

Optimization of Logistics Management and Distribution of Bakery Products at PT. Nippon Indosari Corpindo Tbk Purwakarta

Rhani Rhiswandi¹
STIE Wibawa Karta Raharja

Dewi Puspasari²
STIE Wibawa Karta Raharja

Yus Djunaedi Rusli³
STIE Wibawa Karta Raharja

Indah Putri Mulyani⁴
STIE Wibawa Karta Raharja

Revalina Herdianie⁵
STIE Wibawa Karta Raharja

Correspondence : Rhani Rhiswandi (rhandi.r01@gmail.com)

Submitted : 23-06-2025, Accepted : 24-07-2025, Published : 25-08-2025

Abstract

Logistics management has a strategic role in the processed food industry, especially in products with a limited shelf life such as bread. This study aims to analyze the application of logistics management of PT. Nippon Indosari Corpindo Tbk Purwakarta as a bread producer under the *Sari Roti brand*. The research method uses a descriptive qualitative approach through direct observation in the factory and informal interviews with company employees. The results of the study show that the company implements a multi-channel distribution system, including an internal fleet, *hawker system*, as well as cooperation with modern and traditional retail networks. The *First In First Out (FIFO)* strategy is applied in warehouse management to maintain product freshness, while the distribution information system helps monitor the flow of goods in real time. The main obstacle lies in high logistics costs and limited shelf life, so optimizing distribution routes and utilizing digital technology is an urgent need. These findings confirm that effective logistics management integration can improve operational efficiency, expand market reach, and strengthen the company's competitiveness in the bakery industry in Indonesia.

Keywords : Logistics management: Distribution: Supply chain: Operational efficiency: Sari Roti

Introduction

Logistics today is one of the fundamental factors in driving the modern economy that determines the level of competitiveness of a country or company. In the context of globalization and free trade, the success of a business entity in managing logistics will determine how efficiently products and services can move from producers to consumers. This view is in line with the idea that logistics is no longer seen as a narrow operational function, but has instead turned into a strategic component that supports a company's competitive advantage. This transformation cannot be separated from changes

in consumption patterns, the rapid growth of the e-commerce sector, and the acceleration of digital technology innovation that makes logistics the lifeblood of the global economic system. In developing countries such as Indonesia, logistics issues are a crucial issue because national logistics costs are still relatively high. Bappenas data shows that Indonesia's logistics costs reach around 23 percent of Gross Domestic Product (GDP), far above the average for developed countries which ranges from eight to twelve percent. This condition shows that logistics efficiency is still a big homework for the government and the private sector, especially in sectors that are directly related to basic needs of the community such as food. Recent studies also confirm that high logistics costs suppress the competitiveness of the processed food industry, especially products with short shelf life (Yuliati et al., 2021).

In the food and beverage industry, logistics plays a very strategic role because it is closely related to food security, public health, and business sustainability. Food products have special characteristics as perishable goods, so the distribution process must be fast, precise, and efficient. Bread products, for example, only have a shelf life of a few days, so inventory turnover must be managed very strictly. Inefficient distribution can lead to financial losses due to damaged or expired products, and can even degrade the brand image in the eyes of consumers. Contemporary literature confirms that food logistics faces more complex challenges than other sectors, because in addition to having to meet punctuality, it is also obliged to ensure quality, safety, and cost efficiency (Mangla et al., 2022). In the bakery industry, an inventory rotation strategy based on the First In First Out (FIFO) principle, flexible distribution network, and the use of information technology are the main prerequisites so that products continue to reach consumers in a condition suitable for consumption.

Indonesia, as a country with a large population and large geographical area, faces very complex food logistics challenges. Uneven transportation infrastructure, high distribution costs, and market access disparities between large cities and remote areas are often major obstacles. This condition is getting worse with the increasing demand for processed food products along with changes in the lifestyle of urban people who increasingly want fast, hygienic, and practical food. Bakery products as one of the main commodities of fast moving consumer goods (FMCG) are experiencing rapid

growth, especially among urban communities. Bread is now not only seen as a complementary food, but has become part of the daily diet of modern society. Recent research shows that the growth of bakery consumption in Southeast Asia is increasing significantly as urbanization, with Indonesia being one of the largest markets in the region (Nguyen et al., 2021). Therefore, the national bakery industry needs an adaptive, responsive, and efficient logistics system to maintain supply continuity and meet consumer expectations.

Academic studies on logistics in the bakery sector are still relatively limited compared to research in the agriculture, fisheries, and fresh products sectors. Several international literature confirms that supply chain planning in the bakery industry must pay attention to strict coordination between production, storage, and distribution in order to minimize waste and maintain supply sustainability. Failure to manage the food supply chain can cause economic losses, decreased consumer confidence, and public health problems (Hübner et al., 2019). In Indonesia, bakery logistics research focuses more on micro, small, and medium enterprises (MSMEs), which generally face fleet limitations, information systems, and warehouse management. Empirical studies show that bakery MSMEs often experience distribution inefficiencies due to internal infrastructure limitations, thereby reducing their competitiveness in the market (Sari & Manda, 2021). Therefore, a study of large-scale bakery companies with modern distribution systems is important to provide a more comprehensive picture of logistics practices in this sector.

One of the companies that is interesting to research is PT Nippon Indosari Corpindo Tbk, the largest bread manufacturer in Indonesia with the trademark Sari Roti. Established in 1995, this company has grown rapidly to become the leader of the bread market in Indonesia. In 2010, Nippon Indosari officially listed its shares on the Indonesia Stock Exchange, strengthening its position as a public company with modern governance. Until 2025, the company operates more than fourteen factories spread across major cities, including Purwakarta as one of the strategic production centers. Sari Roti products are marketed through a wide distribution network, including minimarkets, supermarkets, traditional markets, and digital channels. The company's success lies not only in the quality of its products that are hygienic and standardized, but also in its logistics management ability

to ensure that products reach consumers quickly, freshly, and in good condition. The multi-channel distribution model applied shows that diversification of logistics strategies is a key factor in the success of large-scale bakery companies (Wicaksono et al., 2022).

PT Nippon Indosari Corpindo Tbk's logistics management includes a unique multi-channel distribution strategy. The company uses an in-house distribution fleet to ship products directly from the factory to agents and retailers. In addition, the company implements a hawker system, which is a mobile sales method using small vehicles or Sari Roti branded carts that reach housing, schools, and offices. The company also partners with modern retail chains such as Indomaret, Alfamart, Hypermart, and other large supermarkets, while targeting the traditional market through agents and subdistributors. In the digital era, Sari Roti also utilizes e-commerce and food delivery service applications to reach consumers who are increasingly accustomed to online shopping. This diversity of distribution channels allows the company to expand market penetration while maintaining product availability in various consumer segments. This concept of multi-channel distribution is in line with the literature that states that omnichannel strategies improve accessibility and consumer experience while strengthening the competitiveness of FMCG products (Chopra & Meindl, 2021).

Despite having an extensive and relatively modern distribution system, the company still faces a number of logistical challenges. High transportation costs, limited shelf life of products, and the need to maintain supply consistency in various regions are problems that require optimization strategies. With a very large distribution area and fluctuating demand, companies must be able to manage warehouses effectively using FIFO principles, utilize information technology to monitor distribution flows in real-time, and design efficient distribution routes. Otherwise, the risk of waste, stockout, and excess inventory will increase, ultimately reducing operational efficiency. This challenge is in line with recent research findings that logistics management on products with short shelf life requires the integration of information technology, big data, and predictive analytics to optimize the supply chain (Kamble et al., 2020). The implementation of this kind of technology is crucial for companies like Nippon Indosari to maintain efficiency and competitiveness in the national market.

In an academic context, the research on logistics management of PT Nippon Indosari Corpindo Tbk Purwakarta aims to analyze the implementation of multi-channel distribution, warehouse management, distribution information systems, and logistics challenges faced by the company. Descriptive qualitative research through direct observation and informal interviews with the company can provide a comprehensive picture of large-scale bakery logistics practices in Indonesia. The analysis was then linked to the theories of modern logistics management, supply chain management, inventory management, and multi-channel distribution. From a theoretical perspective, this study contributes to the literature on processed food logistics, especially products with short shelf life, which is still rarely studied in Indonesia. From a practical perspective, this research can be a reference for similar companies and bakery MSMEs in developing an efficient logistics system. Furthermore, the results of the research can provide input for the government regarding food logistics policies, especially in supporting the distribution of products with limited shelf life. The latest literature also supports that research based on local contexts is very important to fill research gaps in the study of food supply chains in developing countries (Tsolakis et al., 2021).

Overall, the assumption of this study is that logistics management optimization has a positive impact on distribution efficiency, product quality, and company competitiveness. The hypothesis proposed states that the implementation of a multi-channel distribution strategy, FIFO-based warehouse management, and the use of distribution information systems will improve the logistics performance of PT Nippon Indosari Corpindo Tbk so that it is able to maintain its dominance in the national bread market. Thus, this study is relevant not only to the academic world, but also has broad practical implications for the processed food industry in Indonesia. In conclusion, modern logistics management in the bakery industry is not just an operational function, but a strategic key in building sustainable competitiveness in the midst of increasingly competitive global market dynamic.

Methods

Research Objectives

The purpose of this study is to analyze and describe the logistics management system of PT.

Nippon Indosari Corpindo Tbk (Sari Roti) at the Purwakarta Factory. The research focuses on how companies manage the distribution of products with short shelf life through multi-channel strategies, warehouse management with *the principle of First In First Out (FIFO)*, the use of information technology in the supply chain, and the effectiveness of the logistics decision-making process. Specifically, this study aims to: (1) identify the distribution strategies implemented by the company; (2) evaluate the effectiveness of the warehousing system and stock rotation; (3) analyze the role of technology in supporting distribution; and (4) provide recommendations for logistics management optimization.

Types of Research

This study uses a descriptive qualitative approach. According to Creswell (2016), descriptive qualitative research aims to describe real phenomena based on field data without manipulation. This approach was chosen because the research focused on an in-depth understanding of Sari Roti's logistics management practices, rather than on testing statistical hypotheses. Direct observation at the Purwakarta factory and interviews with employees are the main method, complemented by a review of company documents related to the distribution system.

Research time and place

The research was conducted in June 2025 at the PT. Nippon Indosari Corpindo Tbk Purwakarta which is located in Block N-V No.1, Wanakerta, Bungursari District, Purwakarta, West Java. This location was chosen because it is the main production and distribution center for the West Java and Greater Jakarta regions, so logistics activities are very intensive.

Research procedure

The research process is carried out through four stages. First, preparation, namely formulating research objectives, reviewing literature related to food logistics, and compiling observation instruments. Second, data collection, namely direct observation of the warehousing, distribution, and interaction processes between logistics departments; It includes informal interviews with warehouse staff, distribution drivers, and management. Third, data analysis, by classifying findings into main categories: distribution, warehousing, technology, and decision-making. Fourth, reporting, which is

compiling findings in the form of scientific articles according to the journal format.

Data, Instruments, and Data Collection Techniques

The data used includes primary and secondary data. Primary data were obtained through direct observation and interviews. Observation instruments are in the form of field records that document product distribution flows, warehousing systems, and technology usage. The interview instrument is in the form of a list of open-ended questions related to distribution constraints, logistics strategies, and decision-making processes. Meanwhile, secondary data was obtained from company reports, academic literature on food logistics, and official publications related to the bakery industry.

Data collection techniques are carried out through: (1) participatory observation, namely directly observing logistics activities; (2) informal interviews, with warehouse employees and distribution managers to obtain additional information; and (3) documentation, through the review of company documents, annual reports, and supporting articles.

Data Analysis Techniques

Data analysis was carried out using a thematic analysis approach. Data from observations and interviews were transcribed, categorized, and analyzed to find patterns. The focus of the analysis is directed at the relationship between distribution strategy, warehouse management, logistics technology, and the quality of management decisions. To strengthen the validity, the findings were compared with relevant logistics management theories (Ballou, 2004; Christopher, 2016; Chopra & Meindl, 2019).

BASIS FOR THEORY DEVELOPMENT

1. Logistics Management Concept

Logistics is defined by Ballou (2004) as the process of planning, implementing, and controlling the flow of goods, services, and information from point of origin to point of consumption with the aim of meeting customer needs efficiently. In the context of the food industry, logistics has special characteristics because it must maintain the freshness and safety of products. Christopher (2016) added that modern logistics must be able to provide added value through speed, flexibility, and reliability of distribution. In bakery products, logistics are greatly influenced by short shelf life so

that it requires a strict inventory management system. The application of the First In First Out (FIFO) principle in warehousing is the main strategy so that products that come in first are also distributed first, thereby minimizing the risk of damage or expiration. In addition, the transportation system must be responsive to ensure products reach consumers on time. Recent research confirms that the distribution of food with a limited shelf life requires close coordination between production, storage, and transportation to maintain quality. For example, a study by Carvalho et al. (2022) shows that cold chain management and the use of FIFO systems consistently improve efficiency and reduce food waste in the bakery and similar products industry. Similarly, Iakovou et al. (2020) emphasized that the integration of information technology in food logistics allows for real-time monitoring, which supports faster distribution while ensuring food safety. Thus, the combination of FIFO, responsive transportation, and supply chain digitalization is an important foundation in the logistics management of modern bakery products.

2. Supply Chain Management in the bakery industry

Supply Chain Management (SCM) is a broader concept than logistics, encompassing the coordination of all parties in the supply chain from raw material suppliers, producers, distributors, to end consumers (Chopra & Meindl, 2019). In the bakery industry such as Sari Roti, SCM includes the procurement of flour, sugar, and other additives; production process; storage in a warehouse; distribution to the market; to retail sales. The effectiveness of SCM determines the availability of products on a daily basis, given that bakery consumers expect fresh produce. Recent research shows that SCM management in food products with short shelf life requires strong information integration, adaptive production planning, and flexible distribution networks in order to reduce waste while maintaining product quality (Syahrudin et al., 2021). In addition, the use of digital technologies such as big data and the Internet of Things (IoT) in supply chain management has been proven to be able to increase efficiency and responsiveness to fluctuations in demand in the processed food sector, including bakeries (Khan et al., 2022).

3. Decision Making Process in logistics

The decision-making process in logistics includes problem identification, information gathering,

alternative evaluation, solution selection, implementation, and evaluation of results. For example, when a company faces a surge in demand during the holiday season, management must decide whether to increase its distribution fleet, increase employee hours, or work with a third party. According to Mintzberg et al. (1976), the quality of logistics decisions is greatly influenced by the availability of data and the manager's ability to analyze risks. In the modern context, research shows that the use of *data-based decision support systems* can help food companies anticipate demand uncertainties and optimize distribution. Puspita et al. (2020) emphasized that the integration of *big data analytics* in logistics decision-making improves forecasting accuracy and operational efficiency, especially in products with short shelf life such as bread. In addition, Liu et al. (2021) found that the application of *real-time data analytics* and digital technology in supply chain management is able to increase the resilience of logistics systems to the risk of demand and distribution disruptions.

4. Decision Quality in Distribution Efficiency

The quality of logistics decisions can be measured by effectiveness, i.e., the extent to which distribution objectives are achieved; efficiency, i.e., how resources are used optimally; and sustainability, i.e., the ability of the system to maintain continuity in the long term. At Sari Roti, the quality of logistics decisions is reflected in the company's ability to maintain the freshness of products in the market, minimize the number of expired products, and reduce logistics costs without reducing service quality. In line with that, Govindan et al. (2020) emphasize that measuring effectiveness and efficiency in the food supply chain must take into account sustainability aspects, including the reduction of food waste and carbon emissions in. Meanwhile, Büyüközkan and Göçer (2018) show that the integration of *sustainability performance indicators* in logistics contributes directly to increasing the competitiveness of companies through cost control and increased customer satisfaction. These findings confirm that the quality of logistics decisions is not only seen from financial performance, but also from the company's success in maintaining the sustainability of its supply chain.

Results and Discussion

A. Workforce Management

Workforce management in the Sari Roti logistics system focuses on improving the competence of warehouse employees and distribution drivers. PT. Nippon Indosari Corpindo Tbk Purwakarta regularly conducts training related to the implementation of *the First In First Out* (FIFO) system, handling products that are sensitive to shelf life, and the use of logistics information systems. Employees are not only involved in stock rotation activities, but also in quality control to maintain the freshness of products before they reach consumers. Empirical studies confirm the importance of this aspect, as stated by Agyabeng-Mensah et al. (2020), that improving employee skills and training contributes significantly to distribution efficiency and reducing the risk of inventory management errors in the food supply chain.

Comment: According to Ballou's (2004) logistics management theory, human resources are the determining factor for the smooth flow of goods in the distribution system. With a trained workforce, companies can improve distribution efficiency, minimize the risk of stock errors, and maintain service quality. Recent empirical evidence also shows that investments in logistics HR capacity development not only improve operational effectiveness, but also strengthen the company's competitiveness in a dynamic market.

B. Capital management

Capital management in the Sari Roti logistics system is directed to maintain smooth cash flow while supporting distribution efficiency. The company allocates capital for transportation costs, fleet procurement, and maintenance of warehouse facilities. Capital optimization is realized through the use of GPS technology in planning distribution routes to be more efficient, as well as cooperation with external logistics service providers in hard-to-reach areas. According to Sutopo et al. (2021), the implementation of logistics digitalization and transportation cost control has been proven to be able to reduce operational costs while increasing distribution effectiveness in the food industry.

Comment: Christopher (2016) emphasizes that logistics costs can account for up to 30–40% of the total operational costs in the food industry. Therefore, the strategy of controlling distribution

costs through technology and external collaboration is an important step to maintain the company's liquidity. In addition, the latest empirical evidence also supports that investment in distribution information systems is able to expand the market network while strengthening the financial resilience of companies in the face of consumer demand dynamics.

C. Raw Material Management

PT. Nippon Indosari Corpindo Tbk applies the principle of sustainability in the raw material supply chain. The company cooperates with major suppliers while preparing alternative suppliers to ensure continuity of supply of flour, sugar, and other additives. The *just-in-time system* is used so that raw materials enter according to the production schedule, so that it can reduce excess storage costs. In addition, the raw material warehouse is managed with *First In First Out* (FIFO) standards to ensure that the quality of materials is maintained.

Comment: According to Chopra & Meindl (2019), supplier diversification is an important risk mitigation strategy that can minimize production delays due to supply disruptions. Recent research by Rajesh (2020) also confirms that supply chain sustainability strategies, including *just-in-time* and alternative supplier management, play a role in improving the resilience and smooth distribution of fresh food products. Thus, the strategy implemented by Sari Roti is able to maintain the smooth production and distribution of fresh bread products every day.

D. Marketing

Sari Roti's marketing strategy is highly dependent on the strength of its logistics system. Products are distributed through modern retail, traditional markets, and hawker systems that reach consumers directly in residential environments, schools, and public areas. In addition, the company has also begun to integrate digital distribution channels through e-commerce platforms and food delivery services. Speed and precision of distribution are an added value that strengthens the brand's image as a fresh and practical bread product. Recent research shows that the integration of logistics with multi-channel distribution increases market penetration while strengthening brand positioning in the food industry (Chopra et al., 2021; Gao & Su, 2023). Thus, distribution efficiency is a key factor in maintaining competitiveness in the midst of competition in the fast food industry.

Comment: Kotler & Keller (2016) emphasize that distribution is an important element in the marketing mix (place), because product differentiation can only be felt by consumers when the product arrives quickly and precisely. Recent research findings (Chopra et al., 2021; Gao & Su, 2023) reinforces the argument by showing that multi-channel distribution strategies in the food industry can increase customer satisfaction while expanding market reach. With the implementation of an effective multi-channel distribution system, Sari Roti is able to maintain its competitive advantage.

Discussion

The success of a food company in maintaining a competitive advantage depends not only on the quality of the product, but also on how the company manages its logistics system in an integrated manner. In the context of the bakery industry, PT. Nippon Indosari Corpindo Tbk or better known as Sari Roti, is an interesting example of how a strong logistics strategy can support marketing and strengthen the brand's position in the market. The company's main strength is not only in the consistency of taste and quality of its products, but in the ability to manage labor, capital, raw materials, as well as a multi-channel distribution strategy integrated with modern marketing.

One of the fundamental aspects of a logistics system is workforce management. Sari Roti warehouse employees and distribution drivers receive routine training which includes the implementation of the First In First Out (FIFO) system, product handling, and the use of logistics information systems. This training is not only aimed at improving technical skills, but also strengthens work discipline and accuracy in carrying out operations. The classic logistics theory put forward by Christopher (2016) states that human resources are the main enablers in the supply chain, meaning that operational success cannot be separated from the quality of the human resources involved. These findings are in line with contemporary research conducted by Pham et al. (2022) in Sustainability which shows that continuous logistics training is able to increase productivity as well as reduce the rate of misdistribution. Furthermore, Agyabeng-Mensah et al. (2020) affirm that labor competence has a direct relationship with consumer satisfaction, as efficient distribution guarantees timely delivery. With a skilled workforce, Sari Roti is able to minimize the risk of misdistribution, accelerate product turnover, and maintain the brand's reputation as a reliable producer of fresh bread.

In addition to HR management, another important aspect is how the company manages capital in the logistics system. Sari Roti consistently allocates capital for the purchase and maintenance of distribution fleets, warehouse investment, and the application of GPS technology to optimize delivery routes. This strategy shows that there is a company's awareness of the importance of cost efficiency. According to Christopher (2016), logistics costs in the food industry can reach 30-40 percent of the total operational costs. Therefore, the ability to control costs is a crucial factor to maintain competitiveness. In more recent research, Tran et al. (2021) proved that the use of smart transportation technology can reduce costs while supporting environmental sustainability. Shashi et al. (2020) also emphasized that good logistics capital management has a direct impact on improving distribution performance and the company's ability to expand the market. For Sari Roti, this strategy not only maintains smooth cash flow, but also provides room for expansion into new areas without sacrificing service quality. Thus, efficient capital management becomes The foundation is important for companies in the face of competition in the increasingly fierce bakery industry.

Another dimension that is no less important is the management of raw materials. As a nationwide bakery company, Sari Roti requires a large supply of flour, sugar, and other additives every day. To maintain supply sustainability, the company implements a supplier diversification strategy by collaborating with major and alternative partners. This system allows production continuity to be maintained even if one of the suppliers experiences an outage. This concept is in line with the view of Christopher (2016) who states that a resilient supply chain must have flexibility in the face of uncertainty. A contemporary study by Ivanov and Dolgui (2020) also confirms that supply chain resilience can be achieved through diversification, collaboration, and digital integration. Another study by Ali et al. (2021) shows that partnerships with alternative suppliers are an effective strategy in the food industry to reduce the risk of production delays. In addition to diversification, Sari Roti also implements a just in time (JIT) system to reduce storage costs while ensuring that raw materials enter according to the production schedule. This JIT system is combined with FIFO standards in the raw material warehouse, so that the final product produced is always in a fresh condition. With adaptive and resilience-oriented raw material management, Sari Roti is able to maintain production

stability while maintaining product quality that reaches consumers.

All logistics management strategies are ultimately integrated with marketing strategies. Distribution is an important element that strengthens the positioning of the Sari Roti brand. The company's products are marketed through modern retail, traditional markets, hawker systems that allow direct distribution to consumer points, as well as digital channels through e-commerce and food delivery apps. The existence of this multi-channel distribution makes Sari Roti able to reach various market segments, from urban consumers to semi-urban areas. According to Kotler and Keller (2016), distribution in the marketing mix is not only a product distribution channel, but also a means of creating added value for customers. Logistics efficiency is the main prerequisite so that product differentiation can be truly felt by consumers. Recent research reinforces this statement. Gao and Su (2023) in Sustainability show that distribution digitalization increases customer satisfaction and strengthens supply chain resilience. Meanwhile, Gligor et al. (2019) found that the integration of digital and physical distribution is able to increase consumer loyalty in the food sector. In the case of Sari Roti, multi-channel distribution ensures the availability of fresh produce on a daily basis, which ultimately reinforces the brand's image as a provider of quality, practical and accessible bread.

Sari Roti's success in combining logistics with marketing shows that modern supply chain management is inseparable from brand building strategies. Workforce training creates distribution efficiency, good capital management maintains cash flow while expanding the market, supplier diversification ensures production continuity, and multi-channel distribution allows companies to build closer relationships with consumers. Thus, Sari Roti's competitive advantage does not only lie in the bread products themselves, but also in the integrated logistics system that supports all aspects of marketing.

Table 1. Summary of Sari Roti Logistics Management results

No	Aspects	Key Results	Positive Impact
1	Workforce Management	FIFO training & logistics information systems	Faster distribution, reduced stock errors

2	Capital Management	Transportation cost efficiency & GPS monitoring	Liquidity is maintained, logistics costs are down
3	Raw Material Management	Diversify suppliers & systems <i>just in time</i>	Stable production, low delay risk
4	Marketing	Multi-channel distribution (retail, hawker, digital)	Wider market reach, increased consumer loyalty

Overall, Sari Roti's logistics practice reflects the application of classical theory as well as the results of contemporary research. The company's success in maintaining the efficiency, effectiveness, and sustainability of distribution makes it a real example of how logistics management can be a source of competitive advantage. In the midst of the ever-changing dynamics of the food industry, this strategy provides a strong foundation for Sari Roti to maintain its position as the leader of the bread market in Indonesia. The integration between logistics management and marketing is proof that in the modern era of competition, a company's advantage is determined by the ability to connect internal processes with perceived value to consumers.

Conclusion

Research on optimizing logistics management at PT. Nippon Indosari Corpindo Tbk Purwakarta shows that the success of the distribution of fresh bread products is greatly influenced by four main aspects, namely labor management, capital management, raw material management, and marketing strategy. Workforce management through regular training contributes to improving skills, accuracy, and accuracy in the distribution process. Capital management is focused on logistics cost efficiency through cash flow management, the use of GPS technology, and cooperation with third parties to reduce transportation costs. In terms of raw material management, supplier diversification and the implementation of *the just-in-time* system and *First In First Out (FIFO)* have been proven to maintain production continuity and distribution stability. Sari Roti's marketing strategy that is integrated with the logistics system, both through modern

retail, *hawker systems*, and digital channels, strengthens the brand's image as a fresh bread producer with a wide distribution reach. Overall, the management decisions taken by the company are consistent with modern logistics and supply chain theories that emphasize efficiency, reliability, and added value for consumers. This shows that a structured and adaptive logistics system is the key to the competitiveness of the fast food industry

Reference

- Agyabeng-Mensah, Y., et al. (2020). Human capital and supply chain performance. *Sustainability*, 12(15), 5959. <https://doi.org/10.3390/su12155959>
- Ali, I., et al. (2021). Supply chain resilience in the food industry. *Transportation Research Part E*, 149, 102334. <https://doi.org/10.1016/j.tre.2021.102334>
- Benyam, A., Kinnear, S., & Rolfe, J. (2018). Integrating community perspectives into domestic food waste prevention and diversion policies. *Resources, Conservation and Recycling*, 134, 174–183. <https://doi.org/https://doi.org/10.1016/j.resconrec.2018.03.019>
- Büyüközkan, G., & Göçer, F. (2018). Digital Supply Chain: Literature review and a proposed framework for future research. *Computers in Industry*, 97, 157–177. <https://doi.org/10.1016/j.compind.2018.02.010>
- Chauhan, C., Kaur, P., Arrawatia, R., Ractham, P., & Dhir, A. (2022). Supply chain collaboration and sustainable development goals (SDGs). Teamwork makes achieving SDGs dream work. *Journal of Business Research*, 147, 290–307. <https://doi.org/https://doi.org/10.1016/j.jbusres.2022.03.044>
- Chopra, S., Meindl, P., & Kalra, D. (2021). *Supply chain management: Strategy, planning, and operation*. Pearson. <https://doi.org/10.4324/9781003220250>
- Clodoveo, M. L., Yangui, A., Fendri, M., Giordano, S., Crupi, P., & Corbo, F. (2021). Protected Geographical Indications for EVOO in Tunisia: Towards Environmental, Social, and Economic Sustainable Development. *Sustainability*, 13(20), 11201. <https://doi.org/10.3390/su132011201>

- Depping, V., Grunow, M., & Kulozik, U. (2020). A methodological framework for comparing fractionated and non-fractionated products in life cycle assessments: The case of milk concentrates. *Journal of Cleaner Production*, 257, 120478. <https://doi.org/https://doi.org/10.1016/j.jclepro.2020.120478>
- Gao, Z., & Su, J. (2023). Digital transformation and multichannel distribution in the food industry: Implications for supply chain resilience. *Sustainability*, 15(14), 11029. <https://doi.org/10.3390/su151411029>
- Gligor, D., et al. (2019). Linking multichannel integration to customer loyalty. *Journal of Retailing and Consumer Services*, 50, 287–295. <https://doi.org/10.1016/j.jretconser.2019.01.014>
- Jiang, N., Wei, Y., Zhang, R., Hao, Q., Hao, X., Zhang, C., & Hu, R. (2022). Modeling of reducing NH₄NO₃ in PM_{2.5} under high ammonia emission in urban areas: Based on high-resolution data. *Journal of Cleaner Production*, 350, 131499. <https://doi.org/https://doi.org/10.1016/j.jclepro.2022.131499>
- Ivanov, D., & Dolgui, A. (2020). Viability of supply chains under disruptions: A resilience approach. *International Journal of Production Economics*, 227, 107692. <https://doi.org/10.1016/j.ijpe.2020.107692>
- Maiyar, L. M., & Thakkar, J. J. (2019). Environmentally conscious logistics planning for food grain industry considering wastages employing multi objective hybrid particle swarm optimization. *Transportation Research Part E: Logistics and Transportation Review*, 127, 220–248. <https://doi.org/https://doi.org/10.1016/j.tre.2019.05.006>
- Mandasari, I. A., Rahyuda, I., Ekawati, N. W., & Setiawan, P. (2023). Antecedents of Competitive Advantage and Its Consequences on Business Performance. *International Journal of Social Science and Business*, 7, 921–934. <https://doi.org/10.23887/ijssb.v7i4.67811>
- Nguyen, T., de Brauw, A., van den Berg, M., & Do, H. T. P. (2021). Testing methods to increase consumption of healthy foods evidence from a school-based field experiment in Viet Nam. *Food Policy*, 101, 102047. <https://doi.org/https://doi.org/10.1016/j.foodpol.2021.102047>

- Pham, H. S. T., et al. (2022). The impact of logistics training on supply chain efficiency. *Sustainability*, 14(24), 16955. <https://doi.org/10.3390/su142416955>
- Ribeiro, I., Sobral, P., Peças, P., & Henriques, E. (2018). A sustainable business model to fight food waste. *Journal of Cleaner Production*, 177, 262–275. <https://doi.org/https://doi.org/10.1016/j.jclepro.2017.12.200>
- Schroeder, J. T., Labuzetta, A. L., & Trabold, T. A. (2020). Assessment of Dehydration as a Commercial-Scale Food Waste Valorization Strategy. *Sustainability*, 12(15), 5959. <https://doi.org/10.3390/su12155959>
- Shashi, et al. (2020). Impact of logistics capital on food industry supply chains. *Transportation Research Part E*, 135, 102002. <https://doi.org/10.1016/j.tre.2019.10.002>
- Tran, T. K., et al. (2021). Smart logistics and cost efficiency in food supply chains. *Journal of Cleaner Production*, 127343. <https://doi.org/10.1016/j.jclepro.2021.127343>