

Pentahelix Strategy Improving the Performance of MSMEs Malang City (Study on Food and Beverage Sector)

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Abstract

In Malang City, MSMEs play a significant role in the economy, particularly in the fast-growing food and beverage industry. The goal of this research is to evaluate how food and beverage businesses in Malang City can improve their performance by collaborating with academics, communities, the government, entrepreneurs, and social media. This study utilizes a combination of research methods with a focus on explaining the results in a step-by-step manner. The target population for this research consists of 5,365 food and beverage small and medium enterprises in Malang City, with a sample of 100 participants chosen randomly for the study. Quantitative information was gathered via surveys, whereas qualitative data was obtained through in-depth discussions with various experts. Findings indicate that the academic, community, business, and social media sectors have a noteworthy impact on the success of MSMEs in Malang City, while the government's role is deemed less significant, although this conclusion is supported by insights from the experts. The collaboration between these five sectors enhances the abilities of MSMEs through training, guidance, and marketing support, aiding them in addressing market challenges and enhancing their performance in Malang City. This partnership is anticipated to fortify the MSME industry as the cornerstone of the local economy, boosting job opportunities and reducing unemployment levels.

Keywords: Collaboration, Food and Beverage Sector, Pentahelix Model, MSME Performance.

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in the national economy of Indonesia by creating job opportunities and reducing the unemployment rate. According to Kadin Indonesia, MSMEs make up 99% of all business entities in the country. By 2023, it is estimated that there will be around 66 million MSMEs contributing 61% to Indonesia's GDP, which is equivalent to Rp9,580 trillion. Currently, MSMEs provide employment for approximately 117 million workers, accounting for 97% of the total workforce in Indonesia. The large number of business actors will certainly have more competitors, so innovation and creativity from business actors are the main keys to staying competitive and attracting consumer interest (Afiyati et al., 2019). MSME players need to continue to adapt to changing market trends and strengthen marketing strategies in order to maintain excellence and quality amid increasingly fierce market competition, therefore it is necessary to have stakeholders who have an important role to support the sustainability of MSMEs through improving MSME performance (Hidayat et al., 2024).



Empowering the micro, small and medium enterprise (MSME) sector is crucial and strategic to ensure the Indonesian economy is well-prepared for the future, particularly within the national economic framework (Edelia & Aslami, 2022). The main objective of this empowerment is to create robust and self-reliant micro, small and medium enterprises (MSMEs) that are highly competitive. These MSME actors also aspire to take on a leading role in producing and distributing essential goods, raw materials, and capital to tackle competition. When looked at from a developmental perspective, micro, small, and medium businesses (MSMEs) outnumber other businesses within the large business category (UB).

Enhancing the effectiveness of MSMEs is a key focus in the advancement of the country's economy. These enterprises play a crucial role in supporting the economy of the people by addressing issues related to inequality among various groups, disparities in income among business owners, and the creation of job opportunities (Bapuji, 2015). In order to enhance the success of small and medium-sized enterprises (MSMEs), it is crucial to establish effective partnerships to boost competitiveness and promote sustainable growth. The Pentahelix Model collaboration is one approach that can be utilised to enhance the performance of MSMEs. This collaboration involves the participation of government entities, academic institutions, businesses, community members, and media outlets to foster innovation, create new networks, and offer support and resources to MSMEs as they develop their businesses and turn them into valuable products or services (Tanzil & Susan, 2022).

Ishak and Sholehah (2021) stated that the pentahelix model has great potential to support the revival of MSMEs. This is due to the ability of MSMEs to develop optimally when involving contributions from other parties. Hafidz et al. (2023). stated that the Pentahelix model is a collaborative approach used in MSME recovery programmes, which involves five main stakeholders; academics, communities, government, businesses, and the media. As a socioeconomic development model, Pentahelix relies on synergy and close cooperation between parties to achieve mutual progress. The success of this model is largely determined by the strong commitment, collaboration and responsibility among the five stakeholders.

Beatrice and Hertati (2023) state that the development of MSMEs has an important role in economic recovery and increasing regional income. One effective way to achieve this is by synergising all relevant parties in a model known as the pentahelix model. Collaboration between actors involved in this model is considered to have a significant role in creating more competitive MSMEs and opening up business opportunities. Trianti et al. (2024) stated that the progress of MSMEs currently requires a strategic approach through a pentahelix model that has active roles from various stakeholders. This collaboration is very important to encourage the progress of MSMEs, in its development cooperation between various other parties is very important. The synergy of this pentahelix model has an important function to prevent policy and programme conflicts between stakeholders, especially in post-pandemic economic recovery efforts.

This research provides an explanation of the strategy in implementing the pentahelix model, especially in the food and beverage MSME sector in Malang City. This model involves five stakeholders (academics, community, government, business people, and social media). The approach serves to fill the gap in collaboration between stakeholders in the pentahelix model, which is still considered weak and unstructured, thus often affecting the performance of MSMEs in facing market competition.

This research has significant benefits for MSMEs to have high competitiveness with the support of various parties involved in the pentahelix model. Therefore, the purpose of this study is to analyse the effectiveness of the pentahelix model in improving the performance of MSMEs in Malang City, especially in the food and beverage sector, in order to create a business

environment that supports local economic growth and increase the contribution of MSMEs to the economy of Malang City.

2. Literature Review

2.1. Pentahelix Model

Astuti (2021) stated that the pentahelix concept was developed based on two models, namely, triplehelix theory and quadruple helix theory. The triplehelix theory is stakeholders including government, business actors and academics. It was further developed by adding the element of community (civil society) into a quadruple helix which involves the role of academics, government, business people, and communities. The stakeholders in the pentahelix model were narrowed down to 5 actors, including mass media. The key players now include academics, government officials, business professionals, communities, and mass media. Despite this adjustment, there appears to be a lack of maturity in the theoretical foundations of both the Quadruple Helix and Penta (quintuple) Helix (Subagyo, 2021). This is evident in the discrepancies between the proposals for the fourth and fifth helix, with many studies opting to utilise Pentahelix in qualitative research without confirming its validity (Sudiana et al., 2020).

Pentahelix collaboration can help improve the performance of MSMEs by generating innovative products and services with significant value and benefits for the community. This collaboration is supported by a variety of resources. This pentahelix model can be effectively utilised by business actors for the success and growth of MSMEs, collaboration between the five elements can expand marketing networks and encourage innovation, so that MSMEs can develop more rapidly and sustainably.

There are five stakeholders in the Pentahelix model, among others:

a) Academics

Ishak and Sholehah (2021) state that academics in this pentahelix model act as conceptors and actors who conduct research, helping to manage potential identification. Scholars play a crucial role in expanding knowledge and expertise as they possess a wealth of information containing the most up-to-date concepts, theories, and development models relevant to current situations.

b) Community

Trianti et al. (2024) stated that the community is like a turbocharger in the framework of pentahelix partnership, comprising individuals with common interests and relevance to the project at hand. It plays a dual role, not only endorsing products and services created by the community but also facilitating connections between stakeholders to aid in the community's broader mission of instigating social transformation.

c) Government

Beatrice and Hertati (2023) state that the government has an important role in regulating and responsibility in social change as a regulator and controller. The government acts as a coordinator in formulating policies as well as a driver for other actors related to MSME business development efforts.

d) Business people

Beatrice and Hertati (2023) state that business people act as enablers that help achieve goals in conducting business processes to generate added value and maintain sustainable growth. These business actors are the main entities in developing their businesses and the creativity of business actors is the main capital and main selling point of the products they sell.

e) Media

According to Tanzil and Susan (2022), the media plays a significant role in enhancing collaboration within the pentahelix model. This programme involves utilising various forms of media, such as online, print, and social media, to promote community-produced products and services. By facilitating access to information, the media encourages the involvement of new partners in driving social transformation.

2.2. Micro, Small and Medium Enterprises (MSMEs)

Micro, Small and Medium Enterprises (MSMEs) are ventures that have the potential to create job opportunities and offer economic services to the populace. These enterprises are instrumental in bridging income disparities, fostering economic progress and promoting national stability (Hasibuan et al., 2021).

According to Law No. 20 of 2008 in Indonesia, it is necessary to empower Micro, Small, and Medium Enterprises (MSMEs) as part of the people's economy, as stated in the Decree of the People's Consultative Assembly. This will help in creating a more balanced, developed, and fair national economic structure by harnessing the strategic position, role, and potential of MSMEs.

The Central Bureau of Statistics (BPS) defines Micro, Small, and Medium Enterprises (MSMEs) according to the number of employees they have. Micro enterprises have fewer than five workers, while small enterprises have between 5-19 employees, and medium-sized enterprises have between 20-99 employees. This classification is based on the criteria set by the Central Bureau of Statistics (BPS) (BPS, 2017).

2.3. MSME Performance

Yuliansyah et al. (2017) state that business performance is the result of various company goals that can be achieved through effective strategy implementation. Business performance provides an overview of company goals. Thus, all forms of business endeavours must achieve performance in accordance with a mutually agreed upon performance standard plan within a company. Business performance includes all aspects that customers expect of a product or service, with an emphasis on improving the quality that customers will then receive. Business performance is an important standard used by an economic entity to evaluate its achievements.

Small and Medium Enterprises (SMEs) serve as the backbone of the local economy, playing a crucial role in driving the country's financial growth (Mawuntu & Aotama, 2022; Sarfiah et al., 2019). MSMEs have a very influential potential for the Indonesian economy. This sector provides a very positive influence, because it is able to reduce poverty, economic equality for the community, and so on. One of the reasons why the MSME business sector is able to survive the Indonesian economic crisis is because the use of raw materials used is mostly domestic products (Andriana et al., 2022).

Andriana et al. (2022) state that the achievement of MSME performance can be measured through several factors that affect the performance of these MSMEs, namely, production, marketing, distribution, technological development, capital, business licences, business plans, business focus, market orientation, competitiveness, and product characteristics.

2.4. Hypothesis Development

A. Academia

Academia includes universities and research institutions that function as knowledge sources that provide concepts from the latest theories relevant to MSMEs. This role assists MSME actors in achieving sustainable competitive advantage by sharing information effectively with stakeholders. In the development of MSMEs, academia is crucial in shaping a knowledge-based society, which is needed to support economic growth. Furthermore, scholars equip students with the ability to think analytically, nurture their potential, and generate original ideas and abilities to foster an entrepreneurial mindset that can then be utilised in the local community. According to Ishak and Sholehah (2021), scholars function as creators, serving as intermediaries in sharing knowledge and fresh commercial ideas with enterprises to enhance the efficiency of small and medium-sized enterprises (Hafidz et al., 2023).

H1: Academics have a significant influence on improving the performance of food and beverage MSMEs in Malang City.

B. Community

A community offers a platform for entrepreneurs to collaborate and brainstorm ideas to improve their respective businesses. This interaction plays a crucial role in company growth. By receiving support from the community, members can learn from each other and stay informed about new advancements in business development (Hafidz et al., 2023). The community, apart from having a role in assisting the development of MSME products, also plays a role in expanding market reach and marketing products produced by MSME actors can be sold to a wider market (Beatrice and Hertati, 2023)

H2: Community has a significant influence on improving the performance of food and beverage MSMEs in Malang City.

C. Government

The government has a very important role to provide encouragement and support to MSME actors, by providing applicable regulations and policies. The government is expected to create a conducive environment for business development by providing regulations that support and motivate these businesses to continue to grow (Hafidz et al., 2023). The government provides support for the development of MSMEs which can be seen from the various facilities provided. This assistance can include the provision of facilities and infrastructure, ease of business licensing processes, and assistance in terms of promotion (Beatrice and Hertati, 2023)

H3: The government has a significant influence on improving the performance of food and beverage MSMEs in Malang City.

D. Business actors

Business actors have an important role in the development of Micro, Small and Medium Enterprises (MSMEs) by facilitating access to capital, such as providing raw materials, production equipment, and information related to business networks that are beneficial to MSMEs (Arifin et al. 2021). Business actors, through various programmes provided, have an important contribution to the overall progress of MSMEs by providing capacity and expanding the reach of the businesses they own (Trianti et al., 2024)

H4: Business actors have a significant influence on improving the performance of food and beverage MSMEs in Malang City.

E. Media

Media has an important role in supporting developments in improving the performance of MSMEs, especially in an era that is rapidly developing in the fields of science and technology. Social media serves as a means to market MSME products and engage in various

activities, such as publications that support the promotion of MSME products and build brand image (Beatrice and Hertati, 2023). Social media has a strategic role in the digital era, because information in social media can be disseminated and received by the public quickly and easily. MSME players have personally utilised social media to develop their businesses. However, the government does not yet have a social networking account that can be used to upload information, activities, or promote MSMEs (Ishak & Sholehah, 2021).

H5 : Social media has a significant influence on improving the performance of food and beverage MSMEs in Malang City.

3. Methods

This type of research uses mixed methods or mixed methods. The definition of mixed methods according to Creswell (2017), mixed approach can be interpreted as a research method based on social, behavioural and health science research. In the study, researchers gather both quantitative (fixed-answer) and qualitative (open-answer) information, merging the two to create fresh insights drawing on the strengths of both types of data. This fusion leads to a deeper comprehension of the research issue than either type of data alone could provide.

The study adopts a Sequential Explanatory design, beginning with the use of quantitative techniques for data collection and analysis, specifically focusing on enhancing the performance of small and medium enterprises (SMEs) in Malang City using the pentahelix strategy. Then in the second stage collect and analyse qualitative data to explain and strengthen the data obtained from the results of quantitative research in depth. The sampling technique in this study used random sampling. The population taken from this study were MSME actors engaged in the food and beverage industry in Malang city who were taken by The results of this study used data analysis through Structural Equation Modelling (SEM). The hypotheses that have been formulated in this study were tested using Partial Least Squares (PLS) version 4.0 as a data analysis technique tool that compares several dependent variables and independent variables. the instrument used by researchers as a quantitative data collection tool is in the form of distributing questionnaires to several respondents, while qualitative data collection is in the form of interviews, questionnaires and documentation.

4. Results and Discussion

4.1. Research Results

Respondents in this study were MSME players in the food and beverage sector in Malang City. This is because there are many foods and beverages MSMEs in Malang City and culinary businesses are easier to sell than other MSMEs consisting of internet technology, automotive, education, agriculture, culinary, and fashion MSMEs. It has been explained previously that this research uses a survey by distributing questionnaires and in-depth interviews to several sources.

The survey method used in this research is by distributing questionnaires directly to respondents. Researchers distributed questionnaires directly using Google Forms by means of respondents scanning the QR code that had been created by the researcher, making it easier for respondents to fill out Google Forms. The number of questionnaires distributed to respondents was 100. After distributing Google Forms to 100 respondents, the researcher conducted in-depth interviews with several sources by directly visiting the sources to be interviewed.

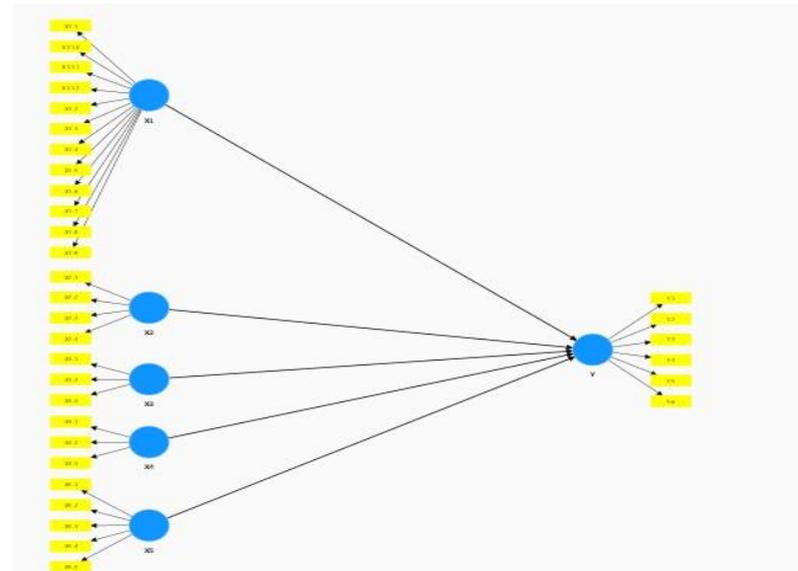


Figure 1. PLS-SEM algorithm
Source: Smart PLS 4 (2024)

4.1.1. Convergent Validity Test

Table 1. Outer Loading Test Results

	Academics (X1)	Community (X2)	Government (X3)	Entrepreneurs (X4)	Media (X5)	Performance Improvement (Y)
X1.1	0.804					
X1.2	0.811					
X1.3	0.752					
X1.4	0.770					
X1.5	0.748					
X1.6	0.826					
X1.7	0.769					
X1.8	0.846					
X1.9	0.824					
X1.10	0.859					
X1.11	0.818					
X1.12	0.740					
X2.1		0.869				
X2.2		0.900				
X2.3		0.856				
X2.4		0.852				
X3.1			0.818			
X3.2			0.904			
X3.3			0.811			
X4.1				0.933		
X4.2				0.721		
X4.3				0.927		
X5.1					0.726	
X5.2					0.861	
X5.3					0.920	
X5.4					0.882	
X5.5					0.795	
Y1.1						0.804
Y1.2						0.891
Y2						0.872
Y3						0.856
Y4						0.842
Y5						0.702

Source: Smart PLS 4 (2024)

Hair et al. (2021) states that validity testing in research is focused on assessing the convergent validity of measurements through average variance extraction (AVE). When there is a change in one indicator within a construct, it is expected that other indicators within the same construct will also change. According to Hair et al. (2022), a correlation is considered to pass the convergent validity test if the AVE value is above 0.5. This threshold is important because it means that the construct can account for 50% or more of the variability in the indicators. Upon conducting the analysis using smartPLS, the results displayed in table 1 indicate that the outer loading of each indicator on their respective variables exceeds 0.5. This validates the use of the indicators in the study, as they demonstrate parameter values above the accepted threshold of 0.5.

4.1.2. Discriminant Validity Test

Table 2. Results of the Discriminant Validity Test of Variables

	Academics (X1)	Community (X2)	Government (X3)	Entrepreneurs (X4)	Media (X5)	Performance Improvement (Y)
X1						
X2	0.776					
X3	0.718	0.638				
X4	0.789	0.716	0.946			
X5	0.349	0.486	0.170	0.200		
Y	0.796	0.842	0.667	0.743	0.552	

After obtaining the test results from the convergent validity value, the next step is to analyse the results of discriminant validity. According to Ghozali (2021: 239) states that discriminant validity for measuring a construct can be tested with Heterotaid-Monotraid (HTMT), if HTMT has a value of <0.90 and> 0.90, it can be said that the construct indicator has good discriminant validity or in other words, the discriminant variable is still considered valid because it has a parameter value of more than 0.90. The calculation results in table 51 show that the HTMT value for each variable shows a value of <0.90 and> 0.90 so that the variables used in the study are declared valid.

4.1.3. Reliability Test

Table 3. Results of the Reliability Test of Latent Variables

	Cronbach's Alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average Variance Extracted (AVE)
Academics (X1)	0.949	0.959	0.955	0.637
Community (X2)	0.892	0.893	0.925	0.756
Government (X3)	0.807	0.886	0.883	0.715
Entrepreneurs (X4)	0.842	0.955	0.899	0.750
Social Media (X5)	0.898	0.952	0.922	0.705
Performance Improvement (Y)	0.908	0.910	0.930	0.689

Source : Smart PLS 4 (2024)

Latent variable reliability is deemed satisfactory when both its composite reliability value and Cronbach's alpha surpass 0.7. According to Hair et al. (2021), a reliability value exceeding 0.7 signifies a heightened level of reliability. The latent variable reliability test results from table 3 illustrate that each variable has a composite reliability value and Cronbach's alpha higher than 0.7. As a result, the data and test outcomes for latent variable

reliability are deemed reliable due to meeting the criteria of composite reliability value and Cronbach's alpha exceeding 0.7.

4.1.4. Structural Model Test

a. R-Square (R²) Test

he following are the R² values based on the output from SmartPLS 4 software:

Table 4. R² Results

	RSquare	RSquare adjusted
Performance Improvement	0.758	0.745

Source : Smart PLS 4 (2024)

According to Hair et al. (2021), R² can vary from 0 to 1, and a higher value closer to 1 indicates stronger explanatory power. The coefficient of determination R² in Table 3 is 0.758, suggesting that the exogenous variables (X₁, X₂, X₃, X₄, X₅) accounted for 75% of the variation in the endogenous variable (Y) in this study, with the remaining 25% influenced by external factors. This implies that the exogenous variables play a role in enhancing the performance of MSMEs in Malang City.

b. Hypothesis Testing

Table 5. Bootstrapping Results

	Original sample (O)	Sample mean (M)	Standatd deviation (STDE V)	T statistics (O/STD EV)	P Values
X ₁ → Y	0.293	0.286	0.104	2.812	0.005
X ₂ → Y	0.225	0.229	0.083	2.724	0.006
X ₃ → Y	0.033	0.027	0.091	0.363	0.716
X ₄ → Y	0.272	0.286	0.096	2.828	0.005
X ₅ → Y	0.273	0.273	0.060	4.537	0.000

Source : Smart PLS 4 (2024)

Based on the output in table 5, the results of testing the hypothesis of this study using a statistical tool in the form of SmartPLS and it can be seen that to determine the level of significance between variables can be done by calculate bootstrapping with a significance value of 5% (0.05). P = 5%, then T = 1.96 so that it can be said that the T-statistic can be said to be significant if it has a value > 1.96. The results of hypothesis testing in table 5 for variables X₁, X₂, X₄, and X₅ on variable Y are said to be significant because they have a calculation value of P = < 5% (0.05) and T = > 1.96. Meanwhile, the X₃ variable on Y is said to be insignificant because it has a calculation value of P => 5% (0.05) and T = < 1.96.

4.2. Discussion

4.2.1. The Influence of Academics' Role on the Improvement of MSME Performance

Academic institutions, such as universities and research centres, play a vital role in the development of MSMEs and in shaping a society that values knowledge and skills. The results are relevant to the current condition of MSMEs in Malang City, where the role of academics is very helpful in improving the performance of MSMEs. It can be interpreted that MSME actors

in Malang City realise the importance of academics in improving MSME performance through providing literacy about what is needed for MSME businesses to continue to grow.

The research results on the academics variable show significant results, this is reinforced by the results of interviews with academics, namely, lecturers at the Islamic University of Malang who provide several programs in the form of socialisation and training in the form of financial literacy, digital marketing literacy, marketing literacy, bookkeeping literacy for incoming and outgoing goods. This is confirmed by the answers to the interview results *'Academics such as these lecturers often conduct socialisation and training on simple financial reports, digital marketing, product marketing,'* said Mrs Eny.

In context of MSMEs in Malang City, academics also provide assistance in the form of production equipment and capital assistance to support the effectiveness of MSME production. *'This year, our academics have also provided equipment assistance in the form of a sealer machine to Nori Crispy MSMEs in Malang City,'* said Mrs Karina. The role of academics is not only given by the Islamic University of Malang, but in its role to improve the performance of MSMEs, Brawijaya University and Malang State University have also made the same efforts as academics from the Islamic University of Malang. *'In 2022, I also received capital assistance and training from Malang State University students who were doing community service'* said owners of UMKM Rurie Malang City.

The role of academics has a very important relationship in helping MSMEs to improve their performance. With this collaboration between academics and MSMEs, it can increase competitiveness and product quality so that they can compete in a wider market. In a study by Hafidz and colleagues (2023), it was mentioned that universities have a part to play in enhancing the efficiency of MSMEs, particularly in the Medan Labuhan District. The University of North Sumatra has initiated a program for Independent Women SMEs in the area, resulting in the development of unique brands and logos through training and mentoring sessions. Trianti et al. (2024) stated that the role of academics does not only involve lecturers, but students also actively participate through mentoring MSMEs, so that it can make a positive contribution to improving the management capabilities of MSMEs.

4.2.2. The Influence of Community Role on Improving MSME Performance

Community as an actor plays an important role in improving the performance of MSMEs (Firdaus et al., 2025). Where the community is a group of individuals who share experiences in a certain environment and have common interests and occupations. The formation of the community is carried out as a place for MSME actors to be able to communicate easily with other MSME actors to develop each other, in this case, the existence of a community can make it easier to provide the information needed by MSME actors.

The results of research on community variables show significant results, this is reinforced by the results of interviews with Malang City MSME players who join the MSME community in Malang, including UMKM Rurie (super thug community and mbois community), UMKM Nori Crispy (mbois community), UMKM Erles Bakery (nozama ngalam community and tumbas community), and UMKM Family Cookies (Malang IKM community). *'The community group is always updated and fast if there is information about training and socialisation of MSMEs like that,'* said UMKM Family Cookies. *'The community group usually always shares when there is training or socialisation, often the training from Diskoperindag,'* added UMKM Nori Crispy. In addition, the community also plays a role in providing information about quality raw materials. *'Usually in the community group, they often provide information on raw materials, sometimes at the Diva shop in the big market or the one in Singosari,'* said the owner of erles bakery UMKM. The community also supports product development by providing information about where to market products to a wider market.

'Usually there is also information for product marketing places, for example in souvenir shops,' said MSME Rurie. Through the Malang City MSME community, MSME players can not only expand their network, but also gain direct access to resources that have expertise in various fields.

The role of the community has a very important relationship in helping MSMEs to improve their performance (Arifin et al., 2021). This can be seen from the various contributions of the community, ranging from providing information on quality raw materials, information on training and socialisation, and information on where to market their products. The support provided by these communities not only helps MSMEs obtain better resources but also expands their business networks, thereby facilitating access to a wider market. This collaboration can support a significant increase in MSME performance.

Hafidz et al. (2023) stated that the Community helps businesses promote products, and the community provides a platform to share and exchange ideas and experiences for the betterment of each business. The interview results also show that the government's efforts to form a community in Medan Labuhan Sub-district have a positive impact on MSMEs and the community itself. Trianti et al. (2024) stated that with the community, MSME players can share ideas, build relationships, exchange information about raw material suppliers, and can collaborate to understand the market at large. This collaborative environment can encourage MSME players to increase their sales turnover.

4.2.3. The Influence of Government's Role on the Improvement of MSME Performance

In the pentahelix model, the government acts as a regulator and coordinator responsible for managing and encouraging other stakeholders to participate in the enhancement of MSMEs, particularly in the city of Malang. Research findings related to the government variable indicate an insignificant result; therefore, this variable can be strengthened through interviews with government representatives and MSME actors in Malang. A government representative, Mrs Nanda, a staff member in the micro-business division of the Department of Cooperatives, Industry, and Trade of Malang City, explained:

"Data collection from the government is indeed not yet comprehensive, which is why some MSMEs have not yet received support from the government," said Mrs Nanda.

However, despite these obstacles, the government strongly supports the improvement of MSME performance by facilitating MSME needs and providing training and mentoring to enhance the performance of MSMEs in Malang City. *"The government often provides training and mentoring on digital marketing, sales, and sometimes even practical business classes,"* said a representative from MSME Nori Crispy. *"Most of the training and mentoring I receive is from the government, miss, but you have to be registered first before you can join,"* added MSME Erles Bakery.

The government's role in the MSME sector involves providing both physical and non-physical programme assistance. In terms of physical assistance, the government offers capital support in the form of equipment to improve MSME production efficiency.

"In order to receive equipment assistance, there are usually specific requirements and a selection process to ensure the aid is well-targeted," said Mrs Nanda.

On the other hand, non-physical assistance includes training programmes and public outreach, as well as providing access to practical classes and simplifying business permit processes such as obtaining a Business Identification Number (NIB), Home Industry Food Production (PIRT) permits, BPOM, Halal certification, and other necessary licences.

"For business permits, we collaborate with several agencies to simplify the process. For NIB and PIRT, we refer them to the licensing office. For Halal certification, we direct them

to the Halal Centre. And for Intellectual Property Rights (brands), we work together with the Ministry of Law and Human Rights,” said Mrs Nanda.

The support provided by the government plays a very important role in MSME growth. Through training and mentoring programmes, ease of obtaining business licences, equipment assistance, and product marketing facilitation, the government helps MSMEs increase their performance over the long term.

“I often join product exhibitions, miss. Usually, the facilities are provided by Bank Indonesia, from the exhibition venue, transport, and so on,” said MSME Rurie, a partner of Bank Indonesia.

In this regard, the government’s role is not limited to the Department of Cooperatives, Industry, and Trade of Malang City alone. Bank Indonesia is also considered part of the government through its provision of business training and mentoring for MSMEs. Therefore, the government’s role is crucial in assisting MSMEs to improve their business performance in the long run.

Beatrice and Hertati (2023) stated that development activities to improve MSME performance carried out by the government, particularly the Surabaya city government, include providing facilities, guidance, assistance, and support to enhance and strengthen MSMEs’ competitiveness. Ishak and Sholehah (2021) asserted that government support plays a crucial role for MSME actors. The government’s role in effectively and optimally encouraging MSME development is realised through its function as a facilitator, regulator, and catalyst.

4.2.4. The Influence of Business Actors on the Improvement of MSME Performance

Business actors serve as enablers. In enhancing MSME performance, business support is carried out directly by MSME actors themselves as well as through assistance from other private sector entities. MSME actors in Malang City play a central role in the current development of MSMEs, as they are the ones running the businesses. Research findings on the business actor variable show a significant result. This variable is further supported by interviews with business figures in Malang, namely Mr Fahmi, the coordinator of the JNE sales counter in Malang City, and Mrs Evi, the owner of Nori Crispy, an MSME based in Malang.

The business representative from JNE explained that *“One of our efforts to support MSME performance is through outreach programmes for MSME business actors, such as organising seminars aimed at increasing knowledge among MSME entrepreneurs,”* said Mr Fahmi. In addition, JNE provides training programmes specifically for its fostered MSMEs, including training in digital marketing, live streaming on marketplaces, and collaborations with influencers in Malang City.

“For training and business outreach with MSME actors in Malang, the locations vary, one of which is at Ibis Hotel, Malang City,” added Mr Fahmi.

In this context, JNE plays an important role in supporting the improvement of MSME performance, particularly in Malang City, through training, outreach, and mentorship.

The second business actor interviewed was Mrs Evi, the owner of Nori Crispy, who also plays an active role in delivering business training to MSMEs in Malang. Mrs Evi stated,

“Besides running this business, I also participate in various business training activities to support MSME actors in Malang,” Mrs Evi

Her involvement in these training sessions represents a concrete contribution from Malang’s business community in helping MSME actors to better develop their enterprises.

“These training sessions are often held at Hotel Montana,” added Mrs Evi.

The role of business actors is not limited to managing and owning businesses, but also includes active contributions to the development of MSMEs through training and mentoring, which aim to enhance the skills and knowledge of MSME actors in Malang City. Moreover, the role of business actors is crucial in improving MSME performance by providing training sessions. With direct guidance from experienced entrepreneurs, MSMEs can operate more effectively and be better equipped to face various challenges in the business world. These training initiatives serve as strategic means to strengthen MSMEs, especially in Malang.

Beatrice and Hertati (2023) stated that businesses play a supportive role in helping MSME actors enhance their capabilities through training or knowledge-sharing, which supports changes in human resources, products, and business processes. Sultan et al. (2024) noted that business actors play a vital role through collaboration in promoting the growth and success of MSMEs.

4.2.5. The Influence of Social Media's Role on the Improvement of MSME Performance

In the implementation of the pentahelix model, social media functions as an expander, as it plays a vital role in supporting publicity efforts for MSMEs to promote themselves and build their brand. Social media has become increasingly significant in the enhancement of MSMEs, particularly in the current era of rapid technological and knowledge advancement. It serves as a platform for MSME development by enabling product marketing and accelerating the delivery of information. The business performance of MSME actors can improve significantly when the role of media, along with the other four elements of the pentahelix model, is effectively utilised.

Research results on the social media variable show a significant outcome. This finding is reinforced by interviews with MSME actors, which confirm the positive role of social media in enhancing MSME performance. Commonly used platforms include Instagram and WhatsApp Business. On Instagram, MSME actors in Malang post content about their activities, products, and other relevant information.

"I'm not very active on Instagram, miss, because sometimes I get confused about what kind of content to make. But all the product information and event photos are there," said MSME Erles Bakery.

"My product's Instagram also has a Linktree, which includes my WhatsApp number and Shopee store. It was created by a student from a community service programme at Universitas Negeri Malang," said MSME Rurie.

The use of social media in MSME development is considered highly supportive of increasing product sales. In addition to Instagram, MSME actors also utilise WhatsApp Business for marketing their products. With WhatsApp Business, they can easily share product information using the platform's catalogue feature. It also enables promotion through WhatsApp Stories.

"I'm more active on WhatsApp, miss, for promoting my products. I usually post WhatsApp Stories about shipping activities or product videos," said MSME Nori Crispy.

"Through social media, more people have become aware of my products, which has led to greater demand and increased interest," added MSME Rurie.

Beatrice and Hertati (2023) also stated that the use of social media in MSME development is considered very supportive of boosting product sales. When utilised to its fullest potential, social media can assist and have a positive impact on MSME development and performance. Sultan et al. (2024) also stated that the involvement of social media in MSME product marketing is highly effective and can enhance consumer perception and buying interest toward the products.

5. Conclusion

The development of collaborative efforts based on the pentahelix model, bringing together the five key stakeholders: academics, communities, government, business actors, and media, has a highly significant impact on improving the performance of MSMEs in Malang City, particularly in the food and beverage sector. This collaboration involves the active contribution of each stakeholder in providing continuous support to MSMEs in Malang City, whether in the form of training, mentoring, government policies, or expanded market access.

Effective implementation of the pentahelix model enhances the competitiveness of MSMEs in broader markets, drives local economic growth, and strengthens the MSME sector as the backbone of Malang's economy. Thus, this pentahelix collaboration not only contributes to the sustainability and development of MSMEs but also plays a vital role in creating a comprehensive and sustainable economic ecosystem for the future of Malang City.

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