# **CHAPTER 1**

#### **INTRODUCTION**

#### **1.1 INTRODUCTION**

International competition and customer's demand are changing from time to time. Manufactures have to change their business strategy and factory management in order to adapt to rapid change. As the international competition grows faster, this will lead the traditional types of manufacturing paradigms are being opposed and forced the new manufacturing concepts are being developed.

Nowadays, the manufacturers are struggling in the global market in order to reduce the operating cost and also eliminate waste as part of the competitiveness in the industry. As a result, a tool called Value Stream Mapping (VSM) had been introduced to improve and increases the factory productivity through elimination non value added activities. Besides that, VSM also provides a clear pictures how to improve the process by eliminating waste (non-added value) in the factory.

In addition, VSM is the action to identify value added and non-value added activities which one currently required to bring a product through the main flow essential to every product. The flow is starting from the raw material until delivery to the customer. Along this path, VSM is used to eliminate the waste such as the lead time (waiting time) as to increase the productivity.

Therefore, this study will examines and improve production lead time in Small and Medium Enterprise (SME) by using Value Stream Mapping (VSM) technique at Zest Venture Sdn. Bhd (Kadlawo).

### **1.2 PROBLEM STATEMENT**

Most of the processes in the factory or company are occupied by non-value added, so a clearly attention is needed to eliminate the waste in order to improve the productivity. There are a few problems faced by the SMEs such as:

- Lack of knowledge
- Lack of resource like skill or financial

Therefore this studies could assist SMEs company to learn and explore a new system for their benefit such as improve company's productivity and efficiency.

## **1.3 OBJECTIVES**

The main objectives of this study are:

- To improve production lead time by using VSM
- To eliminate non-value added selected production line or model
- To propose new production process flow

### **1.4 SCOPE OF STUDY**

The scope of this study is to analyze the process flow of style 3 cards. This research will concentrate on production lead time for the process flow of style 3 cards. Besides that, this paper also will include cycle time, available time, Uptime of the process flow. Then,

after the overview of process flow, the waste can be eliminated at the current state mapping. The future state mapping will be created after the new improvement is made.