

# CHAPTER I

## INTRODUCTION

This chapter includes the research background, problem formulation, research objectives, research scopes, and report outline.

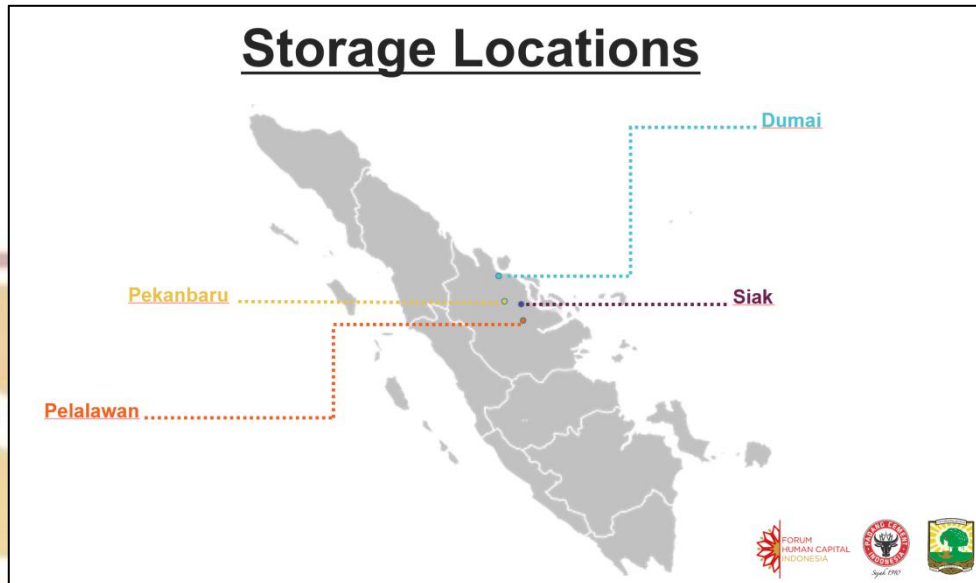
### 1.1 Background

PT. Semen Padang is one of the biggest state-owned enterprises in Sumatra, Indonesia. The company was opened around 1910 and was once confirmed to be the biggest factory controlled by regional ownership outside Jawa. But after it became a state-owned enterprise, some sectors still need better optimization. PT Semen Padang is engaged in the manufacturing sector. PT Semen Padang produces many cement types: Portland, Portland Composite Cement (PCC), and Portland Pozzolan Cement (PPC).



Picture 1.1 Types of PT Semen Padang products

To support the distribution of products, PT Semen Padang has four warehouses in Riau Province to store the types of cement. Those warehouses are located in Dumai, Pekanbaru, Pelalawan, and Siak.



**Picture 1.2** Storage Locations of Outbound Inventory Unit

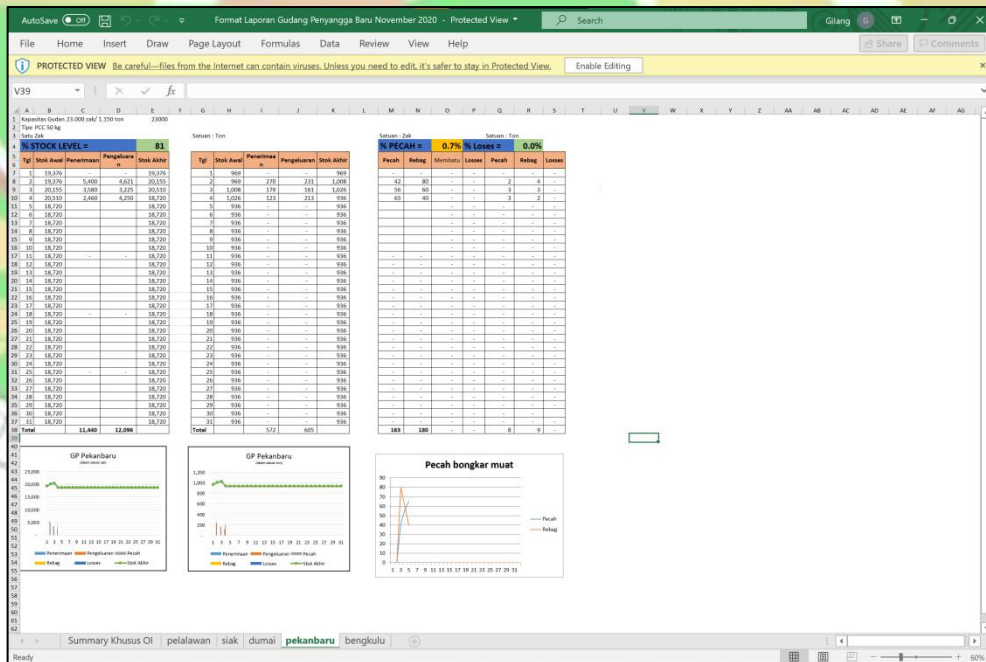
To manage the warehouses, PT Semen Padang needs inventory management. Inventory Management is a decision-making activity of a company that can optimally cover the needs for materials or commodities for both production and sales business activities with the lowest possible risk. PT Semen Padang has a unit that controls inventory management activity in the warehouse called Outbound Inventory Unit.

Outbound Inventory is a unit in PT Semen Padang that manages the cement product stock and delivery process outside the main factory. The Outbound Inventory Unit's main office is on the 2<sup>nd</sup> floor of the Semen Padang Headquarters building in Jalan Raya Indarung, Padang City. While doing the inventory management, the staff coordinates with the Transportation Unit. Outbound Inventory requests the transportation unit to deliver a certain amount of products to the warehouse and make the reports. Following is the appearance of the sample reports.

Tgl	DC Siak			DC Pelawan			DC Pekanbaru			DC Bengkulu			DC Dumai		
	PO	Zak	Realiasi	PO	Zak	Realiasi	PO	Zak	Realiasi	PO	Zak	Realiasi	PO	Zak	Realiasi
10/1/2020	5100050315	2,640		5100050314	7,920	1,600	5100050313	22,500	2,080						
10/2/2020			1,200			800			4,360						
10/3/2020									4,220						
10/4/2020			1,200			3,200			4,800						
10/5/2020						2,000			1,600						
10/6/2020						400			400						
10/7/2020						400			4,780						
10/8/2020	5100050349	3,060		5100050351	7,920		5100050350	22,500	1,700						
10/9/2020			1,600			1,600			6,820						
10/10/2020															
10/11/2020															
10/12/2020															
10/13/2020															
10/14/2020															
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10/26/2020															
10/27/2020															
10/28/2020															
10/29/2020															
10/30/2020															
10/31/2020															
<b>Total</b>		<b>5,700</b>	<b>4,000</b>	<b>Total</b>	<b>15,840</b>	<b>10,000</b>	<b>Total</b>	<b>45,000</b>	<b>30,760</b>	<b>Total</b>	<b>0</b>	<b>0</b>	<b>Total</b>	<b>0</b>	<b>0</b>
<b>Sisa</b>		<b>1,700</b>		<b>Sisa</b>	<b>5,840</b>		<b>Sisa</b>	<b>14,240</b>		<b>Sisa</b>	<b>0</b>		<b>Sisa</b>	<b>0</b>	

**Picture 1.3** Report of the delivery amount requested by Outbound Inventory to Unit of Transportation

Besides making a delivery report, Outbound Inventory also makes a daily report of products stocked in the warehouse.



**Picture 1.4** The appearance of the product stock report



Every company has a private information system to support operational activities such as making daily reports. Information System is a system in an organization that meets the needs of daily transaction management, supports operations and strategic activities of an organization, and provides certain required reports for outside parties. (Hutahaean, 2014). The importance of information systems is to make the job more effective and efficient. Also, to make it easier to facilitate the information flow of every connected user.

According to **Picture 1.3** and **Picture 1.4**, In giving the information to the Outbound Inventory Unit supervisor, staff will send the reports through e-mail every morning since Outbound Inventory was established in late 2019. The unit has a shortage of facilities. Even though PT Semen Padang is one of the biggest manufacturing companies in Indonesia, the company should have a private information system to support its daily activity. Based on the background, the company necessarily designs an information system.

## **1.2 Problem Formulation**

The problem formulation of this research is how to develop an information system that can help Outbound Inventory Unit manage inventory and make daily reports.

## **1.3 Research Objective**

The research objectives are to make an information system to help Outbound Inventory Unit manage inventory and make a daily report.

## 1.4 Research Scope

The scopes of the research are:

1. The data used are from last year
2. The focus of the design of the information system is inventory management and daily report appearance.

## 1.5 Outline of Report

The Outline of the report is written as follows:

### CHAPTER 1 INTRODUCTION

This chapter describes the background of the research, the problem formulation, the objective, and the research's scope.

### CHAPTER 2 LITERATURE REVIEW

This chapter describes all the theories related to the research.

### CHAPTER 3 RESEARCH METHODOLOGY

This chapter explains the steps of the research.

### CHAPTER 4 DATA COLLECTING AND DATA PROCESSING

This chapter contains the data collected during the research process as well as the results of the data processing that will be used and needed in the analysis and interpretation chapter.

### CHAPTER 5 ANALYSIS

This chapter contains an analysis of the discussion based on the results of data collection and processing that has been carried out previously

### CHAPTER 6 CLOSING

This chapter outlines the conclusions that can be formed based on data analysis and interpretation, as well as inputs supplied based on the study outcomes and for the enhancement of the next final project research.