

The Factors Affecting Business Innovation to Improve the MSME Competitiveness in Medan City

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Abstract. The development of Micro, Small, and Medium Enterprises (MSMEs) in Medan is still unstable. This condition is related to limited working capital, low-quality human resources in accessing information and managing capital, weaknesses in obtaining market opportunities and increasing market share, and limited product marketing. The latest innovations are needed to increase the MSMEs' competitiveness. This study aims to analyze the performance of MSMEs to increase competitiveness and determine the effect of innovation on MSMEs in Medan. The study included 20 business actors from Medan Johor, Medan Sunggal, Medan Denai, and Medan Marelan. This study uses a quantitative descriptive method with purposive sampling. The respondents were based on agribusiness in culinary and processed derivative products. Data were analyzed using a Likert scale and binary logistic regression. The results showed that business actors' performance by analyzing opportunities to increase competitiveness resulted in a very good category. The highest results were on certification indicator, while the lowest were on service indicator. Meanwhile, the factors influencing MSME innovation were level of education and information technology. The results recommend that government should train Medan City MSMEs in online sales applications to increase their market share. Furthermore, to support a more accessible certification and licensing process, BPOM should socialize more with business actors.

1 Introduction

Micro, Small and Medium Enterprises (MSME) has been fundamental instrument for based on the world of economy programs because when the collapsed economy, MSME still hold the business potential to be the highly encouraged sector. MSME can potential business to increase the employment that are from local resources, local workers, and local financing by benefited optimally.

The existence of MSME plays an important role in the economy. The role of MSME in the Indonesian economy can at least be seen from: (1) the role as a major player in economic activities in various sectors, (2) the largest provider of employment, (3) an important player in the development of local economic activities and community empowerment, (4) the creator

of new markets and sources of innovation, (5) its contribution in maintaining the balance of payments through community export activities reduces the poverty level

Economic development in North Sumatera Province, especially in Medan City also has an important role for economic growth and non-oil and gas exports which directly contribute to an increase in people's income. Micro-economically, MSME are very volatile, this can happen due to a shift in the business sector to follow the existing market share because they have limited capital, MSME growth is very difficult to detect. From a macroeconomic perspective, the development of MSME always shows an increase.

Based on data from the Medan City Cooperatives and MSME Service, the number of MSME development in 2015 was 515 units, 2018 was 751 units, in 2019 there were 1,014 units, in 2020 there were 1,402 units and in 2021 have 1,612 units. The number of developments of micro, small and medium enterprises from 2017 to 2021 continues to increase from year to year so that their competitiveness increases. Therefore, MSME have a very important role for the economy in the city of Medan. With this very important role, MSME must continue to be developed.

Despite of the very important role, MSME in Medan City also face problems that are very difficult to develop. This is due to limited working capital, low human resources in accessing information and managing capital, weaknesses in obtaining market opportunities and increasing market share and limited product marketing.

MSME products have great competitiveness with the potential for a broad business scale, however, the market share is limited which means that the market segmentation for MSME products is still not extensive due to the absence of an appropriate marketing system for selling these MSME products. The conditions of competition for MSME products are currently quite tight and complex. Every business actor (producer) is required to always understand and understand what is happening in the market and what consumers want, as well as changes that exist in order to be able to compete with competitors.

Due to increase competitiveness, MSME must have the ability to compete. In order to achieve excellent performance, MSME must consider several factors that affect performance. Business actors (producers) must be able to innovate to answer what consumers want to compete with other competitors and changes that occur in the market.

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Based on the above problems, it is important to understand the factors that can support an innovation, as an effort to increase competitiveness, especially in the city of Medan, so this research is carried out with the title Factors Affecting Business Innovation in Efforts to Improve the Competitiveness of MSME in Medan City. There are two topics that will be analyzed such as the performance of MMSE to improve the innovation and "Factors Affecting Business Innovation in Efforts to Improve the Competitiveness of MSME.

2 Theory of Research

MSME (Micro, Small and Medium Enterprises) are businesses that are able to survive when the economic crisis occurs in Indonesia. This business is able to absorb labor and contribute to distributing development results and using local resources. There are characteristics of MSME, namely small capital, small number of workers, slightly high risk but high return, usually driven from households, and bringing entrepreneurship to the owner.

Medium Enterprises are productive economic businesses that stand alone, which are carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or become a part either directly or indirectly with small businesses or large businesses with total net assets. more than IDR 500,000,000 up to a maximum of IDR 10,000,000,000 excluding land and buildings and having annual sales of more than IDR 2,500,000,000 up to a maximum of IDR 50,000,000,000 [1].

Innovation is the discovery of new products with the production process. Various kinds of efforts were made by business actors in developing new products, starting from recognizing market life, identifying self-potential, integrating resources, and increasing collaboration, all of which were invested in a new product. This process is called 'lead time', which is a certain time starting from the search for new ideas to realizing them into new products so that they are ready to be marketed [2].

The Innovation is the most important competitive factors to give success where the business environment is improving rapidly. Innovation from planning the production and processes is highly interfere on the creation of technology. Innovation talks about how the business actors handle of resources especially cost from creativity. By innovating in terms of business, business actors can not only face competitors, but also challenges when creativity is in the right organizational culture, the result is spectacular innovation [3].

There are factors that influence innovation based on characteristics according to Umidjon et al such as business size, business age, education level, training, and information technology. The age of the business or the length of the business is the length of time that has been undertaken by the business actor in running his business. The longer a business actor is in his business, his knowledge will also increase, and it will affect his income level [4].

Business size, education level, training and information technology are an indicator to increase the performance business condition where there are several parameters that can be used to determine the size (big/small) of a business, such as the large number of employees used to run the business and the number of assets owned, and the total sales achieved. The age of the business or the length of the business is the length of time that has been undertaken by the business actor in running his business. The longer a business actor is in his business, his knowledge will also increase, and it will affect his income level and innovation. It's fit to research of Sirait [5] factors of affecting the performance Innovation MSME in Bogor City with research results showing that business size, level of education and utilization of information technology have a significant impact on innovation. The formed factors that affect the competitiveness of MSME are market factors, competencies, regulations, products, service certification and prices.

Competitiveness is the ability of business actors to face every challenge or competition with the aim of attracting market attention from competitors with similar businesses. Competitiveness plays a very important role in the success of a business. Therefore, to be able to compete in a dynamic and competitive business environment, every MSME actor must see opportunities and utilize their competitiveness [6].

The benefits of competitiveness in an increasingly competitive environment and a dynamic market situation, it is no longer possible for every company to avoid competition, but what must be done is to face the level of competition in the best possible way, which is

defined as efforts that are carried out optimally. and continuously to produce something better and better in the future [7].

On another research with the title “Analysis of factors that influence product innovation to increase competitive advantage and marketing performance of agricultural products in Bogor and Surakarta” shows that marketing performance can be improved through competitive advantage where competitive advantage can be created by product innovation [8, 9]. Factors that influence product innovation are market orientation and technology orientation. The following will be explained in the framework in Figure 1.

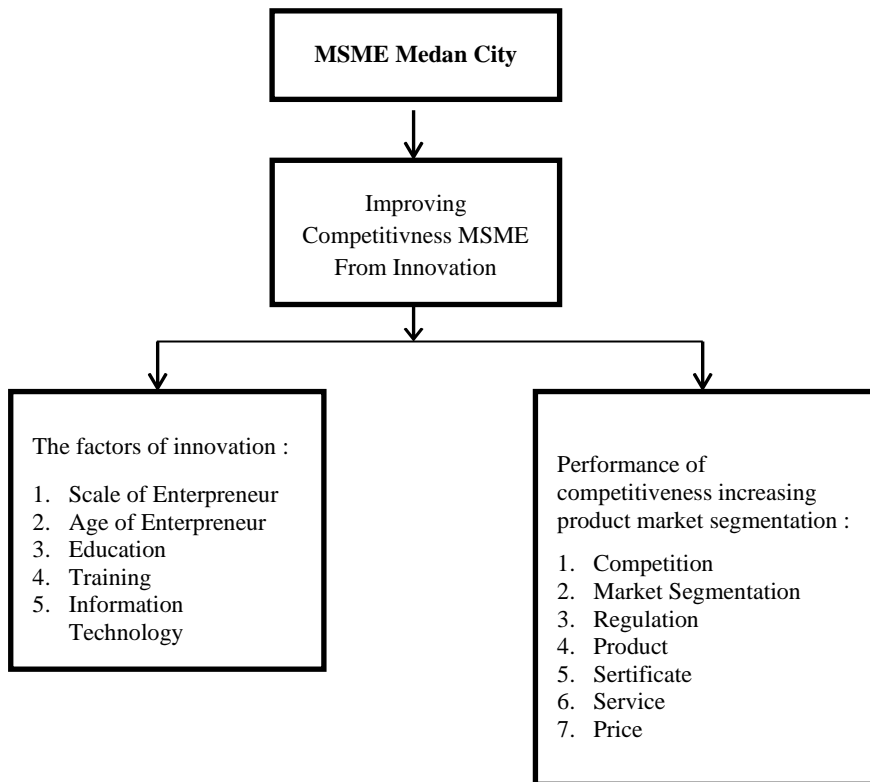


Fig. 1. Framework of factor of improving MSMEs in Medan City.

Based on the picture, it refers that MSME (Micro, Small and Medium Enterprises) are the most common types of businesses in Indonesia. One of the areas for the spread of MSME is in the city of Medan. MSME have a very important role because they open job opportunities for people who need work. The current competitive conditions are quite tight and complex, every business actor (producer) must understand what is happening in the market and what is the consumer's desire so that changes are made in order to be able to compete with other competitors. Efforts to increase the competitiveness of MSME are expected to produce micro and medium scale business actors (producers) able to improve their capabilities through innovation. To increase the competitiveness of MSME which can be influenced by factors that influence innovation such as business size, business age, education, training, technology, information technology. It is important to understand an innovation in this competition to increase the competitiveness of MSME in the city of Medan. One of the most important things in determining the success of a business, to maintain competitiveness, business actors need to study or know the performance of MSME actors by analyzing competitiveness opportunities that can be improved with indicators: market segmentation, competence,

regulations, products, certifications, services, and price. By innovating, business actors (producers) can survive with other competitive competitors.

3 Method of Research

The research method is descriptive quantitative research. Quantitative Research is a research method used to examine certain samples. Descriptive research is research that aims to obtain a description or description of the considerations of MSME actors on the competitiveness of MSME based on the perceptions of MSME actors. The research was conducted in the city of Medan. Determination of the location is purposive. The coverage area of the city of Medan studied was 4 sub-districts, such as: the Medan Johor district, Medan Sunggal district, Medan Denai district and Medan Marelan district. The reason the author chose 4 sub-districts is because there are many Agribusiness-based MSME actors with the culinary sector and processed derivative products. On this study, the sample is MSME business actors by considering or meeting the criteria regarding Agribusiness-based MSME business actors with the culinary sector and processed derivative products. The sample used is 20 MSME business actors registered from the Cooperatives and MSME Service in Medan City.

Research data obtained from the results of this study, to solve the first formulation regarding performance in increasing competitiveness using descriptive analysis using a Likert scale. [10].

To solve the case of factors innovation product MMES, it can be finished by logistic biner with the model (Formula 1):

$$Z_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + D_1 X_3 + D_2 X_4 + D_3 X_5 \quad (1)$$

Description:

Z_i = Innovation

β_0 = Constant

$\beta_1 \beta_2 \beta_3$ = Coefficient

D_1, D_2, D_3 = Dummy

X_1 = Turnover (IDR)

X_2 = Age of entrepreneur (year)

X_3 = Education (if the bachelor's degree = 1: if non bachelor's degree = 0)

X_4 = Training (if follow training = 1: if unfollow training = 0)

X_5 = Information technology (If can use the technology = 1, if can't use technology = 0)

4 Result and Discussion

To see the performance of MSME actors by analyzing in an effort to increase the competitiveness of MSME. The performance of business actors can be interpreted as a measure of the level of success in managing a business. A business actor who wants to succeed in managing a business must have effective communication skills, so that the opportunity to increase competitiveness is quite large or very good. The performance of MMSE to increase product competitiveness are 7 indicators such as market segmentation, competence, regulations, products, certifications, services, and price. Table 1 shows an explanation of the scores obtained from each of the indicators given by respondents on performance in improving the competitiveness of MSME in Medan City.

Based on Table 1, it can be seen that the performance of business actors in an effort to increase the competitiveness of MSME, resulted in an average number of 533 with a percentage of 87.5% (very good category). This shows that MSME actors have a great or very good opportunity in increasing competitiveness. Based on the research results, there is

the highest indicator, namely the certification indicator which produces a score of 280 with a percentage of 93.5%. This is because business actors often take part in training to add insight and knowledge. MSME actors have registered Home Industry Food as a distribution permit and guarantee that the food or beverage business that produces it meets food and beverage safety standards and MSME players have met the local market target. While the lowest results on the service indicator with a score of 262 and a percentage of 87% this is due to the service provided is quite good for consumers and business actors still don't meet consumer desires.

Table 1. Performance Indicator for Increasing Competitiveness.

No.	Competitiveness	Score	Percentage (%)	Compliment
1.	Market Segmentation	367	91.7	Very Good
2.	Competition	430	88.8	Very Good
3.	Regulation	264	88	Very Good
4.	Product	350	87.5	Very Good
5.	Certificate	280	93.5	Very Good
6.	Service	262	87	Very Good
7.	Price	179	89.5	Very Good
Total		2,132	-	-
Average		533	87.5	Very Good

In addition, MSME analyze market share to increase competitiveness. I often seek information on business developments through social media such as Instagram, Facebook, WhatsApp, and sharing with business actors of the same type or not. It must be done to communicate well with consumers so that MSME products are accepted by the market share. Based on the table, it refers that MSME actors have a high enthusiasm for entrepreneurship because if they have a high enthusiasm, they can produce maximum MSME products. Besides that, some MSME actors already have had halal certification or the MUI label so that these products are an advantage in increasing competitiveness.

Furthermore, to analyze the case of factors innovation product MMEs, it can be finished by logistic biner. Logistic regression analysis was carried out to find out the testing of the hypotheses carried out on what are the influences of factors that influence innovation in MSME. Because the dependent variable is dichotomous, the measurement of MSME innovation as a dependent variable defines a value of = 1 if a new product or process or additional innovation is worth = 0 if it does not exist. The stages in testing using the logistic regression test are described in Table 2.

Table 2. Model of Logistic Regression.

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1	Turnover	1.705	2.222	0.589	1	0.443	5.5	0.071	428.214
	Age of Entrepreneur	-2.903	1.877	2.393	1	0.122	0.055	0.001	2.17
	Education	3.951	1.66	5.664	1	0.017	51.991	2.008	1,346.18
	Training	-1.985	1.86	1.138	1	0.286	0.137	0.004	5.268
	Information Technology	3.997	2.081	3.687	1	0.055	54.428	0.921	3,217.91
	Constant	-2.072	2.008	1.064	1	0.302	0.126		

For the model of logistic biner can be described in Formula 2:

$$Z_i = -2.702 + 1.705X_1 - 2.903X_2 + 3.951X_3 - 1.985X_4 + 3.997X_5 \quad (2)$$

- X_1 = Turnover (IDR)
 X_2 = Age of entrepreneur (year)
 X_3 = Education (if the bachelor's degree = 1: if non bachelor's degree = 0)
 X_4 = Training (if follow training = 1: if unfollow training = 0)
 X_5 = Information technology (If can use the technology = 1, if can't use technology = 0)
 Z = Innovation (If have innovation = 1, if have no innovation = 0)

Based on the Table 2, it can refer that education and information technology have to effect to the innovation on the alpha 10%. Meanwhile, turnover, age of entrepreneur and training don't have to effect to the innovation on the alpha 10%. Furthermore, to see the magnitude of the influence of each independent variable on the dependent variable, it can be seen odd ratio probability

Based on table the effect of the variable partially the level of education has a significant effect on innovation. So based on the results of the research, the average MSME actors are undergraduate strata. This makes MSME have good innovation in running their business. The higher a person's level of education, the more experience and knowledge he gains to run his business in order to develop. This means that the creativity, entrepreneurial spirit, and innovative spirit of entrepreneurs are the main sources of increasing the competitiveness of. It can be seen from odd ratio amount 51,991 % that refers to the probability for MSME actors with a bachelor's degree have the innovation 51.991% greater than MSME actors with a non-graduate degree. It can be the same of research Rahmana et. al that analyze of development manufacture sector that explain education have to affect the innovation product [11].

Furthermore, the effect of the variable partially, information technology has a significant effect on innovation so that based on the results of research, the average MSME actors use information technology to more easily find information related to their business development and it is easier to market products through social media such as Instagram, WhatsApp, Facebook and marketplace. This makes MSME have good innovation in running their business. It can be the same research of Rosli et.al about Innovation and Firm Performance Evidence from Malaysian MSME that refers to information technology have to effect innovation product. It can be seen from odd ratio amount 54,428 % that refers to the probability for MSME actors with the ability of information technology have the innovation 54.428% greater than the probability for MSME actors with the non-ability of information technology [12].

MSME actors are still having trouble getting a product distribution permit from BPOM (Food and Drug Monitoring Agency), because MSME actors are still unable to meet the requirements. For example, the research about of the requirement is that a household kitchen and a production house kitchen must be different. However, this MSME is a home-based business, like it or not, household kitchens and production house kitchens are integrated and the process of obtaining a BPOM distribution permit costs quite a lot. The big costs are not only related to licensing fees but indirect costs such as renovating or building a production site that must be done to meet standards and successfully pass BPOM inspections [13].

Businesses that are still running for 1-2 years also have the opportunity to innovate to increase competitiveness. This means to innovate seen from the products being marketed. According to the research of the tittle about A study of technical, marketing, and cultural differences between virtual communities in industrially developing and developed countries halal certificate If the product is not selling well or has experienced a decline in income, business actors must innovate. So, the higher period of business, the opportunity of developing innovation business will be higher [14].

MSME actors have registered for the PIRT (Home Industry Food) Program as a distribution permit and guarantee that the food or beverage businesses that produce meet food and beverage safety standards and MSME actors have met local market targets. This is in accordance with a study entitled the effect of product innovation on repurchase intentions mediated by consumer satisfaction which states that the better the standard of a food product, the higher the innovation that has been carried out [15].

5 Conclusion

1. The performance of MSME actors have the very good category the competitiveness product by the highest indicator is the certification indicator and while the lowest result is the service indicator.
2. The factors that influence innovation product in MSME in Medan City are education and information technology while turnover, age of entrepreneur and training don't have the effect of the innovation product

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