
SUSTAINABLE DEVELOPMENT STRATEGIES FOR MICRO, SMALL, AND MEDIUM ENTERPRISES (MSME) USING SWOT: A CASE STUDY OF MSME IN MALANG REGENCY IN EAST JAVA PROVINCE

Agus Suman^a, Shofwan^b, David Kaluge^{c*}

^{a,b,c}Faculty of Economics and Business Universitas Brawijaya, Jl.M.T. Haryono 165, Malang 65145, Indonesia

ABSTRACT: *Evaluating the current situation of micro, small, medium enterprises (MSME) activities in Malang, East Java province and offering strategies for its sustainable development are the main objectives of this study. To this end, different decision making tools were used including questionnaires and interviews with experts, local owners of MSME and consumers of the MSME's products. Strengths, weaknesses, opportunities and threats (SWOT) analysis techniques were conducted to identify the required management strategies. Results showed that the existing MSME business activities within two regencies not in line with the sustainability requirements. Although the result of the present study showed that Malang has an unsustainable situation with regard to its current management strategies, if authorities take its great opportunities and strengths more into consideration, it can have positive effects on developing sustainable strategies to increase level of sustainability in business activities for SMME in the area to reduce the adverse effects on the environment.*

KEYWORDS: sustainability; development strategy; MSME; SWOT analysis

INTRODUCTION

Sustainable development in a business strategy is increasingly popular for some literatures of drivers of business transformation more than twenty years. Sustainable development, according to Brien and Hamburg (2014), is adopting business strategies and activities that fulfill the companies' needs and its stakeholders while protecting, sustaining and enhancing the human and natural resources needed. It is important to measure progress of a company transition to more sustainable, however, more important is to establish and to find ways in which the enterprise has ability to move toward a sustainability level. Elkington (1994) argued that a company should prepare three different bottom lines; first bottom line is the company maintains its orientation to increase profits through financial performance, return on investment, shareholder value and the broader economic size; the second bottom line is to measure interaction with neighbor societies where the company operates; the third one is to measure the company's environmental responsibility. The company with a positive triple bottom line should have a positive impact on the 3Ps (profit, people, planet). Roles of a skillful, experiential, competent manager are needed to apply changes within a company moving toward sustainability. Achieving sustainable development of companies also defined as

one that is economically feasible, socially acceptable and ecologically benign, is dependent on environmental protection and reconciling shareholders' purposes with social values.

For micro, small, and medium enterprises (MSMEs) as companies which employ less than 100 people, sustainable development is relatively new trend which has impact to people's lives and would be demanded by consumers in the coming years. Despite the fact that many admit to confusion over what sustainability is and how to introduce sustainable measures into MSMEs' daily activities and how to evaluate its benefits (Hill, 2016). Moreover, MSMEs managers do not fully understand and are not ready to prepare resource allocations to sustainability initiatives, when their main focus tends to how to increase sale values for survival. Those may motivate the MSMEs to conduct sustainable business to be more competitive, even though the MSMEs' have only smaller-scale production than other companies' size.

The role of micro, small and medium enterprises (MSMEs), in Indonesia has been recognized by various groups to help many communities to improve living standards and reduce unemployment with all its effects. However, without realizing it, the activities of the economic agents (production, distribution and consumption) of MSMEs with the application of the latest simple technology have resulted in side effects, namely the production of waste or waste substances that are discharged into the environment. Wastes that are wasted in the environment tend to damage the ecosystem with different scales in the long run and potentially reduce the quality of the environment (Greenan, Humphreys, dan McIvor, 1997; Colyer, 2003).

The characteristics of the existence of MSMEs in Indonesia, especially in the observed areas in Malang, has product-scale is limited without varied products. Lack of well-administration and financial management have been points of inefficiency for the owners and managers. Even though some MSME could access some banking sectors for financing, the role some non-banking institutions has been dominating financing assistance of MSME living for years. Another feature is low level of the ability of human resources that are not evenly distributed in terms of technical production. This condition certainly requires special handling and treatment by the regional government to be able to become a regional economic buffer.

The purpose of this study is to evaluate the current situation of MSME management and the implementation of sustainable business development strategies that is environmentally friendly in Malang districts. Observed MSMEs in the regency have been trying specific strategies for developing environmentally friendly products. The development focused on how the production process adopted a triple bottom line which involved three aspects, namely economic, environmental and social aspects. Therefore, the SWOT analysis method can be used to analyze this study. With the SWOT approach, it can be analyzed the strengths and weaknesses (internal factors) and opportunities and threats (external factors) of MSME in Malang regency for implementing of sustainable development with a triple bottom line approach. Achieving sustainable development with this approach, stakeholders and owners of MSME are tested through questionnaires, structural interviews and focus group discussion (FGD).

From the analysis of research conducted, it was discovered empirical facts that the triple bottom line based sustainable development strategies are being not in line with the environmental development policies in which government issues. This is because some factors including the supervision of managerial board of MSMEs who is in charge not discipline doing those strategies. From government side, there is still no encouragement for law enforcement of business units which violate environmental laws in the production process. The reluctance of local governments in the enforcement of environmental law is in doubt because this policy is less popular and have an effect in local general elections. If the local government really considers the strengths and opportunities in the SWOT analysis, it can have a positive effect on the achievement of strategies for achieving sustainability in the production of MSME production. Other implications certainly have an effect on efforts to prevent harmful impacts on environmental sustainability in the long run.

METHODS

Study site

This study takes place in Malang regency where one of the most population of MSME in East Java concentrated. The characteristic of MSME in this district is various products produced in small-scale. For example, the export-oriented confections have been produced in northern clusters of this district, while *mukena* (female praying clothes) have been produced in southern cluster side. Handicrafts, batik clothes and other unique souvenirs are available in the middle side of the district. One of the typical and prominent culinary products from this area is *bakso Malang* (local meatball soup) cuisine which is much loved by local tourists from the surrounding area. The more MSME located, the more local visitors come in.

Malang districts have two different cultures in living harmony; Javanese and Madurese who are coexisting peacefully. Javanese is less open-minded, while Madurese is more open-minded which assists this culture gain living as best traders in local economy. Both styles of typical cultures influence the mindset of its citizens how to manage business. Likewise, in developing sustainable and environmentally friendly businesses, they have their own style and ways of managing sustainable businesses.

Survey respondents

Respondents from this study consisted of business owners, employees, relevant government officials and product consumers with questionnaire instruments and focus group discussions. They are selected through multi-stage stratified random method so as to minimize the occurrence of bias in selected respondents. With a varied background of respondents, they are considered to have complete knowledge regarding business continuity issues and environmental sustainability to complement the SWOT analysis of sustainable development strategies.

Data collection

In collecting data, primary and secondary data are collected. Primary data is collected from observations and the results of the focus group discussion on the strength of the Stakeholder group, namely business owners, employees, consumers and government officials. Secondary data was obtained from the Cooperative and UMKM Service related to the number of UMKM and the type

of business. After the questionnaire data was collected, the data was analyzed with MS Excel to determine the opinion index. SWOT is determined and several policies related to development are recommended according to the results of the SWOT analysis.

SWOT analysis and development strategies

SWOT analysis is derived from the assessment of S, W, O and T faced by industry organizations, companies, sectors and every organization. The roots of SWOT come from strategic management research conducted in the 1960s and 1970s. SWOT analysis can also be used to identify potential projects and plans to be completed in a development strategy. S and W (Local analysis) are internal factors when O and T (global analysis) are external factors. Internal evaluations and external factors are an important part of strategic planning which is an instrument in the adoption of strategies and a component of the development of sustainable business units.

SWOT analysis aims to identify key internal and external factors as important aspects in achieving goals. This analysis classifies key parts of information into internal factors consisting of S and W and external factors that consist of O and T from outside the company.

Scanning factors outside and inside environment and considered as a major component of the sustainable development process. An analysis of this kind of strategic environment is an instrument in the formulation of strategies and can help researchers benefit from past events and think of possible solutions to existing problems. In this study, SWOT analysis was conducted on MSMEs to test the behavior of MSMEs in conducting SDS (Sustainable Development Strategies). First, internal factors in MSME are classified as Strengths or Weaknesses and external cyclical factors as Opportunities or Threats.

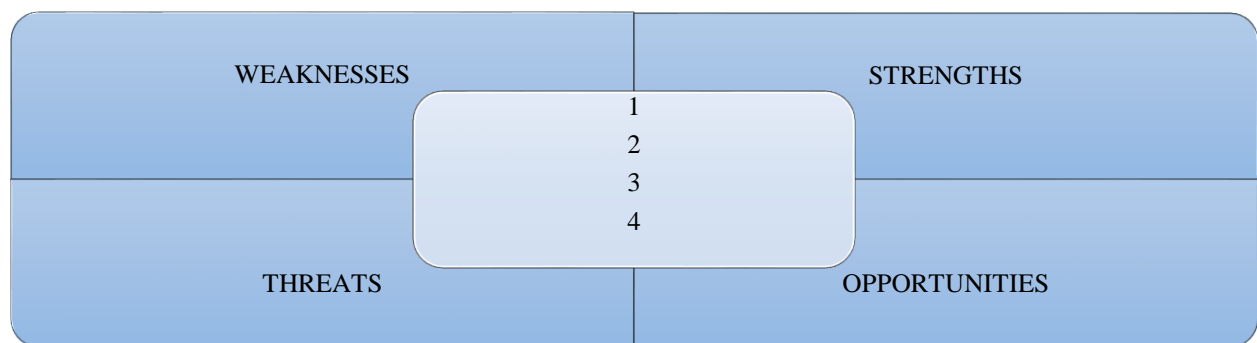


Figure 1: Variables based on SWOT Analysis.

Accordingly, a list of Ss and Ws and a list of Os and Ts were drawn. The first group was tabulated into Internal Factor Estimate Matrix (IFEM), while the second ones were tabulated into External Factor Estimate Matrix (EFEM). These factors are given weight and score by selected respondents and the final score is calculated. Following is the scoring process for the SWOT analysis:

- a. Factors are given coefficients between 0 and 1, to "not important and" most important. This coefficient represents the relative significance of factors at the success rate and is represented by the weight in IFEM.
- b. Each factor is scored between 1 and 4 where 1 = Very weak, 2 = weak, 3 = strong and 4 = very strong.
- c. To determine the final score of each factor, the weight is multiplied by the score
- d. The total score is totaled all to calculate the final IFEM score
- e. If the total IFEM value is less than 2.5, then the strength is smaller than the weakness and vice versa, if the value is more than 2.5, the strength exceeds the weakness.

FINDINGS AND ARGUMENT

External factor estimation

There are 25 pertaining to O and T factors with weights between 0.01 to 0.05 and effectiveness scores between 2 and 4, while T has a weight between 0.02 and 0.4 and an effectiveness score between 2 and 5. According to the results, the most important to be obtained with the highest weight identified (for opportunities) as "Environmentally Friendly products of MSMEs are preferred by global consumers". The next important factors, including followed by "Reducing of fossil fuels for machines of production processing, will be implemented for "environmental auditing for production processing in the coming years". On the other hand, the first less important factor is the "Product-scale is relatively larger than ordinary SMEs 'product scale", followed by "Communities has taken benefits for existing of MSME" and "MSMEs' potential products are exported to frequently into developed countries". For the highest threats is the "Global economic conditions tend to be able" to be followed by each of "the national economic recovery process is not as fast as expected" and "Green public space is going down city areas". Conversely, "the level of forest fire is quite high in Kalimantan and Sumatra islands" followed by the "Decreased rate of water reserves in alarming levels", each of which has the lowest score. The total value of EFM is 2.36 more than 2.5, which means Opportunities exceeds Threats (Table 1).

Table 1. External factor estimation matrix (EFEM)

	Weight	Effectiveness score	Final Score
Opportunities			
Economic			
MSMEs' potential products exported frequently into developed countries	0.03	3	0.09
Environmentally Friendly products of MSMEs are preferred by global consumers	0.05	4	0.20
Exhibition of newly local products for foreign consumers is prioritized for the owners of SMEs	0.03	2	0.06
Good relationship between suppliers and SMEs' owners	0.02	3	0.06
Product-scale is relatively larger than ordinary SMEs' product scale	0.01	3	0.03

Environment

Enforcement of environmental law is more strict in the future	0.03	4	0.12
Environmental audit would be implemented for production processing in the coming years	0.05	3	0.15
Reducing of fossil fuel for machines of production processing	0.06	3	0.18

Social

Implementation of corporate social responsibility for neighbourhood is realised	0.03	2	0.06
Communities has taken benefits for existing of MSME	0.02	3	0.06
Labour law is protecting labour rights	0.03	3	0.09
Environmental law protects people	0.05	3	0.15

Threats**Economic**

Global economic conditions tend to be instable	0.05	3	0.15
National recovery economic process is not as fast as expected	0.04	3	0.12
People purchasing power tend to decrease	0.03	3	0.09
Exchange rate of Indonesia rupiah against United State dollar is fluctuated currently.	0.04	3	0.12
Interest rate of banking sector is going up	0.04	3	0.12

Environment

Level of forest fire is quite high in some forest areas in Kalimantan and Sumatera islands	0.02	2	0.04
Level of pollution seems uncontrollable rate	0.03	2	0.06
Decreased rate of water reserves is in alarming level	0.02	3	0.06
Green public space is going down city areas	0.03	3	0.09

Social

Individualism in communities increases currently	0.04	2	0.08
No interaction among other people is due to busy matters	0.03	3	0.09
ASEAN Economic Community has been applied since 2015 and has affected social life of people	0.03	3	0.09

Internal factor estimation

Regarding strengths and weaknesses, 15 and 10 factors are surveyed and respectively is selected (Table 2). The weights of strengths were allocated for factors between 0.01 and 0.05 and scores ranged between 2 and 3. For weaknesses, weights were allocated 0.02 and 0.05 and scores were between 2 and 4. For strengths, “Government giving tax incentives for MSME products which have export orientation”, return rates of capital in faster than other SMEs”, “SMES recruits its clients who the most of them from villages” have the highest final scores, while “More active in the communities' events are prioritized”, “Family approaches are used to bond with people around SMEs” and “Reducing water programs are applied within the production process of SMEs” are having the lowest final scores. In relation to weaknesses, “Finance management of SMEs is not

being separated with household finance management”, “Low punishment for pollutants is unavoidable”, “the competition to capture both national and global markets has been defeated by other non-SMES competitors” have a high weight. On the contrary, the “Local power is afraid to lose popularity for local general election” because the environmental law is enforced and “Environmental matter is government business not ordinary people” have the lowest weight. The total value of internal factors is calculated as 2.26, which means more than 2.5, meaning that strength exceeds weakness (Table 2).

Table 2. Internal factor estimation matrix (IFEM)

	Weight	Effectiveness score	Final Score
Strengths			
Economic			
SMEs products selling is higher than non SMEs products	0.02	3	0.06
Segmented market of SMEs products is wider for low and middle income people	0.03	2	0.06
Return rates of capital in SMEs is faster than other companies	0.05	3	0.15
Government is giving tax incentive for MSME products which have export orientation	0.06	3	0.18
SMES recruits its labors who is most of them from villages	0.04	3	0.12
Environment			
SMES installs instruments to manage waste of production processing	0.03	2	0.06
Input of production process is recycle materials	0.03	3	0.09
Saving energy machines have been used for production process in SMEs	0.03	2	0.06
Reducing water program is applied within production process of SMEs	0.02	2	0.04
Design and products SMEs are environmental friendly	0.04	3	0.12
Social			
Family approach is used to bond with people around SMEs buildings	0.02	2	0.04
More active in the communities' events is prioritised	0.01	2	0.02
No violence of environmental law during production process of SMEs	0.04	2	0.08
The SMEs owners always give a tax report to authorised institution routinely	0.03	2	0.06
Reputation of SMES is high for social activities	0.03	3	0.09

Weaknesses**Economic**

Finance management of SMEs is not being separated with household's finance management	0.05	4	0.2
Using much unskilled labour has caused low productivity in SMEs	0.03	3	0.09
Competition to capture both national and global markets has been defeated by other non-SMES competitors	0.04	3	0.12

Environment

Supervision for violence of an environmental law is not effective	0.04	3	0.12
Low punishment for pollutants is unavoidable	0.05	3	0.15
Supervision of production processing for SMEs which cause pollution is not working well	0.03	3	0.09
Environmental matter is government business not ordinary people	0.03	3	0.09

Social

Low level of people disciplines for obeying the law is a hard problem to law enforcement	0.03	3	0.09
Relationship between employees and employers need a third party	0.02	2	0.04
Local power is afraid to lose popularity for local general election because an environmental law is enforced	0.02	2	0.04

SWOT strategies

After selecting and evaluating the most important internal and external factors and identifying internal and external feature relationships, four strategies are developed through SWOT analysis that can be used effectively for the Sustainable development strategies of MSMEs. For example, strong bonds between strengths and opportunities can represent the good conditions of MSMEs and allow aggressive strategies. On the other hand, a strong relationship between weakness and threat can be considered as a warning and inform the use of defensive strategies. Further strong relationships between strength and threat can use different strategies. And finally a strong relationship between weakness and opportunities can be analyzed as a potential use of an overview strategy. Results are shown in table 3.

Table 3. Sustainable development strategies for MSMEs

SO strategies

1. Special tax incentives for MSMEs whose products are environmentally friendly and export-oriented
2. Reducing the use of fuel oil in production to accelerate the rate of return on capital
3. Environmental audits can maintain the sustainability of MSMEs

ST strategies

1. Export of products that have strong brands in the midst of the global economic crisis
2. Suppress production costs by recruiting workers from the countryside

WO strategies

1. Separation of business finances with family finances to encourage exports
2. Providing legal sanctions for pollution makers so that consumers are sure of the UMKM products purchased

WT strategies

1. Convincing the public that the government has the power to approve regulations
2. The implementation of 30 percent of the area becomes green public space

To Explain the combination of SO and WO, ST and WT pairs in the table 3, the strategic key is determined by SO of MSME. The SO strategies propose to maintain sustainability is the provision of special tax incentives for MSMEs whose products are environmentally friendly and favored by local and global consumers. As for the ST strategy, MSMEs should reduce production costs by employing people from the villages. Meanwhile the WO identifies ways to overcome weaknesses in UMKM management, namely the separation of financial management between businesses and households and encourage products to be exported. WT strategies announced a defensive plan to better convince the community that the government was eager to conquer environmental law.

CONCLUSION

This study presents an assessment of sustainable development strategies using SWOT. The main issue is used the use of SWOT analysis to get the best strategy in sustainable in the MSME sectors. From the analysis it is known that sustainable development strategies for MSMEs' identification of its their own potentials. Special intensive tax provision for the friendly environmentally MSME products and is able to penetrate the export market. To streamline production costs, the strategy of recruiting rural workers can be taken into consideration and separates the company's finances from family finances. And the government's assertiveness in the enforcement of environmental violators is an important factor driving the sustainability of MSMEs in the future. Thus, this article provides an important and valuable technique in the use of SWOT analysis in investigating sustainable development stability for MSMEs in a region. These results can help MSME owners in the observed areas to identify sustainable development in those areas

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