CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

This chapter will present a brief explanation of the methodology applied in carried out the project from the beginning until the end. In this chapter, the flow chart of the operations involved in order to complete this project displayed and explained briefly. The methodology of the research consists of several stages as described in Figure 3.1 in this chapter.

3.2 PROJECT METHODOLOGY

Based on the project title, ‘Simulation Modeling and Analysis of Productivity Enhancement in Manufacturing Company Using ARENA Software’, the project background, project objectives, and project scopes were identified and determined. Then, the study on the literature review of the project was implemented in order to receive a better understanding regarding the project. For this research, a manufacturing company was selected as the subject research which is an automotive component vendor that producing pistons.
Figure 3.1: Flowchart of project methodology

START

Collect data from the production plant

Complete data?

YES

Study & analyze the data

Develop the existing layout design manually

Convert the existing layout design into the ARENA simulation

Run the simulation

Summarize the simulation result

A

NO
Figure 3.1: Continued