SUPPLY CHAIN STRATEGIES IN MEDIATING THE EFFECT OF KNOWLEDGE MANAGEMENT ON BUSINESS PERFORMANCE

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Abstract

Purpose of the study: The study aims to determine the effect of variable mediation in this case the Supply Chain Strategic (SCS), on the influence of Knowledge Management (KM) on Business Performance (BP).

Methodology: The method used in this research is using quantitative descriptive studies using a simple dissertation approach and linear regression analysis with SPSS and Amos version 23, starting from the measurement of Confirmatory.

Main Findings: The main finding of this study is that the mediation variable, in this case, the Supply Chain Strategy (SCS) can mediate the effect of Knowledge Management on Business Performance carried out in the Small and Medium Enterprises (UKM) sector in Java Island, Indonesia in 2019.

Applications of this study: The implications of this study indicate that SCS has an important role in the development of future business, especially in Small and Micro Enterprises (SMEs).

Novelty/Originality of this study: SCS is used to mediate the effect of KM on BP on SMEs, and this is one of the Novelties in this study.

Keywords: Supply Chain Strategic, Knowledge Management, Business Performance, Simple Mediating Analysis, Usaha Kecil dan Mikro.

INTRODUCTION

One of the interesting and important things to study in business development is performance. This is important because it is the starting point for maintaining the life of the business organization. By having a good performance, the competitive advantage in their business is obtained. Some things that can improve the performance of a business organization include innovation, creativity, and performance of each management within the company.

The benefit of the performance of a business organization is that the company or organization is able to survive in a variety of conditions that are being faced, besides that with good performance will bring the maximum ideas, ideas and creativity in the framework of building innovation towards the country's economic growth (Riswanto, 2016), and also the effectiveness of creative self, innovation, and experience of a company.

Performance improvements also need to be supported by a strategy that is in line with the vision and mission of the business organization. Without a maximum strategy, competition in the real world is impossible to conquer. Therefore, it is important for a business organization that has the goal of gaining a competitive advantage in order to maximize competencies in order to mix ideas and ideas in order to bring up appropriate strategies in dealing with various changes and challenges that come.

With the increasing strategy used in developing business organizations, it can ultimately improve the business performance of the organization by using various innovations and creative ideas used in applying the chosen strategy. In other research shows that business performance is influenced by market orientation and mediated by the company's dynamic marketing capabilities (Riswanto, Hurriyati, Adi Wibowo, & Ghaffar, 2019). In the part of the research process that is associated with performance, this plays a role in developing the managed company. Therefore, the company, in this case, needs to increase the financial allocation that is directly related to the development of sub-cork which is in the company both by always providing guidance, assistance, and other development programs.

Creative ideas and innovations carried out by entrepreneurs have a positive influence on increasing development towards the category of developed countries and avoiding disturbances and poverty. Indonesia in 2013 experienced an increase in the number of both business units and employment. In that year the development of the largest business unit in the Medium Enterprises was 6.35% units and 21.7% person labor. The data above shows that Indonesia as part of a developing country has the potential to develop a very high population of entrepreneurs, this is very possible to be able to alleviate poverty and improve the welfare of its people (Riswanto, 2016).

Besides that, the development of micro and small business units in 2014-2015 in several provinces on the island of Java (West Java, Central Tawa, Yogyakarta, and East Java) has a number that is quite large compared to the national level, reaching a comparison with the national number in 2014 58.6% (number of units) and 60.8% employment absorption,
while in 2015 it was 64.4% (number of units) and 73.6% employment absorption. The complete data are presented in table 1 below:

**Table 1: Number of Micro and Small Businesses Java Island 2014 - 2015**

<table>
<thead>
<tr>
<th>Province</th>
<th>Number of Businesses (Units)</th>
<th>Number of Businesses (Units)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>2015</td>
</tr>
<tr>
<td>Micro</td>
<td>437.985</td>
<td>421.881</td>
</tr>
<tr>
<td>Small</td>
<td>60.078</td>
<td>58.359</td>
</tr>
<tr>
<td>West Java</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Java</td>
<td>766.782</td>
<td>934.814</td>
</tr>
<tr>
<td>Yogyakarta</td>
<td>73.266</td>
<td>52.907</td>
</tr>
<tr>
<td>East Java</td>
<td>608.774</td>
<td>771.185</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3,220.563</td>
<td>3,385.851</td>
</tr>
</tbody>
</table>

**Source:** Central Bureau of Statistics, 2018

Addressing potential MSE development data in 4 (four) provinces in Java. Therefore, it needs to be supported by a very appropriate strategy to maintain and enhance the creative effectiveness of MSEs to become more advanced and developing in the early stages which is to improve the performance of business organizations.

Based on the description and the above expressions that reveal the importance of business performance, the support from the strategy that exists. Therefore, in order to maintain the life cycle of the business organization and avoid the risk of bankruptcy, it is necessary to maximize the potential of the business organization in developing a good strategy to have the ability to compete with business organizations that become competitors.

The study aims to determine the effect of variable mediation in this case the Supply Chain Strategic (SCS), on the influence of Knowledge Management (KM) on Business Performance (BP) that SCS is used to mediate the effect of KM on BP on SMEs, and this is one of the Novelties in this study

**LITERATURE REVIEW**

**Business Performance**

Performance can be described as the extent to which the success or failure of the organization carries out its main tasks and functions towards the realization of its goals, objectives, vision, and mission. So that it can be concluded that performance is an achievement that can be achieved by the organization in maximizing its potential (Garschagen, 1960; Grant, 2005; Matland, 1995; Mohamed, 1997).

Business performance can be said as something that is produced by business activity in a certain period based on the established operational standards (Francis, 2005). The performance of a business organization should be an embodiment of measurable results and describe the actual conditions of a business organization of various agreed sizes. So, it can be concluded that business performance is the ability, business, personnel opportunity, or business unit of the organization in carrying out its duties to realize the strategic goals set in the past. The success of strategic achievement which is the basis for measuring performance is influenced by the measurement tools used and determined by the initiative for a certain period (Epstein & Roy, 2001; Francis, 2005; Hervani, Helms, & Sarkis, 2005; Ishihara, Funahashi, & Tanaka, 1986; Kaplan & Norton, 2001; Mcarthur, Cullen, & Wilcox, 2012; Neely, 1999; Zimmerman & Martinez, 1986).

Strategic tools are used to realize these goals along with their size tools which are then used to determine targets that are used as a basis for performance appraisal. Therefore, performance measurement is a measurement action that can be carried out on activities from various value chains that exist in business organizations. The measurement results are then used as feedback that can provide information about the implementation of a plan for a business organization that requires adjustments to the planning and control activities (McLean, 2018; Steiss, 2017).

**Knowledge Management**

Knowledge Management can be defined as a process to help strengthen the identity of a business organization, choose, organize, disseminate, and send important information and expertise in various moments of business organization activities that are located and arranged in a specific manner in organizations in certain areas (Donaldson & Donaldson, 2016; Kalpič & Bernus, 2006; Kimiz Dalkir, 2011; Malhotra, 2001; Sensky, 2002; Sirhan & Sirhan, 2018).

Knowledge management in management can be given an understanding as a process of achieving intellectual prosperity in an organization (knowledge base assets), namely something of value without the physical dimensions inherent in people, or obtained from processes, systems, and cultures related to organization, brand, knowledge individuals,
intellectual property rights, licenses and organizational knowledge (database, understanding of organizational processes and relationships). This process is achieved through various methods including creating, sharing and applying knowledge and through valuable lessons and best practices in organizational memory in order to encourage all elements of the organization to continue learning (Egelie, 2019; Jones, Seet, Acker, & Whittle, 2019; Min & Lu, 2017).

Prosperity above can be obtained if the business organization that is run can use knowledge to create processes that can be in the company to be more effective and efficient. In addition, business organizations are able to use knowledge to create and add value or benefits to consumers by encouraging unique product development innovations (Dyer, 1998; Stoltz-andersen, 2014). On the other hand, Knowledge Management is defined as systematic coordination in an organization that regulates everything that exists in the organization including human resources, technology, processes, and organizational structures in order to increase value through reuse, the emergence of creative ideas and ideas and innovation (Kimiz Dalkir, 2011).

Organizational knowledge if it is not managed properly and maximally results in the failure of the organization to carry out continuous innovation, therefore it is necessary to blend individual knowledge and managed group knowledge into organizational excellence. Knowledge management implementation can have a positive influence on business processes in companies both directly and indirectly, while some positive benefits of knowledge management for companies include: 1) Savings on time allocation and costs, 2) Increased organizational knowledge assets, 3) Organizational capabilities in adapting, 4) Increasing organizational productivity.

Knowledge management is the answer to the development of human resources in an organization, through the empowerment and development of intellectual capital, organizations can process information, experiences, ideas, and knowledge gained into Capital in decision-making and learning for its members. Organizations or companies need to consider the importance of management of knowledge management. The research results of knowledge management on employee empowerment are still different results. Zaei & Kapill(2016), Ranjbar & Agah (2015), Haghighi, Tabarsa, & Kameli(2014) and Hasani, Boroujerdi, & Sheikhmesaesi (2013), the results of his research shows the variable knowledge creation, knowledge sharing and knowledge application positively influence the empowerment of employees. The results of the research showed that the knowledge application has a significant positive impact on employee empowerment, while knowledge sharing; knowledge creation has no effect on employee empowerment.

Based on the background and the phenomenon presented and still, there are research gaps in previous studies, authors interested in researching to get new empirical results on the influence of Knowledge creation, knowledge sharing and knowledge application to employee empowerment.

Supply Chain Strategy

Supply Chain can be interpreted as a flow of materials, information, money, and services from raw material suppliers through factories and warehouses to end customers (Angerofer & Angelides, 2002; Byer, 2009; Croom, Romano, & Giannakis, 2000; Davis, 1993; Lummus & Vokurka, 1997). Furthermore, there are some expressing the connection and nodes in the Supply Chain in achieving the functions that contribute to the value of goods through the chain and with its achievement. Relationships that are not well established to reduce the effectiveness of all Supply Chains (Janvier-James, 2011; Transport, 2008; Wang, Gunasekaran, Wt Ngai, & Papadopoulos, 2016). Then coordination is needed so that the good can achieve the effectiveness of the Supply chain.

The Supply Chain Strategy is divided into several stages, namely: 1) Many suppliers, through many suppliers, can negotiate with many choices, companies can choose between one supplier and another supplier. Strategies that are usually taken from many suppliers are many sources per item, adversarial relationships, short term, little openness, negotiable and large amounts. 2) Few suppliers, it is necessary to develop the relationship to be a partner in the long term to suppliers in satisfying consumers. This strategy occurs when few suppliers source, the application of just in time, long term and stable. Contracts that occur are exclusive, low cost, large and frequent orders. 3) Vertical integration, taken by buying existing suppliers, the company is able to produce previously purchased items. In this case, financial analysis plays a very important role, it is not easy to do vertical integration except for large companies whose management is good. 4) Keiretsu Network is to make suppliers become part of the company coalition, keiretsu is an alliance system that benefits from joint venture company ownership. There is a connection between manufacturers, suppliers, distributors and creditors which is a broader partnership in SCM. 5. The virtual company is an effort to build a virtual company that uses suppliers when needed, usually engaged in services (Beamon, 2002; Cachon & Zipkin, 2008; Huang, Sheoran, & Keskar, 2005; I, 2001; Vonderembse, Uppal, Huang, & Dismukes, 2006).

The Previous research results about Supply chain strategies are: (Ayoub, Abdallah, & Suifan, 2017; Dröge, Claycomb, & Germain, 2003; Peng Wong & Yew Wong, 2011; Youssif Al-Hakim & Hassan, 2013). Based on previous research, the novelty of this research is that SCS is used to mediate the effect of KM on BP on SMEs.

METHOD

This research was conducted on SMEs in the island of Java, with 252 respondents as UKM. As for related research methods using qualitative descriptive analysis, the method that uses simple linear regression analysis using Amos version 23 as a Structural Equation Modeling (SEM) tool (Chin, 1998; Wong & Kwong, 2013). Furthermore, after a fit
model is produced, an analysis using the Product of Coefficient Strategy is carried out: Multiple Mediation Models - The Normal Theory Approach (Hayes, 2013).

RESULT AND DISCUSSION

The purpose of this study is basically to find out whether the Supply Chain Strategy (SCS) variable can mediate the influence between knowledge management and business performance in SMEs in several provinces in Indonesia. The development of both business units and labor in small and medium industries in several provinces on the island of Java showed a significant increase in 2014-2015. However, its development eventually allowed a decline, this became a matter of consideration for more in-depth studies related to the industry specifically deals with small and medium-sized industries (SMEs).

The fit Model Test in this study uses the Confirmatory Factor Analysis (CFA) in order to validate the proposed instruments and models. The results of testing the model are as follows:

![Figure 1: Measurement Model Test (All Items)](image1)

The picture above is the result of a fit test of the measurement model for marketing performance research. From the picture above shows that the calculated value for the chi-square is 267.004; p-value = 0.000 with df = 32; value of Root Mean Square Error of Approximation (RMSEA) = 0.171. The output count results in the estimate of standardizing the Regression Weight section, as a whole, the indicators tested have a value> from 0.50 so that the item in question is considered valid and can test things tested.

![Figure 2: Simple Mediating Models (innovativeness)](image2)

The picture above shows a research model that Supply Chain Strategy (SCS) functions as a mediating variable between Knowledge Management and Business Performance. While the results of the research analysis are as follows:

![Figure 3: Analysis Models](image3)
Research that has been done and can prove the relationship between knowledge management with performance (Boumarafi & Jabnoun, 2008; Darroch, 2005; Darroch & McNaughton, 2009; Daud, Fadzilah, & Yusoff, 2010; Fidel, Schlesinger, & Cervera, 2015; Kalling, 2003; Yang, 2010), then related to knowledge management with business performance, among others (Heisig et al., 2016). While some research related to Supply Chain Strategy related to Business Performance are as follows (Opata, 2015; Zhou et al., 2014).

In this study, it has NOVELTY which is placing variable Supply Chain Strategy (SCS) as a mediating variable between the influence of knowledge management and business performance, besides that this research is conducted on SMEs that have not been studied before and are getting more attention from the government to be developed. The results of this study prove that there is a positive influence between variables X (KM) and M (SCS) and there is also a positive influence between M (SCS) and Y (BP). The second NOVELTY, that previous research only examined those related to knowledge management variables with business performance, also between knowledge management and Supply Chain Strategy. In this study a research model that links between Knowledge Management (KM), Business Performance (BP) and Supply Chain Strategy (SCS) models, which places the SCS variable as a mediating variable so that new models are examined. Furthermore, in the previous research, there has been no review regarding the management of doubts associated with the supply chain strategy, so that this becomes the next NOVELTY.

**CONCLUSION**

The conclusion of this study is that the mediation variable, in this case, the Supply Chain Strategy (SCS) can mediate the effect of Knowledge Management on Business Performance carried out in the Small and Medium Enterprises (UKM) sector in Java island, Indonesia in 2019. The implications of this study indicate that SCS has an important role in the development of future business, especially in Small and Micro Enterprises (SMEs).

**LIMITATION AND STUDY FORWARD**

This research was conducted in the small and medium industry sector and was carried out in several cities on the island of Java because it was only carried out in a small sample. This study could not be generalized to all existing industries, because the different types of industries, location and areas would affect the results research. Therefore, for further research, it is recommended that the research area be expanded and also carried out in other industrial sectors.

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**REFERENCE**


