Formulation of Green Economy Based Business Strategy for Micro, Small and Medium Enterprises in Kupang City

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ABSTRACT

Indonesia is one of the countries with a very large population and tends to increase over time. The increase in population will result in an increase in the volume of waste where if the waste is not managed properly it can cause various disturbances. This is the reason for the object of research on Micro, Small and Medium Enterprises (MSMEs), because MSMEs are the largest type of business in Indonesia and are also in direct contact with natural resources. The majority of MSMEs in Kupang City are engaged in the field of ikat weaving which uses fabric dyes, thus producing production waste in the form of liquid waste and other forms. The increase in the number of MSMEs can be a threat to increasing the potential for environmental pollution if the waste produced is not managed properly. Therefore, the concept of green economy is further analyzed to become the basis for implementing business activities, namely as a business strategy. Researchers used a sample of 30 fostered Ikat Weaving MSMEs in Kupang City, then simulated the formulation of business strategies with a green economy approach which showed that the ideal business strategy implemented by Ikat Weaving MSMEs in Kupang City is in zone 4 with a weighted average value of the EFE Matrix of 2.0 - 2.5. The results of the IE matrix mapping show that Kupang City MSMEs use a growth and build strategy, which consists of an intensive strategy or an integrative strategy.

Keywords: Business strategy, Green Economy, UMKM

INTRODUCTION

Environmental issues are currently becoming a global problem that can no longer be separated from every aspect of human life. An environment that is still maintained and provides a good and healthy atmosphere has in fact become something very rare and difficult to obtain, the reason is because almost every space on the face of the earth has been damaged. The damage that occurs to the environment is also triggered by human actions to utilize everything that is in nature. Lately, there has been massive attention in terms of environmental protection and the growth of Sustainable Development due to the increasing environmental problems faced by current and future generations. These environmental problems are not only the responsibility of individuals or by the government alone, but are a problem that must be borne together. Therefore, ideas related to the green economy have begun to emerge to support environmental development that influences the development of an economic system towards an environmentally friendly economy.

Green economy known as Green Economy is a renewable idea where business actors are able to improve economic and social welfare without giving negative impacts to the surrounding natural resources (Saputra, 2021). This idea emerged after it was undeniable that current economic

activities are very dependent and cannot be separated from environmental aspects in their journey, because the majority of raw material sources come from the natural potential that is owned so that as economic actors, it is natural to be the most responsible in terms of the balance of economic, social and environmental conditions.

In its development, economic activities and the existing environment have an imbalance. Economic development that is always carried out generally threatens and even exploits other resources. As a result, the environment becomes uncontrolled and even damaged and until now the impact of this has slowly begun to be felt. The most difficult environmental problem to solve is the problem of waste. Indonesia is one of the countries with a very large population and has a tendency to increase over time. The increase in population will result in an increase in the volume of waste where if viewed in terms of environmental balance, health, safety and pollution, if waste is not managed properly it can cause various disturbances. This is one of the reasons for the object of research on MSME Actors, because MSMEs are the largest type of business in Indonesia and are also in direct contact with natural resources.

The increasing number of MSMEs can be a threat of increasing potential pollution to the environment if the waste produced, either liquid or gas, is not managed properly. Therefore, the concept of green economy is analyzed further, not only analyzed but also needs to be imbued by MSME actors so that it becomes the basis for implementing business activities, namely as a business strategy. Suzantho & Hadi (2019) have conducted research related to green industry in small and medium industries in Surabaya. The results of the study showed that the understanding of small and medium industry actors in Surabaya about environmental problems is still low, so that moving towards a green industry still requires a process that is not short. Therefore, continuous research is needed accompanied by coaching activities. Education that needs to be provided is especially related to the development of production process technology and environmental management, so as to produce green products. The application of the Green Economy concept to MSMEs aims to advance human welfare and social justice and significantly reduce environmental risks.

Based on the background description, the core problem in this study is how to balance the economic growth of Kupang City through an increase in the number of MSMEs by encouraging the implementation of the green economy concept in business strategies so as to reduce the potential for increased environmental pollution without reducing the economic factors of the achievements of an MSME business activity.

This study refers to a renewable concept, namely the concept of green economy. The Green Economy in question is an environmental management effort that can develop as an economic instrument by improving environmental quality through recycling rate activities, reducing the amount of waste, improving the quality of water bodies through the implementation

of clean production such as strategic elimination to reduce the amount of waste and if necessary avoid waste disposal (zero emission), prevention (reducing waste sources) Recovery steps so that waste is not formed in the initial activity, recycling using the 3R principle and proper waste disposal strategies (Arune, 2019). There are several indicators or requirements in the application of the green economy concept, namely low carbon, resource efficiency, and social inclusiveness. The Green Economy concept will then be formulated in a business strategy using the QSPM method. The design of the strategy in question aims to formulate a vision, mission and values. Then continued by conducting an examination of the internal and external environment of an organization (Djajadiningrat, 2014).

This research with the theme of Green Economy is not the first to be conducted. In fact, this research is a follow-up research from the internal routine research road map conducted by researchers over the past 4 years. Research that has been conducted includes the following:

Research conducted by Dewi Wungkus Antasari (2019) published in a journal at the Islamic University of Kediri entitled "Implementation of Green Economy towards Sustainable Development in Kediri City". This study formulates the conclusion that the increase in population causes an increase in the amount of waste which then becomes an obstacle in carrying out economic activities which directly inhibits the achievement of the Sustainable Development plan mission according to the previously set time target. So the solution offered is to use the 3R concept (Reduce, Reuse and Recycle) as an application of the green economy concept in Kediri City. The meeting point of this research is that both raise the concept of green economy in MSME actors, and the point of novelty lies in the focus of the research where this research develops green economy as a business strategy.

Second, research conducted by Researcher Reinamah, (2023) conducted in 2023 which has been published in the International Proceedings of ICAST 2023 with the title "Efficiency of the Kupang Weaving Tie MSME Production Process for Implementing Green Economy". This study formulates the conclusion that Ikat Weaving MSME Actors in Kupang City will initially incur business losses due to implementing a new type of cost, namely Environmental Costs, but the estimate is that MSME Actors will start to enjoy profits in 2 years with a very efficient category. The meeting point of this research is at the research location and research focus, but in the current research it has a new point in deeper development not only on cost and income efficiency, but on business strategy as the initial foundation for the MSME Actors' business process and also in this research it is not only focused on Ikat Weaving MSMEs but on MSME Actors in general in Kupang City with increasing levels of business complexity.

Third, a similar study was conducted by Ferry Suzantho and Wahyono Hadi in 2019 which was published in the Journal of Engineering, Technology and Science with the title Study of

Environmental Performance of SMEs in Surabaya Towards Green Industry. This study recommends that environmental performance studies in production operations carried out by SMEs be carried out continuously. This study activity must be accompanied by coaching efforts in the form of green industry concept education for SME actors. Education is specifically focused on materials related to increasing the development of production process technology and environmental management. Including the need for in-depth understanding of the Green Economy concept to what is stated in the related SME business strategy so that it is a form of SME commitment to implementing the Green Economy principle.

This study specifically develops suggestions formulated for MSMEs in Kupang City. The meeting point is in the focus of the research, namely the application of the Green Economy concept as a business commitment of MSMEs. The novelty is the development of the Green Economy concept in the form of formulating a business strategy. This research is a form of continued research from researchers who have entered phase 4. Research with a focus on developing the Green Economy concept began in 2021 where the researcher conducted a system design on the Ikat Weaving MSME to obtain information related to the business processes carried out by MSMEs that would be used as research objects. Then continued to phase 3 in 2023, namely the researcher assessed the efficiency and effectiveness of the application of the Green Economy to MSMEs in Kupang City, and has now entered the final phase in terms of in-depth education for MSMEs in Kupang City where the application of the Green Economy concept as a business commitment is imbued with the formulation of business strategies.

RESEARCH METHODS

MSMEs in Kupang City still implement simple business strategies and do not set market targets to compete. Therefore, the purpose of this study is to formulate a suitable business strategy for MSMEs in Kupang City so that they can compete and ultimately increase sales as a result of implementing the strategy management formulation. This strategy analysis will be carried out in the Priority business strategy will be formulated and implemented in its business process.

Data collection was carried out by interview and distributing questionnaires. The questionnaire was distributed to respondents to obtain weights on the EFE and IFE matrices. The results of the questionnaire were processed and grouped in the EFE and IFE matrices according to the research objectives. The interview results were processed to obtain a choice of strategies to be used in the QSPM matrix. The results obtained in the QSPM matrix will then be communicated to MSME actors to provide education related to recommendations and future market targets.

RESULTS AND DISCUSSION

Data presentation is done using internal and external matrices, IE matrices and SWOT to show the results of data processing and alternatives that emerge at the matching stage.

a) EFE and IFE Matrix

According to Sedarmayanti (2014), External Factor Evaluation (EFE) Matrix is used to evaluate the company's external factors. External data is collected to analyze matters concerning: Economic, socio-cultural, environmental, political, legal, technological, competition in the industrial market. EFE Matrix can be developed in five steps:

i. Make a list of external factors. Include a total of 15 to 20 factors, including opportunities and threats, that affect the company and its industry.

ii. Assign each factor a weight ranging from 0.0 (not important) to 1.0 (very important). The weight indicates the relative importance of the factor to the success of the company's industry. The sum of all weights assigned to a factor must equal 1.0. The factor weight is the result of the average of the results of the questionnaire on external parties such as lecturers and competitors.

iii. Researchers assign a rating between 1 and 4 to each external factor to indicate how effective the company's strategy is in responding to the factor, where 4 = superior response, 3 = above average response, 2 = equal to average response, and 1 = inadequate response.

iv. The values of each factor are ranked according to their respective values to determine a weighted score.

v. The sum of the weighted scores for each variable is used to determine the total weighted score for the organization.

b) IE Matrix

The IE Matrix is a matrix that summarizes the results of the evaluation of external and internal factors that place the company in one of the conditions in nine cells, where each cell is a condition of the steps that must be taken by the company. The IE Matrix is based on two key dimensions, namely the total weighted average of IFE on the x-axis and the total weighted average of EFE on the y-axis.

The IFE Matrix can be developed in five steps:

i. Create a list of internal factors. Include a total of 10 to 20 internal factors, including strengths and weaknesses.

ii. Determine the weight ranging from 0.0 (not important) to 1.0 (very important) for each factor. The sum of all weights must be the same, namely 1.0. The determination of the

weight is the average result of the questionnaire distributed to the actors of the Kupang City Ikat Weaving UMKM

iii.   Researchers assign a rating of 1 to 4 to each factor to indicate whether the factor is a major weakness (rating = 1), minor weakness (rating = 2), minor strength (rating = 3), or major strength (rating = 4).

iv.   Each factor is assigned a weighted score for each variable.

v.   Add up the weighted scores for each variable to determine the total weighted score for each MSME.

c)   Swot Matrix

According to David (2012), the strengths, weaknesses, opportunities and threats matrix is an important matching tool that helps managers develop four types of strategies, namely SO (Strengths-Opportunities) Strategy, WO (Weakness-Opportunities) Strategy, ST (Strengths-Threats) Strategy, and WT (Weakness-Threats) Strategy. The steps required to compile the SWOT Matrix are as follows:

i.   Write down the company's external opportunities and threats that determine it.

ii.   Write down the company's internal strengths and weaknesses that determine it.

iii.   Match internal strengths with external opportunities and record the resultant SO strategies in the appropriate cells.

iv.   Match internal weaknesses with external opportunities and record the resultant WO strategies in the appropriate cells.

v.   Match internal strengths with external threats and record the resultant ST strategies in the appropriate cells.

vi.   Match internal weaknesses with external threats and record the resultant WT strategies in the appropriate cells.

d)   QSPM Matrix

According to Sedarmayanti [9], QSPM is a technique that can objectively determine prioritized alternative strategies. This method is a recommended tool for strategists to objectively evaluate alternative strategy choices, based on previously identified internal-external key success factors. There are 6 steps needed to create a QSPM:

i.   Compile a list of strengths, weaknesses, opportunities and threats similar to the SWOT matrix.

ii.   Assign weights to strengths, weaknesses, opportunities and threats. These weights are the same as those given to the IFE and EFE matrices.

iii.   Examine stage 2, and identify alternative strategies that should be considered for implementation.

iv.   Determine the attractive score (AS) by examining each external and internal factor. The range for Attractiveness Score is 1 = not attractive, 2 = somewhat attractive, 3 = quite attractive, and 4 = very attractive.

v.   Calculate the total attractiveness scores (TAS) then multiply the weight by the attractiveness (AS).

vi.   Total attractiveness score analysis, higher values indicate a more attractive strategy..

vii. Results of analysis of external and internal key factors in business

Discussion

The results of the analysis of external and internal key factors in Ikat weaving UMKM actors in Kupang City which were obtained from interviews and adjusted to existing conditions and have been verified can be seen in Table 1 and Table 2.

Table 1. Results of Analysis of External Key Factors of Ikat Weaving MSMEs in Kupang City

External Key Factors		
No.	Opportunity	Threat
1.	Technological advances provide opportunities for products to be marketed widely.	It is easy for competitors to enter the imported fabric convection industry
2.	Increasing interest in woven industry products	Many competitors on a national scale.
3.	Has a strategic location, crowded with visitors. (mall, office, canteen)	Consumer tastes change.
4.	The custom of the NTT community of using woven fabrics as office uniforms	Price offeredvery competitive.
5.	Growth amount employee increase every year.	Unstable fluctuations in dye prices.

Table 2. Results of Analysis of Internal Key Factors of MSMEs in Kupang City

Internal Key Factors		
No	Strength	Weakness
1.	Has different characteristics.	Does not have any certification or copyright patent.
2.	Have social media facilities to make it easier for consumers to view and order products	The brand is not yet widely known to the public.
3	The price is quite cheap and affordable for employees	Less productive resources
4	Product quality is maintained	Don't have your own location yet, still joining other businesses

Table 3. External Factor Evaluation Matrix

No.	External Factors	Weight	Rating	Mark Weighted
	Opportunity			
1.	Technological advances provide opportunities for products to be marketed widely.	0.1048	3	0.3143
2.	Increasing the regional convection industry	0.0667	4	0.2667
3.	Has a strategic location, crowded with visitors. (mall, office, canteen)	0.0905	4	0.3619
4.	Growth of the youth population.	0.0667	2	0.1333
5.	The number of employees increases every year.	0.0905	3	0.2714
6.	The habit of Indonesian people of using woven fabrics as office uniforms	0.0762	1	0.0762
7.	Woven uniform trend	0.1095	3	0.3286
	Threat	Weight		
1.	It is easy for competitors to enter the imported convection industry	0.0810	4	0.3238
2.	Many competitors on a national scale.	0.0952	3	0.2857
3.	Consumer tastes change.	0.1000	2	0.2000
4.	The prices offered are very competitive.	0.0762	2	0.1524
5.	Unstable price fluctuations of dye materials.	0.0429	1	0.0429
	Total	1		2,7571

In Table 3, the weighted value is 2.7571. This shows that the ability of Kupang City MSMEs is classified as moderate in utilizing existing opportunities in overcoming threats. The main opportunity owned by Kupang City MSMEs is having a strategic location, crowded with visitors (malls, offices, canteens) with a value of 0.3619, while the main threat faced is the ease of cotton woven fabric import companies entering the Kupang City ikat weaving industry, so it is easy to imitate similar products with a value of 0.3238.

Table 4. Internal Factor Evaluation Matrix

No.	Internal Factors	Weight	Rating	Weighted Value
	Strength			
1.	Has different uniform characteristics.	0.0644	3	0.1931
2.	Having uniqueness	0.0901	4	0.3605
3.	Having social media facilities to make it easier for consumers to view and order products.	0.0730	3	0.2189
4.	Does not use preservatives.	0.0987	4	0.3948
5.	Has a strategic location in the office area	0.0730	2	0.1459
6.	The price is quite cheap and affordable for office workers.	0.0730	3	0.2189
7.	Product quality is maintained (made with quality ingredients and processed hygienically)	0.0773	3	0.0773
8.	Practical packaging and easy to carry anywhere	0.0773	3	0.2318
	Weakness	Weight		
1.	Does not have product certification yet	0.0300	1	0.0300
2.	The brand is not yet widely known to the public.	0.0558	3	0.1674
3.	Don't have your own location yet, still joining other businesses.	0.0601	2	0.1202
4.	Has limited production capacity.	0.0730	4	0.2918
5.	Limited resources.	0.0773	4	0.3090
6.	Less productive resources.	0.0773	3	0.2318
	Total	1		3,1459

In Table 4, the total weighted value is 3.1459, this shows that Kupang City MSMEs are in a strong position in utilizing their strengths and are able to overcome existing weaknesses. The main strength of the company is not using dyes with a value of 0.3948 while the main weakness is limited resources with a value of 0.3090.
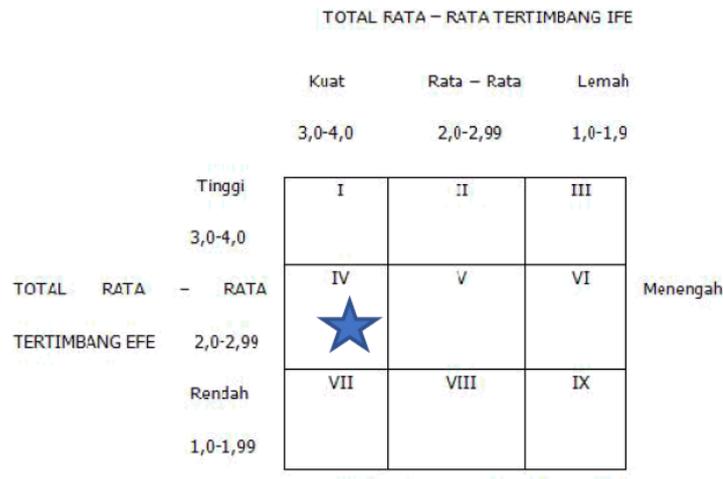

Figure 4. IE Matrix

Based on the mapping on the IE matrix, it can be seen that the x-axis of the IE matrix the total value of the IFE matrix is 3.1459, while on the y-axis of the IE matrix the total value of the EFE matrix is 2.7571. The results of the IE matrix show that Kupang City MSMEs are in cell IV of the IE matrix, the strategy commonly used for companies in cell IV is the growth and build strategy which consists of intensive strategies (market penetration, market development, and product development) or integrative strategies (backward integration, forward integration, horizontal integration).

SWOT Matrix

Based on the SWOT analysis in Table 5, there are 12 alternative strategies that will be used by Kupang City MSMEs to develop their businesses, namely:

1. SO Strategy (Strengths – Opportunities)

a. Adding different product variants that have unique characteristics every 6 months (SO-1).

b. Collaborate with various e-commerce applications so that products can be known more widely (SO-2).

c. Has unique packaging (SO-3).

d. Establish cooperation with government agencies (SO-4).

2. ST Strategy (Strengths – Threats)

a. Adding different innovations to the products produced (ST-1).

b. Providing uniqueness to each product (ST-2).

c. Create new products for people who don't like ordinary models (ST-3).

d. Carry out accurate calculations, so as to offer as affordable a price as possible (ST-4).

e. Cooperate with suppliers to get cheap raw material prices and be able to sell at affordable prices (ST-5).

3. WO Strategy (Weakness – Opportunities)

a. Carry out regular promotions by distributing brochures and adding promotions on social media (WO-1)

b. Improving the performance of resource services to increase customer satisfaction (WO-2).

c. Innovate the stand with unique decorations (WO-3).

4. WT Strategy (Weakness – Threats)

a. Using a guarantee system, to maintain the quality of the Sambal Noesantara brand and maintain consumer trust in the product (WT-1).

The analysis process using the SWOT matrix can be seen in Table 5.

Table 5 SWOT Strategy Alternative Matrix

	Strengths	Weakness
INTERNAL **EXTERNAL**	1. Has different characteristics.. 2. Having social media facilities to make it easier for consumers to view and order products. 3. Does not use synthetic dyes. 4. Has a strategic location 5. The price is quite cheap and affordable for employees 6. Product quality is maintained (made with quality ingredients and processed hygienically) 7. Practical packaging and easy to carry anywhere	1. Does not have certification yet. 2. Brand not too muchwidely known to the public. 3. Don't have your own location yet, still joining other businesses. 4. Has limited production capacity. 5. Limited resources. 6. Less productive resources.
Opportunities 1. Technological advances provide opportunities for products to be marketed widely. 2. Improvement of the weaving convection industry. 3. Has a strategic location, crowded with visitors 4. Growth of the youth population. 5. The number of employees increases every year. 6. HabitIndonesian people who use woven fabric as a uniform 7. Woven clothing trends	**SO Strategy** 1. Adding different product variants and having unique characteristics every 6 months. (S1,O4,O6) 2. Cooperate with various e-commerce applications so that products can be known more widely. (S3,O1) 3. Having unique and different packaging every year. (S8,O4) 4. Establish cooperation with government agencies (S5,O3,O5)	**WO Strategy** 1. Conduct regular promotions by distributing brochures and adding promotions on social media. (W2,O1,O4) 2. Increase performanceresource services for increasesatisfaction consumer.(W6,O7) 3. Innovating the stand with unique decorations. (W3,O3,O5)
Threats	**ST Strategy**	**WT Strategy**

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1. It is easy for competitors to enter the weaving industry, making it easy to imitate similar products. 2. Many competitors on a national scale. 3. Consumer tastes change. 4. The prices offered are very competitive. 5. Unstable fluctuations in dye prices.	1. Giving uniqueness to each product. (S4,T2) 2. Creating new products for the public. (S1,S2,T3) 3. Do the right calculations, so that you can offer as affordable a price as possible. (S6,T4,T5) 4. Cooperate with suppliers to get cheap raw material prices, and can sell at affordable prices. (S6, T5, T4)	1. Using a guarantee system, to maintain brand quality and maintain consumer trust in the product. (W1, W2, T1)

The alternative strategies obtained are included in the strategies that have been formulated in the IE matrix, namely growth and build, namely:

1. Market Penetration Strategy: By collaborating with various applications so that the product can be known more widely (SO-2), conducting regular promotions by distributing brochures and adding promotions on social media (WO-1), and using a guarantee system to maintain brand quality and maintain consumer trust in the product (WT-1).

2. Market Development Strategy: By establishing cooperation with government agencies (SO-4).

3. Product Development Strategy: By adding different menu variants and having distinctive characteristics every 6 months (SO-1), having unique and different packaging every year (SO-3), improving the performance of resource services to increase consumer satisfaction (WO-2).

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CONCLUSION

The results of the study showed that Kupang City's ikat weaving UMKM had 8 strengths, 6 weaknesses, 7 opportunities, and 5 threats. After conducting an analysis using the EFE and IFE matrices, it can be concluded that Kupang City's UMKM is in a strong position in utilizing its strengths and is able to overcome existing weaknesses. The main strength has a value of 0.3948, namely not using synthetic dyes, while the main weakness is limited human resources with a value of 0.3090. The UMKM is classified as moderate in utilizing existing opportunities and overcoming threats, the main opportunity with a value of 3.619 is having a strategic location, crowded with visitors (malls, offices), while the main threat faced is the ease of competitors entering the imported cotton woven fabric industry, making it easy to imitate similar products with a value of 0.3238. The results of the IE matrix mapping show that Kupang City's UMKM uses a growth and build strategy, which consists of an intensive strategy or an integrative strategy. The priority strategies that must be implemented based on the analysis using QSPM with the largest TAS values in succession are adding different menu variants and having distinctive characteristics every 6 months with a value of 3.2617, collaborating with various applications such as Grab and e-commerce applications so that products

can be known more widely with a value of 2.0878, having unique and different packaging every year with a value of 2.0602, providing unique products.

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