CHAPTER 1

INTRODUCTION

This Chapter will cover the background of project, problem statement, objective, and project scopes.

1.1 BACKGROUND OF PROJECT

In the modern world at this time, the manufacturing industry is one of the key sectors in the economy increased. All products are manufactured has been keen to give and receive extensive and satisfying demand from customers. Dealing with the ever-constant competition not only can provide good results and satisfying, but it can improve the quality of excellence in management and can play the important role sector economy at the industrial.

The project was corporate with TT Electronics Sdn Bhd. This company is located in the Jalan Tanjung Api, Kuantan, Pahang Darul Makmur. The company produces automotive electronic components such as Encoders, Hybrid Microcircuits, Magnetic Components, Panel Potentiometers and others. The product is sold for the customer in area Malaysia.

There are four department at TT Electronics which are Production Magnetic Line which focus on standard and customize design of transformers and indicators product, Production M44 Potentiometers which produce variable resistor 44 trimming potentiometers, Production CNC area that have several CNC machine which capable to
wind/form flat/rectangular wire, Production Moiled Inductor that produces high performance inductor into iron powder press and Production Agilent which consist of production cell that produces transformers.

The discussion and interview has been made with the production manager and supervisor at the TT Electronics where some observation in company was identified. The production line of make a product HA00-10502LF is at Production Magnetic Line is the one target to improve where the production that produced not meets customer demand.

1.2 PROBLEM STATEMENT

In the semiconductor industries such as TT electronics Sdn Bhd, the lack of using lean tools exists because of lack of confidence use lean tools in these companies. The main problem that often occurs on the assembly line is a non-value added and high processing time. This will lead to bottlenecks in certain processes and cause inconsistent process flow.

The problem of low productivity will also occur when the cycle time exceeds the takt time, this will create problems for the company not being able to meet customer demand due the inconsistent of production. Besides that, poor workstation and manpower and delay on the production of this line often occur in production.

1.3 OBJECTIVE

The objective of this study is:

i. To study existing process in product HA00-10502LF
ii. To reduce cycle time and non-value added in the process
iii. To improve productivity using Value Stream Mapping
1.4 PROJECT SCOPES

This study will analyze an industry specific problem in this company to increase the productivity and solve the alternative solution.

i. This study is conducted at TT Electronics Sdn Bhd which located at Kuantan, Pahang.

ii. The process flow of production will be identification using method Value Stream Mapping by draw a current state map, it can be calculated cycle time and non-value added time.

iii. This study evaluates and implement by lean tool at future state map and propose improvement using simulation.