MJBEM

Malaysian Journal of Business, Economics and Management

journal homepage: https://mjbem.com.my/



Analysis Supply Chain Management and its Applications in PD Agro Selaparang East Lombok

Widia Febriana*¹, Melati Rosanensi¹ and Juliana Palit¹

¹ Universitas Bumigora. Nusa Tenggara Barat, Indonesia.

KEYWORDS

Supply Chain Management Information System Company

ARTICLE HISTORY

Received 15 August 2022 Received in revised form 27 August 2022 Accepted 28 August 2022 Available online 29 August 2022

ABSTRACT

PD. Agro Selaparang Lombok Timur is a company engaged in supply chain management: bottled drinking water (AMDK), animal feed, iodized salt, and ice cubes. Agro Selaparang, 2. Analyzing information systems (information communication technology, expert support, electronic business processes), which are used in dealing with suppliers, 3. Identifying how important information systems are in managing supply chain management, current problems in PD. Agro Selaparang Lombok Timur, namely government obstacles such as lack of sanitarian staff, allocation of funds, inspection of product samples of ice cubes, feed, iodized salt and drinking water in low AGRO packaging (AMDK), double workload. There are no strict sanctions and the lack of inter-sectoral cooperation, also affects the quality of products that do not meet the requirements, so that it affects the product management process, in addition to the lack of feed stock because the company is a distributor. Based on the problems that occur, a supply chain management analysis is needed. The purpose of analyzing information systems can help apply supply chain management in the company. The research was conducted with a qualitative approach through direct observation, in-depth interviews and documentation. The results showed that in the supply chain management process PD. Agro Selaparang East Lombok uses an integrated and one-stop information system, through a financial information system.

 $\hbox{@ 2022}$ The Authors. Published by Penteract Technology.

This is an open access article under the CC BY-SA 4.0 license (https://creativecommons.org/licenses/by-sa/4.0/)

1. Introduction

Globalization has significantly boosted the development and growth of the world economy in market services, resulting in very fierce business competition, resulting in many manufacturing companies gradually expanding the reach of market services and creating value-added products. In this context the intended services such as marketing services, operations management services and supply chain services. (Liu Weihua, Di Wang, 2019).

Inventory in the supply chain, direct trading partners (buyers-suppliers) can choose one of three interaction levels (cooperation, coordination, collaboration) to work together in a harmonious atmosphere to carry out inventory management activities (consisting of purchasing and logistics-related activities). The effect of inventory management activities between the two trading partners is directly transferred

upstream and downstream by the supply chain management aspect to achieve synchronization. (Malik, S, N, A, A, Musa, H, Ahmad, S, Mohamad, 2014)

A business phenomenon that often arises is related to supply chains so that the competitiveness of Indonesian products is low and high logistics costs cause the delivery process to be slow. This is influenced by conventional logistics facilities, such as ports and connectivity between production and consumption centers (Primiana, Azis, Juanim, Yunani, 2016).

Sidharan and Simatupang (2013) provide new insight into the role of power and trust that facilitates chain members to pool their capabilities in creating and rewarding value for customers and themselves. Strength and trust become one of the important factors in supply chain management collaboration (Simatupang, T. M., Handayati, Y., & Perdana, 2013)explores

^{*}Corresponding author:

E-mail address: Widia Febriana <dhidhin@almaata.ac.id>.

^{2948-4928/ © 2022} The Authors. Published by Penteract Technology.

the concept of supply chain management quality, and explains that supply chain quality can provide solutions at the supply chain management level. (Sharma, A., Gard, D., & Agarwal, 2012)

The role of information systems in business administration and supply chain management processes provides savings on input costs such as time, labor and energy, thereby enabling the realization of profits and collective customer satisfaction. Manufacturing companies, create a safer and more cost efficient supply chain thanks to the efficient use of information systems in the supply of both production equipment and materials in the manufacture of bottled drinking water. The application of information technology is becoming more important in supply chain management (SCM) in terms of packaging and ordering processes (Kaya Ergun, 2012).

Supply Chain Management according to Sampaio P et al (2015) that, overall, employees who participate in the supply chain availability process for the advancement of a process, workforce culture and products will increase competitiveness, this will provide job satisfaction to members and increase productivity. work, for the sake of the advancement of a company, while according to Croxton et al (2001). Supply chain management is the integration of key business processes from end users to original suppliers, providing products, services and information that add value to customers and other stakeholders (Croxton, K.L., Garcia-Dastugue, S.J., Lambert, D.M. and Rogers, 2001).

Supply chain management is a reciprocal relationship between providers and customers to deliver highly optimal values to customers at a fairly low cost but provide overall (Christopher, M. and Holweg, 2011). The focus of supply chain management is relationship management to create optimal results and benefits for all parties involved in the supply chain management chain.

The supply chain gives rise to an overview of the movement of products or supplies from suppliers to product makers, distributors, retailers, customers along the chain. According to (Chopra S and Meindl P, 2013)The supply chain usually involves a variety of stages, these stages include: 1) Customers (Customers), 2) Retailers (Retailers), 3) Distributors, 4) Product makers (Manufacturers), 5) Components or suppliers of raw materials (suppliers).

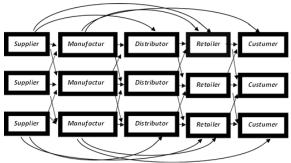


Figure. 1 Stages of Supply Chain

Supply chain management as the integration of business processes from end users through suppliers provides products, services, information, and even value enhancement for consumers and employees. Through supply chain management, companies can build cooperation through the creation of a coordinated network in the efficient supply of goods and services for consumers.

2. RESEARCH METHODS

Search was carried out with the aim of knowing "Analysis Supply Chain Management and Its Applications in PD. Agro Selaparang East Lombok". The type of research used is descriptive qualitative research. Bogdan and Taylor describe qualitative research methods (Moleong, 2012) research procedures that produce descriptive data in the form of written or spoken words from people and observable behavior. Qualitative research is known for several data collection methods that are commonly used. Some of these methods include interviews, observation, documentation studies, and focus group discussions. In this study, the researchers used the methods of interviews, observation and documentation studies, because in this study using theoretical explanations that must be built by researchers based on general data in observations that must be analyzed, explained and interpreted as well as preparedness, therefore researchers need a separate approach. in this study, the direction and purpose of which is to understand a problem based on a perspective that is in accordance with the direction and purpose is a qualitative research approach.

3. RESULT AND DISCUSSIONS

PD. Agro Selaparang Lombok Timur divides its organizational structure into 4 sub-divisions in outline which play an important role in the company and are considered as the spearhead of the company:

- 1. Project manager (PM): The project manage team coordinates any given project by the company. Supervise the production process to the delivery of goods to clients.
- 2. Design: communication design by the Director of Operations who is the spearhead in delivering the company to its achievements. Design is always consistent in creative and highly experienced people, which helps its clients to help its employees to create a new product design change and new market share. The design applied here by establishing good communication with clients is assisted by information technology that has developed recently such as communication tools used in the supply chain management process in the company.
- Technical Drawing (TD): The drafter team translates design drawings into work in order to facilitate production to make new products so that designed innovations can be well realized.
- 4. General: The general team includes several generals, namely administration, finance, operations needed, by PM, TD in production including material purchases, relationships with suppliers, making PO (Pree Order).

Logistics management, from the point of view of the supply chain management system , is the means by which customers' needs are met through the coordination of materials and information flows that extend from the market, the company produces and sends it to suppliers, to achieve customer satisfaction.

The parties involved in the Es Balok supply chain management model at PD. Agro Selaparang Lombok Timur is a human resource consisting of staff in the company, fishermen and ship owners on the island of Lombok. Retailers consisting of small traders and factory retailers, who buy Es Balok from the company and resell it retail, consumers are: final buyers who buy Es Balok from the company or through retailers.

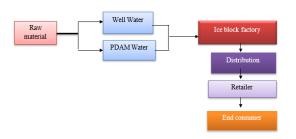


Figure 2. Process of Supply Chain Management Ice Balok PD. Agro Selaparang East Lombok

The *supply chain management process* is to determine the flow of the ice cube *supply chain starting from raw* materials to the final consumer, the company does not deal directly with the final consumer in distributing its products, but through retailers who are direct consumers for the company.

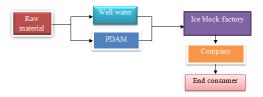


Figure 3. Process *Supply Chian Management* Ice Beams PD. Agro Selaparang East Lombok

The flow of the Block Ice network is further simplified, starting from the raw materials used to produce ice blocks, namely well water and PDAM water as reserves, the freezing process, releasing ice blocks from the machine, to selling them to the final consumer, it takes one day, there are the difference in *supply chain processes* within the company, the company also has to come to fishermen and ship owners to deliver ice cube orders, so retailers do not need to go to the factory and follow the existing *supply chain process*, because they already have a previous agreement between the company and fishermen and ship owners.

1. PD Feed *Supply Chain Management* Structure . Agro Selaparang East Lombok

The process of *supply chain management* of fish feed at PD. Agro Selaparang Lombok Timur, namely by ordering feed at PT Patriot Prima according to customer needs, then the company markets the product to *clients*, the company as the sole distributor.

As the results of the interview with the person in charge of feed, namely:

"Supply chain management, yes, we are collaborating with PT Patriot Prima, in Surabaya, Siduwarjo, we are working with him, he is the producer, we are the distributor, so we order the supply process first, as usual, order it. Later it will be prepared there, including the specs, including the size, so we have agreed on that."

As the competitive business context continues to change, bringing with it new complexities and concerns for management in general, companies must also recognize that the impact on logistics and *supply chain management* of these changes can be very large, indeed, from the many strategic problems facing business organizations today. , perhaps the most challenging is in logistics and supply chain management,

to address these challenges in detail but it is useful at this stage to highlight what is perhaps most pressing right now: New rules of competition, industrial globalization, downward pressure on prices customers and take control.

This supply chain process involves all interactions between manufacturers, distributors and customers. The chain includes the time, cost, and transportation of cash and credit money transfers and raw materials, in general the application of the supply chain management concept will provide benefits for increased revenue, reduced costs, higher asset utilization, increased profits and greater business.

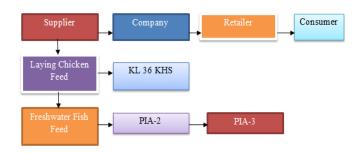


Figure 4. PD Feed *Supply Chain Management*. Agro Selaparang East Lombok

The picture above is the structure of the *supply chain* of PD. Agro Selaparang East Lombok from upstream to downstream.

a. Supplier

At the upstream part of the PD *supply chain structure*. Agro Selaparang East Lombok supplies raw materials for PD needs.

Agro Selaparang East Lombok. Starting from laying hens feed (KL 36 KHS) and freshwater feed (PIA-2 and PIA-3), for *packaging* made by PT. Patriot Prima, for PD. Agro Sealaparang East Lombok which is a distributor of PT. Patriot Prima, all these materials are checked again by the company before reaching the hands of consumers.

b. Company (PD. Agro Selaparang, East Lombok)

The company has warehouses for storing goods, one of which is a warehouse for laying hens and fish feed. The warehouse functions as a special place for storing goods, where the staff re-checks the goods that have been ordered, then they are delivered to the *customer*.

c. Retailer

The feed that has been ordered is then distributed to farmers, branches and retailers, then through these branches and retailers the product is delivered to the final consumer.

d. Customers

PD *customers*. Agro Selaparang East Lombok is the end user of a product who buys feed for their own use.

PD. Agro Selaparang Lombok Timur, namely performance management integration of production activities, procurement of materials and services, conversion of semifinished and final products, and delivery to customers. All of these activities include purchasing activities with the aim of building a supply chain that focuses on maximizing value for

customers, no longer competition between entrepreneurs between *supply chains*. But the priority is to be able to maintain, quality and on time delivery is important because it involves trust from consumers and if the product is not delivered on time, it will suffer losses and consumer confidence, here is the flow of PD iodized salt *supply chain management*. Agro Selaparang East Lombok.

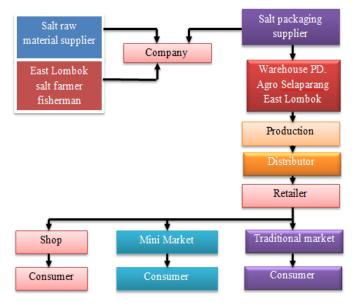


Figure 1. PD Feed *Supply Chain Management*. Agro Selaparang East Lombok

Iodized salt supply chain management process at PD. Agro Selaparang East Lombok starts from suppliers who supplying salt from the company, the area that is the supplier coarse salt, namely Pemongkong, Keruak, Jeruaru and Ketapang. Furthermore, the company deviates the salt in the warehouse and iodized, then packaged, and marketed to customers. Enterprises simplify supply chain management flow namely in the distribution of salt from suppliers to companies up to the customer.

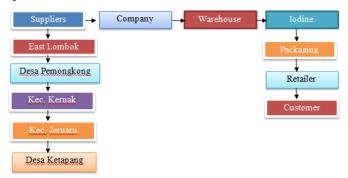


Figure 6. Supply Chian Management of Iodized Salt at PD. Agro Selaparang East Lombok

Iodized salt *supply chain management* process at PD. Agro Selaparang East Lombok started from suppliers who supply salt from companies, areas that supply coarse salt, namely Pemongkong, Keruak, Jeruaru and Ketapang. Furthermore, the companies that deviate the salt are warehoused and iodized, then packaged, and marketed to *customers*. The company simplifies the flow of *supply chain*

management, namely in the distribution of salt from suppliers to companies to customers.



Figure 2Iodized Salt Supply Chain in PD. Agro Selaparang East Lombok

Associated with the costs and reports of receipts in the business unit of iodized salt PD. Agro Selaparang Lombok Timur covers the data in a matter of months or in three months, this is in accordance with the data obtained from the company. PD. Agro Selaparang Lombok Timur has report data and business units of iodized salt, operational flow of iodized salt from companies, retailers, and product customers with increased sales depending on product quality, The flow of making iodized salt is as follows:



Figure 3. Supply Chain Management Salt Making PD. Agro Selaparang East Lombok

The operational director implements (operational standards), SOPs within the company well, so that the *supply chain management structure* can run smoothly in accordance with the company's *plan*. Supply Chain *Management* Structure of AGRO Bottled Drinking Water (AMDK) at PD. Agro Selaparang East Lombok.

Supply chain management process in PD. Agro Selaparang East Lombok, the company partners with other companies, then the company markets its products.

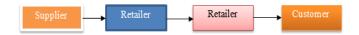


Figure 4Supply Chain Structure of Bottled Drinking Water (AMDK) PD. Agro Selaparang East Lombok

The picture above is the structure of the *supply chain* of PD. Agro Selaparang East Lombok from suppliers to *customers*.

1) Supplier

At the upstream part of the PD *supply chain structure*. Agro Selaparang East Lombok supplies raw materials for PD needs. Agro Selaparang East Lombok. Starting from glass sizes of 330 ml, 600 ml, 750 ml, and

1,500 ml, for *packaging* made by PT. Narmada, for PD. Agro Sealaparang East Lombok which is a distributor of PT. Narmada, all the packaging is checked again by the company before it reaches consumers.

2) Company (PD. Agro Selaparang, East Lombok)

The company has warehouses for product storage, one of which is a warehouse for bottled drinking water (AMDK). The warehouse functions as a special place for storing goods, where the staff re-checks the goods that have been ordered, then they are delivered to the *customer*.

Retailer

Packaged drinking water (AMDK) that has been ordered is then distributed to farmers, branches and retailers, then through the branches and retailers the product is delivered to final consumers.

4) Customers

PD *customers*. Agro Selaparang East Lombok is the end user of a product who buys bottled drinking water (AMDK) for their own consumption.

4. CONCLUSION

The process of supply chain management ES Balok PD. Agro Selaparang Lombok Timur to determine the supply chain flow of ice blocks starting from raw materials to final consumers, the company does not deal directly with the final consumer in distributing its products, but through retailers who are direct consumers for the company. PD Feed supply chain management process. Agro Selaparang Lombok Timur, namely suppliers, companies, retailers and customers. Iodized salt supply chain management process at PD. Agro Selaparang Lombok Timur, namely suppliers of raw materials for salt, suppliers of raw materials for salt from fishermen, salt farmers in East Lombok, companies, suppliers of salt packaging, warehouse PD. Agro Selaparang East Lombok, production, distributor, retailer, end consumer. Supply Chain of Bottled Drinking Water (AMDK) PD. Agro Selaparang Lombok Timur suppliers, companies, retailers and customers.

Research Based on the results of this study, there are some good suggestions for PD manufacturing companies. Agro Selaparang Lombok Timur as a material for consideration in the formulation related to the realization of this research variable, as well as suggestions for further research to be able to improve the findings that have been generated from this research:

1. Advice Regarding Supply Chain Management

PD. Agro Selaparang in carrying out Supply Chain Management must be able to make breakthroughs or innovations so that customers, workers and suppliers are more advanced and satisfied. Not only relying on a satisfaction structure system that is capital from marketing results.

2. Suggestions for the development of information systems

In this 4.0 world, PD should be. Agro Selaparang as a regional company must be able to use an updated and mobile IT system so that; data protection, database and company access with suppliers and customers is getting easier. Then access to data and company news must still be upgraded.

3. Suggestions for Further Research

a. Researchers conducted observations with a longer time so that they would obtain more detailed problem findings regarding the role of information systems in supply chain management.

b. At the time of research, researchers should make an agreement with the company to be willing to implement a Based Information System so that the benefits will be known and felt directly.

REFERENCES

- Chopra S and Meindl P. (2013). Supply Chain Management: Strategy, Planning, and Operation. Pearson.
- Christopher, M. and Holweg, M. (2011). Supply chain 2.0: Managing supply chains in the era oturbulence "International Journal of Physical Distribution&LogisticsManagement. Vol.4, p.
- Croxton, K.L., Garcia-Dastugue, S.J., Lambert, D.M. and Rogers, D. S. (2001). The supply chain management processes", The International Journal of Logistics Management. Vol. 12 No.
- Kaya Ergun, M. A. (2012). Role of information systems in supply chain management and its application on five-star hotels in Istanbul, Vol. 3 No.
- Liu Weihua, Di Wang, S. L. and X. S. (2019). Service supply chain management: A behavioural operations perspective. Vol. 1 No.
- Malik, S, N, A, A, Musa, H, Ahmad, S, Mohamad, N. (2014). The factors influencing supply chain distruptions on supply chain perform. Journal of Technology Management and Technopreneurship. 2(2):1-7.
- Moleong, L. J. (2012). Metodologi Penelitian Kualitatif. Bandung: PT Remaja Rosdakarya.
- Primiana, Azis, Juanim, Yunani, & H. (2016). Improvement Strategy for Supply Chain Performance of Garment Industry to Decrease Logistics Cost and Enhace Competitiveness. Journal of Industrial and Intelligent Information. 4(2), 121-.
- Sharma, A., Gard, D., & Agarwal, A. (2012). Quality Management in Supply Chains: The Literature Review. International Journal for Quality Research. 6(3), 193-.
- Simatupang, T. M., Handayati, Y., & Perdana, T. (2013).). A New Collaborative Approach for Horticultural Supply Chain. In T. M. Simatupang, Logistic and Supply Chain in Indonesia: Emerging Practices. pp. 27-43). Bandung: SBM ITB.