Innovation, competitiveness, and business ecosystem: determinants of local economic strengthening

**ARTICLE INFO**

**ABSTRACT**

This study aims to analyze the influence of innovation, competitiveness, and business ecosystem variables on strengthening the local economy. The development of small businesses as the basis of the people's economy is one of the strategic steps that need to be followed up with concrete steps to increase family productivity, improve the economy, and overcome the problems of poverty, and unemployment. Community business is one of the strengthening of the local economy. This research is field research with qualitative and quantitative approaches to provide a comprehensive explanation. The research sample was MSME business actors in Sukajadi Village, Muaraenim Regency using the purposive sampling method. Data collection techniques are used through surveys, documentation, and questionnaires using Likert scales to assess instruments. Multiple linear regression equations were utilized for the analysis of the data. The results showed that the variables of innovation, competitiveness, and business ecosystem partially or simultaneously affect the strengthening of the local economy. The independent variable affected the dependent variable by 51.2% while the remaining 48.8% was influenced by other variables not described in this study. Innovation, competitiveness, and business ecosystems play a crucial role in strengthening the local economy. These factors are interconnected and have a positive impact simultaneously and reinforce each other. By working together, innovation, competitiveness, and business ecosystems can create a strong sustainable, and inclusive local economic environment at the local level. This not only benefits local businesses but also for communities to become more resilient and able to access more opportunities. This condition supports the improvement of the welfare and quality of life of the community as a whole.

**Keywords:** Innovation, Competitiveness, Local Economy, MSMEs

**JEL Classification:** M21, O10, O31

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**Introduction**

The economic development of each region can be seen as an effort made by the local government and its people to utilize available local resources, which is expected to increase economic development. Local economic development is very important because it encourages, and stimulates business activities that have the potential to create new opportunities or jobs and encourage regional economic growth.

MSMEs, which make up 99% of all business units, play a significant role in Indonesia's economic growth. Additionally, MSMEs contributed 60.5% of the GDP, and 96.9% of all jobs in the country were filled by labor absorption (Kemenko Perekonomian, 2022).

In people's economic development, especially small and medium-sized businesses as a guide for strengthening the local economy in the era of autonomy, they include, namely, 1) boosting productivity to support small and medium-sized business development and expansion; 2) as a guide that provides opportunities and growth in the development of local wisdom and business activities by the carrying capacity and ability of the community; 3) as an institutional and legal guide to become an umbrella in the management of small and medium-sized businesses in the regions (Utomo, 2017). Therefore, these three things can be a guide for strengthening the local economy based on regional resources and becoming new economic centers driving economic growth. According to Alibegović et al (2019), a resilient local economy implies the ability to adapt and respond to changes, challenges, and threats from outside to
economic stability. Strengthening the local economy should be implemented to spur people's economic development, especially small and medium-sized businesses as the basis of the people's economy (Jonek-Kowalska & Wolniak, 2021; Zada et al., 2021).

The development of small businesses as the basis of the people's economy is one of the strategic steps that need to be followed up with concrete steps to increase family productivity (Krekova et al., 2016), improve the economy, overcome the problems of poverty, and unemployment (Tambunan, 2022). Innovation and technology will be key issues facing MSMEs in the future, and all pertinent parties must work together to address them (Le et al., 2023; Mahmutaj & Krasnigi, 2020), competitiveness (Adamik & Sikora-Fernandez, 2021; Hutahayun & Yufran, 2019), business ecosystem (Lenkenhoff et al., 2018; Suuronen et al., 2022), branding and marketing (Yuliani et al., 2022; Zusrony et al., 2021), and human resources (Burhan et al., 2020; Hamadamin & Atan, 2019).

Food products are still an option for people in doing business. A wide variety of food can be produced by the community according to the raw materials available in the region. One of the community businesses in Sukajadi village, Muaraenim Regency is a food product in the form of chips that can be used as a typical souvenir from the community in the village. Various kinds of chips produced include banana chips, sweet potato chips, mushroom chips, tofu chips, and tempeh chips. The raw materials used are available in the village which is managed by MSMEs such as bananas, sweet potatoes, mushrooms, tofu, and tempeh. Each MSME works together to meet the needs of raw materials to produce processed food products.

In running this business, there are still many obstacles faced by MSMEs in the village. Low competitiveness of MSME products related to innovation, product development, promotion, and marketing. The ability of MSME actors is still low in mastering production technology, and the use of information technology. It is still low and not optimal for the development of the creative economy.

This study analyzes innovation, competitiveness, and business ecosystem as determining factors for strengthening the local economy in Sukajadi village, Muaraenim Regency. Innovation is key to creating added value and maintaining competitive advantage. Research results of (Galperina et al., 2016; Umam & Mafrihat, 2022) found that innovation, knowledge, and entrepreneurship influence sustainable economic development. Sukriani (2022) explained that there is a significant influence of innovation and creativity on MSME business performance. Different things were stated (Mongkol, 2022), SMEs need to give priority to their inventive capabilities and give innovation and creativity more attention, even though innovation has a big impact on their performance.

Juliana Jaya et al (2020) found that competitiveness shows a positive and significant influence on the competitiveness of small and medium-sized businesses. According to Darwanto et al (2018), the competitiveness of MSMEs can be achieved through a partnership model between various stakeholders that can strengthen the local economy, while (Krstić & Gaweł, 2023) found that competitiveness has a positive impact on innovation and human resources that can strengthen local businesses. Priambodo (2023) found that competitiveness has an impact on the economic expansion of Central Java cities and regencies.

Economic progress through the digital business ecosystem shows significant benefits (Lenkenhoff et al., 2018; Suuronen et al., 2022). However, the findings of Alvina Tania Destiani and Saraswati (2023) found that the business ecosystem has not aided in the growth of the local economy and has not been able to utilize the existing potential.

Based on the above review, the purpose of this study is to examine the influence of innovation, competitiveness, and business ecosystem on strengthening the local economy in MSMEs in Sukajadi village, Muaraenim Regency.

**Literature Review**

**Strengthening the Local Economy**

Strengthening the local economy is an effort to optimize the use of local resources involving local governments, businesses, local communities, and community organizations to develop the economy of a region. Strengthening the local economy in practice is connecting production innovation centers, and community business independence in an information technology-based network to create a more stable community economic condition than the previous situation (Mubyarto, 2014). All commercial endeavors that are conducted locally, regionally, or that have an influence on an area capable of utilizing or exploiting natural and human resources are considered contributions to local economic development (Birkhölzer, 2005) so that the local economy consists of a network of social, public, and commercial activities that are all interconnected and dependent on each other (Jackson & McInroy, 2015).

**Innovation**

Innovation is a process that incorporates multiple activities to discover new ways of doing things, rather than just proposing or implementing new ideas or methods (Hoffecker, 2018). Creativity complements as a form of production of new ideas and is useful to individuals or groups of individuals working together. Yuliani et al (2020) stated that creativity and innovation are elements of reliable human resource strength, while Hijri & Atmaja (2022) stated that innovation and creativity are applied in a business that can facilitate a business and obtain new challenges for the progress of their business. This is consistent with the findings of a study conducted by Juliana et al (2021); (Yuliani et al., 2020); (Phan et al., 2020), and (Syafudin, 2017) discovered that creativity and
innovation have a major impact on entrepreneurship and community economic resilience. They also concluded that innovation plays a crucial part in economic development strategies.

H1: Innovation has a positive and significant effect on strengthening the local economy

**Competitiveness**

The essence of success or failure in a venture has more value than others that will make its profit. Competition has two effects: on the one hand, it can drive business actors to become more dynamic and competitive in their production of goods and services; on the other hand, it can weaken them because they become fearful of competition and are unable to produce high-quality goods. Therefore, competition has two benefits. According to Winarti et al. (2019); and Ahmedova (2015) competitiveness is one of the factors and an important condition for the development and growth of micro, small, and medium enterprises or business prosperity determined by the ability of human resources to produce quality goods, prices, designs, and environmental factors. Building a strong business network that may boost economies of scale, facilitate effective business management, and enhance market share is one way to boost competitiveness (Irawan, 2020). In addition to building business networks, another thing was stated by Kurdi and Firmansyah (2020) stated that building good closeness with customers is a strategy that can be used to increase competitiveness. The outcome of a study conducted by Juliana Jaya et al (2020) on competitiveness shows a significant positive influence on the competitiveness of MSMEs.

H2: Competitiveness has a positive and significant effect on strengthening the local economy.

**Business Ecosystem**

A business ecosystem is a collection of companies with complementary relationships that work together in building strategic partnerships to provide benefits to consumers. A business ecosystem is not just a collection of business people, but a complex social system. If all stakeholders have the potential to create more benefits from the partnership than working alone, and there are fair and satisfactory returns between stakeholders, it will improve business performance. According to Khuong and Van (2022), the entrepreneurial ecosystem significantly influences entrepreneurs’ perceptions and business success. Meanwhile, the results of Guerrero et al.’s (2021) research found that the most favorable conditions of the entrepreneurial ecosystem are incubators/accelerators and expert support, networks, and R&D investment, while those that do not affect the entrepreneurial process are the lack of sources of funding, the state of the labor economy, and social norms. Kholid Mawardi (2020) found that the entrepreneurial ecosystem affects entrepreneurial interest.

H3: The business ecosystem has a positive and significant effect on strengthening the local economy.

H4: Innovation, competitiveness, and business ecosystems simultaneously have a positive and significant effect on strengthening the local economy.

So the framework of thought in this study can be arranged as shown in Figure 1 below.

![Figure 1: Framework of Thought; Source: Authors](image)

**Research and Methodology**

This research is a field research with qualitative and quantitative approaches (Kuncoro, 2013). An overview of the observed variables is obtained through the use of qualitative descriptive analysis. The impact of the independent variable on the dependent variable is determined through quantitative analysis.

The research location is in Sukajadi village, Muaraenim Regency. The population in this study is MSMEs from various businesses, namely producers of chips or processed foods, tempeh and tofu factories, mushroom farmers, meatball makers, and banana and sweet potato farmers. The number of MSMEs is 30 MSMEs. The sampling technique used in this study is a saturated sampling technique where all populations are sampled. Quantitative analysis to identify the influence of the independent variable on the dependent variable. Using Linear Multiple Regression Analysis to measure the effect of the independent variable on the dependent variable. In this study, the dependent variable is the strengthening of the local economy (Y), while the independent variable is the innovation variable (X1), competitiveness (X2), and business ecosystem (X3). Then the multiple linear regression equation in this study is:

\[
Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon
\]
where:

\[ Y = \text{Strengthening the Local Economy} \]
\[ \beta = \text{Constant} \]
\[ X_1 = \text{Innovation} \]
\[ X_2 = \text{Competitiveness} \]
\[ X_3 = \text{Business Ecosystem} \]
\[ \epsilon = \text{error term} \]

Furthermore, a hypothesis test design is carried out, where parameter estimation from the analysis of relationships between variables is carried out using the Ordinary Least Square (OLS) method because it will produce unbiased and best parameter estimators. Several tests were also conducted to determine the accuracy of the model and the relationship between variables (Greene, 2017).

**Findings and Discussions**

Strengthening the local economy is an important strategy in building a sustainable economy. By optimizing local resources, strengthening the local economy can create new business opportunities, and increase production and competitiveness. Strengthening the local economy can increase local economic development which can help reduce the economic gap between urban and rural areas.

Numerous internal and external variables contribute to the local economy’s strengthening. In this study, the variables that impact the local economy's ability to strengthen were identified, the independent variables are innovation \((X_1)\), competitiveness \((X_2)\), and business ecosystem \((X_3)\), while the dependent variable is the strengthening of the local economy \((Y)\). Testing the validity of the research instrument using the corrected item-total correlation method with a significant level of 5% with a two-sided test. The magnitude of the \(r\) table is 0.3610 while \(r\) counts > \(r\) table so that all statement items are declared valid. Reliability testing with Cronbach Alpha statistical test > 0.60. The results of the respondents' data processing obtained reliability test results of 0.820, this means that Cronbach Alpha > 0.60 so that all statement items are declared reliable.

Multiple linear regression is used in the data analysis technique. Table 1 below displays the outcomes of the multiple linear regression.

**Table 1: Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>11.158</td>
<td>2.473</td>
<td>4.512</td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td>.315</td>
<td>.095</td>
<td>.587</td>
</tr>
<tr>
<td></td>
<td>Competitiveness</td>
<td>.348</td>
<td>.109</td>
<td>.571</td>
</tr>
<tr>
<td></td>
<td>Business Ecosystems</td>
<td>.259</td>
<td>.085</td>
<td>.552</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

**Source:** Authors

Based on Table 1, the regression equation can be explained as follows.

\[ Y = 11.158 + 0.315X_1 + 0.348X_2 + 0.259X_3 + \epsilon \]

A constant of 11.158 can be interpreted if the variables of competitiveness, innovation, and business ecosystem = 0 are considered constant, then the value of strengthening the local economy is 11.158.

**Table 2: Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.750*</td>
<td>.563</td>
<td>.512</td>
<td>1.038</td>
</tr>
</tbody>
</table>

**Source:** Authors

a. Predictors: (Constant), Innovation, Competitiveness, Business Ecosystems

According to Table 2, the independent variable can have a 51.2% impact on the dependent variable, with additional variables not covered in this study influencing the remaining 48.8%.

Ho's decision was rejected because the significant value was less than the \(\alpha\) of 0.05 in the simultaneous testing to ascertain the independent variable’s effect on the dependent variable using the F test, which produced a significance value of 0.000 from the data processing findings.
To ascertain the significance of independent variable characteristics, simultaneous testing is performed with the F test. The subsequent Table 3 displays the test findings as follows:

Table 3: ANOVAa

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>36.031</td>
<td>3</td>
<td>12.010</td>
<td>11.143</td>
<td>&lt;0.001b</td>
</tr>
<tr>
<td>Residual</td>
<td>28.022</td>
<td>26</td>
<td>1.078</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>64.053</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors
a. Dependent Variable: Y
b. Predictors: (Constant), Innovation, Competitiveness, Business Ecosystems

Table 1 explains that all significant parameters have a significance value of < 0.05. The innovation variable has a significant effect on strengthening the local economy with a value of 0.003. MSMEs have great potential in Indonesia's national economy. MSME business development is an important key in moving the wheels of the economy in the free market era. In developing an MSME business, MSMEs must be able to adapt quickly to market and technological changes. MSMEs must be able to develop products and innovations that are better than their competitors. The innovations that have been carried out by MSMEs in Sukajadi village are more important in product development. One of them is MSMEs that produce chips from various raw materials produced by other MSMEs in the village, such as tempeh, tofu, mushrooms, sweet potatoes, bananas, and meatballs which are processed into processed chip foods that are more durable, in-demand by the community, and have a good taste. Tempeh and tofu producers also innovate the products produced by improving the quality of products and sizes that match the demands of other manufacturers. Similarly, mushroom, yam, and banana farmers improve product quality, such as good and abundant harvests.

From field research, it was obtained that the products produced were easily recognized by consumers, and the products sold were in demand. In running their business, business owners have tried to use new methods to produce faster than competitors. However, only processed food business owners in the form of chips have made attractive and unique product packaging in various sizes. This MSME has done online marketing so that the products that have been produced can be enjoyed by consumers outside the village, even outside the city. Business activities carried out by MSMEs have an impact on the economy, especially in the village. Utilizing existing resources and cooperating is one of the keys to strengthening the local economy to develop in a better direction and be able to move the wheels of the economy. The results of research by Adam and Alarifi (2021) reveal that innovation affects the performance and survival of MSMEs. This condition is clarified by the findings of Hofecker (2018) and Yuliani et al (2020) that innovation contributes to building and strengthening a series of system capacities that are important for local economic development. However, the results of Juliana et al (2021) research found that creativity and innovation correlate strongly with technological advances, but the direct impact on entrepreneurial development is not estimated significantly.

The competitiveness variable, which has a significance value of 0.004, is the next variable that has an impact. Various factors such as internal capacity, market share, demand, market circumstances, and the sustainability of output growth can impact the competitiveness of MSMEs (Maesaroh et al., 2020). Many products produced by MSMEs in Sukajadi village are also produced by similar MSMEs from other villages so the difference is product quality. The price offered by MSME owners is quite competitive depending on the raw materials used. The higher the quality of the raw materials used, the price offered is quite high. The managed business has been able to meet market demand. Product brands are important as identity and make it easy to be recognized by the market or consumers. However, only MSMEs that produce processed foods already have a business brand, while other MSMEs such as tofu and tempeh producers, mushrooms, bananas, sweet potatoes, and meatballs do not have product brands.

Research conducted by Winarti et al (2019) revealed that the rapid growth of MSMEs fosters competitiveness among MSMEs to maintain their business. A company's competitive capital may come from MSMEs with a robust business network (Irawan, 2020), and good closeness to customers is one of the strategies for increasing competitiveness (Kurdi & Firmansyah, 2020).

Business ecosystem variables have a significant effect on strengthening the local economy with a significance value of 0.005. A business ecosystem refers to a complex network of organizations, individuals, and other factors that interact and influence each other in a particular industry or market. A business ecosystem encompasses all elements involved in a product or service’s life cycle, from development to distribution, sales, and customer service. Raw material suppliers and business partners contribute positively to the success of the business through mutually beneficial cooperation. In addition to business partners, MSME owners continue to maintain good relations with consumers and maintain their loyalty. Feedback from consumers addressed to MSME owners provides positive things in improving the products produced. All MSME owners still rely on their capital and borrowed capital from their families. Some reasons for not borrowing from banks or cooperatives are because of long management. A healthy business ecosystem therefore enables collaboration, innovation, and sustainable growth. Changes in one part of the ecosystem can propagate and affect all stakeholders involved. Therefore, a good understanding of the business ecosystem is key to a company's long-term success.
According to Haratua & Wijaya (2020), the results of the study explain that the entrepreneurial or business ecosystem in Indonesia needs to be improved and developed to provide a conception of an entrepreneurial or business ecosystem picture that matches the entrepreneurial character in Indonesia. In contrast to the findings of Guerrero et al (2021) in the business ecosystem, there are favorable conditions, including professional support, networking, research, and development investment. A shortage of finance sources, the state of the job market, and social norms are examples of unfavorable circumstances. Fortunisa (2022) obtained the results of research that there is still an inability to comprehend respondents to create and establish cooperation with their entrepreneurs so the entrepreneurial ecosystem cannot run sustainably and mutually beneficial.

Conclusions

The strengthening of the local economy can be influenced by innovation, competitiveness, and business ecosystems. Innovation has a significant effect on strengthening the local economy. Product innovation and information technology applied by MSMEs provide positive value in increasing sales of products produced by MSMEs. Furthermore, competitiveness has a positive and significant influence on strengthening the local economy where the prices provided by MSMEs are quite competitive and the quality of products can compete with similar competitors. Another determining factor that influences the strengthening of the local economy is the business ecosystem. The results of the study found that the business ecosystem has a significant effect on strengthening the local economy. The business ecosystem is an interaction between stakeholders and business actors to encourage entrepreneurship, innovation, and MSME growth.

The findings of this study suggest that local governments and other institutions should give mentoring MSMEs more significant consideration and participation. There exist certain drawbacks in this study, one of which is the narrow scope of the research region, which includes only one village. Future research can advance this study by broadening its scope, increasing the sample size, and expanding the analysis with other variables.

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References


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