Sales, Purchase & Production Management System for

SAMPATH PRODUCTS

Introduction

Sampath Products is a company that manufactures and distributes packets of **Biscuit powder** on a small scale in the area. It manufactures and distributes packets of various sizes following its own methods by procuring the required raw materials from a **few selected suppliers**. The primary targets for this are small **retail businesses and wholesale businesses** in the area. These buyers and suppliers are permanently identified.

Motivation for the Project

This company is currently being run completely **manually.** Due to the **increase in the number of orders** received and **increase in demand**, there is difficulty in store, handling data and information about the business. Basically, the following types of data can be identified in this business.

1. Data and information about **suppliers and supply process.**
2. Data and information related to the **manufacturing process.**
3. Data and information on **product distribution and sales.**

Currently, this data and information flows into this business as follows.

Supply Process

- The basic ingredients used for the products are bread and buns.
- There are three main types of ingredients.
  - ➢ dry bread
  - ➢ raw bread
  - ➢ bun
- A few specific bakeries in the area are used to get them.
- The ingredients needed for a week are supplied at once.
- Prior notice should be given to the bakery three days prior to supplying the ingredients.
- About 100kg of ingredients are issued by one bakery at a time.
- For that, the specific prices mentioned earlier are used.

Manufacturing Process

- Products are sold in packs.
- Powder is made using bread ingredients.
- The powder is stored separately.
- The powder is used to make packets.
- Several predefined packet sizes are available.
  - ➢ 100 g
  - ➢ 250 g
  - ➢ 500 g
  - ➢ 1 kg
  - ➢ 5 kg
  - ➢ 10 kg
- Each of these packets has an expiration date and is issued in that order.

Distribution and Sales Process

- These products are sold to wholesale and retail stores.
- All orders are picked up before delivery and then transported using the company's own vehicles.
- All transactions are done in cash.
- New packets are exchanged for damaged packets.
- Products left after sale will not be accepted.

Due to the increase in the number of orders that are increasing day by day and the fact that this procedure is almost completely manual and not automated, many problematic situations arise.

- ❖ Lack of proper understanding of the quantities of raw materials required.
- ❖ Delayed errors in placing orders for raw materials
- ❖ Difficulty keeping track of leftover biscuit powders to pack.
- ❖ Expired packets left due to non-release of batches.
- ❖ Lack of understanding about the quantities of products required for distribution.
- ❖ Absence of a specific, efficient system for accepting order.

To store and handle this data and information and to resolve these problems, it is expected to create a web application. Objectives of the application are given below.

Objectives

The aim of this project is to help the existing business activities of the business by giving correct and efficient answers to the weaknesses mentioned above.

All the activities mentioned above are carried out by the following sections available in this application.

- Providing all the information to the user by logging into this application in a very short time.
- All data is stored transparently and accurately.
- Increasing the reliability of all transactions made.

Supply Management Sub-System

- Notifying when ingredients are low to a certain amount.
- Maintaining supplier details. Obtaining information about the cost of raw materials.
- Getting information about the number of raw materials needed for future products.

Process Management Sub-System

- To get an understanding of the existing prepared biscuit powder and the number of packets of each size.
- Knowing about the expiry dates of the currently remaining packets.
- To know about the total amount of packets required for orders and their quantity.
- Getting data about the value of each packet.

Distribution and sales Management Sub-System

- Taking notes on customer orders.
- Taking note of customer information.
- Recording information about the quantities of packets sold and the income.

Scope

Supply Management Sub-System

- Supplier Management.
- Purchase Order Management
- Material Receive Note Management
- Material detail and Inventory Management
- Quotation Request Management.
- Supply Payment Management

Process Management Sub-System

- Material Analysis Management.
- Production Order Management.
- Product detail and Inventory Management

Distribution and sales Management Sub-System

- Customer Management.
- Customer Order Management.
- Customer Invoice Management
- Delivery Management
- Payment Management

Authentication and Authorization Management

- User Management.
- Privileges Management.

Critical functionalities for project:

- Authentication and Authorization Management
- Purchase order management.
- Material Analysis Management.
- Production Order Management.
- Customer Invoice Management
- Material Receive Note Management