

IMPLEMENTATION OF SUPPLY CHAIN MANAGEMENT FOR PRODUCT MANAGEMENT AT BAKTI JAYA STORE

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Abstract: Toko Bakti Jaya is one of the shops in Kisaran which is engaged in selling cake and food ingredients. Currently, the store is still managing product inventory manually by recording the number of incoming goods based on order records. Stock counting is done by looking directly at the warehouse, which causes difficulties in accurately monitoring stock and risks of shortages or excess stock. These constraints can affect customer satisfaction and store operations. This study aims to improve the efficiency of product inventory management at Bakti Jaya Stores by implementing a technology-based and information-based Supply Chain Management system. The research method is a qualitative method, with data collection techniques through interviews with informants, conducting field observations, and also obtained from literature studies. This research produces a product stock management information system using Supply Chain Management that connects Bakti Jaya Stores with suppliers to maximize coordination between stores and suppliers, facilitates control of the flow of stock availability in stores, and makes it easier for store owners to make decisions related to purchasing and procuring goods by providing accurate inventory analysis and real-time product stock information.

Keywords: management; stock; suppliers; supply chain management

Abstrak: Toko Bakti Jaya adalah salah satu toko yang ada di Kisaran yang bergerak dalam bidang penjualan bahan kue dan makanan. Saat ini, toko tersebut masih mengelola persediaan produk secara manual dengan mencatat jumlah barang masuk berdasarkan catatan pemesanan. Penghitungan stok dilakukan dengan cara melihat langsung gudang, yang menyebabkan kesulitan dalam pengawasan stok secara akurat dan berisiko terjadi kekurangan atau kelebihan stok. Kendala tersebut dapat mempengaruhi kepuasan pelanggan dan operasional toko. Penelitian ini bertujuan untuk meningkatkan efisiensi pengelolaan persediaan produk di Toko Bakti Jaya dengan menerapkan sistem Supply Chain Management berbasis teknologi dan informasi. Metode penelitiannya ialah metode kualitatif, dengan teknik pengumpulan data melalui wawancara kepada narasumber, melakukan observasi ke lapangan serta juga didapat dari studi literatur. Penelitian ini menghasilkan Sistem Informasi pengelolaan stok produk dengan menggunakan Supply Chain Management yang menghubungkan Toko Bakti Jaya dengan para supplier dapat memaksimalkan koordinasi antara toko dengan supplier, memudahkan pengendalian aliran stok ketersediaan barang di toko serta memudahkan pemilik toko membuat keputusan terkait dengan pembelian dan pengadaan barang dengan menyediakan analisis persediaan yang akurat dan informasi stok produk yang real time.

Kata kunci: pengelolaan; stok; supplier; supply chain management

INTRODUCTION

Supply Chain Management (SCM) has related to product distribution models, product flow and money in an optimal and integrated manner [1]. SCM does not only operate internally within the company but also takes care of external parts such as the company's relationship with suppliers who supply raw goods to the company as well as consumers as product users. To obtain quality products and efficiency in the product delivery process by the wishes of consumers, good cooperation is needed between the elements in Supply Chain Management.

A company often experiences problems in inventory control both controlling raw materials and finished products which are sometimes too much to require a lot of storage costs or conversely too little so that consumer demand is not fulfilled which hurts decreasing sales [2].

SCM covers all relationships between suppliers and companies based on production, distribution, and end-user processes. Supply Chain Management has the goal of reducing logistics costs, and minimizing investment in logistics and another goal is to improve services on an ongoing basis [3].

The concept of SCM cannot be separated from Information Technology (IT). With the help of IT, parties and entities that are integrated into their SCM domain can share information [4].

Many studies have been conducted on SCM and its superiority in inventory control, including research entitled Design and Build of Web-Based Supply Chain Management Information Systems for the Distribution of Goods and Services [5] where the research results show that SCM can simplify business process-

es between suppliers. With the company [5]. Research with the title Application of E-Supply Chain Management in Efforts to Increase Productivity and Product Marketing in the Domestic Home Industry Competition in the Technology Era, the results of his research show that the E-SCM of the productivity of home industry results can be controlled starting from the supply of raw materials to the sales process to consumers [6]. Research with the title Welding Workshop Goods Distribution Information System and Advertising Using the SCM Model shows that the application of the SCM concept can make it easier for companies, especially manufacturers, namely Sahal Jay [7]. SCM is not only about stock control, more broadly the implementation of SCM can increase the competitiveness and selling power of companies and can encourage companies to carry out an environmentally friendly inventory procurement process [8] [9][10].

Toko Bakti Jaya one of the shops in Kisaran which is engaged in selling cake and food ingredients. Precisely located on Jl. Panglima Polem, Tegal Sari, Kota Kis-aran Barat District, Asahan Regency, North Sumatra, 21211. Bakti Jaya Stores managing product inventory at the store is still done manually, by manually recording the number of incoming goods adjusted to the number of order records. The stock counting process still uses the manual method by directly looking at the stock in the warehouse which requires quite a long time and risks errors. In addition, the difficulty of carrying out accurate stock monitoring results in frequent occurrences of understock or overstock of a product. This can affect customer satisfaction and interfere with the smooth operation of the store. In managing product inventory in stores that still use the manual method, there are often various

obstacles and problems.

Some of them are difficulties in determining optimal inventory levels, difficulties in accurately controlling inventory and checking stocks, and difficulties in making the right decisions regarding purchasing and procuring goods. In addition, the use of manual methods in inventory management can also take a long time and waste energy and money. Therefore, it is necessary to improve inventory management by utilizing information technology and systems to increase the efficiency and effectiveness of product inventory management in stores and to develop a more effective and efficient product inventory management system by applying the appropriate technology and methods. in Supply Chain Management.

The purpose of this research is to design a web-based information system that can manage product inventory data. In addition to facilitating coordination between suppliers and stores to maintain the flow of product inventory stocks and to make it easier for Bakti Jaya Shop owners to make decisions regarding purchasing and procurement of goods by providing accurate inventory analysis and real time information about product stock.

METHOD

This study uses a qualitative descriptive method which is usually used for exploration and carried out through literature and field studies [11]. The data collection method was carried out directly through interviews with informants, conducting field observations, and also obtained from literature studies. Respondents who were used as informants in the interviews were five people con-

sisting of owners, three warehouse staff who were able to control stock, one cashier, and one supplier. Including the purpose of this research method to determine the object under study is to facilitate the admin in controlling product stock and informing data by designing a system using the SCM (Supply Chain Management) method at Bakti Jaya Stores.

To help carry out research more efficiently, a step-by-step arrangement of the research is drawn up in a research framework:

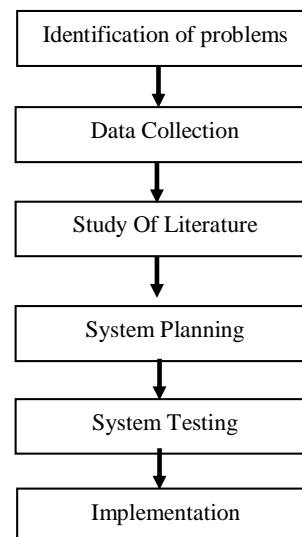


Image 1. Research Framework

First, Identify of problem. Finding the problems being faced by Toko Bakti Jaya. The problem is the challenge of managing product inventory which is still done manually. This process involves manually recording the number of incoming goods based on order records, as well as direct checking of stock in the warehouse which takes a long time and has the potential for errors. The difficulty in carrying out accurate stock monitoring causes frequent shortages or excess stocks of a product. As a result, the store

is facing difficulties in managing inventory.

Second, Data Collection. Data collection is done after the problems identified. Thus it can be seen how the system is running at this time. Data and information can be obtained through direct interviews and direct observation at Bakti Jaya Stores.

Third, Literature Study. Literature studies are carried out to support research carried out such as from books, and articles relating to the problem being researched.

Fourth, System Design. System design is a design or description made to overcome the problems faced by related agencies or companies after conducting an analysis first. The system is designed using the PHP and MYSQL programming languages. The design of this application uses Sublime Text 3 and Visual Paradigm to create an overview of the system that will. Thus it can be seen how the system is running at this time. Data and information can be obtained through direct interviews and direct observation at Bakti Jaya Stores.

Fifth System Testing. After completing the system design, the system can be tested to what extent the system can be relied upon by the Bakti Jaya Store.

Sixth Implementation. Ready programs will be implemented whether the new system can help overcome the problems that exist at the Bakti Jaya Store.

RESULTS AND DISCUSSION

Login View

This view is used for validating users who can enter the system/program. In the application of SCM for product management at Bakti Jaya Stores, there

are three users who can log in, namely: admin, supplier, and shop owner.



Image 3. Login Display

Owner Main Menu Display

In this view, the owner can view item data, item categories, supplier data, sales data, stock item data, order lists, sales reports, and order reports and can change passwords.



Image 4. View of the Owner's Page

Admin Main Menu Display

In this view, the admin can manage item data, item category data, unit data, supplier data, login access rights data, sales data, view stock items, order goods to suppliers, offer goods, and manage reports.

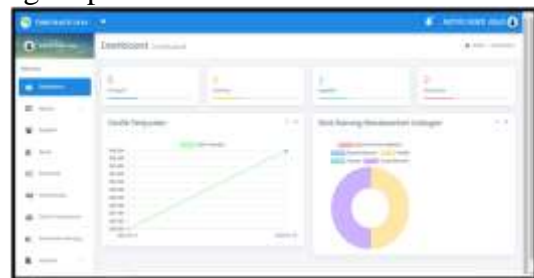


Image 5. Display of the Main Admin

Page

Supplier Main Menu Display

In this view, suppliers can manage category data, goods data, store order data, goods supply data, partner goods stock data, and report data and change passwords.

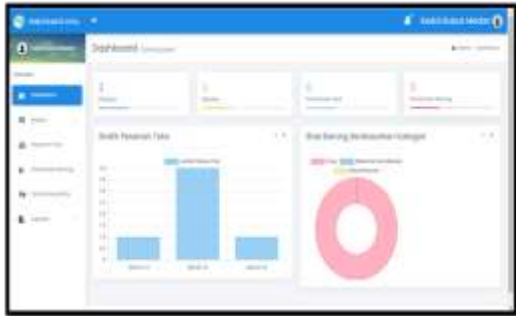


Image 6. Supplier main menu display

CONCLUSION

The first result of this study is the availability of a product stock management information system at the Bakti Jaya Store using Supply Chain Management. The two systems built make it easier to coordinate shops with suppliers to facilitate product stock control. The three systems built make it easier for Bakti Jaya store owners to make decisions related to product and supplier stock control.

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