Implementation of Operational Management at the Manufacturing Company (Pt Nippon Indosari Corpindo, Tbk) Sari Roti

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ABSTRACT: Operational management is very important for all types of industries, one of which is manufacturing. Manufacturing companies are concerned with production processes on a large scale that use equipment and machinery to manage raw materials into finished goods. PT Nippon Indosari Corpindo Tbk “SARI ROTI” is one of the leading bread manufacturing companies in Indonesia. This Journal discusses how SARI ROTI applies operations management concepts to achieve competitive advantage and meet growing market demand. Based on these objectives, researchers use qualitative research with qualitative analysis methods in which research is conducted by analyzing data using theoretical foundations as the basis of analysis. The data analyzed is secondary data, which is data that comes from existing sources and is not self-processed data. The results showed that this company is a company that successfully runs the overall operations management concept, so that the company is able to produce quality products and ensure the cleanliness of all its products, as well as efficient in terms of the production process and distribution of products produced with a wide marketing area coverage.

I. INTRODUCTION

Food that is practical and easy to carry is currently a prima donna among the people, one of the foods that is bread. Many people who consume bread as a food substitute for rice because the nutritional content contained is not much different, but they do not know whether the bread is produced cleanly (hygienic) or not. All that lies in the production process where the bread is made and packaged and then marketed. In addition, the cleanliness of the factory that produces the bread and the supply chain (Supply-chain) from raw materials to finished products to the hands of consumers. Of course, it is not easy for the product to have high quality so that consumers are satisfied with the product.

The bakery manufacturing industry has a high level of competition. PT Nippon Indosari Corpindo Tbk is the first and largest producer of bulk bread in Indonesia. The company produces a variety of products under the brand “Sari Roti”, “Sari Kue” and “Sari Choco” halal, quality, safe for consumption and affordable by the public. Sari Roti, as the market leader, needs to implement an effective operations management strategy to maintain its position. The application of proper operations management concepts can help Sari Roti optimize its production process, improve efficiency, and produce high-quality products that suit consumer tastes. Operational management is one of the important factors in the activities of the enterprise. Operational management is a planning process that focuses on production activities ranging from finance, human resources and marketing. In production activities, good management is needed to achieve goals and control operational activities. Good operational management will be in line with the activities and maximum production performance. Operational management leads to planning activities so as to create a production process that is maintained and maintained.

Operational Management

According to Zulian Yamit (2003), operational management has the following characteristics: have the goal to be able to produce goods and services, has the main activity that is in the transformation process activities, has a mechanism that can control an operation.
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According Heizer, Render, and Munson (2015) operational management is set of activities that generate value in the form of goods and services by converting inputs into outputs.

According to Stevenson (2018) Operational Management is a set of principles, concepts, and techniques used to plan, organize, control, and improve the production process and delivery of products and services.

From the above definitions, it can be concluded that operations management is the science and art of managing the process of transforming inputs into outputs in an effective and efficient way to achieve organizational goals. Operations management includes a variety of activities, such as production planning, inventory control, scheduling, quality management, and operating system design.

Implementation of Operational Management

Slack, Chambers, and Johnston (2013), the application of operational management is a field of study that focuses on the design, operation, and control of production systems and the delivery of products and services.

Chase, Jacobs, and Aquilano (2017), the application of operational management is the management of production systems and transformation processes within an organization to create and deliver products and services that meet customer needs in an effective and efficient manner.

Jumadi (2021), the application of operational management is an activity in organizations in producing goods and services through a series of planning, organizing, implementing and monitoring activities to achieve efficient and effective results.

It can be concluded that the application of operational management is the science and art of managing the process of transforming inputs into outputs in an effective and efficient way to achieve organizational goals. The application of operational management includes various activities, such as production planning, inventory control, scheduling, quality management, and operating system design.

The main purpose of implementing operational management is to optimize the process of transforming inputs into outputs in an effective and efficient manner.

Effective means achieving a set goal, while efficient means using the minimum possible resources.

Implementation of operational management includes various activities, such as:

- Planning: determining what products to make, how much, and when.
- Control: manage inventory levels of raw materials, in-process goods, and finished products.
- Scheduling: set the order and timing of production activities.
- System design: choosing and designing the right operating system to achieve the company's goals.
- Management: ensuring products meet established quality standards.
- Resource management: managing the workforce involved in the production process.
- Chain management: managing relationships with suppliers, distributors, and customers.
- Management: managing the buildings, equipment, and infrastructure used in the production process.

Some factors to consider in implementing operational management include:

- Customers: what products customers need, how much, and when they need them.
- Competitor: what competitors do, and how companies can compete with them.
- Technology: new technologies are available, and how they can be used to improve the efficiency and effectiveness of operations.
- Regulations: what regulations a company must comply with, and how they can affect a company's operations.

Implementation of operational management is an ongoing process. The company must constantly evaluate and improve the implementation of its operations management to remain competitive in a dynamic market.

RESEARCH METHODS

This type of research is qualitative research with a qualitative analysis method where research is carried out by analyzing data using theoretical foundations as the basis of analysis (W. J. Creswell & Creswell, 2018). The theoretical basis used is operational management theory, namely: project management, managing quality, process strategy, and the research object is PT. Nippon Indosari Corpindo Tbk which is a manufacturing company engaged in the first and largest mass bread producer in Indonesia. The company produces various products under the brands "Sari Roti", "Sari Kue" and "Sari Choco". The data analyzed is secondary data, which is data that comes from existing sources and is not data that is processed by yourself (J. W. Creswell, 2014). The data analyzed is in the form of news sourced from trusted sites such as Tribun and Otorider.com.
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II. RESULTS AND DISCUSSION

Company Profile

PT Nippon Indosari Corpindo Tbk ("Sari Roti") was established in 1995 by Wendy Sui Cheng Yap. Initially, this company produced only plain bread and simple sweet bread. The company has its first factory located in Block W, Jababeka Industrial Estate, Cikarang. This company is not necessarily accepted by consumers because they have to compete with local bakery products that are cheaper. However, over time, Sari Roti developed into one of the largest bakery companies in Indonesia by offering a wide range of bakery products, cakes, and snacks that are innovative and high quality. Demand for products is increasing after people are aware of the culture of healthy living by consuming healthy foods. The company increased production capacity by adding two lines of machines (bread and sweet bread) in 2001, demand is increasing after sari roti increase machine capacity so as to meet consumer demand continues to increase. In 2003 the company changed its name to PT. Nippon Indosari Corpindo, in 2005 the company expanded its business by establishing a second plant in Pasuruan, East Java followed by the construction of a third plant in Cikarang, West Java in 2008. The company conducted an initial public offering in 2010 on the Indonesia Stock Exchange under the issuer code ROTI. Since becoming a public company PT. Nippon Indosari Corpindo, Tbk continues to expand its production and distribution network by operating 5 new factories in Semarang, Central Java (2011), Medan, North Sumatra (2011), Cibitung, West Java (2012), Makassar, South Sulawesi (2013), and Palembang, South Sumatra (2013). Sari Roti offers a wide range of innovative and high quality bakery, pastry and snack products. Sari Roti products can be found in supermarkets, minimarkets, grocery stores, and bakeries throughout Indonesia.

● Products

Here are some categories produkof Bakery Products:

- Sari Roti offers a wide range of roti tawar, including White roti, wheat roti, and sweet roti.
- Sweetbread: Sari Roti offers a wide variety of sweet breads, including stuffed sweetbreads, fried sweetbreads, and special sweetbreads.
- Cake: Sari Roti offers a wide variety of cakes, including sponge cakes, layer cakes, and pastries.
- Snack menu: Sari Roti offers a wide variety of snacks, including donuts, martabak, and pastels.

● Awards and certificates

The company has received various awards and certificates that make this company more solid and the public is increasingly convinced that SARI ROTI products are clean and healthy products. In 2006 the company received a HACCP (Hazard Analysis Critical Control Point) certificate, namely a food safety guarantee certificate as proof of the company's commitment to prioritizing the 3H (Halal, Healthy, Hygienic) principles in every SARI ROTI product. In addition, all SARI ROTI products have been registered through the Indonesian BPOM Agency and obtained Halal certificates issued by the Indonesian Ulema Council. Now, SARI ROTI has registered itself as the largest bread producing company in Indonesia with various awards achieved, including Top Brand and Top Brand for Kids from 2009 until now, Marketing Award 2010, Original Brand 2010, Investor Award 2012, and awards from Forbes Asia “Best under a Billion” 2013

● Company's vision and Mission

- Company’s Vision
  Continues to grow and maintain its position as the largest bakery company in Indonesia through extensive market penetration and in using a wide distribution network to reach consumers throughout Indonesia.
- Company’s Mission
  Producing and distributing a variety of products that are “Halal”, high quality, hygienic and affordable for all Indonesian consumers.

● Financial Information

In 2022, PT Nippon Indosari Corpindo Tbk ("Sari Roti") posted net revenue of Rp 4.9 trillion and laba Net Profit of Rp 614 billion.

Implementation of Operational Management in Sari Roti

The implementation of effective operations management has been the main key to Sari Roti’s success in achieving competitive advantage and meeting growing market demand. Here are some examples of implementing operations management in Sari Roti:

1. Production Planning

Sari Roti uses an integrated production planning system to predict demand, determine raw material needs, and develop optimal production plans. Raw materials into things that must be maintained by the company in order to maintain quality, in the production process of raw materials are strictly selected before being processed into bread dough. Raw materials
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sent by suppliers are first checked through a strict process with the aim that the selected suppliers can maintain consistent quality of the raw materials received. The process of making bread knows several process methods, ranging from processes that require only one mixing such as straight dough mixing and no time dough mixing, to the process of making bread that requires two mixing processes such as sponge and dough mixing the company produces bread continuously for 24 hours a day and 7 days a week to meet the needs of consumers. The resulting product has a life cycle (Product Life Cycle) is short because the essence of bread does not use preservatives, the average age of this product 3-4 days from the time of completion of production.

2. Inventory Control

Sari Roti implements a strict inventory control system to ensure adequate availability of raw materials and finished products. This is done through real-time monitoring of raw material stocks, the implementation of an efficient reordering system, and effective warehouse management. Because product produced has a short life cycle (Product Life Cycle). SARI ROTI directly markets its products so that there is no inventory that accumulates in the warehouse because of the short life cycle. SARI ROTI does not hoard the goods produced in the warehouse this is done to maintain the quality of the goods so that the goods sold are fresh. The company applies the Just in Time (JIT) system so that the goods produced are in accordance with consumer demand and the company does not hoard goods in the warehouse which of course in addition to increasing costs also decreases the quality of the goods produced. Inventory set by the company is not only the inventory in the warehouse of the company but the inventory of goods sold in the sales agents scattered marketing area SARI ROTI, the company ensures that no agent who has their bread inventory is too much and no agent who has too little bread inventory for sale. The company ensures that the inventory spread across the agents matches the demand of the consumers so this will minimize the return of unsold products by the agents.

3. Scheduling

Sari Roti uses a sophisticated production scheduling system to ensure a smooth production process and minimize waiting time. This is done by determining the order and timing of each stage of production, allocating resources optimally, and monitoring the progress of production in real-time. Delivery of bread to SARI ROTI sales outlets is done every day up to two times a day depending on the high and low demand from each customer. The company sets the lead time or deadline for submitting orders no later than 2 days before delivery, so that the company can arrange production time at the factory and can send fresh products.

4. Location selection

Sari Roti continuously innovates and improves its operating system. This is done by applying the latest production technology, designing an efficient factory layout, and paying attention to ergonomic aspects in the work. There are seven factories that currently produce SARI ROTI and spread in several regions to serve consumers SARI ROTI. The location of the factory is determined based on the marketing area of the bakery products, this is done to shorten the time while saving distribution costs as well as to increase the production capacity of the factory. The company is trying to build new factories with locations close to the intended marketing area. This step can save the cost of product distribution where the company does not need to spend a lot of distribution costs because the factories are scattered in the marketing area of the product, the product that reaches the consumer is really in a fresh state because the time required to send the product is very short besides this is done to prevent expired products before they reach the hands of consumers.

5. Quality Management

Sari Roti has a strong commitment to the quality of its products. This is evidenced by the implementation of a strict quality control system at every stage of production, from the selection of raw materials to the packaging of products. SARI ROTI also conducts regular product inspections and implements defect repair programs to ensure that the products produced meet high quality standards. The company always maintains the quality of the products produced by maintaining the quality of raw materials used to produce bread, raw materials must through strict selection that has been set by the internal company and must be guaranteed halal so as to produce good quality bread in terms of appearance, texture, aroma, taste and also guaranteed Halal of bread produced. SARI ROTI maintain the quality of the bread produced by selecting the bread before it is packaged and marketed, bread must meet the standards of shape and size that have been set by the company so that the quality of the resulting product is the same. The company keeps the goods sold are always of high quality so as to maximize sales and minimize return goods.

6. HR and Work Plan

SARI ROTI has employees reaching about 1200 people so that they can continue to operate production for 24 hours, SARI ROTI employees are set based on the Hold Constant Employment system so that when production demand rises or falls...
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the company continues to recruit and retire employees. The company recruit workers to be placed as employees based on education level, for example employees with high school education level will be placed in the production section to make bread, they will be trained on how to make bread, measure the raw materials to be mixed, arrange the production on the cooling rack, and pack the production in large packaging to be put carrier. This company has used the SAP system in managing their work and HR planning so that it is easier and more efficient than using a manual system, they use SAP to monitor Business Processes and decision making to develop their business, besides that the company can save costs because the time to design performance and also HR can be done in a short time.

7. Supply Chain

SARI ROTI distribution chain optimization is very high considering they have a product with a short life span, SAP is used to monitor the supply of raw materials and also the sale of products to large agents, they do not need to bother to take care of the transaction because this is done automatically by the SAP system, the system will also inform can be customized, in addition the business map becomes clearer because all are integrated with each other. Small agents such as traditional markets and small shops are also spearheading the sale of SARI ROTI products, they play an important role in marketing bread in the hands of consumers who cannot go to the modern market, besides that sari roti distributed through mobile agents from one place to another by using cart, making it more efficient to reach the target them. Return system at this company is very concerned, this is done to maintain the quality and safety of food, the company recalls the bread that has not been sold in retail regai, one day before the expiration date indicated on the packaging. For this reason, the company deliberately uses a different colour bread packaging binder every day of the week, which is to facilitate officers in making product withdrawals by looking at the colour of the packaging binder. Bread-bread returnees from the market are then sent back to the factory, put into a shredder to prevent abuse or falsification of quality, before finally sold to third parties who will process it into animal feed and fish.

8. Company Layout

SARI ROTI prioritizes speed and efficiency in its production without neglecting the quality aspect, the company prioritizes smooth production where the factory is made very wide thus the flow of workers becomes free, in addition SARI Roti factory also adopts the concept of Product-oriented layout where the machines are located close together and connected to each other and the production process takes place every day. SARI ROTI factory is also very clean sanitation in the factory, the factory layout does not have a corner of the room that has the potential to be a place of microbial growth and also dust, besides that before entering the factory every employee will be sprayed with alcohol to kill germs and will be aerated so that dirt such as hair loss can. In addition, this factory also performs machine maintenance flexibly, the extensive factory layout allows machine maintenance to be carried out in the factory, cleaning and machine maintenance are divided into two categories, the first is CIP (Clean in Place) where the tools are cleaned in the factory directly without having to be dismantled first, and there are also those who apply COP (Clean out Place) where the machine is cleaned in the factory by disassembling first, then the dirt from the machine will be disposed of to a waste disposal site Bread is made through several stages that must go through several machines ranging from dough making machines to bread wrapping machines, machines placed adjacent based on their respective functions, the reception room for raw materials that come is located adjacent to the raw material storage warehouse so that when the raw material comes it does not need to be moved far because it is not efficient and will make the flow not smooth, then the weighing place for raw materials to be processed is in the raw material storage warehouse so that storage, mixing machines with pressing machines are placed side by side so that the dough that has been mixed can be directly pressed to eliminate gas levels in the dough, a place for printing and roasting and fermentation are placed close together but a bit far apart from the previous two machines, this is intended so that there is ample space to bring the finished dough to the printing press, then after printing the dough is baked and after it is cooked it will be put on a special rack that has a so that when packaged bread does not evaporate and damp, then the rack is located next to the bread packaging machine so that the bread that has been cold can be directly packaged quickly and directly distributed to consumers.

III. CONCLUSION

PT Nippon Indosari Corpindo Tbk ("Sari Roti") has successfully applied its operating management concepts effectively to achieve competitive advantage and meet the increasing market demand. The implementation of proper operations management strategies has helped Sari Roti in optimizing its production processes, increasing efficiency, producing high quality products, and maintaining its position as a market leader in the bread manufacturing industry in Indonesia.
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The company is able to optimize operations management in carrying out their business processes, assisted by SAP systems that also make it easier for them to run their business. The company can optimize production and distribution efficiently so that the products produced are of high quality and completely clean and healthy. Quality control is very concerned from the start of raw materials to finished products, this is evidenced by the strict selection of incoming raw materials in order to produce good quality bread in terms of appearance, texture, and taste. 
This company is a company that successfully runs the overall operations management concept, so that the company is able to produce quality products and ensure the cleanliness of its products, as well as efficient in terms of production and distribution of products produced with a wide marketing area coverage.

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