

Analysis of the Effect of Supply Chain Management and Local Wisdom on the Competitiveness of Coastal Fishing Communities in North Minahasa District

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Abstract

Supply Chain Management is an integrative method or approach to manage the flow of products, information, and money in an integrated manner involving parties from upstream to downstream consisting of suppliers, factories, distribution networks and logistics services. The supplier is one of the most important links in determining product quality and the speed with which the product reaches the consumer. In the capture fisheries industry in North Sulawesi, coastal fishing communities in North Minahasa District are one of the spearheads of the success of the supply chain for the capture fisheries industry because they function as suppliers for the fish processing industry in North Sulawesi. The purpose of this study was to analyze the influence of Supply Chain Management, namely the variables of technical and managerial assistance, information sharing, trust, long-term relationships, and process integration on the competitiveness of coastal fishing communities in North Minahasa District and local wisdom on competitiveness. This research uses causal associative research. The analytical method used is Multiple Linear Regression Analysis. The results showed that technical and managerial assistance, information sharing, trust and local wisdom had a significant effect on the competitiveness of coastal fishing communities in North Minahasa District, while long-term relationship variables and process integration did not significantly affect the competitiveness of coastal fishing communities in North Minahasa District.

Keywords: supply chain management, technical and managerial assistance, information sharing, trust, long term relationship, process integration, local wisdom, competitiveness

Preliminary

Background

Supply Chain Management is one approach that can be used to manage the supply chain network of a product. Supply Chain Management is an integrative method or approach to manage the flow of products, information, and money in an integrated manner involving parties from upstream to downstream consisting of suppliers, factories, distribution networks and logistics services (Pujawan, 2005: 22). The classic problem that is often encountered related to the fisheries sector, especially fishermen, is competitiveness. According to the Advisory Coordinator of the Minister of Maritime Affairs and Fisheries 2020-2024, Prof. Dr. Ir Rokhmin Dahuri MS released by Republika.co.id (22 October 2020) explained a number of problems and challenges for marine and fisheries development. He stated that the majority of capture fisheries, aquaculture, fishery product processing, and fishery product trading are carried out traditionally and on a small and micro scale (SME) scale so that the level of fish resource utilization (SDI), productivity, and fishery business efficiency are generally low. The long coastal area accompanied by ethnic diversity causes almost every coast of Indonesia to have varied customs. One of the customs of coastal communities which is dominated by fishermen is local wisdom. The role and status of local wisdom as laws or regulations implemented in coastal areas is very important considering that historically it was obtained in a very long process and passed down orally by the community from generation to generation. Moreover, in terms of the purpose of its application, namely as a control over human nature whose needs and desires are not limited, it

allows the existence of local wisdom to greatly affect the sustainability of the human environment as a place to live, especially in coastal areas.

North Minahasa District, which is one of the regencies in North Sulawesi Province that has superior potential in the marine and fisheries sector, is in third place as a contributor to capture fisheries production in North Sulawesi province after Bitung City and Minahasa District. The Fisherman Community in North Minahasa District is a supplier to manufacturing companies involved in the supply chain network of the Capture Fisheries Industry. Several dimensions in supply chain management that are considered to affect the competitive ability of suppliers in a supply chain network are: technical and managerial assistance to suppliers (Pujawan, 2005: 7), information sharing (Pujawan and Mahendrawati, 2010), trust (Panayides and Lun, 2009).), long-term relationships (Dyer and Singh in Panayides and Lun, 2009) and process integration (Zailani and Rajagopal, 2005).

Formulation of the Problem

In connection with the above matters, the problems in this research are:

1. Does technical and managerial assistance have a significant effect on the competitiveness of coastal fishing communities in North Minahasa District?
2. Does information sharing have a significant effect on the competitiveness of coastal fishing communities in North Minahasa District?
3. Does trust have a significant effect on the competitiveness of coastal fishing communities in North Minahasa District?
4. Does the long-term relationship have a significant effect on the competitiveness of coastal fishing communities in North Minahasa District?
5. Does process integration have a significant effect on the competitiveness of coastal fishing communities in North Minahasa District?
6. Does local wisdom have a significant effect on the competitiveness of coastal fishing communities in North Minahasa District?

Literature Review

Supply Chain Management

Supply chain management is the integration of the activities of procuring materials and services, converting them into semi-finished goods and final products, and delivering them to customers (Heizer and Render, 2009). Simchi-Levi et al in Irmawati (2007) state supply chain management as an approach applied to unite suppliers, entrepreneurs, warehouses, and other storage places (distributors, retailers, and retailers) efficiently, so that products can be produced and distributed in large quantities. right place, right location and right time to lower costs and meet customer needs.

Major Players in Supply Chain Management

According to Indrajit and Djokopranoto (2006: 6 - 8), the supply chain consists of several main players who are companies that have the same interests, namely: 1) Suppliers, 2) Manufacturers, 3) Distribution, 4) Retail Outlets, 5) Customers. The main purpose of Supply Chain Management according to (Pujawan, 2005) is to produce cheaper, timely, and quality products to achieve company goals. Chopra and Meindl (2007:6) state that the purpose of the supply chain is to maximize the overall value generated.

Technical and Managerial Assistance

According to Pujawan (2005:7) factories need to provide technical and managerial assistance to their suppliers because in the end this will create the competitiveness of the entire supply chain. According to the Big Indonesian Dictionary (KBBI) in Lektur.id, it states that the meaning of technical assistance is capital assistance, experts and so on from abroad to launch the business of a developing country. Meanwhile, managerial assistance when viewed from the meaning of the word managerial, according to the Big Indonesian Dictionary (KBBI) in lektur.id, the meaning of the word managerial is related to managers. This means that it can be said that managerial assistance is assistance related to business management.

Information Sharing

Information sharing is the intensity and capacity of companies in their interactions to share information with partners related to joint business strategies (Simatupang and Sridharan, 2008). Information sharing also allows supply chain members to obtain, maintain and convey the information needed to ensure effective decision making and is a factor that can strengthen the elements of collaboration as a whole, therefore industrial bottlenecks can be reduced by sharing information (Yaqoub, 2012).

Trust

Trust in a cooperative relationship has an understanding as the company's belief that the partner will take actions that bring the company to a certain advantage, and vice versa instead of doing actions that are detrimental to the company (James C. Anderson & James A. Narus, 1990, p.45) . According to Doney & Cannon (1997, p.40) trust in suppliers is able to form a good cooperative relationship between customers and suppliers and is the key to maintaining this cooperative relationship.

Long Term Relationship

Long-term relationship is the perception of the interdependence of buyers on suppliers both in the context of products or relationships that are expected to bring benefits to buyers in the long term (Ariani, 2013). Building long term relationships can yield benefits including market access and reliable market information. By building long-term relationships with suppliers, buyers and sellers can achieve cost savings through: 1) Reduction of search costs and evaluation costs, 2) Reduction of transaction costs, 3) Effects of knowledge and relationships of global economies of scale .

Process Integration

Integration is a combination of various activities to form a whole, integration can improve relationships in each value chain can also facilitate decision making and enable value chain creation. The company's supply chain integration pattern reflects the company's operational focus in competing in the business world. In integrating the company, it is faced with a choice of which direction the supply chain integration pattern is, whether it is internal or external (towards suppliers, consumers, or both (Setiawan and Santoso, 2006).

Local Wisdom

Local wisdom is a view of life and knowledge as well as various life strategies in the form of activities carried out by local communities in responding to various problems in meeting their needs. In a foreign language, it is often conceptualized as a local policy of local wisdom or local knowledge "local knowledge" or local genius, Fajarini (2014: 123). The same thing is also expressed by Alfian (2013: 428) Local wisdom is defined as a view of life and knowledge as well as a life strategy in the form of activities carried out by local communities in meeting their needs. Dimensions of Local Wisdom According to Mitchell (2003) in Sedyawati Edy (2006), local wisdom has six dimensions, namely: a) Dimensions of Local Knowledge, b) Dimensions of Local Values, c) Dimensions of Local Skills, d) Dimensions of Local Resources, e) Dimensions of Local Decision Making Mechanisms, f) Dimensions of Local Group Solidarity.

Competitiveness

Competitiveness is defined as the ability of an organization to create a position that can be maintained through competition with others (Li et al., 2006). Corporate competitiveness is a company's way of creating value for its customers that exceeds the company's costs in creating it (Porter, 2003). Meanwhile, Hansen and Mowen (2000) argue that competitiveness is creating better customer value at the same or lower costs than competitors or creating equivalent value at lower costs than competitors. According to Danang Sunyoto (2015:3), there are five dimensions that can be used to determine Competitive Advantage, namely as follows: 1) Price, 2) Quality, 3) Reliable delivery, 4) Innovation, 5) Time to market.

Research Hypothesis

The Effect of Technical and Managerial Assistance on Competitiveness

According to Pujawan (2005:7) factories need to provide technical and managerial assistance to their suppliers because in the end this will create the competitiveness of the entire supply chain. Dahuri (2012) conveyed the same thing to improve the quality of national fishermen's human resources so that they are competitive, it is necessary to provide education, training and counseling on fishing techniques, financial

management, environmental management, and work ethic including achievement and motivation on an ongoing basis. Kusumastanto and Wahyudin (2012) also stated that the guidance of fishermen through counseling is the spearhead of national fisheries development, among others, through strengthening and fostering coastal communities to increase knowledge and skills related to fishing business so that they have high bargaining power. Based on the above, the following hypothesis can be drawn:

H1: Technical and Managerial Assistance has a significant effect on the competitiveness of coastal fishing communities in North Minahasa District

Influence of Information Sharing on Competitiveness

Information Sharing is the intensity and capacity of the company in its interactions to share information with partners related to joint business strategies. Information Sharing also allows supply chain members to obtain, maintain, and convey the information needed to ensure effective decision making, and is a factor that is able to strengthen the elements of collaboration as a whole. Sridharan in Yaqoub, (2012). Information sharing activities are the main support (backbone) in all supply chain management activities to reduce costs and increase customer satisfaction (Spekman et al. in Shidharan and Simatupang, 2009). Effective information sharing activities become the common basis for carrying out integrated actions between different functions with other companies in the supply chain. (Whipple et al. in Shidharan and Simatupang, 2009). Based on the description above, a hypothesis can be formulated as follows:

H2: Information Sharing has a significant effect on the competitiveness of coastal fishing communities in North Minahasa District

The Influence of Trust on Competitiveness

According to Doney & Cannon (1997, p.40) trust in suppliers is able to form a good cooperative relationship between customers and suppliers and is the key to maintaining this cooperative relationship. Trust is a party's belief that the other party will fulfill its promise (Moore, 1998). An important aspect of this definition is the statement that trust is a belief or expectation in a trusted partner as a result of the expertise and reliability of the partner. This is in line with the opinion of Doney and Cannon (1997, p. 36) which states that trust arises as a result of the reliability and integrity of partners shown through various attitudes such as consistency, competence, fairness, responsibility, helpfulness and caring. Sahay (2003) explains that trust is very important in the supply chain because it can reduce uncertainty and make the relationship stable. Based on the foregoing, the following conclusions can be drawn:

H3: Trust has a significant effect on the competitiveness of coastal fishing communities in North Minahasa District

The Influence of Long-Term Relationships on Competitiveness

Ganesan in Indriani (2006) defines a long-term relationship as the perception of the interdependence of buyers on suppliers either in the context of products or relationships that are expected to bring benefits to buyers in the long term. According to Indriani (2006), a long-term relationship is the company's ability to build sustainable good relationships with suppliers. This is because the company assumes that a good relationship in the long term can be profitable. According to Lestari (2009) In the context of the value chain or supply chain, the relationship between suppliers and companies is the strongest collaboration. Based on the description above, a hypothesis can be formulated as follows:

H4: Long-term relationship affects competitiveness

Effect of Process Integration on Competitiveness

Integration in the supply chain shows a complex process of cooperation between the company and its suppliers and buyers which, if managed, can increase efficiency in the company's operations and further increase company profits and provide satisfaction for all parties (Cousineau et al in Setiawan and Rahardian, 2005).). In addition, research from Ariani (2013) entitled Analysis of the Effect of Supply Chain Management on Company Performance and research from Mellat-Parast and Spillan (2014) entitled Logistics and supply chain process integration as a source of competitive advantage also states the same thing that process integration has a positive effect on supply chain management performance. Zailani and Rajagopal (2005), further explain that an effective integration process in supply chain management is the

key to success for a company to achieve a competitive advantage. Based on the description above, a hypothesis can be formulated as follows:

H5: Integration process affects the competitiveness of coastal fishing communities in North Minahasa District.

The Influence of Local Wisdom on Competitiveness

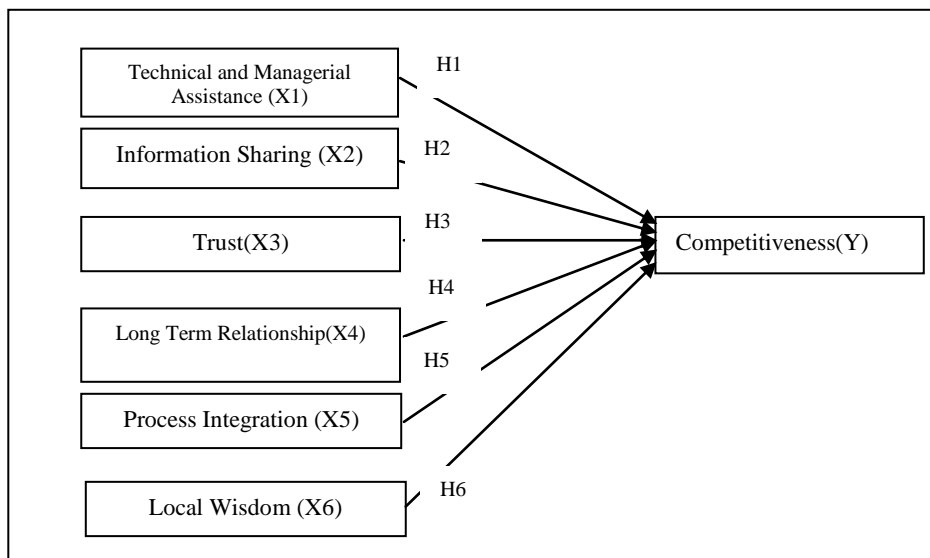
Wahyudi (2014: 13) local wisdom is an unwritten rule that becomes a reference for society that covers all aspects of life, in the form of rules concerning relations between human beings, for example in social interactions both between individuals and groups, which are related to hierarchies in government and society. customs, inter-clan marriage rules, karma in daily life The rules concerning the relationship between humans and nature, animals, plants which are more aimed at nature conservation efforts. . Local wisdom can be in the form of customs, institutions, words of wisdom, proverbs (Javanese: parian, paribasan, freedom and saloka). Local wisdom is a view of life and knowledge as well as various life strategies in the form of activities carried out by local communities in responding to various problems in meeting their needs. In a foreign language, it is often conceptualized as a local policy of local wisdom or local knowledge "local knowledge" or local genius, Fajarini (2014: 123). Local wisdom is defined as a view of life and knowledge as well as a life strategy in the form of activities carried out by local communities in meeting their needs (Alfian, 2013: 428).

H6 : Local Wisdom affects the competitiveness of coastal fishing communities in North Minahasa District.

Research Model

Based on the hypothesis above, the research model is as follows:

Figure Research Model



Research Methods

Research Type and Design

Types of research

The type of research used is associative research, namely research that aims to determine the relationship between technical and managerial assistance, information sharing, trust, long-term relationships, and process integration on the competitiveness of coastal fishing communities in North Minahasa District.

Data source

The primary data in this study were obtained directly from fishermen who own boats who act as suppliers to processing companies. Thus, the secondary data sources used in this study are data sources obtained through literature, internet media and data from related agencies such as DKP North Sulawesi Province and DKP North Minahasa District.

Population, Sampling Techniques and Sample Size

The population in this study are all fishermen who own motorboats who are suppliers for fish companies in Bitung with a population of 163 motorboats (Data from DKP Department of North Minahasa District, 2018). The sampling technique used in this study is probability sampling with the type of simple random sampling. Because fishermen who act as suppliers do not have strata and have the same opportunity to be sampled. Determination of sample size using the Slovin formula. Based on the calculation, the number of samples that can be taken in this study is a minimum of 62 respondents.

Variable Measurement

According to Sugiyono (2017:102), the research instrument is a tool used to measure the observed natural and social phenomena. Thus the number of instruments to be used for research will depend on the number of variables studied. Each instrument has a scale, and the scale used in this study is the Likert scale.

Data Analysis Techniques

The collected data will be analyzed in several stages, firstly testing the validity and reliability of research instruments, testing classical assumptions, and finally multiple linear regression analysis. The data obtained from the respondents through the questionnaire was coded according to a Likert scale of 1 – 5, and then tabulated using statistical analysis with the SPSS computer program.

Hypothesis test

Coefficient of Determination (R²)

The coefficient of determination (R²) essentially measures how far the model's ability to explain variations in the dependent variable is. A small R² value means that the ability of the independent variables in explaining the variation of the dependent variable is very limited (Ghozali, 2012: 97).

F-Test

The F test uses a 5% level of significance, by comparing the calculated F value with the F value according to the table, if the calculated F value is greater than the F table value, then the regression model can be used to predict or in other words the model used is fit (Ghozali, 2012:98).

Test t

The t-test is used to determine whether the independent variable (X₁, X₂, X_n) partially has a significant effect on the dependent variable (Y). The t test uses a significant level of 5%, by comparing the t statistic value with the critical point according to the table, if the calculated t statistic value is higher than the t table value, we accept the alternative hypothesis which states that an independent variable individually affects the dependent variable.

Results and Outcomes

Overview

North Minahasa District with the capital city Airmadidi, is located in North Sulawesi Province. This district has a strategic position because it is between two big cities that have strategic value in North Sulawesi Province, namely Manado as the provincial capital of North Sulawesi and Bitung as a port city. Based on its geographical position, North Minahasa District has boundaries: North – Sitaro Islands District, Sulawesi Sea, and Maluku Sea; South – Minahasa District; West – Manado City; East – Bitung City. It consists of 10 sub-districts, namely Kema sub-district, Kauditan sub-district, Airmadidi sub-district, Kalawat sub-district, Dimembe sub-district, Talawaan sub-district, Wori sub-district, West Likupang sub-district, East Likupang sub-district, South Likupang sub-district. Based on the geographical location of the North Minahasa district, of the 10 existing sub-districts, there are 4 sub-districts located on the coast, namely Kema sub-district, Wori sub-district, West Likupang sub-district and East Likupang sub-district. This makes North Minahasa District has a large capture fisheries potential.

Capture Fisheries

Based on data released by BPS 2020, capture fisheries production in North Minahasa District is at a volume of 33,821.08 tons with a value of Rp.963,900,666.00. It is in third place as a contributor to capture fisheries production in North Sulawesi province after Bitung City and Minahasa District.

Hypothesis Testing

Coefficient of Determination (R²)

Based on the result, the number R² (R Square) is 0.758 or (75.8%). This shows that the percentage contribution of the influence of the independent variables (technical and managerial assistance, information sharing, trust, long-term relationships and process integration) on the dependent variable (competitiveness) is 75.8%. While the remaining 24.2% is influenced or explained by other variables that are not included in this research model.

F Test

Based on the table obtained F count of 32.817. Because F arithmetic > F table (32.817 > 2.27), then H₀ is rejected, the conclusion is that technical and managerial assistance, Information Sharing, trust, long-term relationships and process integration together affect competitiveness.

Partial Regression Coefficient Test (t-test)

Testing the Regression Coefficient of Technical and Managerial Assistance Variables

Based on the table obtained t count of 2.713. Because the value of -t arithmetic > -t table (2.713 > 2.004) then H₀ is rejected, meaning that partially there is a significant influence between technical and managerial assistance with competitiveness.

Testing the Regression Coefficient of Information Sharing Variables

Based on the table obtained t count of 2.878. Because the value of -t count > -t table (2.878 > 2.004) then H₀ is rejected, meaning that partially there is a significant influence between Information Sharing and competitiveness.

Testing the Regression Coefficient of Trust Variables

Based on the table obtained t count of 2,970. Because the value of -t arithmetic > -t table (2,970 > 2.004) then H₀ is rejected, meaning that partially there is a significant influence between trust and competitiveness.

Testing the Regression Coefficient of Long-Term Relationship Variables

Based on the table obtained t count of 1.363. Because the value of -t count < -t table (1.035 < 2.004) then H₀ is accepted, meaning that partially there is no significant effect between the long-term relationship with competitiveness.

Testing the Regression Coefficient of Process Integration Variables

Based on the table obtained t count of 0.598. Because the value of -t count < -t table (0.598 < 2.004) then H₀ is accepted, meaning that partially there is no significant effect between process integration and competitiveness.

5.2.5.3.6 Testing the Regression Coefficient of Local Wisdom Variables

Based on the table obtained t count of 3.265. Because the value of -t count > -t table (3.265 > 2.004) then H₀ is rejected, meaning that partially there is a significant influence between local wisdom and competitiveness.

Discussion

The Effect of Technical and Managerial Assistance Variables on Competitiveness

Based on the results of the t-test of technical and managerial assistance variables on competitiveness, the value of -t count > -t table (2.713 > 2.004) means that H₀ is rejected, meaning that partially there is a significant influence between technical and managerial assistance with competitiveness. So from these results it can be concluded that partially technical and managerial assistance has a significant effect on competitiveness. This is in line with Pujawan (2005:7) who said that in the supply chain, factories need to provide technical and managerial assistance to their suppliers because in the end this will create the competitiveness of the entire supply chain. Dahuri (2012) conveyed the same thing that in order to improve the quality of national fishermen's human resources to be competitive, education, training and counseling on fishing techniques, financial management, environmental management, and work ethic, including achievement and motivation on an ongoing basis, need to be provided. Rinda Novianty et al (2015) in the results of their research on Self-Capacity Development for Fishermen in the Context of Sustainable Capture Fisheries Development at PPN Pelabuhan Ratu also stated that the key indicators in developing the self-

capacity and ethics of fishermen are knowledge, competence, mentality, commitment and understanding of laws and regulations. which can be the basis for developing bottom-up fishing community empowerment programs, namely cooperative fisheries management between the government, fishermen (main business actors and partners) and relevant stakeholders in making decisions before transforming into independent fishermen.

Effect of Information Sharing on Competitiveness

Based on the results of the research on the t-test of the information sharing variable on competitiveness, the value of t count $>$ t table ($2.878 > 2.004$) means that H_0 is rejected, meaning that partially there is a significant influence between Information Sharing and competitiveness. The positive value obtained means that if there is an increase in information sharing then competitiveness will increase and vice versa if there is a decrease in information sharing then competitiveness will decrease. The results of this study support several previous studies conducted, among others, by Sera Maya Santi (2018) which states that supply chain management has an influence on competitive advantage where supply chain management indicators include information sharing. Regina Suharto and Devie (2013) also in their research entitled Analysis of the Effect of Supply Chain Management on Competitive Advantage and Company Performance stated that the supply chain management variable has a significant relationship to competitive advantage where the supply chain management variable measured is information sharing. The success of the supply chain is highly dependent on the information system, with the information of business partners in the supply chain it can be calculated (Pujawan and Mahendrawati, 2010).

The Effect of Trust on Competitiveness

Based on the results of research with partial test, the value of t count $>$ t table ($2,970 > 2,004$) then H_0 is rejected, meaning that partially there is a significant influence between trust and competitiveness. In managing the supply chain, trust is very important in an effective and efficient supply chain (Heizer & Render, 2004). Trust is a willingness to take risks (and a willingness to depend on an exchange partner in which one has confidence. Trust refers to the extent to which supply chain partners perceive each other as credible and benevolent partners (Salam, 2017). The results of this study support research conducted by Anderson and Narus (1990) which sees trust as a belief that will provide positive results for the organization. Kwon and Taewon (2004) state that the success of the company's performance (operation performance) in the supply chain also comes from the high value of trust and One of the most important things for each company to have in a supply chain network is trust between organizations (Chopra and Meindl, 2007).

The Effect of Long-Term Relationships on Competitiveness

Based on the partial test results of the long-term relationship variable on competitiveness, the value of -t count $<$ -t table ($1.035 < 2.004$) is obtained, then H_0 is accepted, meaning that partially there is no significant effect between the long-term relationship with competitiveness. The competitive conditions in the business world are becoming increasingly unstable, causing companies to be prepared and able to anticipate things that can threaten the sustainability of the company's activities. Tate et. Al (2013) suggests that the way businesses can deal with these conditions is to properly manage supply chain flows related to business from upstream (downstream) and downstream (upstream), an effective step that can be taken is to establish long-term business relationships. in the supply chain, especially in the performance of supplier and buyer relationships. Because in this way it can result in a small existing business risk so as to minimize the costs that must be incurred due to business activities, which causes profitability/profits to increase. The results of the research obtained are understandable because for capture fisheries where the catch cannot be ascertained both in time and quantity of fish and the certainty of the supplier's business continuity, it is difficult for companies or suppliers to guarantee long-term relationships.

Effect of Process Integration on Competitiveness

Based on the results of the partial test, the value of t count $<$ t table ($0.598 < 2.004$) then H_0 is accepted, meaning that partially there is no significant effect between process integration and competitiveness. So it can be concluded that partially process integration has no significant effect on competitiveness. Integration should be able to improve relationships in every supply chain, facilitate decision making, value creation and

information from upstream to downstream namely consumers. However, this is not the case in the capture fisheries supply chain in North Minahasa District.

The Influence of Local Wisdom on Competitiveness

Based on the results of the partial test, the value of t count $>$ t table ($3.265 > 2.004$) then H_0 is rejected, meaning that partially there is a significant influence between local wisdom and competitiveness. Local wisdom is defined as a view of life and knowledge as well as a life strategy in the form of activities carried out by local communities in meeting their needs (Alfian, 2013: 428). According to Danang Sunyoto (2015: 3), there are five dimensions that can be used to determine Competitive Advantage, namely as follows: 1). Price, 2). Quality, 3) Reliable delivery, 4). Innovation, 5). Time to market. Local wisdom possessed by fishing communities in North Minahasa District helps them in carrying out fishing activities so that it will be very helpful in efforts to increase competitiveness. Local wisdom can be used as valuable capital for regions to increase their regional competitiveness against other regions (Fauzan and Sukardi, 2014). Fishing communities in North Minahasa District carry out fishing activities that are still fairly conventional without using advanced technology. So that in fishing activities either at the time of going to sea or at sea usually the fishing community will pay attention to natural signs. Including if they return from fishing, the catch will be given free of charge to people who happen to be on the beach when they land or are also given to anyone they think can be helped by give free fish. At the time of purchasing a new ship, the community will also make a thanksgiving event or a prayer event as a form of gratitude so that the ship that will be used to earn a living can give good results. Likewise, if it is felt that the arrest activity is not giving good results, a joint prayer activity will be held to refuse reinforcements. All the wisdom efforts possessed by the fishing community really help them in fishing activities which of course helps increase the competitiveness of fishermen.

Conclusions And Suggestions

Conclusion

Based on the results of the study, the following conclusions can be drawn:

1. Technical and managerial assistance have a significant effect on the competitiveness of coastal fishing communities in North Minahasa District
2. Information Sharing has a significant effect on the competitiveness of coastal fishing communities in North Minahasa District
3. Trust has a significant effect on the competitiveness of coastal fishing communities in North Minahasa District
4. The long-term relationship has no significant effect on the competitiveness of coastal fishing communities in North Minahasa District
5. Process integration has no significant effect on the competitiveness of coastal fishing communities in North Minahasa District
6. Local wisdom has a significant effect on the competitiveness of coastal fishing communities in North Minahasa District

Suggestions

Based on the conclusion, it is recommended as follows:

1. Companies involved in the capture fishery supply chain in North Minahasa District need to provide technical and managerial assistance in the form of training and assistance related to knowledge and skills regarding more advanced and modern fishing gear, about sustainable capture fisheries, and or help provide/lend/sell more advanced and modern fishing gear, as well as provide training and assistance on business management. The company, together with banks and the government, cooperate to initiate so that the fishing community can gain access to capital. And together with the Government, the Company can initiate the formation of cooperatives or fishing groups to achieve economies of scale. With the knowledge and skills, the use of more modern fishing tools and aids, understanding and ability in business management, access to capital and catches with economies of scale, it is hoped that this will help fishermen to have competitiveness so that it will be very helpful in ensuring overall competitiveness. supply chains.
2. Information sharing has a significant effect on the competitiveness of coastal fishing communities in North Minahasa District who are involved as suppliers for processing companies. So far, the information

provided to fishermen is limited to the price of fish that has been set by the company and also information that the company will not receive fish from suppliers because the stock has met. The success of a supply chain is highly dependent on the information so it is advisable for companies to build an e-procurement information system through B2B Private Exchange with suppliers (One Buyer, Many Sellers).

3. Trust has a significant effect on the competitiveness of coastal fishing communities in North Minahasa District. The company's trust in the fishing community as a supplier of fish raw materials is very helpful for fishermen in sales activities, so it is recommended that the good etiquette of the company can be maintained and even improved for long-term relationships.

4. The long-term relationship has no significant effect on the competitiveness of coastal fishing communities in North Minahasa District. This is because the length of time fishermen have been in a relationship with the company does not guarantee a commitment or cooperation agreement between the processing company and fishermen as suppliers. So that if in the future fishermen do not supply, it will not be a problem for the company. On the other hand, fishermen do not have the obligation to supply. On the one hand, it is beneficial for both parties because there is no mandatory bond, but for long-term business continuity it will be a problem because there is no long-term relationship in the form of commitments or agreements between processing companies and suppliers, namely fishermen. The relationship is still limited to trust in fishermen for the fish being supplied, so it is recommended that companies can build long-term commitments or agreements that will bring competitiveness not only for suppliers but also for the entire supply chain.

5. Process integration has no significant effect on the competitiveness of coastal fishing communities in North Minahasa District. So far, fishermen have not been involved in the planning process so that the integration process has no effect on competitiveness. Fishermen do not understand the importance of process integration in the concept of supply chain management for business continuity. So it is recommended for the Government, especially DKP to provide training on the concept of supply chain management, including those related to process integration for fishermen. As for the company, it is necessary to establish an e-SCM information system to activate the integration process because good SCM can increase the competitiveness of the supply chain as a whole but does not cause one party to sacrifice in the long term (Pujawan, 2005:7)

6. Local wisdom has a significant effect on the competitiveness of coastal fishing communities in North Minahasa District. Fishing communities in North Minahasa District carry out fishing activities that are still fairly conventional without using advanced technology. So that in fishing activities either at the time of going to sea or at sea usually the fishing community will pay attention to natural signs. Including if they return from fishing, some of the catch will be given away free of charge to people who happen to be on the beach when they land or also given to anyone they think can be helped by providing free fish. At the time of purchasing a new ship, the community will also make a thanksgiving event or a prayer event as a form of gratitude so that the ship that will be used to earn a living can give good results. Likewise, if it is felt that the arrest activity is not giving good results, a joint prayer activity will be held to refuse reinforcements. All the wisdom efforts possessed by the fishing community really help them in fishing activities which of course helps increase the competitiveness of fishermen.

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