INVENTORY MANAGEMENT SYSTEM
(IMS)
FOR FABRETECH RESOURCES SDN BHD

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ABSTRAK

Sistem Pengurusan Inventori merupakan sebuah platform bagi syarikat-syarikat untuk menjejaki peralatan serta barang di dalam perniagaan mereka Sistem pengurusan inventori sudah digunakan dalam pelbagai bidang seperti makanan dan minuman, pembuatan, pertanian dan lain-lain. Sistem inventori yang lebih canggih membenarkan perniagaan untuk melakukan urusan lain seperti pengurusan asset, sumber manusia dan lain-lain. Dalam projek ini, ia akan lebih menfokus pada mendirikan sistem inventori yang sesuai untuk Fabretech Resources SDN BHD di mana ia adalah syarikat pembinaan bersaiz sederhana yang beroperasi di sekitar di Lembah Klang.

ABSTRACT

Inventory management system is a platform for companies to track their supplies and materials needed to make or build a product to meet the customers` demand. Inventory Management system has been used in companies in many field like food and beverages, manufacturing, agriculture and more. Advanced feature in modern inventory system allow business to perform multiple function including managing the companies` revenues, human resources system and more. In this project, we will focus on designing and developing the suitable inventory system for Fabretech Resources SDN BHD which is a medium sized construction company based in the Klang Valley area

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LIST OF SYMBOLS

SBPWM	Simple Boost Pulse Width Modulation
ZSI	Z source inverter
R	Copyright trademark

LIST OF ABBREVIATIONS

HTML	Hypertext Markup Language
PHP	Hypertext Preprocessor
IMS	Inventory Management System
SAP	System, Application and Product
ERP	Enterprise Resource Planning
UAT	User Acceptance Test

CHAPTER 1

INTRODUCTION

1.1 Introduction

Inventory Management systems helps companies to perform their task easier and more convenient to do everyday business. It provides companies with platform to track their supplies, tools and materials to build a product to meet customer demand. The efficiency of the inventory system affects purchasing operation, organizational and business planning and other departments in the organization (L. Kelchner,2017). The inventory management system has several critical parts mainly incoming items, outgoing items, Item used and also relocation (Davies, 2014). An inventory management system help companies to maintain a more organized record of every resources and item of the organization, including the information of their vendors and project specifications, and also the total quantity of an item currently in stock (M. Atieh,2016).

Among the industry that depends on Inventory Management system, among it is manufacturing industry, Construction, Medical and many more. In construction, the Inventory Management System is mainly used by contractors that are dealing with projects on building houses, buildings, sites, Stadium and also landscape. The Inventory Management system allows the contractors to deal with their supplies, tracking the inventories, workers and also any on-going and tracking history of the previous project. Companies applied the inventory management software to avoid oversupplied of an item and also shortages. It is new a approach to organize inventory data that was generally saved in the form of spreadsheets.

Fabretech Resources Sdn Bhd is a local housing developer for Kuala Lumpur and Selangor area. They are specializing in in-house planning, construction, and renovation. Inventory system plays a very important part in their company as it helps them to track their inventories and supplies and also to help them manage their cost of materials. Plus, Inventory can also give a better insight into the management of the inventories. Among the problem the company is facing is in terms of managing their inventories especially tools and apparatus they are going to use for all of their project. Implementing Inventory system in their business would be one of the way to solve the problem, however not all of inventory system on the market is suitable for their company.

In this project, we will build a functional inventory management system for Febretech Resources Sdn. Bhd. for the daily usage of the company

1.2 Problem Statement

The existing Inventory management system has a few problems that need to be solved, there are a lot of general inventory system in the market but mostly are not suitable for a specific business use. There are some other problems existed especially human error and also how can system helps to reduce cost by tracking defect product due to time constraint.

Table 1.1 below shows a further observation of the problems :

Problems	**Description**	**Effect**
lack of specific industrial features in the existing system	The existing software are lacks of some features like tracking the item to its` own categories and also assigning all the items to its respective project. that are needed by a construction company and contractors to make their jobs easier.	Planning and Inspection has to be done regularly and this waste a lot of times and effort.
Error made by employees because they are unfamiliar with the system.	The staffs that are responsible for the transaction of items or action order must be given a necessary training.	Employee errors made by staffs can cause inaccuracies in the inventory records, which can an extensive amount of money..
system are not helpful in terms of tracking materials' shelf life.	There are some product that only can be used within certain period of time and it will be a lost in terms of cost if the products cannot be used anymore. Resources of the company should be optimized for the company to achieve cost effective operations.	Some materials and products cannot be used anymore after certain period of time.
Problems	Description	Effect
lack of specific industrial features in the existing system	The existing software are lacks of some features like tracking the item to its` own categories and also assigning all the items to its respective project. that are needed by a construction company and contractors to make their jobs easier.	Planning and Inspection has to be done regularly and this waste a lot of times and effort.
Error made by employees because they are unfamiliar with the system.	The staffs that are responsible for the transaction of items or action order must be given a necessary training.	Employee errors made by staffs can cause inaccuracies in the inventory records, which can an extensive amount of money..

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