Mapping the Competitive Advantage of SMEs in East Java, Indonesia

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Abstract
This article describes the situation and potential of SMEs in East Java Indonesia. Small and medium enterprises are essential to support the economic progress of a country. By using descriptive analysis and multiple regression then generated mapping. Mapping the characteristics and competitiveness of SMEs is done as a basis for gap analysis. If the current condition of Indonesian SMEs is known, benchmarking can be done by comparing ideal conditions or targets to be achieved in the face of global competition. The mapping generated from this research is expected to provide an overall picture of SMEs in districts of Jember, Bondosowo, Situbondo, and Banyuwangi, East Java Province, Indonesia, so that it can assist government and business actors in determining business strategies and policies. This study found the variables that significantly affect the competitive position are innovation ability, quality focus, customer loyalty, response to change, price advantage and marketing power. While the insignificant membership of the cooperative, it does not have a significant role for the creation of a strong competitive position. This is supported by the fact that most of the SMEs in eastern Java are not members of the cooperative. Similarly, business status with legal status and not and the use of intermediary traders is not a thing that affects the strength of competitive position.

Keywords: Potential Small and Medium Enterprises; Small and Medium Scale Enterprises; Mapping; Business Actors; Business Strategies; Business Policies.

Memetakan Keunggulan Kompetitif UMKM di Jawa Timur, Indonesia

Abstrak

JEL Classification: M3, M31
INTRODUCTION

The local government has made several programs to promote SMEs such as the effectiveness of micro small and medium enterprises (SMEs) and the settlement of business licensing issues (Mfaume & Leonard, 2004). Intensively also provide guidance on standardization and design of industrial products as well as provide facilities of ISO, SNI, and Batikmark certification. Efforts made by the government in general consists of two aspects, namely, infrastructure development and construction soft infrastructure.

The development strategy of SMEs is by digging the data and documenting the data of SMEs in the production sector and its segmentation. Based on the data, the priority of activity program for SMEs is by developing Agroindustry as much as 671,058 units of SMEs, standardization of product for SMEs, and making 5 smelter consisting of 2 Foreign Investment and 3 Domestic Investment. Generally, SMEs is very difficult to be a big business (Zhel-toukhova & Suckley, 2014; Mgeni, 2015; Mgeni & Nayak, 2015).

SMEs is the key of economic growth in East Java. This is evidenced by the contribution of SMEs to Gross Regional Domestic Product (GRDP) reached 54.98% or IDR. 1.1689.88 trillion. In addition to making a substantial contribution to GRDP, SMEs is also able to absorb labor by almost 98 percent.

SMEs data is very important to help local governments in setting strategies and policies in accordance with real conditions. Important aspects of data collection include innovation, quality, loyalty, response, price, cooperative, legal entity and human resources.

Mapping the characteristics and competitiveness of SMEs is done as a basis for gap analysis. If the current condition of Indonesian SMEs is known, benchmarking can be done by comparing ideal conditions or targets to be achieved in the face of global competition. Current inequalities (gaps) between regions, based on mapping results, form the basic framework for strategizing to achieve the ideal targeted conditions (Purnomo, 2011).

Some study literature states that the ability of SMEs to compete in the global era depends on several variable characteristics. Tobing (2016) divides these variables into internal and external variables. Internal variables include factors such as firm size, stakeholder personality, and educational background (owner and worker), as well as corporate culture. Meanwhile, external factors that can affect performance are national culture, a country’s economic system, regional economic integration, and people’s purchasing power.

The ability of business diversification with the support of larger assets makes SMEs at mid-level have flexibility in anticipating demand fluctuations. Meanwhile, small businesses tend to have only one business unit so that the decline in demand can lead to the termination of SMEs operational activities. Therefore, SMEs generally has a higher survivability rate than larger companies (Konstantinos & Triantafyllopoulos, 2014).

The issue of globalization is one of the external factors whose impact can vary on SMEs. Globalization, through the implementation of the Free Trade Area (FTA), for example, opens up domestic market access for the products of FTA partner countries so as to have a negative impact on SMEs with low competitiveness. Conversely, positive impacts can also be felt by SMEs with the opening of opportunities to expand the domestic product market to partner countries. Thus, the characteristics of SMEs that can exploit the opportunity to open market access (or market access in the jargon of international economic literature) in the international market need to be explored. Such characteristics will be useful and become an ideal benchmark for formulating strategies to improve the competitiveness of Indonesian SMEs (Tambunan, 2008).

Analysis performed by U.S. The International Trade Commission (USITC) in 2010 stated that SMEs in the United States doing export activities perform better than those that
do the same type of business focused on the domestic market. Performance is reflected by average earnings per firm, revenue growth, and income per worker. The results of the analysis explain that SMEs conducting export activities have higher performance than SMEs that focus on the domestic market (Tambunan, 2008).

Small and medium-sized enterprises (SMEs) are the most survival groups when the economic crisis hit the country. The growing number of small and medium-sized business units will certainly be able to open large employment opportunities. However, this small business is still seen as a weak business performance (Van der Vaart & Gibson, 2008; Mgeni, 2015; Mgeni & Nayak, 2015).

SMEs were able to open up new jobs for 9.6 million people, while large businesses only able to open new jobs for 55,760 people. In addition, the contribution of SMEs to the export of non-oil and gas national by 19.9%. Small and medium enterprises are business activities that are able to expand employment and provide broad economic services to the public can play a role in the process of equity and increase in people’s income, and encourage economic growth and play a role in realizing national stability in general and economic stability in particular (Hogarth-Scott et al., 1996; Hill, 2001).

The availability of local raw materials for small and medium industries is a distinct advantage that allows it to operate efficiently (Aqwu & Emeti, 2014). On the other hand the working capital required is relatively small, thus giving the opportunity to the community who have entrepreneurial spirit to establish business units with the level of sophistication of affordable production techniques. Within certain limits, the activities of small and medium-sized industries can reduce some of the import burden, so in a strategic framework it can save foreign exchange (Mourougane, 2012).

Hypothesis Development
Innovation

Martín-de Castro et al. (2013) state that the competitive advantage of an organization is very important to be developed and maintained by developing technological innovation. According to Zemplinerová (2010) to acquire a predominantly market share needs to be a fund budget for research, development and introduction of innovation Autant-Bernard et al. (2013) argue the organization must have an original strategy and support the development of knowledge from and to the organization. It can be concluded that organizational innovation has a significant effect on the competitiveness of the company. Competitiveness can be achieved higher by producing products of the highest quality than competitors’ products. Therefore, the proposed hypothesis is as follows:

H1: There is a positive influence of innovation ability on competitive advantage.

Quality Strategy

Quality strategy is considered an important tool for a firm’s struggle to differentiate itself from its competitors. The relevance of quality strategy to companies is emphasized here especially the fact that it offers a competitive advantage to companies that strive to improve it and hence bring customer satisfaction. An analysis of the effect of quality on competitive advantage has been done by many researchers. The researchers conclude there is a weak influence between the two. The intended research is conducted by Wijetunge (2016). Therefore, the proposed hypothesis is as follows:

H2: There is positive influence of quality strategy on competitive advantage.

Consumer Loyalty

There is a need for company to move from mere customer attraction to customer retention which requires a focus on customer loyalty, particularly, on how it is influenced by word of mouth, perceived service quality and trust in order to retain their existing customers and/or attract new ones. Company managers pay more attention to the influence of customer loyalty to company performance. Company performance is a reflection of a company’s competitive advantage and as an important tool to tie long-
term relationships with customers (Mittal et al. 2015). Therefore, the proposed hypothesis is as follows:

**H3:** There is positive influence of consumer loyalty on competitive advantage.

### Respon to Change

If strategy research is to continue to offer credible guidelines on the strategic behavior of firms it seems imperative to have a more fundamental understanding of the factors influencing a firm’s choice of diversification strategy and how this evolves in response to changing business conditions (Fatrisia & Raharja, 2015). The study in finding out the strategic responses adopted by University of Nairobi to cope with increased competitive advantages by public universities in Kenya. Therefore, the proposed hypothesis is as follows:

**H4:** There is positive influence of respond to change on competitive advantage.

### Price

Company performance is influenced by price. the results of the study indicate that the company should focus on its competitors and customers. the differentiation of new products and or services produced by the company will assist the company in determining the pricing strategy. this will positively affect the level of profitability and competitive advantage (Milan, 2013; Davcik & Sharma, 2015). Therefore, the proposed hypothesis is as follows:

**H5:** There is positive influence of price on competitive advantage.

### Labor

Human Assets can be an important source of competitive advantage and economic rents. Both spects of Human Resources (knowledge and motivation) have been shown to have the potential to generate rents. The ability to create a sustainable competitive advantage linked to Human Assets depends on the presence of isolating mechanisms that protect rent-generating HR practices from imitation and substitution (Sin et al., 2015; Ngah et al., 2015; Pe’er, 2016). Therefore, the proposed hypothesis is as follows:

**H6:** There is positive influence of labor on competitive advantage.

### Cooperative

Cooperation networks represent an alternative for companies of small and medium-sized of supermarket sector, in order to achieve competitive gains such as economies of scale, increased product portfolio, better negotiating prices and terms with suppliers and implementation of marketing strategies (Gaspar et al., 2013; Centenaro & Laimer, 2017). Therefore, the proposed hypothesis is as follows:

**H7:** There is positive influence of labor on competitive advantage.

### METHOD

This study will analyze the competitive position of Small and Medium Enterprises (SMEs) to support the development of competitiveness and regional marketing. The research location is in district of Jember, Bondowoso, Situbondo and Banyuwangi, East Java Province, Indonesia. The type of research is explanatory research (explanatory research), because this study discusses the relationship between research variables and test the hypothesis that has been formulated previously with the focus lies in explaining the relationship between variables (Singarimbun & Effendi, 1995).

The study population is SMEs in Jember, Bondowoso, Situbondo and Banyuwangi, East Java, Indonesia with a total of 602,479 business units. The sample of this research is 160 business units. The analysis technique used in this research is descriptive statistical analysis and inferential statistical analysis. Descriptive statistical analysis, in which the analysis is performed to get the description or description of each variable studied by using the frequency distribution, mean, and percentage (%). Inferential statistical analysis, used to test the research hypothesis that has been determined by using existing samples. The analysis tool in this research is
using multiple regression with OLS (Ordinary Least Square) method.

**Analysis of Company’s Competitive Position**
From the model specification variables are as follows:

\[
\text{Competitive Position} = \beta_0 + \beta_1 \text{Inovation} + \beta_2 \text{Quality} + \beta_3 \text{Loyalty} + \beta_4 \text{Response} + \beta_5 \text{Price} + \beta_6 \text{Cooperative} + \beta_7 \text{Legal} + \beta_8 \text{HR} + e
\]

Where:
- Dependent Variable (Y) = Position
- Independent Variables (X) = Innovation, Quality, Loyalty, Response, Price, Cooperative, Legal and Human Resource (HR)

**Information**
The position shows the company’s position in the competition, Innovation shows the company’s efforts to create innovation/product development, Quality demonstrates the application of corporate strategy to quality, Loyalty shows the magnitude of consumer loyalty to the product/brand company, Response shows the company in response to change, The price indicates the ability of the firm to set competitive prices, HR demonstrates how firms have trained workers, which is given a score of 5 (very strong), 4 (strong), 3 (medium), 2 (weak) and 1 (very weak).

The cooperative uses dummy variables, where:
- 1 = Members of the cooperative and
- 0 = Are not members of the cooperative.

Legal entities use dummy variables, where:
- 1 = Already legal entity and
- 0 = Not yet incorporated.

Error (e) = Denotes the confounding variable.

**RESULT AND DISCUSSION**

**Potency SMEs in East Java**
SMEs in district of Jember, Bondowoso, Situbondo and Banyuwangi amount to 602,479 SMEs (Department of Industry and Trade and the Cooperative Office, 2016). This huge amount is in urgent need of government assistance in terms of development programs for these SMEs. The problems faced by SMEs are very complex, especially since the penetration of outsourced products with very competitive prices makes the perpetrators in this industry face a very big problem.

There is a decreasing condition of sales in certain business sectors such as retail industry, due to the more modern retail with more measured business management. The government also grants extensive permits for this modern retailer.

Competition precisely happened strictly because of the appearance of local products branded (branded) which penetrated the market segment of home industry products. The weakness of SMEs in East Java in general is not able to produce raw materials according to global demands in quality. In the European market, for example, people prefer products that are free from harmful chemical elements, both for the body and the environment (recycling).

European markets shifted their purchases to China with 35%-45% cheaper price. Today’s export market is very hard to break if competing with Chinese products. Seeing what has been mentioned above, then the craftsmen in East Java Province next gather, in the hope, these craftsmen can face together problems that whack. The association is expected to create breakthrough programs to improve competitiveness and overcome obstacles.

**Business Identity**
The results show that SMEs in East Java is a household industry that is characterized by the same business location as the location of the residence. Of the 100 respondents studied, all (100%) were home industries. It is also seen from the type of business, this industry is owned by individual/own (99%) and only one sample business which is cooperation.

In terms of age of shoe business owners on average are in productive period. Business owners are between 36-40 years old (38.75%), and only two persons under 25 years (1.03%), this indicates that the business owner has the potential to innovate which will greatly affect the business continuity.
The samples that studied found out that the most of business (70.35%) has not been incorporated. This is in accordance with the characteristics of small industries that are generally not yet legal entities. Most of the businesses are not members of the cooperative that is 72.08% of the total sample of research, while the remaining 27.92% are members of the cooperative.

**Capital**

Judging from the size of the initial Capital, shoe business has different from each other. Most of the initial capital of shoes is under IDR 5,000,001, or equal to 68.12%, then business with capital IDR 15,000,001-IDR 25,000,000 amounted to 23.13. Although the amount of initial capital of this business is dominated by the nominal value below IDR 25,000,000, but there are also businesses that have an initial capital of more than IDR 55,000,000 that is as much as 8.75%.

The source of the initial capital is derived from the capital itself as well as loans from parties other. Most of the shoe capital source comes from loans (90%) derived from the capital assistance of Department of Industry and Trade and the Cooperative Office, banking, cooperatives, raw material stores, partners, family, friends and even from other (one business). While the source of capital from personal or capital alone as much as 10% of all samples studied.

**Yearly Income**

From the sample of the business studied, the annual turnover of the business, the minimum annual turnover is IDR 6,200,250, while the highest sales per year is IDR 1.1 billion. As many as 54.14% have income above IDR 120,000,000, this shows that this business has a profitable prospect. Annual income between IDR 100,000,000-120,000,001 and IDR 60,000,001-80,000,001 there are 11.20% and 14.10%. Furthermore, for annual income between IDR 40,000,001-60,000,000, and IDR. 80,000,001-100,000,000, respectively at 8.17% and 7.34%. While the rest under IDR 40,000,001 of 5.05%.

**Business Administration**

Most of the business has done the financial accounting of 96.39% of business while the remaining 3.61% have not done their financial bookkeeping. In terms of reports the company’s financial position shows that as much as 67.03% there are financial statements and the remaining 32.97% there has been no statement of financial position.

**Profile of Labor**

The labor force in SMEs is 895 people from 120 businesses, mostly from the villages themselves and East Java, where in the labor recruitment process is done not based on the standard and procedure in theory of human resource management but based on work test and directly recruiting brother Alone, neighbors and acquaintances.

The process of business activities such as production, distribution and marketing, where 55.3% of businesses have done a clear division of labor while the remaining 44.7% have not done so. Of the total workforce of the sample research effort, only 743 workers performed a clear division of labor.

The division of labor is clearly divided into 3 parts namely the production, marketing and distribution. Of the total workforce who obtained a clear division of labor, the production workforce has the largest proportion of 68.06%, followed by the marketing and distribution of 13.51 and 18.43% respectively.

In terms of workforce education, 46.75% of the total workforce is elementary school educated, 34.14% have junior high school education, 18.90% have high school education and 0.21% have tertiary education. Highly educated workers are very easy to understand because the shoe industry requires only the skills and talent and energy to produce its products. In an effort to increase the ability and skill in producing shoes, most of the business did not do the training that is equal to 75.6% while the rest equal to 24.4% doing the training. The training was conducted by the Department of Industry and Trade and the Cooperative Office in
district of Jember, Bondowoso, Situbondo and Banyuwangi as well as those who conducted the training independently.

**Production**

The survey results note that the entire shoe business does not have difficulty in obtaining raw materials. Supply of raw materials obtained from Surabaya, East Java, Sidoarjo, Magetan and several other areas.

The effort to maintain the sustainability of its business, every shoe business needed product development to continue to exist and compete in the market. The survey results obtained that all businesses have been doing product development. There are several ways in which the shoe business in East Java in an effort to develop its products include following market trends, improving the quality of production and design innovation, variations of models and raw materials, the use of information technology, create new models, change the model that sells in the market, From sales as well as modeled on the market.

**Marketing**

Business network is needed in marketing business products. From the sample studied almost entirely have a business network, that is as much as 99.0% have a business network and the rest have no network.

Some of the institutions that are the business network are: Local Government, Industry, Department of Industry and Trade and the Cooperative Office, Department of cooperatives, grocery-shop, industries, schools, employee cooperatives, contractors, raw materials stores, shops or wholesalers.

In the process of selling shoe products, most businesses use intermediary traders to market their products. As much as 86.7% used intermediary traders to market their products, while the remaining 13.3% did not use intermediary traders. These intermediary traders include cooperatives, factory employees, agency employees, individuals, shops and wholesalers, traveling sales, contractors-employees of government agencies, market traders, employees of government and non-government agencies, distributors, individuals (trade partners), sales free lance marketing) and producer or entrepreneur friends as well as regular customers. Most businesses have fixed customers 92.8% while the rest 7.2% do not have fixed customers.

In an effort to improve the ability of the workforce, especially in the field of marketing, as much as 70.53% did not conduct continuous training to marketing personnel, while as much as 29.47% conducted continuous training. There is a difference of opinion about the importance of training for marketing personnel Although most salespeople are rarely included in continuous training, but almost all of the research sample states that marketing personnel are very useful. There are several reasons that the marketing force is very useful among others because it can expand the market, add market info, expand the product network and maintain production continuity.

**Competitive Advantage Analysis**

Competitive advantage analysis is required in order for the business to win the competition. Business advantages depend heavily on its marketing advantages. Proper marketing will facilitate penetration of the market that will affect sales. Marketing supported by a strong sales force will be directly proportional to the increase in revenue earned. Based on the research results obtained information that SMEs in East Java is weak in the marketing power of 68.35% of the total sample studied.

The advantages of marketing personnel will greatly affect the process of selling products offered to the market. The establishment of marketing personnel will open a new network to expand its products. The advantages of the business network will be very influential on the number of products marketed, the wider the business network the greater the products sold. SMEs in East Java largely has a network advantage that is being based on surveys that have been conducted. This is indicated by respondents’ answers, where 79.4% have moderate network
advantages, 11.3% are weak, 8.3% are strong and only one business 1.0% has a very weak network advantage. The average labor productivity of SMEs in East Java (covers the area: Jember, Bondowoso, Situbondo, and Banyuwangi), about 58% is still far behind compared to large enterprises (Figure 1). In the period 2014-2016 SMEs, small-scale business still reach 31% and medium-sized business of 58%.

This condition can allow local government to pursue progress in the mid-sized industry into large-scale industries. The ability to grow the scale of industry can absorb more labor.

Another factor is the price advantage that will greatly affect the success of the business. The price advantage is related to the ability to make production efficiency. The more effective and efficient in producing a good or service then the price of products offered will be more competitive.

Most of the SMEs in terms of price advantage indicate the current state of 81.8%, indicating a weak price advantage of 11.7% and very weak 1.0%. While businesses that have a strong price advantage is only 5.5%. In addition to price advantage, other factors that affect the product acceptable to the market or not is the ability of entrepreneurs in developing their products or in other words the ability to innovate. The innovation ability of shoes business showed a strong condition of 9.2%, medium condition equal to 74.15%, weak condition 15.56% and very weak 1.09%.

Competitive Position Analysis

The results of the analysis prove that the main variables that significantly influence the competitive position are innovation ability (INNOVATION), focus of quality strategy (QUALITY), consumer loyalty (LOYALTY), response to change (RESPONSE), price advantage (PRICE), labor (HR) with a significance value below 5%. Other variables, such as membership of cooperatives (COOPERATIVE) has no significant effect on the position of competing SMEs in district of Jember, Bondowoso, Situbondo and Banyuwangi in East Java Province.

All the coefficients of variables that affect the competitive position have a positive sign which means that the higher the ability of innovation, the focus of business strategy, customer loyalty, response to change, price advantage and the advantage of marketing force will be stronger as well as competitive position. While the insignificant membership of the cooperative, it does not have a significant role for the creation of a strong competitive position. This is supported by the fact that most of the SMEs in eastern Java are not members of the cooperative. Similarly, business status with legal status
and not and the use of intermediary traders is not a thing that affects the strength of competitive position.

CONCLUSION AND RECOMMENDATION

The variables that significantly affect the competitive position are innovation ability, quality focus, customer loyalty, response to change, price advantage and marketing power. This is in accordance with the results of research conducted by Kara and DeShields (2005); Laforet (2008).

Based on the findings established by this study, we recommend that, to grow, SMEs need access to both cheap and easy inputs (raw materials, human resources, and capital goods), financial or market support for products/services produced. The government needs to increase its role in providing such facilitation, both in improving productivity and innovation, providing ease of business, financial access, and market access, both locally and globally. The weakening world and regional market conditions should be addressed as an opportunity to improve the ability of Indonesian SMEs.

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