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E-SCM (SUPPLY CHAIN MANAGEMENT) MANAGEMENT OF EDUCATIONAL OIL SUPPLY AT UD. HASTIN

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Abstract: Today's highly competitive trade competition requires business owners to be able to create products and services that are cheaper, better and faster so that they can satisfy consumers. UD. Hastin is a distributor of cooking oil located on Jl. Lt. Gen. Suprapto No. 16 Tanjung Balai – Asahan, North Sumatra. Cooking oil is a very high demand household product. Therefore, it is necessary to have good stock control so that there is no shortage or excess of stock. The problems faced by UD. Hastin currently has limitations in controlling inventory because it is still done manually, which causes slow and inefficient performance. The purpose of this research is to design a Supply Chain Management at UD. Hastin uses the PHP programming language and MySQL database by implementing a web-based system that will make it easier to manage oil supplies. The method used in this research is a qualitative method with literature and field studies. The conclusion, the E-SCM was built at UD. Hastin can avoid shortages and excess stock due to better management, smoother communication with suppliers, and information on UD. Hastin's stock items can be known in real-time. The product resulting from this research is the Stock Management Information System at UD. Hastin.

Keywords: edible oil; E-SCM; suppliers; supply

Abstrak: Persaingan dagang yang sangat kompetitif saat ini menuntut pemilik usaha untuk dapat menciptakan produk dan jasa yang murah, lebih baik dan lebih cepat sehingga bisa memuaskan konsumen. UD. Hastin merupakan distributor minyak makan yang berlokasi di Jl. Letjend. Suprapto No. 16 Tanjung Balai – Asahan, Sumatera Utara. Minyak makan merupakan produk rumah tangga yang sangat tinggi permintaanya. Oleh karenanya perlu pengendalian stok yang baik agar tidak kekurangan dan atau kelebihan stok. Permasalahan yang dihadapi oleh UD. Hastin saat ini adalah keterbatasan dalam mengontrol stok persediaan karena masih dilakukan secara manual, yang menyebabkan kinerja yang lambat dan kurang efisien. Tujuan dari penelitian untuk merancang Supply Chain Management pada UD. Hastin menggunakan bahasa pemrograman PHP dan database MySQL dengan menerapkan sistem berbasis web yang akan mempermudah dalam pengelolaan persediaan minyak. Metode yang digunakan dalam penelitian ini ialah metode kualitatif dengan studi pustaka dan studi lapangan. Kesimpulannya E-SCM yang dibangun di UD.Hastin mampu menggindari kekurangan dan kelebihan stok karena pengelolaanya yang lebih baik, komunikasi dengan supplier lebih lancer dan informasi stok barang UD.Hastin bisa diketahui secara real time. Dan Produk yang dihasilkan adalah Sistem Informasi Pengelolaan Stok Barang pada UD. Hastin.

Kata kunci: E-SCM; minyak makan; persediaan; supplier

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INTRODUCTION

The application of Supply Chain Management (SCM) is increasingly important in deciding to add products at this time, therefore SCM is not only related to product inventory, but also coordinates all processes within an organization or company which includes planning input (source) materials from the supplier to be finished goods, transportation of raw materials, distribution, warehousing, and payment of raw materials until the goods/products are consumed by consumers, is a concept used to integrate customers and their agents in supporting the company's business processes so that suppliers and companies are well integrated [1]. The goal is how to maximize the service of each component to be able to provide added value for consumers.

Many companies are currently implementing a Supply Chain Management system because traditional logistics management practices are no longer relevant today because they do not provide competitive value to the company. And another reason is that the SCM system supported by Information Technology is able to provide a competitive advantage for companies in order to provide the best products for consumers [2]. The SCM approach has been widely used as a method for advancing the industry in terms of competitive advantage and increasing service satisfaction for consumers, as well as minimizing company costs [3][4]. Thus it can be concluded that supply chain management is a key factor in the company's success in winning the competition, improving service and profits [5].

UD. Hastin a company engaged in the field of oil sales distribution which is located at Jl. Lt. Gen. Suprapto No. 16 Tanjung Balai – Asahan, North Sumatra led by Ahmad Bhaki Marpaung. The oil demand fluctuates a lot, sometimes it goes down and sometimes it goes up. These problems will certainly have an impact on UD's ability. Hastin in fulfilling consumer demand to continue to maximize customer service and satisfaction. Besides The demand for edible oil prices also fluctuated greatly. The following is the supply of edible oil from June to December 2022.

Table 1. June-December 2022 Oil Stocks

No	Month	Stocks (Ton)
1	June	128,3
2	July	103,6
3	August	190
4	September	169,7
5	October	94
6	Nopember	100
7	December	113

One of the problems that exist in the UD. This Hastin is related to his oil supply. Oil supplies must be re-checked routinely every day manually and it takes a lot of time, namely by recalculating the ledger records of oil that comes out, resulting in slow and inefficient performance. In addition, consumers are often disappointed because there is no oil stock they want to buy, so consumers feel dissatisfied with UD's performance. Hastin because of the high demand for oil from consumers, UD. Hastin was overwhelmed in controlling the stock of oil supplies, causing oil stocks to run out. Sometimes there is a high demand for edible oil from consumers so the stock is lacking and results in unserved consumers, and conversely, there is a decrease in consumer demand while the stock of oil is in the UD warehouse. Hastin is finished. This condition will certainly have a negative impact, namely

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a decrease in the level of service to consumers and the shift of consumers to other businesses. This should be considered by UD. Hastin in the future through better stock management.

This study aims to determine the information system at UD. Hastin currently applied as well as designing Supply Chain Management at UD. Hastin to make it easier for UD. Hastin in controlling oil stocks and informing data by designing a system using the Supply Chain Management method.

As a support for this research, some of the results of previous studies are used as a reference, such as research entitled Information Architecture on Inventory Management Systems (Case Study: UPT Puskesmas Pardasuka Pringsewu Hospital), and the results show that the SCM infrastructure that was built supports inventory management in puskesmas and make it easier to make inventory reports [6]. The research entitled Analysis of Supply Chain Management (SCM) Planning at PT. Xyz Bandung West Java with the results of determining suppliers at PT XYZ classified as very good in terms of product quality, competitive prices, credible supplier companies, efficient time, strategic location, and efficient costs [7]. Then the research titled is The Concept of Supply Chain Management (SCM) in the Production Process in Raw Material Inventory Management regarding the SCM Concept in the production process in raw material inventory management [8]. And the last reference about SCM is the research entitled Information System for Distribution of Goods Welding Workshops and Advertising Using the SCM Model, the results of the research also shows that information systems built with the SCM concept can provide convenience for companies in conducting ordering goods from suppliers also facilitates the distribution of finished products to consumers, because they are integrated into a system [9].

METHOD

The research method used in this study is a qualitative method with literature and field studies. The initial stage of this research was a literature study by collecting all data sources, both primary and secondary data. The next stage is conducting field studies beginning with determining research locations, respondents, or informants, then conducting observations and interviews [10]. Respondents in this study were five people consisting of one leader, one head of warehouse, one cashier, one person in marketing, and one person in archives.

In order for the research conducted to be more direct, efficient, and effective, a research framework was prepared as a step-by-step reference.

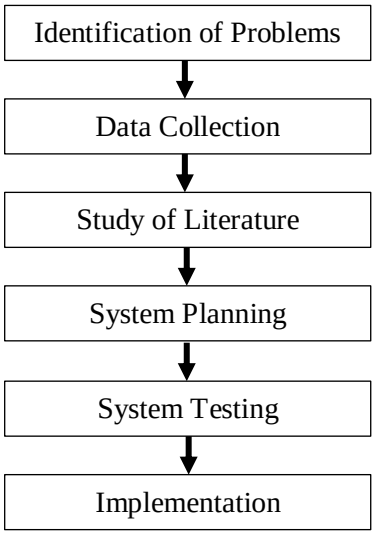

Image 1. Research Framework

Identification of problems

Problem identification describes the problems that exist in research. The identification of the problem in this study

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is that the supply of edible oil must be recalculated routinely every day manually by recalculating the ledger records for incoming and outgoing oil and UD. Hastin in ordering oil from suppliers cannot be predicted because there is no system for managing oil supplies, resulting in poor performance. less effective and efficient resulting in slow performance

Data collection

Data collection is done to find out which system is currently running. Data and information can be obtained through direct observation and interviews with UD. Hastin.

Study of literature

To support this research, it is necessary to conduct a literature study. At this stage, the researcher studied several kinds of literature such as e-books, journals, and articles related to the problem and research objectives.

System planning

System design is a description designed to overcome the problems faced by related companies, after conducting an analysis first. This 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 to be designed**.**

System Testing

After completing the system design, the system can be tested to what extent the system can be relied upon by UD. Hastin.

Implementation

Ready programs will be implemented whether the system that has been designed and tested can help in overcoming problems that exist at UD. Hastin

RESULTS AND DISCUSSION

Login View

The login display is a page for validating user accounts to be able to enter the system. In E-SCM (Supply Chain Management) Management of Cooking Oil Supplies at UD. Hastin has four users who can log in including Owner, Admin, Supplier, and Cashier.

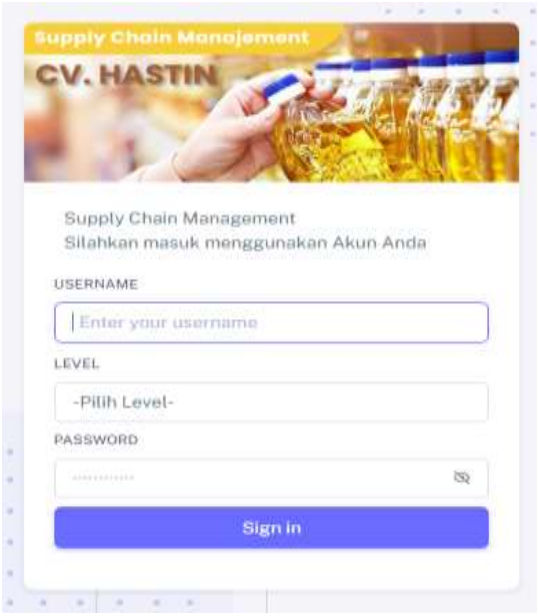

Image 4. Login Display

Owner Page view

On this page, the owner can view item data, item categories, supplier data, sales reports and requests and can change passwords.

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Image 5. Display of the Owner's Main Page

Admin Main Page Display

On this main page view, the admin can manage request data, approve offers, manage sales data, purchases, item data, manage minimum stock data, item categories, supplier data and manage user data, print reports sales, sales transactions, and demand reports.

Image 6. Display of the Main Admin Page

Supplier main page display

On this main page view, suppliers can manage demand data, offers, manage goods data, view partners' minimum stock, and change passwords**.**

Image 7. Supplier main page display

Display Main Page Cashier

On this page, cashiers can manage sales data, print sales invoices and sales reports, and change passwords**.**

Image 8. Display of the Cashier Main Page

CONCLUSION

E-SCM (Supply Chain Management) Management of Food Oil Supplies at UD. Hastin was built to facilitate communication and coordination between UD. Hastin and suppliers, so that they can assist in inventory management, monitoring oil stock levels, and providing sales reports. Apart from that, E-SCM (Supply Chain Management) can increase efficiency in inventory management so that inventory shortages can be avoided.

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