

# CHAPTER 1

## INTRODUCTION

### 1.1. Background

In this modern age, there are many kinds of business whether it is a creative or an old school business. One of the examples of the old school business is a wood workshop business. A wood workshop is still a huge business in this era because it still has many customers that are willing to buy its product because of the price, reliability, or even preference. Having a large market, the wood products industry surely has many participants making the competition in the industry is considerably high. To increase the attractiveness of the products, the price of the products plays an important part in attracting customers especially in Sangihe Island which is located near the border of Indonesia and the Philippines where most people have lower income than the people in Java. Besides the price, another factor that can satisfy customers is the quality and the reliability of the time of the product completion.

The research will be conducted at Setiawan Mebel in Tahuna. The Wood workshop is located on Jl. Tapuang Muka, Tahuna. The workshop is open from Monday to Saturday from 08.00 am to 05.00 pm. The number of workers in "Setiawan Mebel" is 4 people. The workers are paid based on piece work payment system, and this means that they are paid by the amount of jobs they finished and the workers are doing the all of the processes on their own from the start to finish. Products made at Setiawan Mebel vary from chairs, tables, dressers, doors, windows, and other wooden products.

The workflow for Setiawan Mebel starts when customers come to the workshop and places an order and talk about details to the owner or the person in charge to determine if the order is feasible or not. When the order is feasible, the customers make the down payment, and then the order receiver will record the customer's order. Then, the owner or the person in charge will make the scheduling for the product. Then the workers work on the order based on the schedule made. After the product is finished, the product will either be taken by the customer or sent to them. The payment for the order can be done by installment or a single payment to the owner's account.

Based on the interview with the owner, one of the main problems is customer dissatisfaction of the late products completion and/or delivery. The delay on work and delivery completion can result in decrease customer satisfaction and trust, which will make the customers even the old ones, will pick other alternatives if available.

The owner said that most of the tardiness and delay happened because sometimes there are overflow of jobs that needs to be done, while the overflow of jobs happened because there are delays during the production processes that reduce the work efficiency.

Based on the observation done on the workshop, there are several problems that reduce the work efficiency and create wastes in the production floor. There are several unnecessary elements such as: wood scraps, WIPs, tools, materials, and other scraps that takes up space inside the workplace that hinder the work and increase the production time, the wooden scraps mainly takes up a lot of space and hinder the mobility of workers and congestion on a machine's wood scrap thrower will obstruct the job and result in a machine down time especially if there is huge pile up of scraps result hindered motion of the workers.

There is also no place for the workers to store the tools needed to do their job, resulting in workers need to search for tools needed to do their job resulting in additional unnecessary motion in processing. Another problem is that there is no clear scheduling on machine usage, the 1<sup>st</sup> come 1<sup>st</sup> serve rule apply on the machine usage. This means that when more than 1 worker need to use need to use a machine, they need to wait for the other to finish processing in order to do their job, and this can delay the production thus increasing the production time.

There are 3 stakeholders that are in the company which are:

1. The owner, with better productivity and efficiency, the owner can keep or even improve the customer satisfaction and trust toward the company resulting in loyal customer base
2. The customers, the customer want their product to be delivered or completed on time as they might need it especially a construction projects that also have their own customer to satisfy.

3. The workers are paid by the amount of product they make, meaning that the workers will benefit from increased productivity because it correlates directly into their wage.

The owner also said that the solution should not expand the workplace, increase the workforce, and can be done cheaply.

## **1.2. Problem Formulation**

Based on the aforementioned background of Setiawan Mebel, the problem is how to reduce the customer complaint in order to increase the customer satisfaction and trust to gain more loyal consumer base.

## **1.3. Objective**

The objective of this research is how to reduce or minimize the customer complaint by reducing the production time by considering the factors such as, the owner has no desire to expand and limit the cost of solution implementation to be at maximum Rp2.000.000,00, and the workers prefer no more additional workers as it will increase the internal competition for orders assignment. On the customer side, the customers want the company to increase the production capability as to increase the company's output to complete production on time; the customers also want the tardiness to be limited to a maximum 2 days and ideally on time.

## **1.4. Scope and Limitation**

The following are some of the limitations of this research:

- a. The data collected by looking through the order history of Setiawan Mebel and observation starting from September 2020 to October 2020.
- b. The observation object is limited to chair and table pair because it is the most numerous and uniform in the production process because of the standard design.