

# Portfolio Stock Management

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**Abstract**—To manage transactions involving consumer items, a stock management system is essential. A big-box retailer can run out of an essential item if stock control isn't taken care of. When it's time for a reorder, a good SMS will let the store know. Records of sales, both in and out, are also prepared by the stock management system. Making the preparations by hand is prone to inaccuracy. Error risk can be reduced with the use of an effective stock management system. A stock management system aids in tracking retail merchandise theft in retail establishments, offering important insights on shop profitability and the requirement for theft-prevention measures. In this situation, the Stock Management System can fulfill a number of purposes. It can assist a worker in creating bills.

**Keywords**—stock management system, java, product, big-box retailer, Records of sales, Error risk, tracking retail merchandise theft , supplier, bill, stock level.

## I. INTRODUCTION

A small or medium-sized business in India's manufacturing industry needs a stock management system. Having a reliable system in place to efficiently manage and track your inventory is crucial, especially considering the industry's fast-paced nature and the need to satisfy increased client demand. Inventory tracking, including location and condition tracking, is made possible by a stock management system. It also aids in tracking sales and determining which things are selling well and poorly. Furthermore, it assists you in generating purchase orders by giving you information about what products, when, and from whom to place an order.

A comprehensive stock management system ought to provide more than just product information and suppliers, but it should also include a system that

notifies you when the supply runs low. It should also have a unit for billing and creating reports. The only user types with access to this stock management system are staff and system administrators. Staff Users have restricted access, whereas the Admin User has complete control over all pages, forms, and features of the web application.

## II. LITERATURE REVIEW

Every company in the modern world strives to manage inventory levels between what is required and what is desired, keeping in mind the critical component of cost containment. Inventory control, often known as inventory management, is this kind of control. In essence, inventory is a company's stock of assets, such as resources and items. Inventory management focuses on the inventory's capacity, its location to ensure that it can be used when needed, and the raw material and product supply chain management. Demand forecasting, asset management of goods and raw materials, inventory carry cost, forecast, pricing, and validation of goods are all covered by inventory management. It also helps to project future demand. This facilitates communication and coordination between supply chain, production, and quality management for the upper level manager. After doing a thorough literature search in the areas of project management, project portfolio management, and especially project portfolio selection, we completed an exhaustive literature evaluation relevant books, theses, dissertations, periodicals, scholarly, and peer-reviewed papers were located in databases maintained by universities, academic publishers, professional societies, EBSCO, Emerald, Blackwell Synergy, JSTOR, and Science Direct.

These databases included the Academy of Management Journal, Journal of Management Decision, Harvard Business Review, MIT Sloan Management Review, International Journal Project Management, and others. In addition, references have been made to the handouts and teaching notes that instructors supplied during the whole Master of Science in Strategic Project Management - European course. The goal of the thorough literature review is to increase our comprehension of the theoretical and practical ideas that support the project portfolio selection process. Eight primary scholarly and applied domains relevant to our study topic were selected, scrutinized, and summarized in the following parts during the literature review: Relevant definitions; strategies for choosing a project portfolio; the decision-making process that supports the choice of a project portfolio; limited resources and the Theory of Constraints (TOC) and project selection; project categorization that aids in the choice of a project portfolio; and project portfolio selection models or procedures Utilizing information from financial statements for the years 2006–2011, the following topics were covered: g. Project portfolio selection process or framework; h. Challenges in project portfolio selection Tanzanian SMEs. To ascertain the effect of inventory conversion duration upon gross operating profit, regression analysis was used. The findings disproved the substantial negative linear link between profitability and the inventory conversion period.

Kasisomayajula Srinivas Rao (2014)

The topic of "Inventory Management in Commercial Vehicle Industry in India" was the subject of an analytical investigation. For the study, a sample of five businesses was chosen. The analysis came to the conclusion that there is a substantial correlation between inventory and sales across all units in the commercial vehicle market. An organization's ability to sustain and grow depends on its inventory management. The profitability of the company will increase with effective inventory management.

Florence Memba and Edwin Sitienei (2015)

A study on the impact of inventory management on the profitability of cement manufacturing companies in Kenya was carried out in 2015 by Edwin Sitienei and Florence Memba. The research findings indicate a

negative correlation between the gross profit margin and the inventory conversion period. Additionally, an increase in sales indicates that the firm's inventory levels are enhanced by its growth, which in turn drives increased profits because of optimal inventory levels. It is also mentioned that in order to increase profitability and lower the costs associated with keeping surplus goods in warehouses, businesses' inventory systems need to maintain proper inventory levels.

### III. METHODOLOGY

This document, which outlines every system need, is essential to the creation of the software development life cycle (SDLC). It refers to the basic during the testing phase and is intended for use by developers. Future modifications to the standards will require formal change approval procedures.

The Waterfall Model : The first widely used SDLC model in software engineering to guarantee project success was the waterfall technique. The entire software development process is split up into distinct phases according to "The Waterfall" methodology. Because of its plan-driven methodology, it has been one of the most widely used methodologies for web development projects for a number of decades.

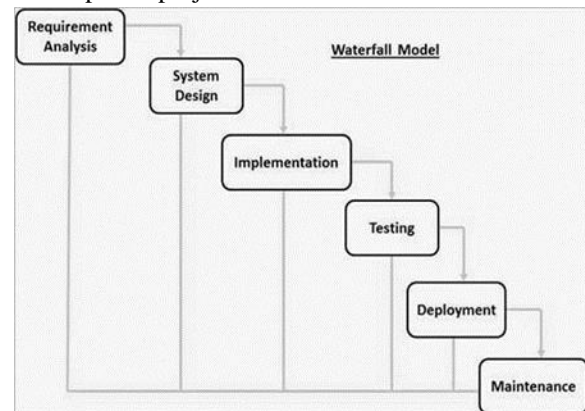


Figure 3.1: Waterfall Model

[https://www.tutorialspoint.com/sdlc/sdlc\\_waterfall\\_model.htm](https://www.tutorialspoint.com/sdlc/sdlc_waterfall_model.htm)

Requirements: During this phase, all potential requirements for the system were identified and recorded in a requirement specification document.

Design: In this phase, the system design was produced after a study of the first phase's requirement specifications. System design aids in determining the

overall system architecture as well as the hardware and system requirements.

**Implementation:** The system was first created in units, or discrete programs, using inputs from the system design. These units were then combined in the subsequent stage.

**Integration and Testing:** Following each unit's testing, all of the units created during the implementation phase were combined into a single system. The entire system is tested for errors and malfunctions after integration.

**Maintenance:** Since this is a university project, it was not feasible to obtain client input in order to assess the outcome from their perspective.

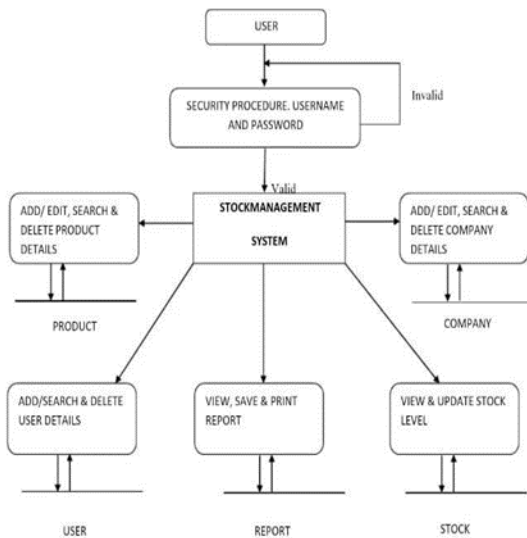


Figure 3.2: Top Level DFD

#### IV. TECHNOLOGY USED

The technologies used in the development of the stock management system include:

- ·Sublime, Notepad++
- ·XAMPP Server
- ·Google chrome, Firefox, Internet Explorer
- ·Bootstrap Framework
- ·Microsoft word for project documentation
- ·Query
- ·HTML
- ·PHP ·MYSQL

1. **PHP:** PHP is a server-side scripting language that may be used for general-purpose programming as well as web development. 2.1 million web servers and over 244 million webpages currently run PHP. The PHP Group currently produces the reference implementation of PHP, which was first developed by Rasmus Lerdorf in 1995. PHP is a recursive acronym that stands for PHP: Hypertext Preprocessor, as opposed to its original meaning of Personal Home Page. A webserver equipped with a PHP processor module parses PHP code and creates the resulting web page: Instead of requiring the user to open an external file in order to handle data, PHP commands can be directly integrated within an HTML source document.

2. **Web design:** uses HTML, CSS, and JavaScript. It makes applying style to HTML tags easier for web designers. A style sheet language called Cascading Style Sheets (CSS) is used to specify how a document written in a markup language should look and be formatted. The language can be used to any type of XML document, including plain XML, SVG, and XUL, although it is most frequently used to style web pages and interfaces written in HTML and XHTML. CSS style sheets are a fundamental component of the web, and they define the presentation of nearly every web page. The main purpose of CSS is to make it possible to separate document presentation—which includes things like layout, color scheme, and font selection—from document content.

3. **MySQL :** MySQL is a free-source database system that makes it possible to deliver dependable, performant, and scalable Web-based and embedded database applications at a reasonable price. A relational database system is what it is (RDBMS). It is a very efficient application that can grow to accommodate user and data demands. Because MySQL is developed in C and C++, it works with the majority of operating systems that are out there.

4. **XAMPP:** On a home Windows PC, XAMPP is an integrated development environment that includes the Apache HTTP Server, MySQL Database, PHP, Mercury, PERL, or Python. A free web server is Apache. Open source MySQL is a database. I've been working with PHP 8.0.0, MySQL 15.1, Windows 7 and XAMPP version 3.2.4 on my project.

V. RESULTS



Fig. 5.1 Signup & Login page

In the fig 5.1, it shows the Signup and login page for user along with interface of home page for website

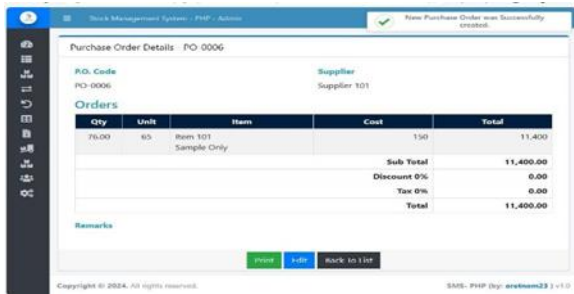


Figure. 5.2 Output: Data saved successfully message

In the fig 5.2, To know what happens if all the required field/s are filled correctly.

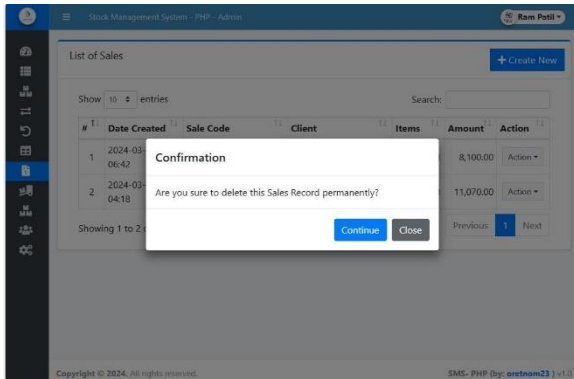


Figure 5.3 Output: Enter required field Message.

VI. CONCLUSION

The achievement of corporate strategy is largely dependent on the performance of project portfolio management, which is visibly aided by project portfolio selection. Organizations must create or modify a systemic approach to project portfolio selection if they hope to guarantee that successful

outcomes will emerge from the effective and efficient selection of a project portfolio. Three crucial components are integrated into this systemic approach: the selection committee, methodologies or models, and processes or frameworks. According to the findings of our study, sophisticated frameworks or procedures for choosing a project portfolio that have been suggested by experts and professionals perform best for mature Vietnamese private companies that are still in their infancy. Our findings, which show that the two private companies in Vietnam that we used as case studies have been using an innovative and adaptable strategy without an a suitable selection committee, strategic models or techniques, and an unambiguous procedure or structure for choosing their project portfolio. In the long run, this technique might not help these companies achieve their corporate plan as the business environment changes and competition gets more intense, forcing them to take on more projects in order to maintain their competitive edge. After analyzing the literature and looking at two situations, we have ideas that will hopefully help these two private firms as well as be practically applicable to other corporations operating in Vietnam's expanding economy. Additionally, the outcomes of the analysis and debate make a significant and fascinating addition to the methodology used to compare the best practices and practices of project portfolio management and selection in SMEs with strategies that concentrate on large, established businesses as noted in the literature, such as Cooper et al. (1997a, 1997b, 1998, 2000, 2001b) research.

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