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# The Effect of the Operational Strategy on the Company Performance: An Empirical Study in the Small and Medium Industries (SMES) in South Sulawesi, Indonesia

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**Abstract:** ***The aim of this study is to determine the implementation on the effect of the operational strategy of the performance in the small and the medium industries, SMEs, in South Sulawesi. The variables of operating strategy consist of the cost, differentiation, quality, flexibility, delivery, and innovation ones. While the operational performance variables encompass the level of the productivity and the level of the efficiency. The number of samples comprises 75 small and medium industries (SMEs) in South Sulawesi, Indonesia. The collected data use a survey method with questionnaire tools, the data were analyzed with a descriptive method and path analysis, using the SPSS ver.17 program package. The results showed that the variables comprise the operational strategy of the cost, the quality, the delivery, the innovation positively significant effect on the improvement of the operational performance and the flexibility of the company. While, the differentiation variables significantly negative effect on the company's improved operational performance. It is recommended to other researchers to examine why the variables of the differentiation and the flexibility did not, as one of the operational strategies, have a significantly positive effect on strengthening operational performance in the industries, the small and medium enterprises (SMEs) in South Sulawesi.***

**Keywords:** Effect, Improvement, Performance, Small & Medium Industries, Strategy

## 1. Introduction

The Indonesia Government, especially South Sulawesi Government, continues to encourage the development and the growth ofthe small and the medium industries, SMEs. Therefore, the number of SME units in South Sulawesi grows from year to year. Until the year of 2013, there are, as many as, 751 802units and specialized for the processing industries, as many as, 16, 745 units or 0.2 percents,(Indonesian Central Bureau of Statistics, BPS, on SME Statistics, 2013). However, the question then is, in terms of the productivity, are the quality and the competitive products also increasing?.Or, can the existing SME industries produce the products which can compete with the foreign companies seize market in Indonesia?.The SME industries penetrated the export market, in 2013, only1.3 percentof the total registered SME units and almost zero percent for manufacturing SMEs (BPS, SME Statistics, 2013).

Porter (1985) argues that the competitive advantage is the heart of the company's performance to compete and thrive so that companies are able to create their customers and can defend itself from the competitive pressures of the market. There are three strategies that can deliver a competitive advantage through operations, namely the low-cost strategy, differentiation and rapid response (Heizer and Render, 2009). Chase and Aquilano (1989) recommend that the competitive priorities include cost, quality, flexibility and delivery.

A research which was conducted by Ward et al, (1995) and Badri et al (2000) suggested that the strategy of the competitive priorities represented some operations in which covered cost, quality, flexibility and delivery which affect the performance of the company. Besides, Stanley (2008) also encourages taking in the context of the operation, innovation strategies which affectedthe operational performance.

### a. Research Questions

This study tried to implement the operational strategies that include the variables of costs, quality, differentiation, flexibility, delivery and innovation in conjunction with improved operating performance in the case of the small and medium industries, SMEs, in South Sulawesi. Therefore, the research questionsare as follows;

1) May the implementation effects of the operational strategies determine the operating performance in the small and medium industries, SMEs, in South Sulawesi?.
2) Which variables have a significantly positive influence on the operating performance?

### b. Hypothesis

This study is based on the hypothesis that the implementation of operational strategies which consisted of cost, differentiation, product quality, the flexibility, and innovation delivery can improve the operational performance of the small and medium industries, SMEs, in South Sulawesi.

### c. Research Methodology

#### i. Characteristics of Population and Samples

The population in this study are all companies that produce goods, tangible, or referred to the small and medium enterprises, SMEs, recorded at the Department/ agencies in South Sulawesi.The samples of this study arethe small and medium industrial enterprises, SMEs, randomly selected, in simple random sampling, based on the Law of No.91995 and

the Law of No.20 2008.The SMEs are the economic activities in the small scale that has a maximum net worth of USD 200 millions, excluding land and building or place of business has annual sales of more than 1 billion rupiahs, belonging to citizens, stand alone and not subsidiaries or the branches of such companies owned, controlled or affiliated directly or indirectly with a medium or large business, in the form of private enterprise.A business entity that is not incorporated including a cooperative referred to in law of no.9 1995 on Small Business. While medium-sized businesses are the business with the net worth of more than USD 500,000,000.00, five hundred million rupiahs, up to a maximum of 10,000,000,000.00, ten billion dollars, excluding land and buildings.

**ii. The Data Collection and Technical Analysis**

The primary data were collected by a direct interview tothe respondents using a questionnaire as a guide relating to a number of questions that have been set or according to the needs in this study. The secondary data obtained from the company's performance report documentation. To achieve the objectives of this study, it was used two (2) pieces of analytical equipments, namely, (1) descriptive analysis, and (2) path analysis. The descriptive analysis aimed to describe the characteristics ofthe respondents and the research variableswhich consist of the average(mean), mode and standard deviation. Then, the path analysis aims to examine the effect ofthe operational strategies on the performance of the small and the medium industries (SMEs) in South Sulawesi.

## 2. Theoritical Framework & Library Review

**a. Concept of Operational Strategy**

Operational strategy is concerned with determining broad policy and planning for the use of the production resources of the company to provide the best support to the company's operational strategy in the long term and to achieve a competitive advantage,(Chase and Aquilano, 1999; Skinner, 1996; Dangayach and Deshmukh, 2006).An effectively operating strategy begins with understanding how to create or enhance value for customers. In detail, the enhanced value through competitive priorities were chosen to support a predetermined strategy (Heineke and David, 2005). Heizer and Render (2000) then suggests that the operational strategies through operations include cost, differentiation and quick response. While, Chase and Aquilano (1999), Krajewski and Ritzman (2005), and Heineke and David (2005) assertthat there are four competitive priorities in the operational strategy that is cost (cost), quality (quality), delivery and flexibility (flexibility). The operasional strategy is, in this research,the variables of the cost strategy, differentiation, quality, flexibility, delivery and innovation.

**b. Cost**

In every industry, in general, a hardly competitive market segment, in terms of price, isto be able to compete.In this situation, a company’s trying to operate with low levels of production costs (Heineke and David, 2005). There is a market segment that buys only on the low cost (Chase and Aquilano; 1999). The customers usethe cost as a major determinant in decision to buy. Those companies compete directly on price, the cost can be a majorly competitive performance objectives (Slack and Lewis (2002). The cost is a wide range of financial input to the operation which allows to produce goods and services,Ward et.al. (1995; Badri et.al.;1999).

The results of the study, by Hossendezadeh Mustafa et.al (2013) on SMEs in Iran, showed that in such a difficult condition (embargo), SMEs can compete and improve the corporate performance by implementing the low cost strategy (cost leadership strategy). In a business environment that is tolerant, the strategy of the low-cost implementation are to improve the performance of the company, (Nanda kumar et.al.; 2010).

**c. Differentiation**

Strategy of a product differentiation or service offered by a company is to create something new is perceived by an industry, as a whole, is dependent on the unique differentiation. The strategyrelies on differentiationwas designed to lure customers who are sensitive to certain product attributes (Porter, 1985). Essentially, a product is deemed to have such a value and the eyes of consumers attribute more attributes than other similar products. The ownership of the specific knowledge,on these attributes, provides the basis for formulating a special promotion to associate with a strategy to the target of the market needs.Thus, capitalization occurred on the unique attributes of the product(Pan David W& John AW Baker, 1999).

With the emphasis on the uniqueness of these attributes, the company seeks to build customer loyalty. This kind of loyalty is often manifested in the form of the ability of firms set a high price for their products. The product attributes can also be a marketing channel used, the image of the advantages of existing features on the products and services that support the network. As a result, the importance of these attributes, the competitors often face some barriers to enter such a "perceptual",ifthe customer of a company,which successfully differentiate their products, assumesthat no other product can replace the product (Pearce and Robinson, 1997).

**d. Quality.**

The improvement in the quality of such a product will have an impact on the company for the provision of added value to their customers. The quality of the product based on two points, firstly, the conformance quality is how well the actual product designed liking to the producer. Secondly, the designed quality is the development where the quality of the made to the product or the quality or content inherent in the product (Clak et.al, 1992, Fynes et al, 2005, Zahra Lotfi et al (2013). The feature or the advantages of such a product can be measured by the level of customer satisfaction. The distinction of the products with specific characteristics such as flawless, reliability directly affect customer satisfaction. The management quality is the key to increase the company performance (Deming, 1982, Juran, 1988). There is a positive relationship between the quality management and the company performance (Flynn et al, 1995 Prajogo, DISohal, USA (2006; Madi Mohammed and Juan Jose Dance, 2012).

**e. Flexibility**

From the strategic perspective, the flexibility refers to the ability of a company offering a variety of products to their customers. Flexibility is also a measure of how the speed of a company changes the process of manufacture of the product line that long to produce a new product line. Variations in the product dimension are often considered to be the customer's flexibility (Chase and Aquilano, 1999). Krajewski and Ritzman (2005) stated that some companies gave top priority to flexibility as a means of beating competitors. As a result, several manufacturers switched to adjustment, in which products and services are designed for individual choice. In addition, volume flexibility is the ability to speed up or slow down the rapid rate of production to cope with large fluctuations in demand.

**f. Delivery**

The ability of a company to provide dependable and fast delivery allows the company to charge the highest price (premium) for its product (Chase andAquilano;1999). Speed indicates the time between surgery and the start of the process until the time the consumer receives the product. (Slack and Lewis, 2002) Badrietal. (1999) used the time-based competition phrases to emphasize that the managers should carefully define the steps and time required to deliver a product and then critically analyze each step to determine whether time can be saved without sacrificing quality. The delivery performance measures include an emphasis on activities that are intended to improve the reliability of delivery or delivery speed. The success of the company decrease lead time products add value to the company in the eyes of consumers (Chase and Aquilano, 1999).

**g. Operational Performance.**

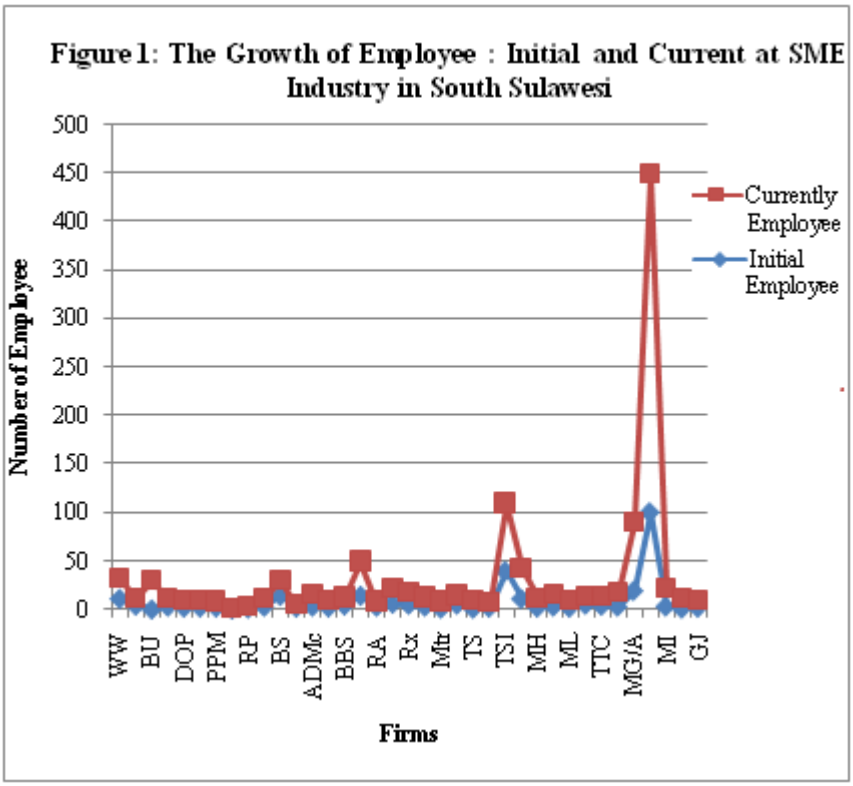
The operational performance is a reflection of achievement over the operating activities, which includes the creation of revenue, control costs, and of achievement (Guo Jianliang, 2003; Chiwen, 2004; Gou Minghua, 2009).In addition, operational performance includes the level of productivity, the level of damage to the product (defect), the cost of the guarantee or warranty, the cost of quality and timeliness of products to the consumer.

## 3. The Results and its Discussion

**a. Description on the Small &the Medium Industries In South Sulawesi.**

Actually, the number of the samples of this study was 75 SMEs, but there were only 70 samples valid, the other five samples were considered invalid. All the 70 industry groups consist of the printing and the publishing industries, the handicrafts, the food and the beverage products, the timber and the clothing convections.

In terms of the number of their workers employed in all industrial SMEs, they variedin numbers. In the early pioneering efforts, the number of workers ranged from one person to 450 people. However, in the stage of business development, the initial amount had increased the amount of labor along with the development effort. The number of employees data, at the start up business, upto now presented in the following figure, Figure 1.




The variations in the amount of labors were small and large ones, they influenced by the development of the business, its type, capital intensive or labor intensive, as well as the characteristics of their industries. In terms of the growth of the company's assets, the amounts of assets of each company were different and varied. In the early stages, the company

started a business, the amount of initial capital from 60,000rps up to 700 millions. Upto now, when the data collection was conducted, the development of the company's assets increased gradually, but the rate of the asset growth varied for each industry group.

The data on the asset growth of each industry were ranging from starting up till the amounts of current assets are presented on the Figure 2 below.

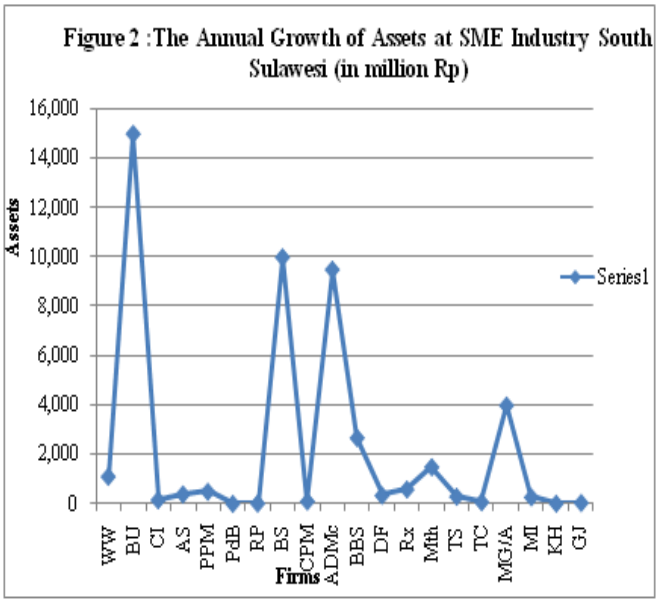



Figure 2 shows that the distance between the company acquiring assets with high and low is so biased. There was a business group received the high asset growth, but there is some business groups received a very slow asset which were increasing per year.

**b. Variable Relations and Their Interpretations On The Research Results.**

The analysis of the relationship between the study variables involved the variable of the operational strategy consisted of six variables: cost, differentiation, quality, delivery, flexibility and innovation. The company's improved operational performance used the path analysis method which measured in terms of the increasing of the production volume over the last five years, and the rate of the defective products generated during the last five years as well.

Structural equation research lines are as follows;

Y = PYX1 + PYX2 + PYX3+PYX4 + PYX5 + PYX6 +Єy
Where,
Y = operational performance x3 = variable of quality
x6 = variable of
xl = variable of costx4 = variable of flexibility innovation
x2 = variable of differentiation x5 = variable of delivery
Similarities of its sub-structure are as follows;

1. Y = PYX1 + Є1
2. Y = PYX2 + Є2
3. Y = PYX3 + Є3
4. Y = PYX4 + Є4
5. Y = PYX5+ Є5
6. Y = PYX6 + Є6

The results of data processingwithSPSSver.17showedthe following results, where the Overall structural equation becomes;
Y = - 10,8x1 + 17,6 x2 + 19,0 x3 – 7,9 x4 + 10,8 x5 + 25,5 x6 + Єy

The results of F-test with a level of 0,042 or 4.2 percents is significant, with α standard, in 10 percents. As the significant test is smaller than the value of α of 10 percents, it can be said that all the variables in this model are fit significantly. In other words, that all six variables in the operational strategies were feasibly to explain the company's operating performance. T-test results for the cost variables showed that the significant of ρ is 8.4 percents lower than the standard α, 10 percents. It means that the cost variables significantly influenced the operating performance variables. The standardized coefficients of β value is 10.8 percents means that the direction of influence is not in the opposite, the low cost affects the operational performance in improving the small and medium industries, SMEs, in South Sulawesi. In other words, the company's, SME industries reduced the cost of production which had some implications for improvements in the operational performance of the companies.

The results of the analysis showed that the value of the instrument ranged the instrument scores in the middle category. This suggests that the cost of production and selling products are almost the same for all SMEs industries in South Sulawesi. This means that there is an intense competition in the field of setting of the selling price and the low production costs. The calculations showed that the t-test for differentiation variable was 12.1 percents significantly, where ρ. was 12.1 percents higher than the standard α, 10 percents. It means that the differentiation of the variables does not significantly affect the operational performance variable. The product of the differentiation strategy, both the product differentiation, which offered varying levels of quality, and product lines, with a variety of accessories, which was implemented by SMEs, may reduce their operational performance.

T-test results for the variable quality was sig. ρ = 7.7 % lower than the standard α. of 10 percents. This variable significantly influenced the quality of operational performance variables. The standard value of β coefficient of + 19.08 percents means that the direction of influence is in the same direction. The increasing of the product quality might affect the operational performance of the company. SME industry companies in South Sulawesi has done the packing on the final product very well and interesting. Such an attractive product packaging will invite the potential customers to consume the product and at the same time increase the loyalty of customers in a long time. This affects the increasing in such sale volume. Furthermore, the products produced by SMEs in general had high quality, the evident from the data collected showed that much less consumers who complained to the product use, both in terms of durability as well as from the side usefulness.

T-test results show that the flexibility of variable sig. ρ = 6.6 % lower than the standard α, 10 percents. Those variables

significantly influenced the flexibility of the variable of the operational performance. Standardized coefficients β value of - 7.9 percents, means that the direction of the influence was in the opposite direction. The increasing of the operational performance was influenced by the flexibility of the function of the production machinery and the equipment used in industrial enterprises SMEs in South Sulawesi. The results of analysis onthe empirical data showedthat the nature of the effect was on the opposite direction. Theoretically, the function of a machine or an apparatus was in further the lower production costs of the machinery and the equipment investment. The multi-function machine was able to produce many variations of the product. This could be achieved if the transition function of machine time it took a short time. SMEs in South Sulawesi more used the machinery and production equipment that were less flexible. The use of machinery and equipment that are not flexible will affect negatively to the increase in production volume and product variety. In other words, the increasing in the production volume and a decrease in the production costs, for industrial enterprises SMEs in South Sulawesi, can be obtained by using machinery and production equipment which are functional and short changeover. Although existing industrial enterprises of SMEs in this sample have had some machines and production equipment,but they had lower production costs.

T-test results for delivery variable is sig. ρ = 6.8 percents lower than the standard α, 10 percents. It means that the variable of delivery significantly effect on the operational performance variable. The standard value of β coefficient is 10.08 percents means that the direction of influence is in the same direction. The increasing of the operational performance was affected by the speed of the delivery of the product to the consumer. The results of the analysis of the data showed that companies with the distance and time (lead time) in short delivering, the goods will obtain a lower delivery cost compared to its opposite. By minimizing the cost of delivering will affect the overall production cost reduction.

The results of t-test for variables showed that the sig. innovation ρ. = 8.5 percents lower than the standard α, 10 percents. It means that the innovation variables significantly influenced the operating performance variables. Standard coefficient of β value is 25.5 percents, it means that the direction of the influence is in the same direction. The increasing of the production volumes can be driven by the product innovation to increase the variety of the products produced over the years, by adding performance benefits and long products. By creating a new product that benefits and functions which were different from the old product, it would provide a variety of the options to consumers. It can then create new markets and increase the number of consumers. Coupled with effective marketing activities, the companies could gain the increased sales volumes and ultimately gotthe increasing profit. Moreover, the improved operational performance through increased production volumes could be achieved by maintaining and increasing the loyalty of the existing customers. The existing customers spoiled by providing innovative products in the form of such additional benefits and long product function.

## 4. Conclusion

The operational strategy is, on the aspects ofthe production cost, low. The aspects of quality, the innovation andthe deliverypositivelysignificant effect on the operational performance of SMEs industry in South Sulawesi. The operational strategy, from the aspects ofthe differentiation and the flexibility,has a significantly negative effect on the operational performance. The strategy of the differentiation of the products, in the short term, would increasethe operating costs and decreasethe operational performance of SMEs industry in South Sulawesi. Meanwhile, the strategy of the flexibility with the increased production volumes and the reduction in the production costs can be achieved by using machinery and production equipment functionally and short change over for industrial enterprises, SMEs, in South Sulawesi.

## 5. The Research Limitation & Suggestion

This study analyzed the direct relationship of the operational strategy variables without involving the operating performance variables between the models of this study. May be variable or variables between moderators, such as external environmental factors and internal company, became accelerate or impede the implementation of operating strategies in improving the performance of SMEs. In addition, there is the reluctance of some respondents' companies to provide the primary data related to the data "confidential and financial performance" of their companies. Therefore, to overcome this problem, the collection of qualitative data used in the form of a questionnaire. In the case of SMEs, in South Sulawesi- Indonesia, need further and intensive research with regarding to the relevant dimensions of operational strategy developed in order to support the enhancement of the performance and competitiveness of SMEs in the future. For that matter, we need such a sample of clusters and larger studies.

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