The Effect of Intellectual Capital and Supply Chain Management on the Financial Performance by Using Cost Leadership Strategy as Moderating Variable

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Abstract: This study aims to examine the direct effect of intellectual capital and supply chain management on financial performance; the effect of cost leadership strategy as a variable that moderates the relationship between intellectual capital and supply chain management on financial performance. This study uses a quantitative approach. The object of research in this study is the manufacturing companies listed on the Indonesia Stock Exchange (BEI). The number of samples used in this study was 20 companies, which were selected based on the purposive sampling method. This study uses the method of documentation and literature. Data were analyzed using a moderated regression analysis method that was processed with statistical packages for the social sciences (SPSS v.25). The research result shows that (1) intellectual capital has a significant effect on financial performance (2) supply chain management has a significant effect on financial performance (3) cost leadership strategy does not moderate the relationship between intellectual capital and supply chain management on financial performance (4) cost leadership strategy moderates and strengthens the relationship of supply chain management on financial performance.

Keywords: Component: Intellectual Capital, Supply Chain Management, Cost Leadership Strategy, Financial Performance.

I. INTRODUCTION

The effects of globalization, technological innovation and intense competition in this century have forced companies to change the way they do business. In order to continue to survive and achieve good performance, the company does not only rely on business based on labor (labor-based business), but business must also be based on knowledge (knowledge-based business) so that it becomes characteristic of companies based on more knowledge in innovation, information systems, organizational management and human resources they have.

The company's financial performance is an outcome that utilizes resources. Sucipto (2003) states that profit is a parameter in measuring financial performance. Therefore, profits are needed by a company for the survival of the company. Profit will be obtained if the company continues to operate.

According to Suhendah (2012) Changes in industry patterns that are now entering the era of knowledge-based business have not been adequately reported in the company's financial statements. Changes in the accounting reporting environment have resulted in a change in the paradigm of accounting reporting that initially assumed financial statements have a stewardship function or manager's responsibility to the owner, however, the current accounting paradigm shows that financial statements have a decision making function for stakeholders in making decisions that require company resources must be measured based on their value or current value.

According to Sawarjuwono and Kadir (2003) Companies that implement knowledge-based strategies must be able to manage intangible assets in order to create added value so that they will provide a competitive advantage to the company which can drive overall company performance.

One approach that can be used to assess and measure intangible assets is Intellectual Capital. Belkaoui (2003) argues that Intellectual Capital is a strategic asset of the company in the form of special and valuable knowledge that has a potential relationship between intellectual capital on the one hand and company performance on the other, so that intellectual capital can be used as the main driver of value creation.

Fadlilah (2013) states that the more advanced the technology, the increasing business competition requires companies to develop new ways of achieving competitive advantage. It really depends on the efficiency and productivity between the functional areas within the company, to be more responsive to consumer needs and market demands. The products provided to consumers are not only high quality but also fast delivery strategies. For this reason, effective business networks or supply chain management (SCM) are needed.

Supply Chain Management is a set of approaches applied to achieve the efficiency of integration of suppliers, manufactures, warehouses, and storage, so that goods can be produced and distributed in the right amount, the right location, the right time so as to provide satisfying services for consumers (Levi, 2000).
The Central Statistics Agency (CSA) reported that the production of Large and Medium Manufacturing Industries grew 3.62 percent in the second quarter of 2019 compared to achieving the same period in 2018. The improved manufacturing performance was due to increased production in a number of sectors such as the apparel industry by 25, 79 percent, the machinery and equipment industry 9.55 percent. Even though manufacturing industry production recorded an increase on an annual basis, the growth of large and medium manufacturing industry production in the second quarter of 2019 decreased by 1.91 percent compared to the first quarter of 2019 (CCN Indonesia, 2019).

According to Heizer and Render (2015) many factors can increase company production or cause a decline in company production such as the quality of human resources and the quality of raw materials. The quality of raw materials is very closely related to the supplier. The company's interaction with suppliers to get raw materials used for production, is one of the activities closely related to the supply chain or supply chain management.

Management of the company's operational activities in the context of obtaining raw goods, managing the raw goods into process or finished goods, then sending the goods to consumers through a distributed system is an integrated activity in supply chain management. According Suhartati and Rosietta (2012) through the Supply Chain Management (SCM) approach, it has an impact on cost control and improving the quality of company services so as to achieve a corporate goal, namely to increase the overall value generated.

In maximizing the role of intellectual capital and Supply Chain Management on performance, companies must use the right strategy, one of which is the cost leadership strategy, which is the company's strategy to produce products with low prices but quality products (Atikiya, 2015). Meanwhile, according to Hoi (2012) the cost leadership strategy is the preferred corporate strategy in developing countries such as Indonesia, Malaysia, India and China. This is because these countries have lower labor costs so that production costs are lower. Low production costs, the company can sell products at lower prices among competitors. Thus the goal of a cost leadership strategy can be achieved.

The manufacturing industry was chosen in this study because manufacturing companies listed on the Indonesia Stock Exchange from year to year experience development so that this causes competition among companies in improving company performance so that the company's main objectives can be achieved. In addition, companies in the manufacturing industry have different strategies to be able to compete and in seeking effective and efficient use of resources (Anggraita, 2013).

Previous studies discussing Intellectual Capital conducted by Baroroh (2013), Zarni et al. (2014), Soegeng and Mursida (2014) stated that Intellectual Capital had a significant effect on the company's financial performance.

While discussing supply chain management in the research of Christopher and Ryals (1999), Wagner et al. (2012), Lisda (2011), Johnson and Templar (2011) whose research analysis results show that supply chain management has a significant positive effect on a company's financial performance and competitive advantage. But in research Fadililah (2013) supply chain (Supply Chain Management) has a significant negative effect on financial performance. In a study conducted by Valipour et al. (2012), Ilyas et al. (2018), which discusses the influence of the Cost Leadership Strategy on the company's financial performance, the results of its analysis show that the Cost Leadership Strategy has a positive effect on the company's financial performance.

Based on the phenomenon described above, the researcher is interested in re-testing these variables by focusing on a study entitled "The Effect of Intellectual Capital and Supply Chain Management on Company Financial Performance with Cost Leadership Strategy as a Moderation Variable in Manufacturing Companies Listed on the Stock Exchange Indonesia.

II. LITERATUR REVIEW AND HYPOTHESES DEVELOPMENT

A. Stakeholder Theory

In the classic definition Freeman and Reed (1983) state that stakeholders are groups or individuals that can be identified, which can affect the achievement of organizational goals or are influenced by organizational goals. Based on stakeholder theory in explaining the concept of intellectual capital on financial performance, stakeholder theory is seen from two fields namely the ethical (moral) and managerial fields. This theory explains how the relationship between company management and its stakeholders is related to company strategic information. The company's management is expected to be responsible and can adjust the company's performance in accordance with the expectations of the stakeholders. The intended adjustment is that organizational management is expected to maximize the creation of values from the company's activities while minimizing losses that could have an impact on stakeholders. Through the utilization of all the company's potentials, both employees (human capital), physical assets (physical capital), and structural capital, the company will be able to create added value for the company. Value added is a more accurate measure created by stakeholders which is then distributed by the same stakeholders. Therefore, intellectual capital information is expected to increase stakeholder confidence and reduce the level of risk and uncertainty faced by investors.

B. Resources Based Theory

Resources Based Theory was first presented by Wernerfelt (1984) in his pioneering article entitled "A Resources-based view of the firm". Resources Based Theory is a resource in a company that can be used as a competitive advantage and able to direct the company to have good long-term performance. This theory discusses the company's resources and how the company can manage and use them. Resource Based Theory (RBT), categorizes three types of
resources namely physical capital (technology, manufacturing, and equipment), human capital (training, experience, and insight), and organizational capital (formal structure). Based on this explanation, intellectual capital (Intellectual Capital) meets the criteria as a unique resource (Kommene and Tomic, 2012). Similarly, to run a low cost strategy (Cost Leadership Strategy) a company must be able to meet the requirements in the field of resources that are strong in capital, skilled in process engineering, strict supervision, easy to produce, and low distribution and promotion costs so that can create added value, which is a good performance in the company and create competitive advantage for the company (Nasri and Ikre,2016).

C. Stewardship Theory

According to Davis and Lex (1997) Stewardship theory is a theory that describes situations in which managers are not motivated by individual goals but rather are aimed at their main outcome for the benefit of the organization, so that this theory has a psychological and sociological basis that has been designed in which executives as stewards are motivated to act according to the wishes of the principal, besides stewards trying to achieve the goals of the organization. Based on this theory, managers are described as stewards who can always be invited to work together in organizations. Stewardship theorists assume that there is a strong relationship between principal satisfaction and organizational success. The success of the organization illustrates the maximization of the wealth of the shareholders (owners). Organizational success will also maximize the utility of the management group, which in turn will maximize the interests of individuals in the group. In achieving the principal objectives, an approach that is suitable for working capital owned by the company requires financial or non-financial (HR) form. Strategies in achieving company goals are explained in the concept of competitive strategy and integration between functions within the company and outside the company.

D. Financial Performance

According to the Indonesian Institute of Accountants (IAI, 2009) Company performance can be measured by analyzing and evaluating financial statements. Information on financial position and financial performance in the past is often used as a basis for predicting financial position and performance in the future as well as things that directly attract the attention of users such as dividends, wages, price movements of securities and the ability of companies to fulfill their commitments ". Meanwhile, according to James and Wachowicz (1995) to assess the condition and financial performance of companies can use a ratio that is a comparison of the numbers contained in financial statement posts. Meanwhile, according to Pahlevi and Handayani (2013) financial performance shows the size of the company level in managing its financial resources, focusing on the management of corporate investment in various forms that aim to generate profits and create value for shareholders and can maximize the value of the company so that investors are attracted to invest their capital in the company. From some of the definitions above, it can be concluded that financial performance is a formal effort carried out by the company by looking at the description of the company's operating results contained in the company's financial statements so that it can measure the company's success in generating profits and can see the prospects, growth and potential for good development of the company by relying existing resources. A company can be said to be successful if it has achieved the standards and objectives set.

E. Intellectual Capital

Intellectual Capital is defined as a resource in the form of knowledge available to companies that produce high-value assets and have future economic benefits for the company. Intellectual capital is knowledge that is supported by information processes to establish relationships with outsiders (Stewart, 1997). While Brooking (1996) suggests intellectual capital as a combination of intangible assets which include markets, intellectual property, human resources, and infrastructure that carry out their functions within the company. Based on these definitions, it is concluded that intellectual capital is a range of intangible assets (human capital, structural capital, and customer capital) that can drive company performance and create value-added companies so as to lead to sustainable competitive advantage.

F. Supply Chain Management

According to Heizer and Render (2015:4) Supply Chain Management is the integration of materials and service procurement activities, conversion into semi-finished goods and final products, and delivery to customers. All of these activities include purchasing and outsourcing activities, plus other functions that are important to the relationship between suppliers and distributors. The purpose of supply chain management is to coordinate activities in the supply chain to maximize competitive advantage and the benefits of the supply chain for end consumers. Meanwhile according to Li et al. (2006) Supply Chain Management or supply chain management is the integration of business processes between networks that are interconnected with suppliers, manufacturers, distribution centers, and retailers to improve increasing the flow of goods, services, and information from suppliers to end customers, with the aim of reducing overall costs system and while maintaining service levels. Based on these definitions, it can be concluded that Supply Chain Management revolves around the efficient integration of suppliers, manufactures, warehouses, distributors and retailers that cover all company activities, from the strategic level to the level of operational tactics that have an impact on product costs produced in accordance with customer needs with the aim that the total cost of all parts to be more effective and efficient thereby reducing costs and maximizing competitive advantage.

G. Cost Leadership Strategy

According to Porter (1980:7) suggested that the cost leadership strategy is an effort made by the company in generating competitive advantage by achieving the lowest cost in the industry. The focus of companies that implement cost leadership strategies is tight cost control, refraining from all activities that incur large costs and prioritizing efficiency in each operation thus the goal of a cost
leadership strategy can be achieved. Based on these definitions, it can be concluded that the Cost Leadership Strategy is a series of integrated actions taken to produce products or services efficiently that can be accepted by customers at the lowest cost, relative to other competitors.

H. Hypothesis

Intellectual capital is classified as an intangible asset that is important for financial performance. Intellectual Capital (IC) can play an important role in improving financial performance. According to Baroroh (2013) Intellectual Capital (IC) is a strategic company asset in the form of special and valuable knowledge that has a potential relationship between intellectual capital on the one hand and company performance on the other. Through the utilization of all the company's potentials, both employees (human capital), physical assets (physical capital), and structural capital, the company will be able to create added value.

In summary, the higher the ability of intellectual capital, it tends to have a good financial performance and profit increases, resulting in an increase in the value of ROI which reflects that profitability has increased. Based on the description above, the hypotheses of this study are:

H1: Intellectual capital has a positive effect on financial performance.

Supply Chain Management is an approach that is applied to bring together suppliers, (distributors and retailers) efficiently, so that products can be produced and distributed with the right amount, the right location, and the right time to reduce costs and meet customer needs. According to Christopher and Ryals (1999), Supply Chain Management can affect an organization's financial performance based on its profitability because it is a surplus from sales minus costs so that supply chain management can increase prices as well as service levels, and also reduce the company's operating costs.

In Brief, the more the company is able to manage the supply chain well, the higher the company's profitability. Wagner et al (2012).

H2: Supply chain management has a positive effect on financial performance.

The strategy includes the entire organization, identifying the direction that must be followed by the entire department and to move in order to achieve the goal of creating value. Intellectual Capital is often seen as a trigger for performance, therefore there is an interaction between company resources and value creation. The use of company resources will improve the company's financial performance which is influenced by the interaction between the strategy and the use of these resources.

H3: Cost Leadership Strategy moderates the effect of intellectual capital on financial performance.

Based on Resource Based Theory so companies can create value to compete with competitors, good strategic planning can produce efficient and economical resources. One of the strategies developed by the company is the Cost Leadership Strategy that offers products to consumers at the lowest prices available in the market, sells at a lower price than competitors, thereby controlling market share and sales, which completely ejects competitors out of the market.

According to previous research Suhartati and Rosiella (2012) stated that, influential strategies strengthen the relationship between supply chain management and company performance. This shows that the sample companies (manufacturing industry) for the period 2008-2010 that implemented supply chain management tended to choose a low cost strategy (cost efficiency) that focused on efforts to meet consumer demand.

H4: Cost Leadership Strategy moderates the effect of Supply Chain Management on financial performance.

III. RESEARCH METHODS

This study is research that seeks to explain the causal relationship between variables through the submission of a hypothesis that has been formulated. The variables in this study consisted of independent variables (Intellectual Capital and Supply Chain Management), dependent variables (Financial Performance) and moderation variables (Cost Leadership Strategy). This research was compiled based on secondary data obtained from the company's annual financial statements published through the official website of the Indonesia Stock Exchange (IDX). The data needed are financial statements, cash flow statements, and financial statement records. The population used in this study were all manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2015-2017, which consisted of 156 companies. The company was chosen by purposive sampling method to produce namely 1) Manufacturing Companies that have been listed on the Indonesia Stock Exchange during the study period of 2015-2017, 2) Companies that present complete data related to the research variables. 3) Companies that present annual financial statements in Rupiah. 4) Companies that implement a Cost Leadership Strategy during the research period as many as 70 company samples with 210 observations. Then, the detected companies adopted a cost leadership strategy of 23 sample companies with 69 observations. Furthermore, the outlier data screening transformation was carried out due to the presence of 3 sample companies with extreme values, thus the final amount of data in this study was 20 samples with 60 observations.

A. Measurement Variable

1. Financial Performance

The ratio analysis tool used in measuring financial performance in this study is Return on Investment (ROI) because this ratio shows the results (return) on the amount of assets used in the company. This ratio is also able to
measure the overall effectiveness of management in managing its investments. (Faisal et al., 2017). Mathematically, ROI is formulated as follows.

\[
\text{ROI} = \frac{\text{Net Profit After Tax}}{\text{Total Assets}} \times 100\%
\]

2. Intellectual Capital

Intellectual capital as measured by value added created by physical capital (VACA), human capital (VAHU) and structural capital (STVA). Value Added Intellectual Coefficient (VAIC™) created by Pulic (2000) is a combination of the three value added indicators that are designed to provide information about the efficiency of value creation of tangible and intangible assets of a company. So the VAIC™ calculation formulation is as follows.

\[
\text{VAIC™} = \text{VACA} + \text{VAHU} + \text{STVA}
\]

3. Supply Chain Management

Proxy supply chain management developed by Johnson and Templar (2011), which is a comparison between net cash inflow from operations and total assets minus debt. The proxy measures how the company evaluates its ability to generate profits and turn those profits into cash. The cash is obtained from activities directly related to the production, purchase and sale of goods/services, purchase of raw materials, to the company's profit/loss. Increased cash, the company can accumulate capital by adding assets and paying off debt smoothly. Based on the increase in cash value, it is indicated that the higher level of supply chain management implementation will be followed by an increase in profitability.

\[
\text{SCM} = \frac{\text{net cash inflow from operation}}{\text{Total asset} - \text{Current Liabilities}}
\]

4. Cost Leadership Strategy

Proxy of cost leadership strategy is the comparison between Cost of Goods sold and Sales. This proxy indicates the company's ability to produce efficiently, so that it will aim to relatively minimize the cost of goods sold against its sales so that it will increase the ratio results. Meanwhile, differentiation strategies are usually developed around company-specific innovations, product-specific innovations as well as marketing efforts that are not easily imitated quickly by competitors so that they do not relatively minimize the cost of goods sold so it is assumed that the ratio results decline. (Banker, 2014; Hambrick, 1983; Berman, 1999).

\[
\text{CLS} = \frac{\text{Sales}}{\text{Cost of goods sales}}
\]

IV. RESULT

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
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<td>.01</td>
<td>28.76</td>
<td>6.6712</td>
<td>5.9840</td>
</tr>
<tr>
<td>VACA</td>
<td>60</td>
<td>.11</td>
<td>1.69</td>
<td>.4621</td>
<td>4.0978</td>
</tr>
<tr>
<td>VAHU</td>
<td>60</td>
<td>.20</td>
<td>4.96</td>
<td>2.0702</td>
<td>1.14894</td>
</tr>
<tr>
<td>STVA</td>
<td>60</td>
<td>.18</td>
<td>.77</td>
<td>.5483</td>
<td>.36040</td>
</tr>
<tr>
<td>VAICTM</td>
<td>60</td>
<td>1.68</td>
<td>5.66</td>
<td>3.0817</td>
<td>.96442</td>
</tr>
<tr>
<td>SCM</td>
<td>60</td>
<td>.04</td>
<td>1.15</td>
<td>.4103</td>
<td>.21240</td>
</tr>
<tr>
<td>CLS</td>
<td>60</td>
<td>1.06</td>
<td>3.03</td>
<td>1.4985</td>
<td>.50942</td>
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<tr>
<td>Valid N (listwise)</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Table 1: Descriptive Statistics

Source: Data processed, 2019

Based on Table 1, the minimum ROI value is 0.01 of the total items assessed and the maximum value is 28.67 of the total items assessed. Descriptive statistical analysis results show that financial performance (ROI) has an average value of 6.6712 with a standard deviation of 5.97840. This shows that the average value of the company sampled is sufficient to represent the entire value of financial performance with the attribute ROI.

Intellectual capital variable with the VAICTM attribute that describes a combination of three value added indicators namely physical capital (VACA), human capital (VAHU) and structural capital (STVA) which shows the amount of new value that has been made per monetary unit invested in each strategic resource. Based on table 5.1 it can be explained that the minimum value of physical capital (VACA), human capital (VAHU), structural capital (STVA) and VAICTM is obtained at 0.11; 0.20; 0.18; 1.68. While the maximum value of physical capital (VACA), human capital (VAHU), structural capital (STVA) and VAICTM were obtained at 1.69; 4.96; 2.75; 5.66. While the average value of physical capital (VACA) of 0.4621 with a standard deviation of 0.40978, human capital (VAHU) of 2.0702 with a standard deviation of 1.14894 and structural capital (STVA) of 0.5483 with a standard deviation of 0.36040. This shows that among the three indicators making up the company's intellectual capital investment is greater given to human capital. While the average value of the VAICTM attribute is 3.0817 with a deviation value (standard deviation) of 0.96442. This shows that the average company has intellectual capital with diverse VAICTM attributes. The average value is enough to represent the whole value of intellectual capital with the VAICTM attribute.

While the minimum value of SCM is 0.04 and the maximum value is 1.15. Descriptive statistical analysis results show that Supply Chain Management (SCM) has an average value of 0.4103 with a standard deviation of...
0.21240. This shows that the average value of the company sampled is sufficient to represent the value of supply chain management.

Furthermore, the minimum CLS value of the company is 1.06 and the maximum value is 3.03. Descriptive statistical analysis results show that the Cost Leadership Strategy (CLS) has an average value of 1.4985 with a standard deviation of 0.50942. Low standard deviations indicate that the average value of the cost leadership strategy can represent the value of the cost leadership of the sample company strategy.

A. Classical Assumption Test

- **Normality Test**
  A good regression model requires data that is normally distributed or close to normal. This study conducted a statistical normality test using the Kolmogorov-Smirnov test (one-sample K-S) with a significance value that must be above \( \alpha = 0.05 \).

An initial method used to deal with abnormal data distribution is screening outlier data. After screening the data, there are 3 company sample data that have been stated as out of 23 with 69 observations. If this study encounters outlier data caused by samples with extreme values, the data will be excluded. Thus, the final data in this study is 20 company samples with 60 observations.

Based on table 2 the normality test results obtained by Sig Kolmogorov Smirnov value of 0.200. This value meets the normality test requirements, that is if the test results obtained Sig> 0.05, then the assumption of normality is met.

<table>
<thead>
<tr>
<th>Variabel</th>
<th>T</th>
<th>Sig.</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variabel Dependen Ln_Res_2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variabel Indipenden</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAICTM</td>
<td>0.565</td>
<td>0.575</td>
<td>Tidak Terjadi heteroskedastisitas</td>
</tr>
<tr>
<td>SCM</td>
<td>1.950</td>
<td>0.066</td>
<td>Tidak Terjadi heteroskedastisitas</td>
</tr>
</tbody>
</table>

**Table 3:** Heteroskedasitas Test Result
*Source: Data processed, 2019*

Based on table 3. Heteroscedasticity test results with the Park Test shows that there are no significant coefficient parameters for the independent variables, it can be concluded that the regression model does not contain heteroscedasticity.

- **Uji Multikolinearitas**

<table>
<thead>
<tr>
<th>Variabel Independen</th>
<th>Tolerance</th>
<th>VIF</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAICTM</td>
<td>0.981</td>
<td>1.019</td>
<td>Non Multikolinearitas</td>
</tr>
<tr>
<td>SCM</td>
<td>0.981</td>
<td>1.019</td>
<td>Non Multikolinearitas</td>
</tr>
</tbody>
</table>

**Table 4:** Multikolinearitas Test Result
*Source: Data processed, 2019*

Based on table 4 the results of testing each independent variable shows that the tolerance value> 0.1 and the VIF value owned by each variable <10. This shows that there was no multicollinearity (non multicollinearity) in this study.

B. Regression Analysis

This study fulfills the requirements of classical assumptions, so that the equation model in this study is considered good and this regression equation model will be able to estimate the effect of the independent variables on the dependent variable. In addition, this study uses Moderate Regression Analysis (MRA) is a special application of multiple linear regression where the regression equation contains interactions (multiplication of two or more independent variables) or there are elements of moderating variables.
**Multiple regression without moderation variables**

<table>
<thead>
<tr>
<th>Variabel Independen</th>
<th>Koefisien</th>
<th>T</th>
<th>Sig.</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Konstanta</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAICTM (X1)</td>
<td>0,824</td>
<td>2,345</td>
<td>0,023</td>
<td>Signifikan</td>
</tr>
<tr>
<td>SCM (X2)</td>
<td>1,530</td>
<td>4,374</td>
<td>0,000</td>
<td>Signifikan</td>
</tr>
</tbody>
</table>

\[
Y= -0,164 + 0,824X1 + 2,530X2 + e..(1)
\]

Based on the results of the regression test without moderation variables, the following mathematical equations can be arranged.

The originating equation shows that the coefficient for all independent variables, namely intellectual capital (X1) of 0.824 and supply chain management (X2) of 2.530 is positive. This means that the higher the intellectual capital with the VAICTM (X1) and supply chain management (X2) attributes, the higher the financial performance with the ROI (Y) attribute. This indicates that the effect of intellectual capital and supply chain management variables is directly proportional to financial performance.

Based on the results of regression tests without moderation variables also indicate that intellectual capital with the VAICTM (X1) and supply chain management (X2) attributes shows a significant effect on financial performance with the ROI (Y) attribute. This can be seen from the probability value smaller than 0.05, where the probability value for intellectual capital is 0.023 and supply chain management is 0.000. These results indicate that all independent variables significantly influence the dependent variable.

R square determination coefficient value of 0.329 or 32.9%. These results indicate that the Financial Performance variable is influenced by 32.9% by intellectual capital (X1) and supply chain management (X2). In other words, there are 67.1% (100% - 32.9%) influenced by other variables outside the independent variables examined in this study.

**Regression Analysis with Variable Cost Leadership Strategy Moderation**

<table>
<thead>
<tr>
<th>Variabel Independen</th>
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<td>Konstanta</td>
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<td>X1*Z</td>
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<td>X2*Z</td>
<td>3,925</td>
<td>2,617</td>
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</tr>
</tbody>
</table>

\[
\alpha = 0,05
\]

\[
Rsquare = 0,520
\]

Table 6: Multiple regression with moderation variables

Based on the results of the regression test after interacting with the variable cost leadership strategy (Z), then the mathematical equation can be arranged as follows:

From table 6 it is known that after the intellectual capital variable (VAICTM) interacts with the cost leadership strategy (moderation) it has a probability value of 0.169 below the standard significance value of 0.05. This shows that the cost leadership strategy (CLS) cannot moderate the effect of intellectual capital (VAICTM) on financial performance (ROI).

The interaction of supply chain management with the cost leadership strategy (moderation) has a probability value of 0.011 below the standard significance value of 0.05. This shows that the cost leadership strategy can moderate the effect of supply chain management on financial performance (ROI). The coefficient for positive supply chain management variable interactions is 3.925, which means that the variable cost leadership strategy strengthens the influence of supply chain management on financial performance (ROI).

R square determination coefficient value of 0.520 or 52%. These results indicate that the Financial Performance variable is influenced by 52% by intellectual capital (X1) and supply chain management (X2) after interacting with the variable cost leadership strategy (Z). In other words, there are 48% (100% - 52%) influenced by other variables outside the independent variables examined in this study.

**V. DISCUSSION**

A. Intellectual capital has a positive effect on financial performance

Based on the results of testing on hypothesis 1 which shows that Intellectual Capital (VAICTM) on Financial Performance (ROI) with a significance level value is 0.023 and a regression coefficient value of 0.824 which shows that a positive relationship. These results support H1 formula which states that Intellectual Capital has a positive effect on financial performance.

The Intellectual Capital (VAICTM) variable has a positive effect on financial performance (ROI), which means that the higher the ability of Intellectual Capital, the financial performance will increase. The results of this study are in line with research conducted by Zarni et al. (2014), Soegeng and Mursida (2014), and Baroroh (2013).
Intellectual capital (VAICTM) is a strategic asset of the company in the form of special and valuable knowledge that has a potential relationship between intellectual capital on the one hand and company performance on the other hand through the utilization of all the company's potential, both employees (human capital), physical assets (physical capital), as well as structural capital, the company will be able to create value added that will lead to increased financial performance.

The results of this study are in line with stakeholder theory which emphasizes the relationship between management and corporate stakeholders in increasing value creation as a result of the activities undertaken. Stakeholders have an interest in influencing management in the process of exploiting the potential of the company. Good and optimal management of the potential of the company can create added value (value added) that can improve the company's financial performance including profitability which is the goal of the stakeholders in intervening in management.

The results of this study are also in accordance with resource-based theory which provides an explanation that companies that are able to manage resources and knowledge well will have a competitive advantage that will affect financial performance.

B. Supply chain management (SCM) has a positive effect on Financial Performance (ROI)

Based on the results of tests on Hypothesis 2 the Supply Chain Management (SCM) variable on Financial Performance (ROI) with a significance level value of 0.000 and a regression coefficient value of 2.530 indicating a positive relationship. These results support the H2 formula which states that supply chain management has a positive effect on financial performance.

The Supply Chain Management (SCM) variable has a positive effect on financial performance (ROI), which means that the higher the supply chain management is managed properly, the higher the company's profitability (an increase in financial performance). This sample company engaged in manufacturing has been able to provide a process of creating added value in goods and services so that it is able to focus on the level of efficiency and effectiveness of inventories, while for cash flow and information flow the process can involve the whole part of a function in companies in working together to achieve company goals.

The results of this study are in line with research conducted by Wagner et al. (2012), and Lisda (2011). With the supply chain management, the performance measurement system can run well and the company is expected to make continuous improvements because the supply chain management teaches how to form a good organizational network and business processes so as to improve the company's financial performance can be supported by improving the implementation of supply chain management.

The results of this study are in line with the stewardship theory which states that managers are not motivated by individual goals but are aimed at their main outcome goals for the benefit of the organization. So it is assumed that there is a strong relationship between principal satisfaction and organizational success.


Based on the results of research on Hypothesis 3, the variable Cost Leadership Strategy moderating the influence of Intellectual Capital on Financial Performance cannot be proven. The significance value is 0.169 and the regression coefficient value is 0.287 which indicates that the cost leadership strategy does not significantly moderate the effect of intellectual capital on financial performance.

In the Resources Based Theory discusses the company's resources and how the company can manage and use them. In this theory the cost leadership strategy should moderate the effect of intellectual capital on financial performance because the cost leadership strategy also explains how companies utilize resources to produce efficiency at a low cost in order to create good performance and competitive advantage for the company. But in this study, showed different results.

The results of this study indicate that the cost leadership strategy does not moderate the effect of intellectual capital on financial performance.

This is shown in table 1 descriptive statistics where the average VAHU value of 2.0702 is still greater than the average value of VACA and STVA that is equal to 0.4621 and 0.5483. Whereas in implementing cost leadership strategy, companies should be able to reduce costs in creating added value for companies, including reducing the cost of human capital.

D. The Cost Leadership Strategy moderates the influence of Supply Chain Management on Financial Performance

Based on the results of testing in Hypothesis 4, the Cost Leadership Strategy variable moderates the influence of Supply Chain Management on Financial Performance, showing a significance value of 0.011 and a regression coefficient value of 3.925, indicating that the positive relationship is significant. This shows that the higher the cost leadership strategy, the higher the effect of supply chain management on financial performance. These results support the H4 formula which states that the cost leadership strategy moderates the effect of supply chain management on a positive effect on financial performance.

The results of this study are in line with Resource Based Theory, explaining how companies are able to create value to compete with competitors with good strategic planning that can produce resources that are efficient and economical. The implementation of a cost leadership strategy that creates efficiency with an emphasis on costs will certainly support supply chain management because
with cost efficiency it can reduce costs used in all company activities ranging from strategic levels to operational tactics so as to maximize competitive advantage which will certainly improve the company's financial performance.

This research is in line with the research of Suhartati and Rosieta (2012), Jonhson and Templar (2011) in their research stating that, a positive cost leadership strategy moderates the influence of supply chain management on the company's financial performance.

VI. CONCLUSION

- The higher the ability of Intellectual Capital (VAICTM), the financial performance (ROI) will increase. This shows that the sample companies in this study have done a good and optimal management of the potential of the company so that it can create added value (value added) that can improve the company's financial performance including profitability.
- The higher the management of supply chain management properly, the higher the company's profitability (an increase in financial performance). This shows that the sample company engaged in manufacturing has been able to provide a process in creating added value to goods so as to be able to focus on the level of efficiency and effectiveness of inventories, while for cash flow and information flow the process can involve the whole part of a the function of the company in working together to achieve the company's goals is to improve the company's financial performance.
- Cost Leadership Strategy does not moderate the relationship between intellectual capital (VAICTM) and financial performance (ROI). This shows that the sample companies that have been studied still incur a lot of costs for human capital. Whereas in implementing cost leadership strategy, companies must be able to reduce costs in order to produce efficiency with low costs in order to improve the company's financial performance.
- The higher the cost leadership strategy, the higher the effect of supply chain management on financial performance. This shows that the sample companies that have been studied have created cost efficiencies by reducing costs used in all company activities from the strategic level to the operational tactics level so as to maximize competitive advantage which will certainly improve the company's financial performance.

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