

## **CHAPTER 1. INTRODUCTION**

### **1.1 Background of the Project**

The development of the needs of the Factory Resource Monitoring System Website is carried out to create an up-to-date and standardized information system that facilitates the needs of factories to increase expertise and technical skills in their respective fields of Regional Technology Development Sector.

Monitoring and evaluation of activities is a very important series in the development of factory technology. A factory can survive and achieve its goals if managed properly and has a plan as well Good raw material control in all fields especially in raw material monitoring. Factory requirement for apply such planning and control to prevent irregularities, deficiencies, and excess raw materials to reduce losses on factory.

The factory is a company engaged in the industrial sector. In monitoring the demand and delivery of raw materials. The factory does this by registering the goods to be shipped and the goods to be requisitioned using Microsoft Excel. However, the system that is running cannot run optimally well, this is because when the production section requires information on requests and delivery of production raw materials, the admin must open the existing Microsoft Excel to search for data one by one, the process takes a long time, so the system runs this is not going well. Experienced production admin.

Constraints in controlling production raw materials in production area because there is no system that can Monitoring demand and delivery of raw materials production automatically so that reports are generated not in accordance with the occurrence of transactions in the field.

### **1.2 Problem Statements**

How to implement a system at a factory that aims to collect data on raw materials so that there are no irregularities, shortages, and excess of raw materials to reduce losses at the factory. The previous raw material data collection system still used computer application assistance, namely Microsoft Excel. But, when

searching for data, it takes a lot of time to search for data one by one, for that we need an information system that can overcome these problems. With this system is expected to facilitate users in doing the job. So, some of the problems related to this system are:

1. Difficulty to manage and searching for large amounts of data.
2. Difficulties in controlling or monitoring demand and delivery of raw materials automatically.
3. Difficulties to know stock in the warehouse several requests and returns of raw materials and delivery status as well as the amount of stock of raw materials.

### **1.3 Objective of the Project**

The aims of this research are:

1. Develop systems for manufacturers to manage and facilitate search of large volumes of data.
2. Automatically control and monitor demand and delivery of raw materials.
3. To display dashboards stock in warehouse multiple requests and return raw material also roadmaps and raw material stock quantities.

### **1.4 Scope of the Project**

#### 1.4.1 User Scopes

- a. Users can login and logout on the system.
- b. Users can input raw materials into the system.
- c. Able to manage goods, WI (Warehouse issue), and travel documents.
- d. Can do delivery of raw materials.
- e. Can accept returns.
- f. Can make reports.

#### 1.4.2 Admin Scopes

- a. Admin can do CRUD (create, read, update) data.
- b. Admin can make changes to appearance of the information system.

#### 1.4.3 System Scopes

- a. There are login and logout features for users and admins.

- b. There is a data input feature to input raw materials.
- c. There is a display to show raw material requests.
- d. There is a feature for sending raw materials.
- e. There is a feature to view the activity history of raw materials.

### **1.5 Significance of the Project**

In this project, the significance of this study includes:

- a. An information system capable of searching data in large amounts of data.
- b. An information system capable of controlling and monitoring demand and delivery of raw materials.

### **1.6 Assumptions and Limitations**

#### 1.6.1 Assumptions

Contributing to improving the quality of processing resources in factories, monitoring, and managing registration data and monitoring product marketing so that the information produced is more effective and efficient.

#### 1.6.2 Limitations

This website is only limited to facilitating factories in controlling or monitoring demand and delivery of raw materials automatically.