RESOURCE MANAGEMENT AND EVALUATION OF COMPETITIVE ADVANTAGE: A CASE STUDY OF EAST JAVA MANUFACTURING COMPANIES

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ABSTRACT

This study attempts to answer some essential issues related to the management of the firm’s resources to create competitive advantage and survival. The following research questions will be explored in this study: 1. What are the general purposes of resources management by organizations (technology, human resources, capital, materials, and other capabilities)? 2. How do external and internal factors encourage companies to manage their resources? 3. What are the factors that supported the management of resources, and what obstacles faced in its allocation? 4. How companies manage their resources in a business environment to accommodate uncertainty and the intense of competition? 5. How do companies develop the capabilities of the resources and benefits that are expected with proper resource management? This study uses a case study approach. This study involves five manufacturing companies in Surabaya and surrounding areas with different fields. Furthermore, this study provides some findings i.e: First, in terms of resources, especially hard technology, the level of technology adoption is still in the moderate level. Second, the study indicates that the skills of the participants are still in moderate levels and tend to be low. Third, the quality and availability of raw materials tend to be in moderate level. Furthermore, related to the business environment and the relationships with resource management, indicates that business uncertainty perceived by the participants. Final conclusion of this study is that the financial and operational performance measurement can be seen from many aspects, however, this study use financial performance and operational aspects are common and frequently used by previous investigators.

Keywords: firm’s resources, resource management, business environment

INTRODUCTION

Background of the Study

To achieve this competitive advantage, companies must have the capability to create a competitive advantage with limited resources. A resource-based view of strategy (a resource-based strategy) provides a solution for companies to achieve a competitive advantage continuously through a unique set of resources owned by the company. Resource-based strategy focuses on firm-specific resources, which is more than the industrial structure (Barney, 1991)

Several previous studies have found that the effect of the company's resources on business performance is affected by economic uncertainty and business competition (Spital, 1992; Badri, 2000; Zahra and Covin, 1993). This relationship is also influenced by the business relationship (Chisea, Manzini and Tecilla, 2000), manufacturing strategy, business strategy (Wernerfelt, 1984; Grant, 1991; Russo & Fouts, 1997), and the type of cooperation (Ellitan, 2006). Past studies on the importance of the resource, and the integration with internal and external factors have been done before in the context of a manufacturing company in
Indonesia found the phenomena that (Ellitan, 2010): (1). corporate resources (technology, human resources, materials and management practices) affect the company's competitive advantage. (2). The relationship between the company's resources and performance depends on the economic conditions and competition in the marketplace. However, the empirical studies using quantitative approaches that emphasize the generalization of the findings.

Therefore, by using a qualitative approach and case studies are expected this study can explore more deeply how resources are managed, how the role of management, how resources should be managed by integrating them with business strategy and operations, how the company faces competition and the uncertainty of the business environment, and what strengths, weaknesses, opportunities and challenges companies to have the resources and internal and external conditions that exist. The general purpose of this study is to describe the case in several manufacturing companies related to resource management, strategy, business environment and competition in achieving sustainability. The objectives of this study can be formulated as follows:

1. To explore the general purpose resource management by organizations.
2. To explore the internal and external factors that encourage companies to manage their resources.
3. To explore the factors that support the management of resources, and what obstacles faced in its allocation?
4. To explore how companies manage their resources to accommodate the uncertainty of the business environment and the intense of competition.
5. To explore how companies develop the capabilities of the resources and benefits that are expected with proper management.

LITERATURE REVIEW

Firm’s Resources and Competitive Advantage

Although the importance of resources in creating a competitive advantage has been recognized, but there is no general agreement about the viewpoint of resources as a concept. One critical view of the Resource-Based View of research is the need for a broad definition of the resource or "resource" that has been generated by research conducted separately by different approaches (Newbert, 2007). Both in practice and theory, we can discover that the concept of resources in previous studies is different, and our point of view there is no reconciliation of the concept. Firm’s resources are still sometimes seen as a paradox. Some experts recommend paying more attention to intangible resources, in addition to tangible resources as a resource to complement, reinforce and complement each other with each other in contributing to the competitive advantage (Barney, 1991).

The classic definition of the resources developed based on neoclassical theory of the firm (eg Barney, 1991) and resources-based. The model emphasizes to the internal resources of the company, that competitive advantage can be achieved if the company has a unique resource (Lado et al., 1992). Hunt and Morgan (1995) discuss the details of the resource-based theory of competition (competition-based resources) to highlight a few things. First, the demand is heterogeneous outside the industry. Secondly, consumer information is not perfect. Third, human motivation is a constraint in seeking personal gain. Fourth, the company's goal is superior performance. Fourth, firm’s resources cover the financial resources, physical, organizational, informational, and relational.

Technology. Adoption of technology and technological innovation is the power for companies to industrialize, improve productivity, drive growth and improve living standards.
(Abernathy and Clark, 1985; Calantone, et al., 2002; Pavia, et al. 2008). The power of technology and competitive manufacturing costs affect other drivers (Harrison & Samson, 1997; Ellitian, 2004). Cagliano and Spina (2000) found that the adoption of technology (innovation) creates opportunities and competitive challenges for companies that adopt and companies that adopt the technology.

**Human Resources / Labor.** Based on the concept of intangible resources, it can be concluded that human resource (skills, knowledge, talents, and so on) is an intangible resource. Human resource can be joined in a company that has a high compensation, career development programs and the like (Ellitan, 2002; Anatan and Ellitan, 2009).

**Material (Raw Materials).** Raw materials include raw materials, usability and other supporting materials in the production process (Heizer & Render, 2000). Material resources - asset considered as an asset that can create a competitive advantage if it has special advantages compared to its competitors (Badri, et al. 2000). Availability and material resources also determine the competitiveness of companies. Ellitan, (2004) found that the availability of raw materials will increase the impact of technology on business performance. Therefore, it can be concluded that the availability of raw materials is the key to the success of the company's performance.

Management Practices. There are many articles and empirical studies that examine the effect of management practices (such as TQM, JIT, TPM, MRP, and benchmarking) on firm performance (Beaumont & Schroeder, 1997; Sakakibara, et al., 1997; Sohal and Terziovky, 2000; Tzang and Chan, 2000). Sohal and Terziovky (2000) suggested that the implementation of the practices and effective quality improvement (TQM, benchmarking, process reengineering) have an impact on the company's performance improvement both in terms of productivity and profitability, along with improved customer satisfaction. Beaumount and Scroeder (1997) suggested that achieving competitive price and quality would not be possible without the right technology and modern management practices.

**The Role of Uncertainty and Competition**

Spital (1992) suggested that environmental uncertainty (caused by rapid changes in technology products and processes) have an impact on the technology and competitive strategies. In a dynamic business environment where there is a high-tech products, companies tend to have high levels of investment in R & D, high technical competence and product innovation strategy is followed (Bany-Hani & Hawari, 2009). Hostility is the level of competition, pressure levels, and the number of dimensions or sources of competition (Miller, 1988). Hostility also represents a keen of competition in the market (Badri et al., 2000). Technological innovation is needed when the competition is tougher to achieve competitive advantage (Zahra & Covin, 1993).

**RESEARCH METHOD**

**Research Design**

There are several approaches to study the resource management of the firms. Some previous studies investigate the resource management and allocation through a questionnaire developed by several methods, (Schroeder & Sohal, 1999; Sim, 2001; Koo, et al., 2000), and conducted interviews directly to the organizations examined (eg Bond, et al., 1999). Some other researchers use a case study to examine the resource management and its impact on the competitive advantage of the organization (Harrison & Samson, 1997). This study uses a method that has been developed by Dawson (1994); in Harisson and Samson (1997), which has been modified and adapted to the purpose of the study. This approach is used as a
reference for a review of the experience of a business organization in an effort to obtain superior resources and allocate them.

Sample and Data Collection Method

For the purposes of this study, the sample was obtained from Manufacturing Company Directory published by the Central Bureau of Statistics Indonesia, 2009 because this study aims to conduct in-depth case studies on the organization then to get a company that is willing to be a participant in the study was conducted with the following steps: (1). Proposals submitted to medium scale manufacturing company and is in Surabaya Area, with the hope of getting 5 to 10 responses from companies that are willing to become a participant. (2). The early stages of data collection using a semi-structured questionnaire to the leadership of the company. (3). In-depth interviews carried out to clarify the information obtained previously. Expected some manufacturing companies in Surabaya and surrounding areas with different fields are willing to participate in this study. Data were collected through a structured questionnaire and interview to the leading companies contains issues related to the research problem and research objectives were formulated at the beginning of this proposal.

Data Analysis Technique

Data analysis was performed throughout the study and carried out continuously from the beginning to the end of the study. Data analysis is the process of systematically tracking and setting-transcript of the interview transcripts, field notes, and other materials so that researchers can present the findings. Data analysis involves organizing work, breakdown and synthesis of data and search patterns, disclosure of the things that are important and determining what is reported. Examination of the data validity in qualitative research includes techniques (Santoso, 2010), credibility, transferability, and dependability.

DATA ANALYSIS

Participant Profiles

Five companies manufacturing in Surabaya and surrounding areas with different fields participated in this study. Data were collected by interview to the leading companies using a semi-structured questionnaire. Approximately interviews conducted for 2 hours. We also observed how the firms run their business.

Elected five company profiles are companies that operate in the food industry (3 companies), 1 gas company (chemical industry), and safety equipment. All companies are private perusahaan which has been operating for more than ten years. Scale of companies ranging from 500 to 1,500 employees working in full-time work. The data were collected in mid-2014, and surprise that the five companies of which show improved financial performance over the last three years. This indicates the likelihood of the development of the company in terms of achievement of performance. Four of the five companies that participated in this study have agreements with external entities the country and only one company that operates without the cooperation with entities outside the country. Judging from the fifth ownership of this company is owned enterprises, local business people.

General Purpose of Resources Management

The study found that resource management objectives vary for each of each organization. However, almost all the companies considered that the general purpose resource management organization is for short-term orientation and linking with the operational aspects of the company. Only a few of their viewpoint that relate to the organization's long-term strategic aspects such as growth, expansion and long-term survival. The Company has not fully aware of the importance of resource management for long-term profit orientation. Companies need
to do more in-depth identification to create competitive advantage for their companies. The purpose of resources management should be focused on value creation and difficult to be imitated competitors. The analysis of the organization's resources should be linked to the analysis of organizational resources.

Tabel 1. Factors that Support Resource Management, and barriers Faced in Resource Allocation

<table>
<thead>
<tr>
<th>Perusahaan</th>
<th>Factors that Support Resource Management, and barriers Faced in Resource Allocation</th>
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<tbody>
<tr>
<td>1</td>
<td>Supporting Factors</td>
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<tr>
<td></td>
<td>a. The availability of an adequate supply of suppliers are supported by a partnership built with suppliers.</td>
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<td></td>
<td>b. Availability of HR and workforce support strongly support machine pengeloan other resources, technology, raw materials and auxiliary materials and support organization management practices on all fronts.</td>
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<td>2</td>
<td>The availability of adequate infrastructure in the organization.</td>
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<td>3</td>
<td>Competent human resources</td>
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<tr>
<td>4</td>
<td>a. HR: training related to increased motivation to be done regularly. b. Management of material resources to the effort to provide sufficient material resources so that the production process is not hampered by the stock out. c. Machinery and energy management is done with maintenance planning and improvement of technical skills. d. Financial management is conducted in a professional manner through the management involving the Finance Manager, Financial Director, and BOD. e. Information including data: applied technology such as computer applications and application of SOP.</td>
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<tr>
<td>5</td>
<td>a. systematic and organized management system. b. skilled workers</td>
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</table>

The study found that three out of five companies consider human resource is the greatest role, while 2 other company considers that the material resources that were most responsible. For perusahaan which considers human resource is the most dominant because of the quality and high availability of human resources is key to successful management of organizational resources. While the other company considers that the dominant source of power is that they
are oriented to the cost of production and output. These findings indicate that technology and modern management practices are used as enabler for the achievement of organizational goals by integrating it with HR (Human Resources) and Natural Resources of the organization (Ellitan, 2010).

**Business Uncertainty**

Uncertainty of the business environment tends to be at moderate level, except political uncertainty which was considered high. Another uncertainty is considered quite high is changing consumer tastes and changing strategies of competitors in product and process innovation. Spital (1992) suggested that environmental uncertainty (caused by rapid changes in technology products and processes) have an impact on the technology and competitive strategies. In a dynamic business environment, where there is a high-tech products, companies tend to have high levels of investment in R & D are high, deep technical competence and product innovation strategy is followed (Harrison, et al., 2001). In a company that has a product that is low dynamism of technology, Organizations have lower product knowledge understanding of technology. Furthermore, in an uncertain environment, firms face greater uncertainty, both in terms of challenges and opportunities greater. Thus, the company is required to be more flexible in accommodating change. Analysis of the business environment needs to be done in-depth so that accuracy in the formulation of strategies and policies can be achieved.

**Factors that Support Resource Management, and barriers Faced in Resource Allocation**

Table 1 shows that factors supporting resource management that allows the achievement of economies of scale. HR with skill and high availability is also a major factor that supports the management of the resources of other organizations. If a problem occurs, the resource management in the context of the organization's competitive strategy requires a revolution or change outside the existing structure (Lynch, 2006). This study also indicates that the weakness of human resources as a barrier to resource management. Consistent with the findings related contributing factors, the lack of good partnerships with suppliers also affect the management of organizational resources.

<table>
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<tr>
<th>Table 2. Competitive Advantage</th>
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<tbody>
<tr>
<td><strong>Competitive Advantage (Organization’s Performance)</strong></td>
<td>Lower than competitor (LR)</td>
<td>Average (RT)</td>
<td>Higher</td>
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<tr>
<td>1. ROI (Return on Investment)</td>
<td>LT</td>
<td>RT</td>
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<td>2. ROA (Return on Asset)</td>
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<td>RT</td>
<td>RT</td>
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<td>3. Profitability</td>
<td>LT</td>
<td>LT</td>
<td>RT</td>
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<td>4. (Growth in sales).</td>
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<td>5. Overall productivity</td>
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<td>LT</td>
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<td>6. Growth</td>
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<td>7. Product cost per unit.</td>
<td>LT</td>
<td>LT</td>
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<td>8. Process quality</td>
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<td>9. Volume flexibility</td>
<td>LT</td>
<td>LT</td>
<td>RT</td>
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<td>10. Product flexibility</td>
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<td>LT</td>
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<td>11. On time delivery</td>
<td>LT</td>
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<td>12. Delivery capability before customer demand.</td>
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<td>LT</td>
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</table>
Competitive Advantage

To measure the competitive advantage can be done by measuring the performance of the company. Performance is the rate of success in implementing the tasks and the ability to achieve its intended purpose. Table 2 shows the firms’ performance from financial and non-financial perspectives.

CONCLUSIONS AND SUGGESTIONS

Conclusions

The study found that resource management objectives vary for each of each organization. However, almost all the companies considered that the general purpose resource management organization is for short-term orientation and linking with the operational aspects of the company. Only a few of their viewpoint that relate to the organization's long-term strategic aspects such as growth, expansion and long-term survival. Further related to the business environment relationships with resource management research found that: First, business uncertainty perceived by the participants. Uncertainty of the business environment tends to level mederate, except political uncertainty which was considered high. Another uncertainty is considered quite high is changing consumer tastes and changing strategies of competitors in product and process innovation. Thus the company is required to study participants over and flexible in accommodating change. Analysis of the business environment needs to be done in-depth Lebin order accuracy in the formulation of strategies and policies can be achieved. Second, local market competition The sharp high-graded according to the perception of the participants. This is due to them not only compete with local products, but also to compete with imported products with quality and competitive price.

REFERENCES


