

ANALYSIS AND DESIGN OF SCM METHOD IN 66 STORE WEBSITE-BASED

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Abstract: Clothing is a basic human need, along with food and shelter. People need clothing to protect and cover themselves. 66 Store is a business that operates in the product and service sector. This business offers various types of products, such as clothes, pants, and shirts that are second-hand or pre-owned. However, the lack of a distribution transaction channel from upstream to downstream is one of the business problems faced by 66 Store. The goal of this research is to build a distribution channel from upstream to downstream, which is one of the business issues at 66 Store, by implementing a Supply Chain Management system that can regulate the transaction flow from upstream to downstream and also facilitate the owner in generating sales reports. Based on the research findings, it can be concluded that the implementation of a web-based Supply Chain Management system at 66 Store can help the owner, admin, suppliers, and customers in conducting the transaction flow from upstream to downstream. The business process from upstream to downstream has also been carried out according to the applicable Supply Chain Management procedures at the research site, thus providing information about the availability of sufficient product stock to ensure smooth transaction flows from upstream to downstream.

Keywords: clothes; distribution; supply chain management

Abstrak: Pakaian merupakan kebutuhan pokok manusia selain makanan dan tempat tinggal. Manusia membutuhkan pakaian untuk melindungi dan menutup dirinya. 66 Store merupakan usaha yang bergerak dibidang produk dan jasa, usaha tersebut menawarkan berbagai jenis produk seperti baju, celana dan juga kemeja yang sudah second alias bekas pakai. Namun, belum adanya jalur transaksi distribusi dari hulu ke hilir menjadi salah satu masalah bisnis yang ada di 66 Store. Tujuan dari penelitian ini adalah membangun jalur distribusi dari hulu ke hilir yang menjadi salah satu masalah bisnis yang ada di 66 Store dengan penerapan sistem Supply Chain Management yang dapat mengatur alur transaksi dari hulu ke hilir dan juga dapat memudahkan pemilik untuk membuat laporan penjualan. Berdasarkan hasil penelitian maka dapat disimpulkan bahwa dengan pengimplementasian Supply Chain Management berbasis web pada 66 Store dapat membantu pemilik, admin, supplier dan juga pelanggan dalam melakukan alur transaksi dari hulu ke hilir. Proses bisnis dari hulu ke hilir juga telah berjalan sesuai dengan prosedur Supply Chain Management yang berlaku di tempat objek penelitian sehingga dapat memberikan informasi mengenai adanya stok produk yang cukup untuk terjalannya alur transaksi yang baik dari hulu ke hilir.

Kata kunci: distribusi; pakaian; supply chain management

INTRODUCTION

The 66 Store is a business that operates in the field of products and services. This business offers various types of products such as shirts, trousers and also second hand tables, while in the service sector they send customer orders via bus transportation. 66 Store started operating in 2010 with its address in Tanjung Balai City. 66 Store has a workforce of 25 people, the number of foremen is 2 people and the workforce is 23 people. In developing its business, 66 Store continues to strive to expand its target market to achieve its goals and tries to retain customers so they can be loyal to the company.

The large number of customers means that 66 Store requires a good system to support a better buying and selling process for the progress and development of the business. The implementation of a website-based Supply Chain Management (SCM) system at 66 Store will address various operational issues, such as a lack of integration in distribution, difficulties in generating reports, inefficient stock monitoring, and limited communication with suppliers and customers[1][2]. With this implementation, 66 Store can enhance operational efficiency, improve report accuracy, and foster better collaboration among stakeholders, contributing to improved business growth in the future.

Based on the interview with the business owner, several issues were identified, including a lack of integration, ineffective communication, poor inventory management, high operational costs, and limited visibility and adaptability to technology. Addressing these challenges requires innovation, collaboration, and technology-based strategies to enhance efficiency and sustainability.

From the analysis of the problems, a system is needed that can help 66 Store with the Supply Chain Management (SCM) method to assist the company in managing business distribution channels so that it can increase the company's productivity[3], simplify the buying and selling process with business distribution channels that are built from upstream to downstream in a sustainable manner[4][5].

Supply Chain Management (SCM) is a method for planning, controlling and running business production supplies[6]. This method includes the process of obtaining raw materials, production, and distribution to final resellers in the most economical and effective way [7][8]. SCM consists of three elements that are interconnected with each other, namely: supply chain network structure, member work network and relationships with other supply chain members[9].

Overall, SCM functions to plan, implement, and control the recording of demand, receipt, expenditure, and usage effectively and efficiently while monitoring the condition of goods and material flows in real-time, as demonstrated in previous studies such as Designing a Production Information System with SCM at a Confectionery Shop and Analysis of Supply Chain Management (SCM) Planning at PT. XYZ Bandung, West Java [6][10].

METHOD

The research method used in this research is a qualitative research method. The qualitative research approach is research that is used to investigate, discover, describe and explain a condition or phenomenon by collecting data by making observations and by means of de-

scriptions in the form of words and language, so that qualitative research is realistic[11][12]. Sources of qualitative data are observation notes and related documents in the form of writing or images.

To assist in preparing this research, it is necessary to have a clear framework in stages. The framework for this research can be seen in the picture:

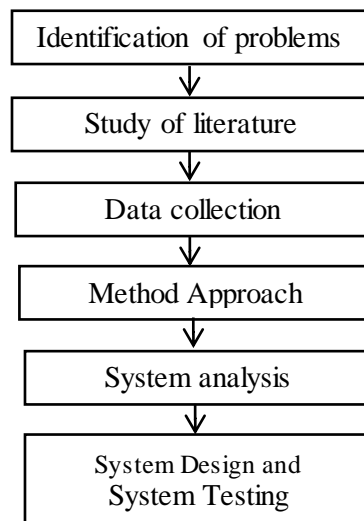


Image 1. Research Framework

The description of the framework in this research is as follows:

First, Identify the Problem. Problem identification is where the researcher must first determine what the problem will be researched. Here the researchers observed that there was no distribution route from upstream to downstream at 66 Store.

Second, Literature Study. The literature study carried out was by searching various written sources, in the form of books, journals, the internet and other references that were relevant to the problem being studied. So that the information obtained from this literature study can be used as a reference to strengthen existing arguments.

Third, Data Collection involves product data, stock data, customer data,

supplier data, user data, and transaction data. These data are used to analyze the supply chain flow, design the distribution network, forecast demand, and optimize inventory management at the website-based 66 Store. Data collection is a technique or method used by researchers to identify various issues at 66 Store and to design the store's distribution network using the SCM method. Here is the data that interacts with each other in the form of a class diagram:

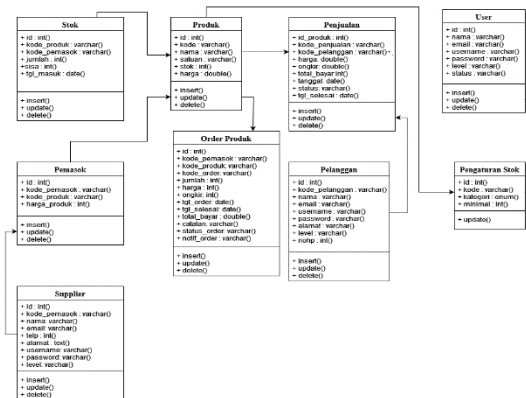


Image 2. Class Diagram

Fourth, method approach. This method approach is carried out by managing the activity process using the SCM method to create a new system at 66 Store. At 66 Store, this method is used to monitor stock in real-time, streamline supplier orders, automate transaction recording, optimize distribution, and generate reports to support business decision-making.

Fifth, Data Analysis. Data analysis is an activity of changing research results into information that can be used to make decisions in research. The way to draw conclusions can be done by estimating the results and analysis carried out on 66 Store using the SCM method.

Sixth, System Design and System Testing. This research carried out the development of the 66 Store system to de-

sign a distribution line system from upstream to downstream, using the PHP programming language and MySQL database.

Seventh, System Implementation. System implementation is a procedure carried out to complete the design in the approved system design document and test and use the new system. After testing the system that has been built and the results are satisfactory or in line with expectations, the system can be used by company owners in running their business and increasing their income.

RESULTS AND DISCUSSION

The supply chain management at 66 store starts with selecting reliable suppliers to ensure the timely delivery of high-quality products. In the distribution stage, products are stored in warehouses with an efficient inventory system and managed using technology to monitor stock levels. The transportation process then delivers the goods to stores or distribution points according to demand. Downstream, products are displayed and managed to ensure they are always available to consumers, with a well-planned sales strategy.

The SCM system testing at 66 Store showed positive results. The system successfully monitors real-time stock, streamlines supplier orders, automates transaction recording, optimizes distribution, and generates accurate reports. Additionally, the system remains responsive even with multiple users. This proves that the SCM implementation enhances operational efficiency, data accuracy, and supply chain process integration, supporting the business growth of 66 Store.

Admin Main Menu Page Display

The main menu can be seen and selected specifically by admins and owners. The main menu in this system aims to simplify the process of viewing and searching for information.

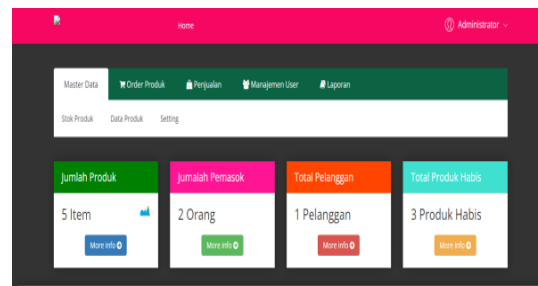


Image 3. Main Menu Page

Product List Page Display

The product list page aims to display product data as well as add, edit and delete product data.

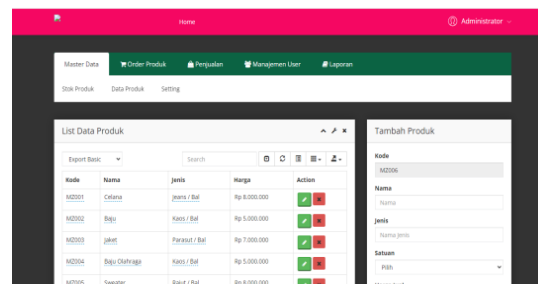


Image 4. Product List Page

Product Order List Page Display

The product order list page aims to display ordered product data as well as adding, editing and deleting product order data.

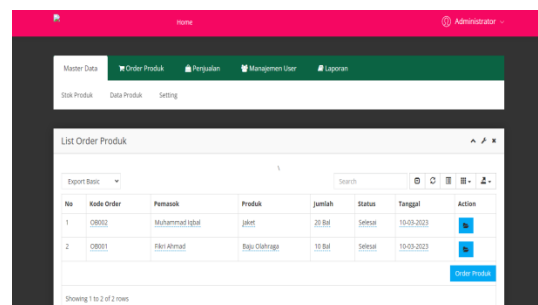


Image 5. Product Order List Page

Notification Settings Page Display

The notification settings page aims to set the minimum available product stock.

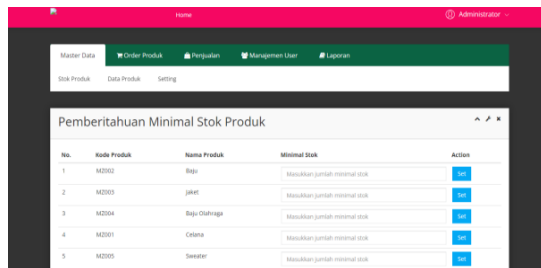


Image 6. Notification Settings Page

Main Menu Page Display (Supplier)

The main menu (Supplier) is a menu that can be seen specifically by suppliers. The main menu in this system aims to simplify the process of viewing and searching for information.

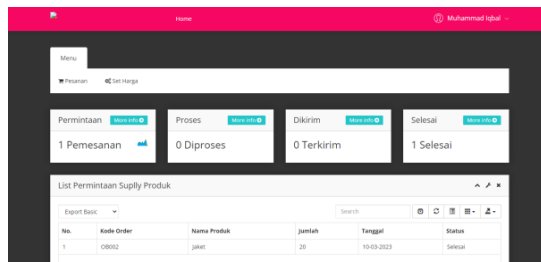


Image 7. Main Menu Page (Supplier)

Order Confirmation Page Display

The product order confirmation page is used by suppliers to confirm product orders made by the admin.

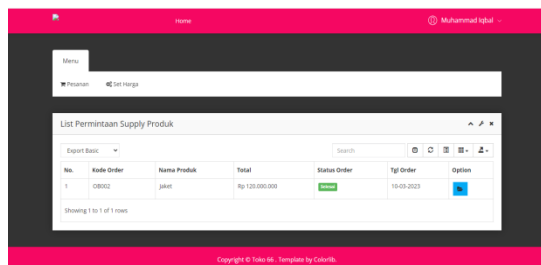


Image 8. Order Confirmation Page

Main Menu Page View (Customer)

The main menu (Customer) is a menu that can be seen specifically by Customers. The main menu in this sys-

tem aims to simplify the process of viewing and searching for information.

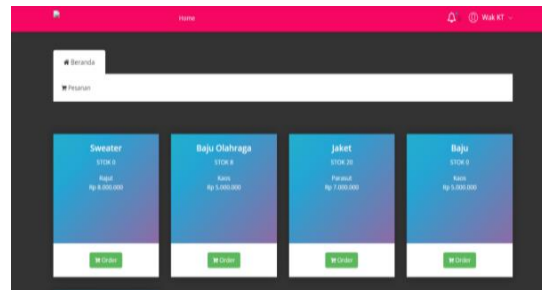


Image 9. Main Menu Page (Customers)

Product Order Order Page Display

The product request ordering page is used by customers to process product requests at 66 Store.

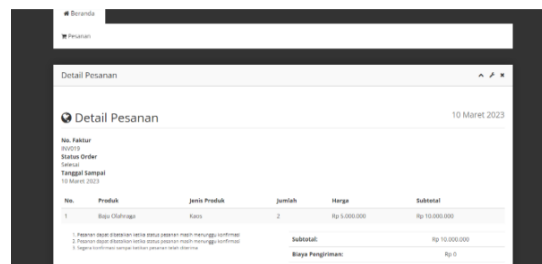


Image 10. Product Request Order Page

CONCLUSION

First, a system has been created that implements web-based Supply Chain Management to assist owners and admins in carrying out transaction flows from upstream to downstream. Second, a business process has been established from upstream to downstream which has been running in accordance with the SCM procedures that apply at the research object location and third, it provides information regarding the existence of sufficient product stock to ensure a good transaction flow from upstream to downstream.

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