

DESIGNING BUSINESS STRATEGY TO IMPROVE THE SCALE OF FOOD AND BEVERAGES INDUSTRY IN MOJOKERTO THROUGH INNOVATION WITH CLUSTER APPROACH

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ABSTRACT

In the knowledge-based economy era, innovation plays an important role in enhancing competitiveness and strengthening social cohesion. Therefore National Innovation System (SIN) and Regional Innovation Systems (SIDa) is formed as a reference in its implementation. Mojokerto is one of the districts/cities in East Java which is well known as the creative cities. Food and beverages industry subsector in Mojokerto has a chance to be developed. It is supported by some factors, there are (1) it make the biggest three contribution to RGDP (Regional Gross Domestic Product) in Mojokerto, (2) it has positive economic growth in 2008-2012, (3) it has an opportunity to creating jobs and reducing unemployment, (4) it support the utilization of natural resources, particularly in agro-based and (5) it has good opportunities in market, both inside and outside the city.

Considering to the industry that will be developed is a small scale industry in households scale and SME, cluster approach judged to be the appropriate approach to develop the model of business strategy design. The stakeholders involved are the food and beverage industries, government institutions, local governance, research institutions, educational institutions, innovation supporting institutions, businesses world and civic organizations in the area.

This research develop the design of business strategy for food and beverages industries in Mojokerto that accordance to the hexagon policy of SIDa, there are (1) the general framework: develop industrial cluster through participatory approaches, (2) build cooperative as a form of strengthening SME's cluster institution, (3) develop the culture of innovation through improving innovations in both three of business process ,financial aspects, and marketing aspect, (4) focus, alignment, value chains and (5) establish an effective monitoring system to monitor the status of the cluster to be able to compete in the global market. Assessment criteria for operational monitoring industrial cluster undertaken with monitoring to the criteria of cluster's component completeness and cluster's functional effectiveness.

Keywords :SIDa (Sistem Inovasi Daerah - Regional Innovation Systems), Food and Beverages Industries, Industrial Cluster, Hexagon Policy of SIDa

1 INTRODUCTION

In the knowledge-based economy era, innovation plays an important role in enhancing competitiveness and strengthening social cohesion. Accordance with this, in the MP3EI (Master Plan Expansion and Acceleration of the Economic Development of Indonesia), Indonesia is projected as the developed countries and the 12 world's great powers in 2025. In order to meet these targets, it needs breakthrough effort through strengthening the innovation system in Indonesia thoroughly, consistently and systematically. This is important to achieved

high, inclusive and sustainable economic growth.

SIDa (Regional Innovation System) is formulated as the effort to implement a innovation system at the local level. East Java province has become one of the pilot project of SIDa. Several districts/cities targeted for the implementation of SIDa include Gresik, Blitar, Malang, Madiun, Banyuwangi, Trenggalek, Pacitan and Mojokerto.

Mojokerto is one of the city in East Java that has a great industrial potential. Based on data from the Department of Industry and Trade, the role of Mojokerto in RGDP (Regional Gross Domestic Product) is divided into 3 groups of sectors i.e. Primary

Sector Groups, Secondary Sector Groups, and Tertier Sector Groups. Data in 2008-2012 indicates that Tertier and Secondary Sector Groups provide the biggest contribution percentage. The industrial sector which has big role are (1) Trade, Hotel and Restaurant Sector (2) Services Sector, and (3) Processing Industry Sector.

From both of three sectors, Processing Industry Sector has enormous opportunities to be developed. It is supported by some of the factors, there are (1) it has 9 subsector supporters, (2) able to absorb workforce, and (3) has potential to increase the income and the prosperity of the society. Among the 9 existing subsector, there are obtained that (1) the textile subsector, leather goods and footwear subsector and (2) food, beverage, tobacco subsector provides a significant contribution to RGDP.

At the moment, textile, leather goods and footwear subsector has gotten a pretty good management, especially for footwear industry because it is the flagship industry in Mojokerto. Industrial cluster has been formed for footwear industry as the effort to improve these industry. Either the government, the banking sector, and the private sector have contribution to the footwear industry cluster.

While food, beverage and tobacco subsector, especially for food and beverage industry, is not yet prioritized to develop. Whereas the perpetrator of this industry were mostly household industry and SME (Small Medium Enterprise) and plenty of absorbing workforce. As the city that gets the predicate as a Creative City, then it is in accordance with the development of food and beverage industries. Different types of processed food and beverages produced by the household industries are snacks, chips, breads, and pastries.

The research needs to be done to produce the design of business strategy to develop food and beverages industries of Mojokerto in particular. The proper method to be used is through strengthening the innovation system by applying the model of industrial cluster.

2 THEORETICAL BACKGROUND

SIDa (Regional Innovation System) is the entire process in a single system to develop innovation that done between government institutions, local governance, research institutions, educational institutions, supporting agencies for the innovation, business worls, and society. There are six innovation policy framework as a main agenda of strengthening the innovation system in Indonesia called Hexagon policy innovation, consists of (1) the general framework, (2) institutional and supporting power, and capacity absorption, (3) cultural innovation, (4) focus, alignment, value chain, and (5) global developments. While the initiative strategy as the pillars of implementation in the innovation system can be done in five ways: (1) strengthening regional innovation systems, (2) industrial cluster development, (3) innovation network development, (4) technopreneur development, and (5) strengthening thematic pillars of information systems

In performing the necessary strengthening of SIDa, it needs the right business strategy design. Strategic planning is a management tools used to manage the current conditions to make projections of future conditions, so that the strategic plan is a guide that can be used in the Organization of the current conditions for their work towards the 5 to 10 years into the future (Kerzner, 2001). Lorange (1980), wrote, that strategic planning is an activity that includes a series of processes of innovation and change the company, so when strategic planning does not support innovation and change, then it is a failure.

In this research, the object to strengthening of SIDa is SME. SME is a type of business that is highly developed in Indonesia and has contributed innumerable benefits for Indonesia's economy. Industrial cluster approach is an effective approach in the strategy of developing SME. Cluster concept introduced by Porter (1998) that sees the industrial cluster as a group of related companies and institutions on specific areas that are geographically close together, cooperating because of its similarities and requires. On industrial cluster, the companies that involved is not only large and medium-sized companies,

but also small companies. The existence of industry cluster will stimulate the onset of new businesses, new jobs, new entrepreneurs who are able to play the new loans. Porter (1990) introduced a theory of competition capability of a country which is described in the form of diamond diagram of four key factor that determines the competitiveness of a country, namely : factor condition, demand, corporate strategy, structure and rivalry, linkages and industrial supports.

3 RESEARCH METHOD

Research methodology was compiled as the guide to conduct research. The series of activities conducted in this research is studying the structure of the industrial of Mojokerto city, conducted a literature review, and conduct surveys directly and FGD (Focus Group Discussion). The next step is made a series of related design business strategy analysis.

4 RESULT AND DISCUSSION

4.1 Survey Results

Based on the data recorded by Diskoperindag of Mojokerto, there are 339 food and beverages SME, where 211 SME are in Magersari subdistrict and 128 SME are in Prajuritkulon subdistrict. Some of the products of the food and beverages SME in Mojokerto are bread, cakes and pastries, chips and crackers, nuts and snacks, peanuts chilli, traditional herbs, and other products. The SME which surveyed were shown on table 1.

Table 1. Surveyed SME

No	SME Name	Product	Description
1	Koki Raja	Petulo; Kacang Telur.	- 1 workforce - Small capital - Simple equipments - Marketing area in Mojokerto
2	Pangranggo	Keripik Tahu; Kembang Goyang; Onde2 Pecah; Rengginang	- 4 workforces - Joint Capital - Supported by Diskoperindag - Marketing Area Mojokerto
3	Kerupuk	Kerupuk	- 2-3 workforces

No	SME Name	Product	Description
	Bawang Tata	Bawang;	- Small capital - Long production process - Supported by Diskoperindag
4	Cahaya Mojopahit	Bidaran Keju; Akar Kelapa; Keripik Ketela; Keripik Sukun.	- 3-5 workforces - Simple equipments - Marketing area in Mojokerto
5	Lidya	Onde-onde; Keciput.	- 2-3 workforces - Glutinous floursupplied from Subang - Marketing area in Mojokerto

4.2 SWOT Analysis

A SWOT analysis is done by identifying strengths, weaknesses, opportunities and threats in the food and beverage industry in the Mojokerto city. Strengths and weaknesses are internal factors of the industry. While the opportunities and challenges are external factors that affects the food and beverage industry. Table 2. shows a scheme of a SWOT analysis made.

Table 2. SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> - The product has long expiration period - Certain types of products (keciput and petulo) already famous as the typical of Mojokerto. - Raw materials are easy to obtained. - The existence of outlets such as Bo Liem and Bypass Mojokerto Stores facilitate the marketing of product. - SME have considerable turnover. 	<ul style="list-style-type: none"> - Most of SME owners don't have long term goal to developing their business. - Production capacity is small and inconsistent. - Business capital is small, so the SME difficult to develop their business - Traditional equipments and lack of technology usage. - Each SME has different and uneven information and knowledge.
Opportunity	Threat
<ul style="list-style-type: none"> - Have support from institutions concerned (Diskoperindag, universities and banks) - Target market is dominated in Mojokerto, so there are opportunities for expanding markets outside the city - Development of process technology and information technology which can help in developing SMES. 	<ul style="list-style-type: none"> - Lack of support from the community around the business place is causing difficulties in getting SME workforce. - The existence of competition with similar products produced from outside Mojokerto.

4.3 Value Chain Analysis

Following are the results of the identification of supply chain in food and beverages SME in Mojokerto, particularly for pastry, chips, and crackers products.

1. Input Supply

Activities in input supply consists of purchasing the raw material for production. Most of food and beverages SME in Mojokerto get of raw materials supplies from local markets, such as Tanjung Anyar Market in Magersari subdistrict and Prajuritkulon Market in Prajuritkulon subdistrict. Some larger SME which have more capital have raw materials supplies from the raw material production center, such as Lydia that get supplies for glutinous flour directly from Rose Brand factories in Subang.

2. Production

Production activity is carried out by food and beverages SME as the core industries in the industrial clusters. The production process consists of the processing of raw materials into the finished product, including the packaging process. Long production process does vary depending on the type of product that was made. Crackers takes quite a long production, i.e. for 5 days, because it has to go through hardening and drying process. While the pastries only takes about 5 hours to produce.

3. Trading

The trading process is the process of marketing products that are made to introduce the product. The trading process is conducted by the core industry. SME will offer the products to distributor stores. SME also incorporating their products in the exhibitions organized by the Government or other institutions. Some SME receive special orders from customers. In the process of marketing, SME used particular brand name to simplify distributors and consumers to know the product and also give add value to the product.

4. Distribution

The products were distributed to stores and outlets in Mojokerto. The distribution of this product using a deposit system, where the SME owners entrust their products in the store and will receive money when its products sold. The

products unsold would be a loss to owners of SME. SME owners will check the availability of products in shops, supermarkets and other outlets that become distribution partners periodically or outlets that reported to the SME when its products has run out from stock. A few outlet to distribute the product are Bo Liem and outlets at Bypass Street Mojokerto. In addition to the deposit in the stores, outlets and supermarkets, sometimes there are parties who brought the product to sell on the market, the school cafeteria, hospital and office or Lapangan Banteng. Some SME experiencing constraints in distribution due to the limited distribution transport used or workforces owned so that the distribution of the product may be says still hasn't been in maximum performance.

5. Support

This activity consists of activities supporting the primary activities carried out by the industry's core as well as institutions and related agencies. In the production process, many SME have been getting help in the form of Government from a production machine, such as Diskoperindag BKPPM and Mojokerto. SME also gain training-training for enterprise development, such as training of making a cake that was held by the Diskoperindag and training of product packaging undertaken by ITS. In addition, SME was also received capital loan from the Diskoperindag of Mojokerto city.

4.4 Porter's Diamond Diagram Potrait

Then the things explained before illustrated in the the porter's diamond diagram to show more details the relationship/linkages that exist. The current conditions of each component in the Porter's Diagram on food and beverages SME, in particular for pastry products, chips and crackers, are described in table 3. below.

Table 3. Factors Condition Mapping Based on Porter's Diamond Diagram

Sub Component	Current Condition
1. Components of Factor Condition	
Product	There are a number variety of product and some product well known as specialtiesof

Sub Component	Current Condition
	Mojokerto. The product can last long up to 1 month, so it has the potential to be distributed outside Mojokerto.
Raw Materials	The raw materials available in the local market, stores and agents of cake and pastry in Mojokerto.
	Raw material prices tend to be more expensive it can still be pressed again.
	Most of the raw materials used come from local production, and it help local raw material industry.
Human Resources	Most SME's owners are lack of motivation to develop their business (no long term vision).
	The workforce for the production process have been trained.
	Lack of workforce number for the production and distribution process.
Capital	Most of the SME is a family business that began with small private capital.
	Source of loan funding comes from Diskoperindag and Bank BRI.
Production Facilities	Production place is small. It's occupy households building.
	Production equipment is simple and in household scale.
	Several manual production process done manually because lack of technologies usage.
	Some of the equipment of production, such as machine and stove, obtained from government assistance.
Infrastructure	Market area available as one of the sources to supply the raw materials and market the product.
	The development of Central outlet in Mojokerto Bypass Street.
2. Demand Condition	
Market Condition	Society consumptions of traditional foods such as pastries, chips and crackers is high enough.
	The product is sought after as a specialty gift from Mojokerto.
Marketing Range	Marketing is still limited inside the city.
3. Supporting Related Industries	
Government Institutions	Government supports for SME is good enough. Government institutions have programs for the development of SME.
Local market, Cake and Pastry Ingridients Store or Agent	The supply of raw material for the production from cake and pastry ingridients store or agentis sufficient to fullfill SME's needs
Distributorsshops,	Distributors shops, supermarkets

Sub Component	Current Condition
supermarkets and outlet	and outlet is open to receive the product, although there are still difficulties to supply in several outlets caused by competition between distributors and also the use of relationship as a priority.
Bank	There is support in the form of capital funds, especially loans obtained from Bank BRI and Diskoperindag. However, in the existing conditions, this fund has not been able to make SME enlarge his business.
Research Institutions/ universities	Several research institutions and universities, such as Balitbang and ITS, has research programs in the development of SME.
Private Companies	Some private companies have programs for SME development, including in the form of training.
4. Strategies, Structures, and Rivalries	
Production	Most production activities is done manually with a simple equipments, small-scale and inconsistent.
Marketing and Distribution	Marketing of products done with deposit system in stores, supermarkets and other outlets. So far is quite effective, especially it can guarantee a fast turnover.
	Distribution access is open and aided by Diskoperindag in linking between SMEs, outlets, and between SMEs and the outlet.
	There is big competition among distributors.
Market Competition	In addition to compete between products from SMES in Mojokerto, there is also competition with products from other cities.
Innovation and Efficiency	SMES are still lacking innovation and efficiency in running the business.
Technology Usage	SME is lacking in technology usage.
Human Resources Coaching and Training	There are human resources coaching and training is facilitated by Diskoperindag and other institutions.
	There is no knowledge-sharing among its industry peers in the cluster
5. Government	
Government Policy and Supports	The Government, in this case is Diskoperindag Mojokerto, has some programs to develop SME.
	The infrastructure of the Mojokerto city are good enough and can support the development effort.
	So far, the SME does not feel the existence of government policies that impede the business.

Sub Component	Current Condition
6. Change	
Industrial Condition	Food and beverage SME Mojokerto has a lot of potential to be developed and it get support from the Government and other institutions.
Society Condition	Lack of support from the community around the business place is causing difficulties in getting SME workforce.

4.5 Stakeholders Model for Food and Beverages SME Cluster

Food industry cluster stakeholders model for food and beverages SME in Mojokerto figured as below.

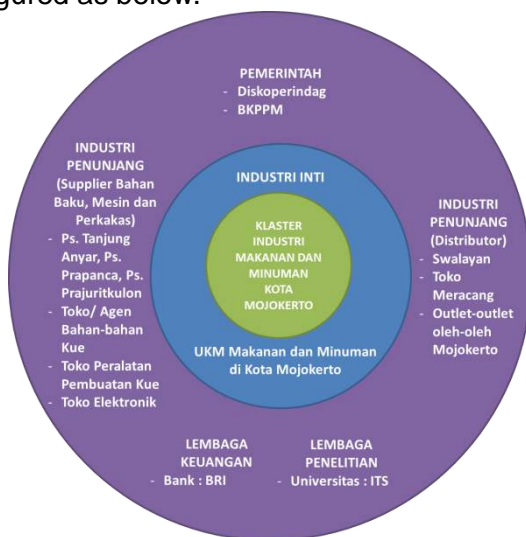


Figure 1. Stakeholders Model for Food and Beverages SME Cluster

The quality of Industrial Cluster institution is determined by two main factors, there are the comprehensiveness and effectiveness of its constituent components in current status. Regarding to the number of attributes that are important in the development of industrial cluster institution, then it made further analysis in the performance of the cluster by comparing completeness criteria that are supposed to be with the current state. It is also represent the functional effectiveness in qualitative. The analysis results on the current conditions component can be described in table 4.

Table 4. Analysis of Cluster's Component Completeness and Functional Effectiveness in the Current State

Criteria	Current State
The existance of business peers on every production	It is already owned by the food and beverage industrial cluster in Mojokerto. The raw materials

Criteria	Current State
chain from the upstream up to the down stream	supplies obtained from local markets, stores and pastry ingredients agents in Mojokerto. The core industry is food and beverage SME Mojokerto. Then, for the product distribution up to the end consumer through convenience stores, and outlets in Mojokerto. But there has been no relationships or coordination between all three stakeholders. They still work independently.
Satisfy the representation from every production chain in the industrial cluster membership	No organization that ties together the business peers in the food and beverage SME cluster in Mojokerto. So, there's no particular media to show the representation of the members in the cluster.
The number of business peers who are committed in industrial cluster meet the "critical mass" that characterized by satisfy the value of "economic scale"	There are big enough number of businesses in the food and beverage SME cluster in Mojokerto. But the business peers, particularly the food and beverage SME as the core industry, still does not yet have a joint commitment of cooperation and coordination in performing industrial cluster development.

4.6 Designing Business Strategy

Based on the analysis of components of the cluster that has been done, next is doing the design of business strategy that refers to the hexagon policy of SIDA. Table 5. describe the results of the design of business strategy that includes a policy framework, the activities and the goals that want to achieve.

Table 5. Design of Business Strategy for Food and Beverages SME in Mojokerto

Activities	Goals
General Frameworks	
Developing food and beverages SME cluster in mojokerto	Forming integrated system and strategies between SME and its stakeholders in purpose to developing food and beverage SME in Mojokerto
Institutional, power supports, and absoption capacity	
Developing <i>Koperasi</i>	Media for connecting and binding the commitment of Food and Beverages SME in Mojokerto and its stakeholders
Interaction/ Linkages, Services	
Enterpreneurship Training	Develop entrepreneurial motivation to the SME's owner Give education to the SME in both all aspect of production, marketing, management and finance.

Table 5. Design of Business Strategy for Food and Beverages SME in Mojokerto

Activities	Goals
Innovation Culture	
Developing research that supports the Food and Beverages SME in Mojokerto	Delivering improvements to the SME, for all aspects of production, marketing, management, and financial, in order to improve the quality of its product.
Focus, Alignment, Value Chain	
Establishing Knowledge Management System among industry peers	Facilitate the information flow between SME and its stakeholders as the tools to uniform quality of the product peers
Global Development	
Developing evaluation and monitoring system for food and beverages SME in Mojokerto	Monitoring the development of the SME and as a tool to determine the next strategy in the development of SMES in accordance with global developments that occur.

Conducting an assessment of the operational aspects for the cluster that can be seen from its institutions performance, it is need a scoring board model that could serve as media for monitoring and evaluating the progress of operational performance of an industrial cluster. The generic model that used shown in Table 6.

Table 6. Scoring Board of Operational Criteria Assessment for industrial cluster

Sub critrion	Bobot Relatif	Bobot Normal	Target	Unit	Capaian	Score		Status
						Relatif	Abs	
Completeness of component								
1	Representation of the core industry							
2	Representation of supporting industries							
3	Representation of supporting institution							
Functional Effectiveness Cluster								
1	Coordination mechanism							
2	Collaboration							
3	Quality Evaluation System							

5 CONCLUSION

Processing Industries sector occupies third position in Mojokerto's RGDP starting in 2008 to 2012 i.e. 17,53%; 16,76%; 16,97%; 16,98% and 16.59%. Whereas textile industries, leather goods and footwear subsector, as well as a food, beverages, and tobacco industries subsector giving a high RGDP.

Food and beverages industries subsector has a great opportunity to be developed through the implementation of SIDA. It is supported by a number of conditions, there are (1) it make the biggest three contribution to RGDP in Mojokerto, (2) it has positive economic growth in 2008-2012, (3) it has an opportunity to creating jobs and reducing unemployment, (4) it support the utilization of natural resources, particularly in agro-based and (5) it has good opportunities in market, both inside and outside the city.

Industrial cluster approach is an effective approach as the strategy to develop industries/SME of food and beverages in Mojokerto. Its expected to increase the added value in economic, social, environmental, and its internal business processes.

Business strategies design for increasing the business scale of food and beverage SME at Mojokerto performed with emphasize on the achievement strategy with the scheme that refers to the Hexagon policy of SIDA, there are (1) the general framework : develop industrial cluster through participatory approaches, (2) build 'koperasi' as a form of strengthening SME's cluster institution, (3) develop the culture of innovation through improving innovations in both three of business process, financial aspects, and marketing aspect, (4) focus, alignment, value chains and (5) establish an effective monitoring system to monitor the status of the cluster to be able to compete in the global market.

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