

Catalyst MSME Competitiveness: Bogor Regency Study

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Abstract

The purpose of this study is to determine the factors that affect MSMEs in Bogor Regency. Competitiveness factors are measured using product advantages, human resources, and product marketing through IT. The sample for this research includes the leading sectors of MSMEs in Bogor Regency, such as footwear, leather craft, and the food sector. The sampling method employs purposive sampling with a total of 100 respondents for the research. Data collection techniques include interviews, observations, and questionnaires. The data analysis method involves conducting instrument tests (validity test and reliability test) and data analysis techniques (multiple linear regression test, determination test, and t-test). A validity and reliability test is conducted with 30 respondents, all yielding valid and reliable results. The t-test results demonstrate that the independent variables, consisting of Quality Product, human resources, and IT marketing, have a significant positive effect on the competitiveness of MSMEs. In the F-test, a significance value smaller than 0.05 is obtained, proving that the independent variables collectively affect the dependent variable. The determination test reveals that Quality Product, human resources, and IT marketing collectively influence competitiveness by 56,7%, while the remaining variance is influenced by factors beyond the scope of this study's independent variables

Keywords: MSMEs, Competitiveness, Featured Products

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) play an important role in the development and economic growth of a region. MSMEs have a leading power in economic development. In addition, MSMEs can make a real contribution to national economic growth, contribute to gross domestic product, and absorb labor in productive age. The role of MSMEs in Bogor Regency is seen as very strategic in making contributions in the economic and social fields. In the economic field, MSMEs contribute 28.45% of GRDP in 2021 (BPS, 2022). As for absorbing labor in Bogor Regency, in 2021 MSMEs can absorb 46,228 workers. The magnitude of the contribution of MSMEs to economic and social development is of particular concern to the Bogor Regency Government. The large number of developing MSMEs must be followed by adequate competitiveness. The competitiveness of MSMEs in the products they produce is mandatory for business people. This became crucial with the implementation of the China ASEAN Free Trade Area (CAFTA) in January 2010 and the enactment of the ASEAN Economic Community (AEC) in 2015 by the Government of Indonesia. The existence of the CAFTA and MEA agreements opens opportunities for free trade between Indonesia and China and other countries in the Southeast Asian region. Free trade that is already in effect is a joint work for the central government, regional governments and business actors including MSME owners to continue to increase the competitiveness of local production. Efforts aimed at

bolstering competitiveness must commence with identifying hindrances to SME development. Research conducted by Darwanto identified two primary challenges faced by MSMEs: financial and non-financial problems. Financial issues encompass: 1) a mismatch between available funds that can be accessed by MSMEs, 2) there is no systematic approach in MSME funding, 3) transaction costs are quite high, 4) a lack of access to formal funding sources, 5) credit interest for investment and working capital which is quite high, 6) many MSMEs are not yet bankable. Problems in the non-financial sector include; 1) lack of technological knowledge production and quality control, 2) lack of marketing knowledge, and 3) limited human resources (HR). The aforementioned issues provide obstacles to the competitiveness of small and medium-sized enterprises (SMEs), leading to the development of goods that possess promise but lack the necessary competitive advantage to prosper in the market. Given the aforementioned circumstances, the researcher aims to further investigate the elements that contribute to the competitiveness of micro, small, and medium enterprises (MSMEs), specifically within Bogor Regency. The primary objective of this study is to examine the impact of many variables, including product excellence, human resources, and IT-based product marketing, on the competitiveness of small and medium-sized enterprises (SMEs)

2. Literature Review

Overview of MSMEs. Small businesses according to the category of the Central Bureau of Statistics (BPS; 2022) are home industries with 1-4 workers, small industries with 5-19 workers, medium industries with 20-99 workers, large industries with 100 workers or more (BPS, 2022). The definition of UKMKM according to UU. No. 20 of 2008 are: Micro Enterprises are productive businesses owned by individuals and/or individual business entities that meet the criteria for Micro Enterprises as regulated in this Law.

Small business is a productive economic business that stands alone and is carried out by individuals or business entities that are not subsidiaries or not branches of companies that are owned, controlled, or become part directly or indirectly of medium or large businesses that fulfill the criteria for Small Enterprises as referred to in this Law. Medium Enterprises are productive economic enterprises that stand alone, carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or become part of either directly or indirectly with small businesses or large businesses with total assets. net or annual sales proceeds as stipulated in this Law. MSMEs are centers for the development of economic activity. Bappenas (2008) suggests two roles for MSMEs in development. First, the role of MSMEs in economic growth and employment. MSMEs can absorb a significant workforce compared to large businesses. Second, MSMEs can reduce poverty levels. The development of MSMEs in Indonesia has the potential to create integrated growth that does not only rely on the trickle-down effect in the form of economic growth and increased employment but can also promote a more even distribution of income and reduce poverty.

MSME Competitiveness. Competitiveness is a concept that refers to a commitment to market competition in the case of companies or industries and success in international competition in the case of countries Fitriani (2015). Competitiveness is very important for both small, medium,

and small industry players including MSMEs. The important role of MSMEs in driving the Indonesian economy must be accompanied by awareness to strengthen MSMEs by increasing their competitiveness.

In industrial competition in developed and developing countries, the important thing is the strength of competitiveness. Tambunan (2008) argues that the competitiveness of MSMEs in Indonesia is still low. Low competitiveness causes the MSME group to experience difficulties in increasing their output because they cannot compete with both large businesses in their own country and goods imported from other countries. Therefore, empowering MSMEs is needed to increase competitiveness while winning the current global competition.

According to Fitriani (2014) MSME empowerment requires planned, systematic, and comprehensive prerequisites. These prerequisites include: (1) creating a business climate in opening up the widest possible business opportunities and guaranteeing business certainty accompanied by economic efficiency; (2) developing a business support system for MSMEs to increase access to productive resources; (3) developing entrepreneurship and competitive advantage for small and medium enterprises; and (4) empowering micro-scale businesses to increase people's income.

In Fitriana (2015) to improve and strengthen the basis of the community's economic life through MSMEs, the government prepared a Long-Term Development Plan (RPJPN) for 2005-2025. This RPJPN contains a Framework for Empowering UMKM and Cooperatives which can be explained as follows: At the macro level, policies to improve the business environment are needed to increase the competitiveness of cooperatives and SMEs. At the micro level, MSME empowerment must focus on increasing MSME (cooperative) access to productive resources for the benefit of business expansion.

At the micro level, empowering MSMEs (and cooperatives) must understand the characteristics and behavior of the business actors themselves. Characteristics and business behavior can be the initial capital for MSMEs (and cooperatives) to improve the level of business competitiveness. According to Tambunan (2008), several factors support the competitiveness of an industry, including the expertise or education level of workers, employer skills, capital availability, good organizational and management systems (according to business needs), technology availability, information availability, and input availability other inputs such as energy, raw materials, etc. In this study, the factors above are summarized into Quality Product, human resources, and IT marketing.

Quality Product and MSME Competitiveness Bogor Regency. Quality Product is one of the key factors for the success of Micro, Small and Medium Enterprises (MSMEs) in Indonesia. In an effort to create better competitiveness, MSMEs need to focus on improving the quality of their products in order to meet customer expectations. Quality Product gives satisfaction to customers and builds a positive reputation. Products with high quality tend to last longer, have good performance, and provide added value to customers. This will create customer loyalty and enable MSMEs to maintain their market share. In addition, improving Quality Product will also help MSMEs compete with large companies and international brands. By having high-quality

products, MSMEs can create differentiation in the market and attract the attention of increasingly discerning consumers. This allows MSMEs to gain a strong position in the market and face competition better.

Human Resources and MSME Competitiveness Bogor Regency. Competitiveness very important for business continuity. So that business development can compete in the market, MSME business actors must be able to create conducive internal and external environment to create business opportunities broad and can maintain a healthy market mechanism. Human resources are important factor for any business. Qualified human resources will determine the level of competitiveness in competition. Likewise with SMEs, if there are resources in it quality human beings certainly will make SMEs competitiveness.

IT Marketing and MSME Competitiveness Bogor Regency. Today's technology continues to grow and the benefits of using the internet are felt for the users. Some people feel addicted to the internet, including the activities of Micro and Small Enterprises and Medium Enterprises (SMEs) in utilizing information technology to run their business. IT marketing makes it easy for actors MSMEs to provide information and interact directly with consumers, expand market share, increase awareness and increase sales for SMEs so as to increase the competitiveness of SMEs

Figure 1 presents the research model used in this study based on the literature review and hypotheses developed

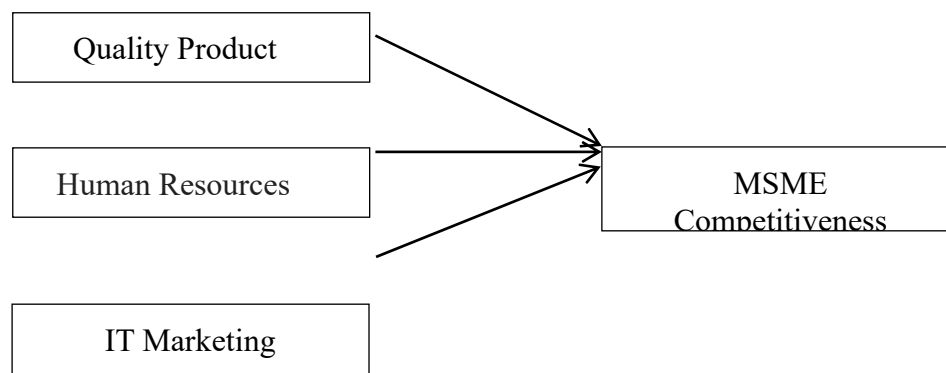


Figure 1. Research Framework

3. Research Method

The research method that is used in this study includes several stages, namely: population selection and research sample, data collection techniques, and data analysis methods. The population in this study are MSME owners in Bogor Regency. Sampling used a purposive random sampling technique with a total sample of 100 respondents consisting of SMEs in the superior sectors of Bogor Regency (footwear, leather crafts, and the food sector).

In obtaining information related to the required data used interview techniques, observation, and questionnaires. Source of data using primary and secondary data.

Instrument Test Instrument test includes validity and reliability tests. The validity test was carried out using Product Moment Correlation with the testing criteria said to be valid if the $r_{count} > r_{table}$ and the significance value < 0.05 or invalid if the $r_{count} < r_{table}$ and the significance value < 0.05 . The reliability test is said to be reliable if the calculated Cronbach alpha is > 0.7 , or unreliable if the calculated Cronbach alpha is < 0.7 .

Data analysis technique. Multiple Linear Regression (Multiple Regression Analysis). The analytical method used in this study is multiple linear regression, namely to see the effect of Quality Product, human resources, and IT marketing on the competitiveness of SMEs. The model can be formulated as follows:

$$TDS = \alpha + \beta_1 TKP + \beta_2 TSDM + \beta_3 TPSIT + e$$

Information:

TDS = Competitiveness

TKP = Quality Product

TSDM = HR

TSDM = Marketing using IT

e = errors

Determination Test. The coefficient of determination (R^2) essentially measures how far the model's ability to explain the variation in the dependent variable. The coefficient values are zero and one. The determination test in this study uses the adjusted R^2 determination. The interpretation of the results of the adjusted R^2 coefficient of determination is as follows:

If the adjusted R^2 coefficient value gets closer to one, it means that the independent variables provide almost all the information provided to predict the variation of the dependent variable.

If the adjusted R^2 coefficient of determination gets closer to zero, then the ability of the independent variable to provide information on the dependent variable gets smaller.

Test the significance of Individual Parameters (test statistic t). Statistical Hypothesis

$H_a: \beta_1, \beta_2, \beta_3 \leq 0$: the independent variable has no significant effect on the dependent variable

$H_a: \beta_1, \beta_2, \beta_3 > 0$: the independent variable has a significant effect on the dependent variable.

Acceptance and rejection of the hypothesis

H_1, H_2, H_3 , accepted if $t_{count} > t_{table}$

H_1, H_2, H_3 , rejected if $t_{count} \leq t_{table}$

In testing this hypothesis, a significant coefficient test is used with a significance level of 5%. If $Sig < (\alpha=0.05)$, then H_a is accepted. Conversely, if the level of $Sig > (\alpha=0.05)$, then H_a is

rejected.

4. Finding and Discussion

Instrument Test. The instrument test performed included validity and reliability tests using 30 respondents. The results of the validity test are tabulated in table 1. The reliability test results showed that the variable Quality Product, human resources, and IT marketing had Cronbach's Alpha Based on Standardized Items > 0.7 . This proves that the three variables above are reliable. While the competitiveness variable has Cronbach's Alpha Based on Standardized Items < 0.7 , it is necessary to re-test the reliability because the results are not reliable. The re-test of reliability was carried out by testing 5 statement items. Table 2 shows the results of the second reliability test for the competitiveness variable. After eliminating the first statement, Cronbach's Alpha Based on Standardized Items results were obtained at 0.896. Thus, the value of Cronbach's Alpha Based on Standardized Items > 0.7 , so that the competitiveness variable is declared reliable.

Table 1. Reliability Test Result

Variable	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Competitiveness	.582	.688	6
Quality Product	.874	.875	5
Human Resources	.718	.757	6
IT Marketing	.870	.870	5

Table 2. Second Reliability Test Result for the Competitiveness Variable

Cronbach's Alpha Based on		
Cronbach's Alpha	Standardized Items	N of Items
.866	.896	5

The second instrument test is the validity test. The following is a summary of the results of the validity test of each variable.

Table 3. Validity Test Result for the Competitiveness Variable

Statement Items	Significance	Validity Result
1	0.000	Valid
2	0.000	Valid
3	0.000	Valid
4	0.000	Valid
5	0.000	Valid
6	0.125	Not valid

Table 4. Validity Test Result for the Quality Product Variable

Statement Items	Significance	Validity Result
1	0.000	Valid
2	0.000	Valid
3	0.000	Valid
4	0.000	Valid
5	0.000	Valid
6	0.000	Valid

Table 5. Validity Test Result for the HR Variable

Statement Items	Significance	Validity Result
1	0.000	Valid
2	0.000	Valid
3	0.000	Valid
4	0.000	Valid
5	0.000	Valid
6	0.000	Valid

Table 6. Validity Test Result for the IT Marketing Variable

Statement Items	Significance	Validity Result
1	0.000	Valid
2	0.000	Valid
3	0.000	Valid
4	0.000	Valid
5	0.000	Valid
6	0.000	Valid

From the results above, the indicator variable for competitiveness has an invalid statement, namely the 6th statement which has a significance of > 0.05 . So, it is necessary to test the validity again by eliminating the 6th statement. While the validity test on Quality Product, human resources, and IT marketing all statements have a significance value of less than 0.05. This shows that the statements used in measuring Quality Product, human resources, and IT marketing are valid. Next, a validity test of the 2nd competitiveness variable was carried out by eliminating the 6th statement. The following are the results as shown in Table 7. The results of the second validity test show that the significance value is less than 0.05, and the statements in the competitiveness variable are declared valid.

Table 7. Second Validity Test Result for the IT Marketing Variable

Statement Items	Significance	Validity Result
1	0.000	Valid
2	0.000	Valid
3	0.000	Valid
4	0.000	Valid
5	0.000	Valid
6	0.000	Valid

Regression Test Result. T-test (Partial). The t-test was conducted to answer the hypotheses in this study. The hypothesis that has been proven is that it is suspected that Quality Product, human resources, and IT marketing have a simultaneous or partial effect on the competitiveness of MSMEs in Bogor Regency. The t-test was carried out using SPSS software version 21. The following shows the results of the t-test.

Table 8. T-test Result Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.984	1.483		3.360	.001
TKP	.433	.091	.425	4.756	.000
TSDM	.231	.077	.285	2.988	.004
TPSIT	.103	.049	.174	2.123	.036

a. Dependent Variable: TDS

From the t-test above, the variables of Quality Product, HR, and IT marketing have a significant positive effect on competitiveness. This is evidenced by all positive t values and all significance <0.05. The regression models in this study are:

$$TDS = 4,984 + 0,433TKP + 0,231TSDM + 0,103TPSIT$$

F-test (Simultaneous). The F test was conducted to see the simultaneous effect of the independent variables on the dependent variable. The results of the F test of this study can be seen in table 9. From the results of the SPSS output below, the significance value is <0.05 and the F value is 44.225. This proves that the independent variables (Quality Product, HR, and IT marketing) have a significant positive effect on competitiveness.

Table 9. F-test Result

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	428.289	3	142.763	44.225	.000 ^a
Residual	309.901	96	3.228		
Total	738.190	99			

a. Predictors: (Constant), TPSIT, TKP, TSDM

b. Dependent Variable: TDS

Determination Test. The coefficient of determination (R^2) essentially measures how far the model's ability to explain the variation in the dependent variable. The following are the results of the determination test.

Table 10. Determination Test Result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.762 ^a	.580	.567	1.797

a. Predictors: (Constant), TPSIT, TKP, TSDM

The results of the determination test showed that the independent variables in the model were able to explain the dependent variable by 0.567 or 56.7%, while 0.433 or 43.3% were explained outside the research model. From the results above, the value of $R^2 > 0.5$, proves that the research model is quite good.

The instrument test performed included validity and reliability tests using 30 respondents. The reliability test results showed that the variable Quality Product, Human Resources, and IT marketing had Cronbach's Alpha Based on Standardized Items > 0.7 . This proves that the three variables above are reliable.

The t-test was conducted to answer the hypotheses in this study. The hypothesis that has been proven is that it is suspected that Quality Product, Human Resources, and IT marketing have a simultaneous or partial effect on the competitiveness of MSMEs in Bogor Regency. From the results of the SPSS output, the significance value is < 0.05 and the F value is 44.225. This proves that the independent variables (Quality Product, HR, and IT marketing) have a significant positive effect on competitiveness.

The results of the determination test showed that the independent variables in the model were able to explain the dependent variable by 0.567 or 56.7%, while 0.433 or 43.3% were explained outside the research model. From the results above, the value of $R^2 > 0.5$, proves that the research model is quite good.

5. Conclusion

The Efforts for strengthen the competitiveness of MSMEs in Bogor Regency require synergy from various stakeholders. The development and empowerment of MSMEs also need to be supported by the Bogor Regency Government as the policy regulator. From the results of this study, there are factors supporting competitiveness that have been tested empirically. These factors are product excellence, HR and IT marketing. These three variables need to get the attention of the Bogor Regency Government. Efforts to strengthen product excellence can be done by fostering MSMEs awareness and strengthening product branding. Many MSME actors do not have knowledge about the importance of product branding. Many MSME products are sold in bulk without a brand. Of course, this is not good if it is done in a long time. The second factor that affects the competitiveness of SMEs is human resources. Human resources are a strength for MSMEs in carrying out the production process. Strengthening skills for workers is a strategy in developing MSME competitiveness including training in HR skills and providing motivation for workers. In addition to product and HR advantages, IT marketing (WA, Tiktok, Instagram, website, etc.) is a determinant of MSME competitiveness. Of the 100 respondents who were used as research objects, only about 35% had utilized IT as a support for expanding the MSME market. This small percentage should receive attention considering that consumer behavior today is more comfortable using gadgets in making transactions. By strengthening the competitiveness of MSMEs as embodied in Government policies and support from other stakeholders, it is hoped that the competitiveness of MSMEs will increase. This increase in competitiveness certainly correlates with market absorption of MSME products. In the long term, strengthening the competitiveness of MSMEs will make MSME's superior products become icons of Bogor Regency.

Based on the results of the determination test, the competitiveness variable can be influenced by Quality Product, Human Resources and IT marketing 56.7%, while 43.3% is explained outside the research model. This means that there are many factors that can be found outside of this research that can support the competitiveness of SMEs. Therefore, suggestions for future researchers are to find other factors that can affect the competitiveness of SMEs. In addition, MSMEs which are used as research objects are better specific (one type of MSMEs) so that they can find out the determining factors for the competitiveness of each MSME product.

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