947	0.578

To make sure that each idea of each independent variable is distinct from other variables, discriminant validity testing is done. As shown in Table 3, some loading factor values for each indicator of each latent variable already have the highest loading factor value when compared to the loading factor value when coupled with other latent variables. Since certain latent variables still have gauges that are strongly correlated with other constructs, this indicates that each latent variable has good discriminant validity.

The purpose of composite reliability testing is to evaluate an instrument's applicability in a research model. The convergent validity of each variable can be assessed using the Average Variance Extracted (AVE) value, as shown in Table 3. Based on table 3 shows that the value of composite reliability and average variance extracted (AVE). According to Ghazali (2014) the average variance extracted (AVE) value must be above 0.5 to meet the requirements of convergent validity and the composite reliability value must be above 0.6 to meet the reliability requirements. From the table above it can be concluded that the model from the usage research meets the requirements.

3. Inner Model

a. R-Square

Table 4. R-Square

	R Square	Adjusted R Square
Organizational Performance (Y)	0.852	0.851

Based on table 4 shows the Adjusted R-Square value is 0.851. This value means that human capital and structural capital have an influence of 85.1% on organizational performance, and another 14.9% are influenced by other variables outside this model.

b. F-Square

Table 5. f-Square

	Organizational Performance
Human Capital	0.279
Structural Capital	0.208

Based on table 5, the f-square reveals the results on the human capital variable, the result is 0.279, the structural capital variable is 0.208, which means that human capital and structural capital have a moderate effect on organizational performance (Y).

4. Hypothesis Testing

Hypothesis testing in this study was carried out using the bootstrapping method.

Table 6. Hypothesis test results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Human Capital -> Organizational Performance	0.506	0.507	0.080	6.314	0.000
Structural Capital -> Organizational Performance	0.437	0.437	0.080	5.434	0.000

Table 6 shows that human capital and structural capital have a positive effect on organizational performance.

Discussion

The first hypothesis testing's findings demonstrate that human capital has a beneficial impact on organizational performance and lend credence to the RBT theory, which holds that firms can successfully compete on the global market if they can effectively manage and utilize their resources[10]. This will function effectively if the company's resources are used to the best of its capacity by workers who are highly motivated to execute their jobs. Employees who are highly motivated will provide good organizational performance for the business. This is consistent with earlier studies that discovered human capital had a major impact on organizational success[13], [11]–[18].

Further, the results of the study also prove that structural capital has a positive influence on organizational performance and shows that the second hypothesis is supported. Based on the theory of Resource Bases Theory (RBT) that a company will be able to compete if it is able to take advantage of competitive advantages that other companies do not have [15]. In this context, companies will be able to compete if they continue to increase structural capital in the form of infrastructure and systems or procedures according to company regulations. The better the infrastructure and efficient procedures in a company, the more it will support the process of employee performance. The better the process of employee performance, the better the organizational performance in a company. This is supported by previous research that structural capital has a positive effect on organizational performance[13], [12], [19].

5. Conclusion

The expansion of MSMEs in the Banyumas, Cilacap, and Brebes Regencies is the driving force behind this study. This study looks at the intellectual capital that MSMEs own, particularly from the Human Capital and Structural Capital components, in order to analyze the organizational performance of MSMEs in the Banyumas, Cilacap, and Brebes Regencies. Based on the study's findings, it can be said that both structural capital and human capital have a favorable impact on organizational performance. The implications that this research can provide in the future are the management of Micro, Small and Medium Enterprises in Banyumas, Cilacap and Brebes Regencies to maintain and increase existing organizational commitment so that the performance of these MSMEs can be maximized. Meanwhile, suggestions for further research are expected to include other variables from the broader components of intellectual capital such as social capital and financial capital.

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