

## **ANALYSIS OF ERP SYSTEM IMPLEMENTATION AND SUPPLY CHAIN IN PT INDOFOOD CBP SUKSES MAKMUR**

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### **Abstract**

*PT Indofood Sukses Makmur is a company engaged in the food sector. The impact of the pandemic was very influential, causing a decrease in the purchasing power of products from suppliers to distributors and the global crisis caused by this pandemic caused a shift in consumer spending tendencies from those that tended to be evenly distributed between main needs. This study aims to analyze the ERP system implementation and supply chain in PT Indofood CBP Sukses Makmur. In managing information on the company, PT Indofood CBP Sukses Makmur Tbk. Implementing an Enterprise Resource Planning or ERP system as an integration system for the company's business functions. The implementation of the ERP system at PT Indofood CBP Sukses Makmur can be considered a success if the implementation of this system can integrate work functions and reduce the need for manual work.*

*Keywords: ERP System, Supply Chain, Company Performance*

## **1. INTRODUCTION**

ERP, which stands for "Enterprise Resource Planning," is a useful tool that can be interpreted as a system that helps to manage a business process in an integrated unit area, for instance, such as Marketing, Production, Purchasing, and Accounting. ERPs also store all transactions that are owned by the company in a database that is used by the company and provide management reporting tools. PT Indofood CBP Sukses Makmur Tbk, more frequently referred to as ICBP among the general public, is a manufacturing company operating out of Jakarta, Indonesia that specializes in the production of a wide variety of foods and beverages. On August 14, 1990, Sudono Salim created the company, which currently has over 70,000 employees as of the end of 2016. The Salim Group is the company's owner.

PT Indofood Sukses Makmur Tbk continues to pursue commercial expansion and development. In 2005, the company launched a joint venture with Netsle through the acquisition of a West Kalimantan-based plantation company and PT Supermi Indonesia and PT Sarimi Asli Jaya. Indofood aspires to become a daily food solution for all businesses, particularly in Indonesia. This company sticks to discipline in order to maintain its efficient operation and continued prosperity. The organization operates with a commitment to honesty, respects its stakeholders, and combines many ideas into sustainable excellence. One of the excellent goods that has become useful for students who reside in a boarding house is Indomie instant noodles.

Indomie has become well-known and has carved out a niche for itself in the national and even international food systems. Instant noodles are so popular in Indonesia that the consumption of instant noodles is a draw for everyday meal supplies. Indomie is one of Indonesia's largest instant noodle consumers. PT. Indofood CBP Sukses Makmur Tbk is one of Indonesia's leading instant noodle producers. Indofood Sukses Makmur was the current leader of instant noodles in Indonesia until 2017.

As we know, that every company has experienced problems, as for PT Indofood CBP Sukses Makmur Tbk. PT ICBP also facing several issues in the number of instant noodle variants produced, due to the large number of instant noodle variants, the flavoring spices also varied because each instant noodle variant has different flavoring spices and also problems in ensuring the availability of spices and instant noodles so that remains minimal in the inventory warehouse. Hence, PT Indofood has a problem in the form of how to run an effective way to ensure that every instant noodle seasoning is available minimally in the inventory warehouse and also uses what ERP system to ensure that every instant noodle seasoning is evenly distributed and no errors occur.

In regards of planning the Supply Chain Management analysis, there are several objectives to be achieved in current study, which are as follows:

1. As an increase in community empowerment in Batam City, the importance of Supply Chain Management Analysis for a company.
2. As information that can help the reader in making a decision
3. Knowing more about the company PT. Indofood Sukses Makmur Tbk.

## **2. LITERATURE REVIEW**

### **2.1. Supply Chain Management**

The notion of supply chain management has been around for quite some time and has been adopted by the world's largest corporations. The supply chain is a comprehensive and complicated term that encompasses all operations from the production and distribution of suppliers, manufacturers, and distributors to the end consumer. With the supply chain, a firm anticipates meeting client demands, increasing its responsiveness, and fostering positive connections with its stakeholders (Hello & Hao, 2021). In addition, the company's implementation of supply chain management has as one of its goals the digitization of business processes (Wulandari & Anwar, 2021) as well as the integration of various stakeholders and assets. This is carried out with the aim of creating a competitive advantage by ensuring that products are suitable for and acceptable to customers (Cahya & Maula, 2021).

Flexibility reflected by the company as a positive impact of implementing good supply chain management. Usually, companies that implement a systematically structured supply chain are companies engaged in manufacturing.

The perceived flexibility of the manufacturing supply chain varies between controlled time and cycle time. This apparent flexibility plays a significant role in the overall cost reduction that occurs throughout the framework of the supply chain (Alkahtani et al., 2021). Achieving flexibility in manufacturing firms also demands alignment between strategy and value, and managers of supply chains need to maintain two-way communications with their

suppliers in order to guarantee the prompt delivery of materials or other components (Adebiyi et al., 2021).

## **2.2. Drivers of Supply Chain Performance**

To be able to effectively support a company's competitive strategy, a supply chain needs to be capable of achieving a balance between responsiveness and efficiency. The management of the supply chain needs to pay attention to a few different things that serve as driving factors in order to make the supply chain achieve a balance of responsiveness and efficiency, specifically: (Chopra & Peter, 2014):

1) Facilities

The facilities are a factor that should not be overlooked in the supply chain. Because the facility serves as the physical location of the network that makes up the supply chain, where products are stored and assembled. The location of production, on the one hand, and the location of storage, are the two types of facilities that make up the supply chain. The supply chain will be significantly influenced by management that is able to make decisions concerning the function, location, capacity, and flexibility of the facility.

2) Inventory

Inventories in the supply chain include raw materials, goods in process of production, and goods ready for consumption. Supply chain efficiency and responsiveness can be improved by adjusting inventory policies. Even though high inventory reduces efficiency, it can demonstrate the supply chain's responsiveness by holding large quantities of inventory and meeting customer demands. However, if the company's inventory of goods consists of fashion clothing, it is extremely risky because the value of these garments fluctuates dramatically with changing trends and seasons.

3) Transportation

As a supply chain support, transportation involves moving inventory from one location to another. Transportation selection has a significant impact on the responsiveness and effectiveness of the supply chain. Therefore, companies must modify shipments such as those using land, air, or sea transport. Each of these modes of transport must be modified to accommodate the type of shipment. In order to provide responsive responses in the form of lower product prices, Management must also minimize transportation expenses. If transportation costs are included in the cost of goods sold, only selling and administrative expenses are incurred for customer shipments.

4) Information

Throughout the supply chain, information consists of data and analysis regarding facilities, inventory, transportation, expenses, prices, and customers. Due to its direct influence on other driving elements, information is regarded as one of the supply chain components with the most potential for performance improvement. With precise information, managers will have more options to develop supply chains.

5) Sourcing

Sourcing is a source that directs the execution of particular supply chain activities, such as production, storage, transportation, and information management.

A choice made at a more strategic level will impact the company's operations. The effectiveness and responsiveness of the supply chain will be influenced by the existence of decisions that define what is most important. If management is successful in adjusting decisions to client requirements, then the organization has demonstrated its responsiveness.

6) Pricing

Pricing is an attempt by a corporation to determine the cost of goods and services delivered in the supply chain. Price undoubtedly influences customer purchase decisions, which in turn influences demand and supply chain performance. Management must set fees based on customer waiting time in order to encourage consumers who value efficiency to order early, and customers who value responsiveness to wait and order before they need the product. Pricing has a direct impact on revenue, so certain factors must be considered while deciding prices.

### **2.3. Enterprise Resource Planning**

Enterprise Resource Planning (ERP) systems are systems in software that are usually used to manage functions in a business, from operational, tactical, and strategic management to emerging information systems management (Hassan et al, 2016). By using an ERP system, a company can manage data comprehensively and provide access to that data to stakeholders who are external users such as customers, vendors, managers, executives and shareholders (Imamuddin, 2021).

A company's business procedures can be improved by implementing ERP system. The company's ERP system can give accurate data and solve business difficulties. This is in line with research undertaken by (Putra et al., 2021), which found that using an ERP system is a good way for corporate managers to increase organizational capacities and boost company performance. The ability of an organization to manage its resources has an impact on the company's ability to enhance operations and finances.

A company's performance is one indicator that may be used to evaluate its success during a specific time period. Positive performance can be achieved if the company's implementation of the strategy is appropriate and tailored to the implementation phase. According to previous research, the implementation of Enterprise Resource Planning in a business requires at least two years to deliver positive results (Fauzi, 2021). In order to establish a competitive edge and enhance performance while implementing ERP, a company must have an information technology infrastructure that is adaptable, user-friendly, productive, and supports the ERP implementation (Haleem, 2021).

### **2.4. Operational Management**

Operations management is a highly crucial aspect for a corporation. Operations management seeks to enable optimal customer value development for both service and industrial enterprises (Edelia & Aslami, 2022). The function of operational management in today's day has expanded so much that many specialists and managers are researching the operational management approaches used to attain the intensity of production and service operations in world-class firms. Operational management is described as actions linked to the development, operation, and improvement of production systems based on the company's major products or services (Volkova & Troian, 2021).

Operations management is a discipline that is applied to the corporate sector that is engaged in creating goods and services. Operational management is concerned with actions that provide value for goods and services and then convert them into inputs and outputs (Najib et al., 2019). Knowledge of operational management provides a methodical strategy in examining various organizational activities. Along with knowledge of the essentials of operational management organizational structure can allow managers to better comprehend the principles of activity in their businesses.

### **3. RESEARCH METHOD**

In order to achieve research objectives on PT Indofood Sukses Makmur Tbk, this study used qualitative data collection methods, as well as documentation methods and websites. Because this is one of the study approaches for collecting numerous data in a sophisticated and comprehensive manner. The researcher employs the documentation method of data collection. The information collected from various sources is accurate information that is documented

This study used primary and secondary data. These primary data were obtained from documents and data directly from the main source through the IDX website, where the research team through the IDX website obtained data from the annual report of PT. Indofood Sukses Makmur Tbk. While these secondary data, the research team obtained through Google Scholar, Google, and even other websites related to supply chain management of PT. Indofood Sukses Makmur Tbk.

### **4. RESULT AND DISCUSSION**

ICBP has a plan to tackle market competition in terms of marketing and distribution techniques in the hands of consumers. The ICBP takes a "take it now, strike first" approach. The plan emphasizes organic expansion while exploiting competitive advantage through scale, breadth, range, and speed. It will also implement cost-cutting and cost-reduction initiatives. It also continues to segregate customers by introducing products with higher pricing and profits. Meanwhile, ICBP performs a comprehensive operation in the distribution process, which include:

- 1) Manufacture → Consumer
- 2) Manufacture → Retailer → Consumer
- 3) Manufacture → Wholesaler → Retailer → Consumer
- 4) Manufacture → Agent → Wholesaler → Retailer → Consumer

In selling its products to the public, ICBP has taken several alternatives, including:

1. Direct sales using sales fleets operating in Special Region of Jakarta, Java, Bali, Sumatra, Kalimantan and Sulawesi,
2. Indirect sales, covering the field of marketing throughout Indonesia. through distributors, then retailers and wholesalers to final consumers, and
3. Through publicity, through print and electronic media.

In managing information on the company, PT Indofood CBP Sukses Makmur Tbk. implementing an Enterprise Resource Planning or ERP system as an integration system for the company's business functions. The company, also known as ICBP, uses the SAP R/3 ERP system assisted by other systems for the integration of business functions such as supply chain management, financial activities, inventory control, and others (SAP Advanced Planner and Optimizer, SAP Business Information Warehouse and mySAP Business Intelligence). In more detail, the use of an ERP system helps companies to know the performance of the company and measure the company's profitability based on transaction data that occurs both inside and outside the company.

PT Indofood CBP Sukses Makmur is known to control 70.7% of the instant noodle market share in 2017, according to Bloomberg. With Indofood products by the company and already known worldwide, it is very important to have good quality control and compounding for each product which is quite difficult to do considering the many variants of the products offered by the company. ERP systems help companies to ease this problem. With a predetermined production plan for each product variant of the company, the SAP R/3 system which is used as the company's ERP system makes it easy from planning to production control while keeping their inventory in the warehouse to a minimum.

As discussed previously, that PT Indofood CBP Sukses Makmur Tbk experienced a few problems in the availability of materials in the inventory warehouse and also the many different spice variants in each Indomie variant. PT Indofood CBP Sukses Makmur Tbk. This convinces the SAP R/3 system as a solution to this problem. In SAP R/3, there are several sections or departments to handle it.

Food Ingredient Division (FID) is a division that makes different seasonings in each variant of instant noodles. The production plan division must make adjustments to the plan in each product to ensure that each instant noodle variant does not experience errors in every step of its production. At the same time, PT ICBP must also ensure that the availability of materials in the inventory warehouse must be kept to a minimum so as not to experience material shortages. SAP Business Information Warehouse (SAPBW), this can help in controlling and also controlling the inventory available in the warehouse to keep it minimal.

The implementation of the ERP system at PT Indofood CBP Sukses Makmur can be considered a success if the implementation of this system can integrate work functions and reduce the need for manual work.

As for application of SAP R/3 software at PT. Indofood in the form of:

1. Logistics Execution (LE): delivery arrangements with logistics starting from the purchase of materials needed in the manufacture of Indofood company's instant noodle seasoning products to the distribution stage so that products can be delivered on time to various places for sale.
2. Plant Maintenance (PM): control the maintenance / maintenance of company equipment effectively so that the production process is not hampered due to damage or repairs to the equipment used in the process of making instant noodle seasonings for the Indofood company.
3. Production Planning and Inventory Control (PP): planning and controlling the process of purchasing raw materials for seasonings by using the delivery process or delivery on time so that the Indofood company can run its production process

smoothly without any obstacles and not run out of stock of raw materials in the manufacture of products.

4. Project System (PS): planning in advance on time & value, planning in detail using cost elements to find out the expenses that must be incurred by the Indofood company in producing seasonings from instant noodles so that there is no loss when the product is traded.

Supply Chain Sustainability (SCS) is environmental, socio-economic management, and promotes good governance practices for the entire cycle of goods and services.

The creation, preservation, and expansion of environmental, social, and economic value throughout the course of time from the perspective of all stakeholders involved in the process of bringing goods and services to market is the goal of supply chain sustainability.

Meanwhile, the significance of supply chain sustainability, include:

- 1) Innovation within the ICBP company

The supply chain is the first step toward a more sustainable company model when we generate items or stock. ICBP company must find innovative ways to function in supply chain, production, and sales and marketing, as well as to detect activities in these areas. As a result, customers will be more willing to provide their support to these reforms.

- 2) ICBP corporate brand upgrade

Sustainability improves product quality in addition to other aspects. However, it can also boost the company's customer relationships. When analyzing product manufacture and inventories, the Indofood CBP company focuses solely on costs; yet, this does not negate the company's requirement for sustainability. Customers will be more loyal to a brand whose values align with their own. Therefore, there is a reason why the Indofood CBP company should invest in sustainable processes that reduce waste and utilize ingredients acquired responsibly.

- 3) ICBP company cost control

In the first phases of the Indofood CBP company's transition to a sustainable supply chain, it is expected that initial prices will be high. However, this will inevitably result in higher efficiency in the long run.

Long-term cost reductions for ICBP companies will be substantial, which is obviously attractive to both producers and consumers. Everyone benefits when we transition to a sustainable business model.

Furthermore, supply chain sustainability can be carried out in ICBP companies which as follows:

- 1) Map supply chain

A considerable number of businesses do not have a complete comprehension of how this sustainability affects their supply chains. When ICBP gets ready to make repairs, one of the first things that needs to be changed is connected to how the supplier inventories are managed.

ICBP companies identify the most significant environmental and social challenges they face. Then, prioritize the efforts you have to improve it together with a company.

- 2) Communicate expectations that ICBP companies have

By focusing on sustainability in the supply chain, PT. ICBP can be more effective in communicating ICBP's values and corporate culture to customers, as well as suppliers. By defining and communicating ICBP's expectations, companies can engage our business relationships in sustainability. These expectations can be communicated through the supplier's code of conduct.

There are many resources and tools available to help ICBP companies improve supplier codes of conduct. Guidelines and tips for writing and implementing an effective supplier code of conduct can be found by doing a little research and using tools available online.

3) Develop training and capacity building programs

Increasing the number of training and capacity building programs is an essential following step that must be taken in order to improve long-term viability and encourage behavior modification.

ICBP companies disseminate information throughout the supply chain by utilizing online training modules, annual conferences, or capacity building efforts. These methods are supported by case studies taken from high-performing suppliers. When businesses showcase the achievements of their top suppliers, urge local communities to acknowledge those suppliers' efforts, and show how sustainability measures may actually improve a community's quality of life in tangible ways. Additionally, businesses have the ability to provide incentives for other suppliers to perform at a higher level.

4) ICBP company basic supplier performance

After the company has determined the compliance standards that must be met by its suppliers, the ICBP company must then collect data from its suppliers by having them complete a straightforward benchmarking questionnaire or conduct a self-assessment in order to determine where the company is beginning from.

Using surveys and questionnaires, a growing number of businesses are beginning the process of assessing the performance of their suppliers. In addition, many companies incorporate all of these areas in their code of conduct, with a special emphasis on self-assessment in relation to an essential component of their company's operations.

The evaluation of supplier performance that serves as a baseline is the point of departure for subsequent initiatives that will be focused at enhancing the sustainability of the supply chain and determining the areas that have the most potential for advancement.

5) Encouraging the improvement of the performance of ICBP

The ICBP company is able to design an audit program to monitor the supplier's performance improvements over time once the business has a good understanding of the baseline performance of the supplier's operations.

An in-person audit can reveal local practices, practical opportunities for improvement, and challenging behavioral challenges that cannot be identified through surveys alone. Even though the self-assessment is completed by a group of companies, an audit conducted in-person can reveal this information.

ICBP needs to be ready to take action based on the findings of any audit programs that are undertaken by the organization. Create a plan of corrective action that involves the sharing of results and expectations, and if required, switch suppliers if they do not comply with the plan. Comparing audit programs with incentive programs that reward compliant suppliers is something that companies ought to do.



## 5. CONCLUSION

As a result of the pandemic, it was very influential, causing a decrease in the purchasing power of products from suppliers to distributors. In addition to this, because of this pandemic, there was a delay in the transportation system, and the global crisis caused by this pandemic caused a shift in consumer shopping tendencies from what initially tended to be evenly distributed between primary needs (essentials goods) such as basic necessities, with secondary needs (non-essentials goods) such as entertainment.

During the current pandemic, there are efforts being made to provide more products that can reach all markets in the country and abroad. This is being done in an effort to increase the purchasing power of consumers. In addition to this, there are numerous strategies to maximize sales, including the release of several new products of interest and the implementation of promotions.

Likewise, in managing information on the company, PT Indofood CBP Sukses Makmur Tbk. implementing an Enterprise Resource Planning or ERP system as an integration system for the company's business functions. The implementation of the ERP system at PT Indofood CBP Sukses Makmur can be considered a success if the implementation of this system can integrate work functions and reduce the need for manual work.

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