

# Confirmatory Analysis of Competency Improvement of Small and Medium Enterprises in Malang, Indonesia

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**Abstract.** This study aims to empirically examine the competencies of SMEs actors formed by various indicators. The results of this study are expected to be a reference by business actors, associations, and policymakers in applying the guidance to SMEs business actors based on problems and potential of business actors so that they have sustainable competence. The research method is carried out by observing business actors to explore the competencies they currently have, as well as the factors that shape them. The population and sample of research taken from the SMEs associations in Malang Raya as many as 110 business actors. The analysis was conducted with quantitative descriptive using frequency analysis and SEM analysis to determine the responses of respondents to the questionnaire distributed. The results show that the competencies of business actors had been developed optimally, however, there were still many business actors who run their businesses based on business instincts without sufficient knowledge, so that it was still rare for business actors to be able to compile and implement the correct business strategy.

**Keywords:** *competence, SMEs, business creativity, performance*

## INTRODUCTION

At present, strong economic actors are importantly needed, they are the ones who can compete at regional, national, and global levels. To accelerate the achievement of these targets, low and middle-level economic actors are needed that are reliable both in quantity and quality [1]. Therefore, a priority for development both at the national and regional levels need to be made. It focuses on the development of lower and middle economies. For this reason, planning policy synergies are needed at the national level and the provincial and district/city levels. At the regional level, lower economic development targets must be integrated into the regional Medium-Term Development Plan in the form of measured programs, indicators, and targets.

The acceleration of the achievement of the target of lower and middle economic development needs to be formulated policies and synergies between development actors, namely the government, academics, and entrepreneurs [2], [3]. Furthermore, the synergy between the actors needs to be spelled out in the form of an Action Plan in accordance with the conditions and problems of each actor. With this action plan, it is expected that related parties will have commitment and clarity in the planning and implementation of programs and activities to accelerate the expected development achievements [4].

One way to increase regional economic growth that is more dynamic is to pay attention to the middle and lower class economies whose greater contribution to the dynamics of economic growth. In Malang, the existing industry has not been optimally oriented towards local economic development so that the existence of the economic area has not been able to provide trickling down effects that can encourage the local economy. This relates to factors of production, markets and the competence of local economic actors to be able to enter the mass production process chain and relate to large industries [5], [6].

The factors of production and marketing networks are closely related to the smoothness of the industrial supply chain which affects the development of industrial estates. This aspect of the industrial supply chain determines how far the inter-industry linkages are formed. The more extensive the linkage, the greater the opportunity for an industry branch to encourage local economic development [7], [8]. This happens because the interconnectedness between industries will create more entrepreneurs, job opportunities, use of local resources, and can generate other activities [9]. Based on the results of the data available to date, the development of SMEs is still relatively stagnant, economic development is dominated by the education sector. The education and tourism sectors should be able to stimulate the local economy by increasing the number and quality of SMEs.

Optimizing economic improvement through enhancing the performance of SMEs needs to be

done to improve regional economic performance. Therefore, it is necessary to conduct an in-depth study with intensive research. This research was conducted to identify factors that increase the competence of SMEs, as well as the elements that shape the competencies of small and medium businesses.

From the observations of the field phenomenon, it can be concluded that to provide optimal results in improving the production, marketing, and developing SMEs, the development of competencies of the main actors and associations of SMEs becomes the main capital. This research aims to improve the performance of sustainable SMEs by increasing competence and determining the right business strategy so that SMEs can compete and develop, both in terms of the efficiency of the production process, capital, network marketing, and the use of human capital.

Improved performance of SMEs so far has been done, there are still weaknesses in terms of planning to implementation, and follow-up evaluation results [3]. If observed, there has been no significant improvement, and integrated management with increased competence of SMEs, as well as not being optimal in synergizing with all relevant parties and other caring groups [10], [11].

Human resource competence is the ability of a person or individual, an organization, or a system to carry out its functions or authorities to achieve its objectives effectively and efficiently [12]. Competence must be seen as the ability to achieve performance, to produce outputs and outcomes [13]. Assessment of the competence and quality of human resources can be seen from the level of responsibility and competence of these resources. Responsibility can be seen from the position description. Job descriptions are the basis for carrying out their duties properly. Without a clear job description, these resources cannot carry out their duties properly. While competence can be seen from the educational background, the pieces of training that have been followed, and the skills expressed in the implementation of the tasks [14].

Competence is a characteristic that underlies a person to achieve high performance in his work [10], [15]. Employees who do not have enough knowledge at work will encounter many obstacles that result in the waste of materials, time, and energy. Organizations must also strive to develop their human resources. Training and development allow employees to effectively carry out their current work and prepare for future work. Performance appraisals are important for validating selection tools, measuring the impact of training programs, deciding salary increases and promotions, and determining training needs.

The performance of SMEs is intended as the level of achievement of SMEs in their activities over a one-year period [16]. Performance is a

reflection of whether SMEs have succeeded or not in their business ventures. There are several benchmarks to be able to assess organizational performance but classified into two types, namely subjective and objective [16], [17]. Objective measures are usually related to profitability from the sale of its products and subjective indicators of profitability are determined by managers' perceptions of the profitability of the company's activities [18] - [20].

Performance can be seen from two aspects, namely: qualitative and quantitative. Quantitatively, the performance of an organization can be seen from the achievements of the organization compared to what was done in the past or compared with its competitors in several factors, such as net income, stock prices, dividend rates, earnings per share, returns on capital, returns on equity, market share, sales growth, the number of workdays lost due to labor strikes, production costs and efficiency, labor turn over, and employee satisfaction index [16], [21]. Qualitative measures, in the form of questions raised to determine the goals, strategies, and integrated and comprehensive plans of a company are consistent and appropriate.

The unsuccessful efforts to empower SMEs have been carried out by the government and other parties such as building their character and competence in the form of competencies, education, training, skills, and assistance [22]. This is because the program policies that have been made are top-down, partial, and temporary policies. The nature of the policy has weaknesses that need to be corrected in fundamental ways such as Empowerment that indicates collusion, corruption, and nepotism, still oriented towards macroeconomic growth, centralized policy, more caricature, positioning SMEs as objects, sectoral, less integrated, unsustainable or override environmental carrying capacity [23], [24].

Some important things in promoting SMEs in empowerment, which is oriented towards activities that provide added value to the community or called participation-based empowerment [1]. Some of these important things include (1) Facilitation to improve knowledge, skills, and information for SMEs through regular discussion association forums that are carried out in rural roundtable discussion with understanding learning and experience for business continuity. (2) Facilitating participatory mapping by SMEs as a basis for extracting needs, problems, and potential resources. (3) Facilitating the understanding and partnership of SMEs, the Government and the private sector / large entrepreneurs are partners and at the same time agents of change capable of compiling and planning SME empowerment activities. (4) Facilitating women to be more involved in various SME empowerment activities. (5) Utilizing

potential sources of entrepreneurship, sustainable management.

**METHOD**

The design of this study is descriptive quantitative combined with inferential statistics. The population in this study were SMEs who were members of the small and medium business associations, and those who were not yet affiliated. This study used as many as 20 business associations and those not affiliated with up to 90 entrepreneurs. So that the total sample to be tested was 110 small and medium scale entrepreneurs. The sampling technique used random sampling.

Statistical analysis used Equation Model Structure analysis (SEM), namely confirmatory factor analysis, to test the strength of each indicator in forming variables, so that it can be known which indicators are dominant in forming variables, by knowing the number of loading factors of each indicator against the variable. It will also be known as the effect between the independent variables and the dependent variable.

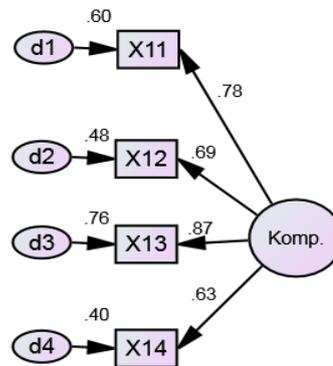
**RESULT & DISCUSSION**

In this study, a structural model with a competency improvement variable was developed consisting of four indicators including entrepreneurship motivation, experience, creativity, and intellectual ability. Based on the evaluation of the sample size of this data, the hypothesis model can be continued to be analyzed using SEM. This analysis is used to determine the loading factor that shows the contribution of each indicator to the variable.

The results of the analysis of the variable unidimensionality of competency improvement have met the confirmatory factor analysis requirements. Substantially, the dimensionality test of competency improvement variables can be formed by five indicators. The highest loading value is an indicator of creativity with a value of 0.848. This shows that according to respondents' perceptions that the increase incompetency is in accordance with the targets and targets of business actors as seen from the creativity of the actors in developing their products and businesses, this is possible by increasing creativity, to be able to increase the competence of entrepreneurs. In the other four dimensions with loading more than 0.30, it can also be explained that the increase in entrepreneurial competency can be measured through good business motivation, adequate experience, sufficient intellectual abilities, and relatively stable emotional abilities.

Based on the above results it is known that the dimensions of the creativity factor have a dominant contribution in explaining the empowerment variable with an estimated coefficient value of

0.848; followed by indicators of motivation ability; with an estimated coefficient value of 0.777, then an experience indicator of 0.705 and an intellectual ability of 0.655.



GOODNESS OF FIT  
 Chi Square=1.320  
 Prob=.517  
 CMIN/DF=.660  
 RMSEA=.000  
 TLI=1.013  
 GFI=.994

Figure 1. Unidimensionality Test of Competency variables

Table 1. Results of Unidimensionality of Competency variables

Indicator	C.R.	P	Estimate
Motivation	1.000	***	.777
Experience	8.978	***	.705
Creativity	9.855	***	.848
Intellectual ability	9.514	***	.655

Competence in this study was formed by indicators of motivation, factors of experience, creativity, and intellectual abilities. These five indicators make a very varied contribution from the largest to the smallest, while the biggest contribution is given by the creativity indicator and the smallest contribution is made by intellectual ability. This shows that the creativity of a small and medium business person becomes important. Even though they have limited intellectual abilities, if someone can create better then they can become a formidable entrepreneur.

Based on the results of testing through SEM analysis, it was found that if the competence of small and medium businesses can be maintained consistently, business performance can be maintained at a good level. This illustrates that if SMEs want to improve business performance, they must always be creative so that they can be distinguished from other business actors. However, in addition to competency, other indicators are important to consider, because these indicators

make a major contribution to the formation of competency latent variables. This means that the combination of competency indicators needs to be possessed in a complete and complementary way to an entrepreneur [25]. The findings of this study support the research conducted by previous researchers who stated that competencies are formed by creativity, motivation, experience, and intellectual abilities and this will have an impact on business performance [26], [27].

### CONCLUSION

The involvement of actors and business associations in the continuous improvement of performance still needs to be optimized. This is to maintain the ability and motivation of entrepreneurship for small and medium businesses. Thus, it is necessary to optimize the empowerment of business actors. Experience and creativity and high motivation possessed by entrepreneurs will enhance the ability to formulate and implement business strategies. So that businesses can survive the rapidly changing environmental conditions.

Based on respondents' perceptions of increasing competence, creativity, and motivation plays an important role. So that intervention is needed from various parties so that motivation and creativity remain stable. This also indicates that competence will have an impact on performance, meaning that the business performance of SMEs can be further enhanced by increasing the competence of business actors. Increasing the competency of business actors is done by increasing the knowledge and skills of entrepreneurs to be able to implement business strategies. This means that improving the performance of SMEs will be more effective when the competencies of business actors are improved and subsequently the skills possessed by business actors are applied by practicing business strategies by applying high motivation and creativity.

It is recommended for SME entrepreneurs to always maintain their self-motivation to remain stable and to increase their creativity by increasing knowledge and literacy. This will have an impact on business performance while increasing knowledge can be done by attending education and training organized by local governments and universities. For future research, it is suggested to further explore other competency indicators, especially if related to the current digital era, it could be that the competency indicators change, adjusting to the current conditions.

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