The Effect of Just in time (JIT) and Supply Chain Management on Company Performance at Seafood Restaurants in Ambon City

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Abstract: The importance of good performance is the main thing that becomes the success of a company or organization. This study aimed to determine the effect of just in time and supply chain management on company performance at seafood restaurants in Ambon city. The population in this study is a restaurant in Ambon city that gets fish supply. The data used in this study were obtained from the results of filling out the questionnaire, for 35 respondents at 20 seafood restaurants in Ambon city. Data collection techniques in this study used a questionnaire. The instrument testing was carried out before the analysis including the validity test, the reliability test, the multicollinearity test, the heteroscedasticity test, and the data normality test. Data analysis used to test the hypothesis was multiple linear regression analysis techniques. The results showed that just in time had a positive and significant effect on company performance while supply chain management had a positive and significant effect on company performance.

Keywords: Just in time, Supply Chain Management, and Company Performance

INTRODUCTION:
Along with the development of the times, many business opportunities are open and used effectively by many business people. The success of a business can be seen from the percentage of the performance level of the business. According to (Simamora 2003), performance is a measure of an organization's success in achieving its mission. Company performance is the work that can be achieved by a person or group of people in a company by their respective authorities and responsibilities to achieve the company's goals legally and does not violate the law, and does not conflict with morals and ethics. According to (Basri, 2004).

The importance of good performance is the main thing that becomes the success of a company or organization. If an organization experiences a decline in performance, it certainly impacts the company's reputation. The causes that usually occur related to underperformance are a general description of the situation of a company or organization in which it can be seen that if there is a decrease in performance, it will impact company productivity and its output. This problem requires business managers to create new models in managing the flow of products and information. The application of supply chain management for the provision of goods and services is needed in order to increase industrial competitiveness, which will have an impact on business performance (Rahmasari, 2011). The Just in time method is a method that is quite effective in overcoming problems in this case timeliness, supplies of raw materials needed, eliminating all waste, and good quality of the supply of raw materials received.

Maluku is one of the provinces in Indonesia, which has the potential for capture fish production of 1.63 million tons per year, while the utilization rate is only 21% or around 341,966 tons (Listriana, 2011). The fishery and marine industry in Maluku is growing quite rapidly, where Maluku is the national fish barn (LIN) with approximately 90% of the total Maluku region in the form of oceans. With such a large potential for fish production, business people see this opportunity and open various types of businesses with raw materials from seafood, so that there are many seafood restaurants in Ambon city. However, in recent years, the development of production and the value of fishery production in Ambon city is experiencing a decline. This problem certainly has an impact on the flow of the fish supply chain in Ambon city.

If there is a problem with the supply of raw materials, or a delay in supply, it will affect the production process and result in a decrease in income. Furthermore, the intense competition among business players encourages them to make strategies to develop and grab market share.

Based on the above thoughts, the authors were interested in conducting research with the title: The Effect of Just in time (JIT) and Supply Chain Management on Company Performance at Seafood Restaurants in Ambon City.
BASIS OF THEORY FORMULATION OF HYPOTHESIS

Company performance (Y)

Performance is the work ability shown by the work results. Company performance is something that the company produces in a certain period by referring to predetermined standards.

Business performance refers to how many companies are oriented towards the market and profit goals (Rahadi, 2012). Company performance is a measure of the success of a company, which is measured over a specified time period. This result can be said to be a value of each activity that has been compiled and implemented to be able to identify whether the strategy that has been made and the implementation of the strategy is correct or vice versa. (Prakosa, 2005) in (Wulandari, 2016).

Just in time (X1)

Just in time is a technology in the form of a system that controls technical processes and human resource processes in the organization. The JIT philosophy aims to eliminate all activities that are not important and do not provide added value (non value added) wherever they are. The definition of Just in time according to (Simamora, 2012) states that the Just in time system is a comprehensive Manufacturing and inventory management system where raw materials and various parts are purchased and produced when they are produced and at times will be used in every stage of the production process or manufacturing.

The concept of JIT can be defined as a series of production activities using inventory in the form of minimal raw materials, which are then processed into finished goods. This concept is also based on the assumption that no goods are produced until the goods' production is needed. Davis Mark M (1999: 398). The point is to provide the correct information to the right people and at the right time so that they (company and supplier) can immediately respond to the market as soon as the information (order) is received. A balance is needed between supply and demand for output to get a continuous and stable production process. For this reason, aggregate planning is needed to balance and determine the overall level of output in the short or medium-term in the face of fluctuating demand.

Just in time Relationship with Company Performance

According to Prayheogo & Devie (2013) in (Rahmad Ikhsan, 2017), the measurement of organizational performance can be seen from the following indicators, namely, the ability to meet market share, the ability to create new products, the company can operate with maximum output, high levels of productivity and can meet customer needs.

According to (Spears 2002), it is stated that JIT is closely related to market and financial performance. The lower cost structure generated by the implementation of JIT will result in better relative financial performance compared to competitors, as well as an increase in Return on investment (ROI). JIT also has a positive correlation with better market performance, because market indicators, such as sales growth and market share, also increase when JIT implementation increases. A study conducted by Flynn, Sakakibara and Schroeder (1995) states that the application of JIT has an effect on company performance.

H1: There is a positive effect of Just in time (X1) on Company Performance (Y)

Supply Chain Management (X2)

Mahendrawathi, 2010 defines a supply chain as a network of companies that work together to create and deliver a product into end-users hands. These companies usually include suppliers, factories, distributors, shops or retail, and supporting companies such as logistics service companies. Supply Chain Management integrates business processes between interconnected networks of suppliers, manufacturers, distribution centres, and retailers to improve the flow of goods, services, and information from suppliers to end customers, reduce system-wide costs, and maintain the level of service. (Suhong Li, Bhanu Ragu-Nathan, 2006) in (Mouliina, 2017)

(Simichi-Levi, David, Kaminsky, 2007) in (Ariani 2013) states supply chain management as an approach that is applied to unite suppliers, entrepreneurs, warehouses and other storage places (distributors and retailers) efficiently so that products can be produced and distributed with the right amount, right location, and right time to lower costs and meet customer needs.

Relationship between Supply Chain Management and Company Performance

According to Yu et al. (2001), the exchange of information in the supply chain helps companies to improve inventory levels and make cost savings. In addition, according to Ganesan (in Indriani, 2006), a long-term relationship is a perception of the company's need for raw materials, information, and relationships with suppliers, so that it is expected to bring mutual benefits in the long term. Ogden (2006) states that companies that build long-
term relationships with their suppliers get benefit from the stability of raw material prices. Collaboration can also be defined as cooperation between two companies in harmonizing their supply chain processes, to create superior value to customers (Simatupang et al., 2004). According to Spekman (in Simatupang et al., 2004), companies must work together with all partners in the supply chain to create competitive advantage.

The implementation of good supply chain management will be able to improve company performance. Research on companies in Surabaya shows that many companies pay less attention to aspects of supply chain management in terms of strategic partnerships for continuous improvement involving suppliers. Companies should make continuous improvements on a regular basis with suppliers so that the quality produced by the supplier is maintained. The quality and quality produced by suppliers affect the company in its performance both in production and sales (Regina and Devie, 2013). From the description above, the researchers formulated the following hypothesis:

**H2: There is a positive effect of Supply Chain Management (X2) on Company Performance (Y)**

**Figure 1 Framework**

**RESEARCH METHODS**

In this study the variables used consisted of the dependent variable and the independent variable. The dependent variable used is company performance, while the independent variable used is just in time and supply chain management.

**Table 1**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Operational definition</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company performance (Y)</td>
<td>Company performance is something that is produced by a company in a certain period by referring to the established standards. The company's performance should be a measurable result and describe the empiric conditions of a company from various agreed sizes. (Lisda Rahmasari, 2011).</td>
<td>1. Able to achieve market share&lt;br&gt;2. Creating New products&lt;br&gt;3. The company's output performance&lt;br&gt;4. Productivity level&lt;br&gt;5. Able to meet customer needs</td>
</tr>
<tr>
<td>Just in time (X1)</td>
<td>Just in time is a compelling, sustainable problem solving philosophy that supports lean production. Lean production supply the customer exactly what the customer wants when the customer wants it, without waste, through continuous improvement. (Heizer &amp; Render, 2004).</td>
<td>1. Selection of suppliers&lt;br&gt;2. Make a purchase when there is an order&lt;br&gt;3. Raw materials that are not produced may be more than ordered&lt;br&gt;4. There are no buffer items in the warehouse&lt;br&gt;5. Do not accept defective components and raw materials&lt;br&gt;6. Responsibilities of part employees production includes before the production process and the product is produced&lt;br&gt;7. Special training for employees&lt;br&gt;8. Each employee is responsible for the output produced.</td>
</tr>
<tr>
<td>Supply Chain Management (X2)</td>
<td>Supply Chain Management is a set of approaches to streamline supplier, manufacturing, warehouse and storage integration, so that goods are produced and distributed in the right amount, right location, right time, to minimize costs and provide customer service satisfaction. (Simchi-levi, 2003).</td>
<td>1. Sharing of information in terms of financial and production&lt;br&gt;2. There is an ongoing exchange of information&lt;br&gt;3. Information can help all parties concerned.&lt;br&gt;4. Long-term projects are the basis of relationships with suppliers</td>
</tr>
</tbody>
</table>
5. Cooperation is the basis of long-term relationships
6. Relationships with suppliers last for a long time.
7. Discuss planning and sales with suppliers
8. Cooperation is determined based on objective conditions.

Population & Sample

In this study, the population is a restaurant in Ambon that gets a fish supply. The sampling technique used purposive sampling, which is a sampling technique based on specific criteria. Therefore, the sample in this study were 40 respondents from 20 Seafood restaurants in Ambon city.

Data analysis method

In this research, the analysis used is qualitative & quantitative analysis. The data collection method was done by distributing questionnaires. The data analysis method used was multiple regression analysis method with the SPSS 20 program.

RESEARCH RESULTS AND DISCUSSION

In this study, the questionnaire was distributed to managers and general managers in 20 seafood restaurants in Ambon, with 40 respondents. In this study, respondents were divided based on gender, age level, years of service and position. The data analysis process was carried out using three tests: research instrument test, classical assumption test and hypothesis test (t).

Research Instrument Testing

The research instrument testing aimed to test whether the questionnaire used was reliable and valid or not. A questionnaire is said to be valid if r_count > r_table (Ghozali, 2011: 52). Significance is carried out at the level α = 0.05. instrument can be said to be reliable if the alpha value is greater than r_table (0.334).

Table 2 Validity Test Results

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Item</th>
<th>Rcount</th>
<th>rtable</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Just in time</td>
<td>1</td>
<td>0.370</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.653</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.397</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0.391</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0.642</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0.339</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>0.543</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0.680</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>0.739</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td>Supply Chain</td>
<td>10</td>
<td>0.397</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td>Management</td>
<td>11</td>
<td>0.502</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>0.486</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>0.501</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>0.438</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>0.342</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>0.398</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>0.586</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>0.340</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>0.464</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>0.349</td>
<td>0.334</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>0.641</td>
<td>0.334</td>
<td>Valid</td>
</tr>
</tbody>
</table>
From the table above, it can be seen that all the variables used in this study have a Cronbach's Alpha value \( \alpha > 0.334 \) and all \( r_{\text{count}} > r_{\text{table}} \) values so that this questionnaire was reliable and valid.

**Classic assumption test**

The classic assumption tests used in this study were the multicollinearity test, heteroscedasticity test, and normality test. The multicollinearity test of a model can be seen from the variance inflation factor (VIF) value and the tolerance value. If the VIF value is <10 and the tolerance value is > 0.1, the regression model proposed does not show sign of multicollinearity.

### Table 3

**Reliability Test Results**

<table>
<thead>
<tr>
<th>Variables</th>
<th>( \alpha )</th>
<th>( r_{\text{table}} )</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>JIT (X1)</td>
<td>0.655</td>
<td>0.334</td>
<td>Reliable</td>
</tr>
<tr>
<td>SCM (X2)</td>
<td>0.484</td>
<td>0.334</td>
<td>Reliable</td>
</tr>
<tr>
<td>KNJ (Y)</td>
<td>0.503</td>
<td>0.334</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

*Source: Primary data processed, 2020*

### Table 4

**Multicollinearity Test Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>JIT (X1)</td>
<td>0.927</td>
<td>1.079</td>
</tr>
<tr>
<td>SCM (X2)</td>
<td>0.927</td>
<td>1.079</td>
</tr>
</tbody>
</table>

*Source: Primary data processed, 2020*

The table above explains that VIF for just in time and supply chain management is around number 1, which is 1.079. With the tolerance level just in time and supply chain management, approaching number 1, which is 0.927, the regression equation is free from multicollinearity. The heteroscedasticity test aims to test whether, in the regression model, there is an inequality of variance from the residuals of one observation to another (Ghozali, 2011: 139). One way to detect the presence or absence of heteroscedasticity in a regression model is by using a scatterplot.

### Figure 2

**Heteroscedasticity Test Results**

From the picture above it can be seen that there is no clear pattern, and the dots spread above and below the number 0 on the Y axis, so there is no heteroscedasticity.

The normality test aims to test the normal distribution of the dependent and independent variables. The data normality test in this study was carried out using a normal probability plot graph.
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Figure 3
Normality Test Results

Source: Primary data processed, 2020

On the normal probability plot graph in Figure 3 above the points are not skewed to one side of the left or right, so it can be concluded that the data distribution pattern is normal.

Multiple Linear Regression Analysis & Hypothesis Testing (t)

The analytical method used to analyze the data in this study is to use multiple linear regression. (Ghozali, 2011) the t statistical test is intended to show how far the influence of one individual variable is in explaining the dependent variable.

Table 5
Multiple Linear Regression Analysis and Hypothesis Test (t) Coefficients*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>15.096</td>
<td>5.180</td>
<td>2.91</td>
<td>.00</td>
<td>6</td>
</tr>
<tr>
<td>JIT</td>
<td>.272</td>
<td>.109</td>
<td>.378</td>
<td>2.48</td>
<td>.01</td>
</tr>
<tr>
<td>SCM</td>
<td>.269</td>
<td>.126</td>
<td>.325</td>
<td>2.13</td>
<td>.04</td>
</tr>
</tbody>
</table>

a. Dependent Variable: KP

Source: Primary data processed, 2020

Based on the results of data processing in the table above, the multiple regression equation model was obtained as follows: \[ Y = 15.096 + 0.272X_1 + 0.269X_2 + \epsilon \]

a. The constant value of 15.096 can be interpreted if all independent variables have a value of 0, therefore the dependent variable will have a value of 15.096.

b. The coefficient X1 (b1) = 0.272 shows that Just in time (X1) has a positive effect on performance (Y). this means that if the Just in time variable is increased, it will increase the performance of 0.272.

Based on the table above, it shows that the just in time variable (X1) has a t count of 2.488 and a significant value of 0.18. This shows that sig. 0.018 < 0.05, which means that the hypothesis is accepted, so that there is just in time influence on company performance. The supply chain management variable (X2) has a t count of 2.137 and a significant value of 0.040 <0.05, which means that the hypothesis is accepted, so that supply chain management has an effect on company performance.
DISCUSSION
This study used seafood restaurants as the object of research by looking at the effect of the just in time method and supply chain management on the business performance of seafood restaurants in Ambon city. The time for distributing the questionnaires to 40 respondents was approximately one month. However, the questionnaires were only received by 35 people (87.5%) from 40 people (100%) respondents. The research results are described below.

4.5.1 The Effect of Just in Time on Company Performance
In the first hypothesis, it is the effect of just in time on performance. Based on table 4.10, it is obtained a significant value of 0.018 < 0.05, which means an influence between just in time on company performance.

The first hypothesis indicates that there is an influence between just in time on company performance in the application of practices in seafood restaurants, where seafood restaurants are directed at the ability to use resources as efficiently as possible, there is no waste, buy and produce only in quantity demanded by customers, and most importantly, the existence of a good relationship or cooperation with suppliers. Flynn, Sakakibara and Schroeder (1995) supported the results of this study, who state that the application of just in time affects company performance. According to Rifka Khairunnisa (2008), there is an influence between just in time on company performance from applying just in time practice in companies, where the company produces demand. It will only carry out the production process if it is hinted at by the following production process, so that wastefulness can be eliminated on a large scale, namely in the form of improved quality and lower production costs.

4.5.2 The Effect of Supply Chain Management on Company Performance
The second hypothesis is the effect of supply chain management on performance. Based on table 4.10, it is obtained a significant value of 0.040 < 0.05, which means an influence between supply chain management on performance. In Ariani and Bambang (2013), some indicators influence supply chain management to company performance, namely 1) information sharing by sharing information in financial, production and design terms, exchanging information on an ongoing basis, and providing related information parties. 2) Long term relationship with long-term projects is the basis of relationships with suppliers, cooperation is the basis of long-term relationships, and relationships last for a long time. 3) Corporation, by discussing sales planning and forecasting, cooperation is determined based on objective conditions and enhances sustainable relationships. Research conducted by Ebrahim Karimi and Mahmoud Rafiee (2013) states that supply chain management affects company performance, improving company performance, operational performance, and financial performance. According to Yu et al. (2001), there is an influence between supply chain management on company performance with information exchange in the supply chain, helping companies improve inventory levels and make cost savings. Lin et al. (2002) also stated that sharing information with partners in the supply chain can reduce uncertainty and improve services in fulfilling customer orders. Therefore, the high intensity of information sharing can improve the company's supply chain management performance.

CONCLUSION
From the results of testing and analysis of the data, it can be concluded that:

1. Just in time has a significant positive effect on Company Performance with a significance value of 0.018
2. Supply Chain Management has a significant positive effect on Company Performance with a significance value of 0.040

The conditions mentioned above may be caused by several things:

1. There is awareness of management's commitment to the implementation of just in time practices and supply chain management.
2. There is good cooperation and communication between the company and suppliers, employees and customers.

SUGGESTION
Suggestions that can be given from the results of this study for further research and to the seafood industry in Ambon city are:

1. Suggestions for the seafood restaurant industry in Ambon city, according to the research results that have been done, there is a positive influence of the two variables just in time and supply chain management on company performance. Therefore, seafood restaurants in Ambon city are expected to focus more on the application and implementation of just in time and supply chain management so that company performance can be maximized.
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2. The seafood industry in Ambon city must maintain customer satisfaction by maintaining the quality of products and services and complete service to create company performance stability.
3. This study only took a sample of 20 seafood restaurants in Ambon city. Therefore, future researchers are hoped to expand the sampling, and the variables used can also be expanded by trying other variables to improve company performance.

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