# CHAPTER 1 INTRODUCTION

## 1.1 Background

In the era of Indonesia's country life, which continues to advance and develops, a significant number of business actors also try to open businesses in various sectors. Both large companies and small companies strive to be able to compete in the market for earning profits. To run a business, it is essential to apply the 5M: man, machine, material, money, methods, and management.

The need of having enough amount of materials for creating products in every industry is very crucial. In general, the benefits received by companies and businesses are for maintaining optimal inventory of goods and to achieve the most minimum total costs. If the minimum total cost is obtained, it can certainly help increase company profits. It is also believed to reduce the possibility of the unavailability and overstock products conditions, which will have fatal consequences for the company. Therefore, it is a must for a company to have inventory control in the business.

Inventory refers to as stock of materials used to facilitate the manufacturing of goods or satisfy customer needs (Sabure, 2020). Inventory has a close relationship with the raw material of making a product. This relationship is due to those two things are related and have a significant impact on each other. The raw materials themselves also have different types depending on the company that needs them. Some interpret raw materials as unprocessed materials, semi-finished materials, and finished materials.

Out of stock creates constraints in the production process due to the lack of materials needed. The company will not meet the existing market demand since it cannot fulfil the production/ demand processes. The production system's performance will undoubtedly be hampered because there are no sufficient materials that can be processed. Therefore, proper control of stock is essential and must be implemented in companies and businesses.

Adhum Cafe is a Small Medium Enterprise (SME) that runs in the food and beverages business sector. Adhum Cafe currently experiencing problems related to inventory control of the raw material. Adhum Cafe is presently experiencing difficulty in determining the purchase of Curhat sweetened condensed milk. This

resulted in Adhum Cafe experiencing out-of-stock on the primary raw material for beverages, namely sweetened condensed milk. The problem is that the customers at Adhum Cafe only want to order drinks if Adhum Cafe uses the sweetened condensed milk they used to use from the very beginning, namely Curhat brand of sweetened condensed milk. This is because the taste produced by the Curhat brand of sweetened condensed milk has become an authentic taste for Adhum Cafe, the target of loyal customers.

This inventory problem occurred due to the stock information system implemented in Adhum Café by the owner using the guessing technique to order the amount of condensed milk. They will reorder Curhat sweetened condensed milk whenever they saw the product is nearly out of stock. So that if this problem goes on continuously without having a solution, it will lead to a more prominent and more crucial effect for Adhum Cafe. Since this problem leads to the loss of profit and getting complaints from the customers.

Several methods will solve this out-of-stock problem that occurred in Adhum Cafe. Namely, the way of Economic order quantity (EOQ) and Reorder point (ROP). Order quantity economy itself is an inventory management method that determines the number of orders/purchases that must be made and how many quantities must be ordered to minimise total costs. In this method, it will be determined how much sweetened condensed milk should be ordered.

The reorder point method is a continuous method from the Economic order quantity calculation results to determine the point amount to reorder sweetened condensed milk before the stock in the warehouse runs out. Reorder points are usually used to determine the minimum inventory limit in the warehouse. If the amount of stock has reached the minimum reorder point, the company must immediately place an order again. This method is considered appropriate to the existing problems and will help the difficulties faced by Adhum Café.

The increasing competition in the café industrial sector from year to year makes food and beverages industry business need to improve their quality and services. In this era of intense competition in the Cafe industry, Adhum café still needs many improvements to be one of the famous cafés in Batam. But, controlling the inventory of raw materials at Cafe Adhum is challenging and hinders achieving the profit target.

This research will use and implement several existing methods to solve the out of the stock problem that occurred in Adhum Cafe. This research was conducted to determine the exact number of orders in each purchase of raw materials for Curhat sweetened condensed milk. Therefore, this undergraduate thesis is completed under "Inventory Control of Curhat Sweetened Condensed Milk at Adhum Café".

#### 1.2. Research Problem

Adhum Café experienced an inventory control problem on deciding how much and what time they should reorder the Curhat sweetened condensed milk. The problem formulation is to solve the stock product of Curhat sweetened condensed milk at Cafe Adhum by providing when and how many products should be ordered.

# 1.3. Research Objectives

The objectives of the study are: TMA JAVA

- a. determining inventory policy for Adhum Café to know the available inventory on Curhat condensed milk at the moment
- b. proposing a simple inventory system on Microsoft Excel spreadsheet for Adhum Café for consideration in reordering the amount and the time of Curhat sweetened condensed milk

### 1.4. Research Limitation

The scope of problems that will be discussed in writing this report are:

- a. the information system that is designed in this thesis is according to the situation in Adhum Café. This design of this problem solving cannot be applied equally to another object and situation
- b. data and issues to be discussed in this thesis are purely from the physical observation and recorded data collected directly from the owner of Adhum Café.