CHAPTER III

RESEARCH METHODOLOGY

3.1. Research Object

The focus of this research will be in the development of self-service business intelligence. This research will be conducted using an open source database, called as Adventure Works that published by Microsoft. Adventure Works is a fictional bicycle wholesaler.

3.2. Literature Review

Literature review is conducted in order to enhance the research. Deductive and Inductive study are applied in this research. Deductive study is conducted to obtain the basic concept of theory related with this research, while the Inductive study is conducted to map the related research and see the position of this research compared among previous research.

3.3. Data Collection

Data collection for this research is using secondary data. The secondary data is data that obtained from the literature or indirect observation of conducted by researcher. Data that collected is the database of the company namely Adventure Works. This database is available for public (open source) that published to perform system testing. Besides, this research also used several literatures, it is being used to compile the information that relevant with the topic that discussed in this research.

3.4. Data Processing

Data processing will briefly explain how to build the BI system after data collecting process was performed. There are several software that will be used to perform data processing such as Microsoft SQL Server, Microsoft Power BI Desktop, Microsoft Power BI Service, etc.

3.5. Discussion

After the system had been build, then discussion will be conducted to discuss the problem formulation and the result of data processing. Discussion will be started from the architecture that needs self-service BI system until the answer of the problem formulation including the building process and report dashboard.

3.6. Conclusion and Recommendation

This section will briefly answer the question stated in problem formulation formulated in chapter 1. Besides, this section also gives some recommendations that might be used to further research.

3.7. Research Flowchart

This research flowchart is used to show the steps of system development. Research flowchart explains the steps of conducting research from the beginning until the end of the research. The research flowchart is shown in Figure 3.1 below:
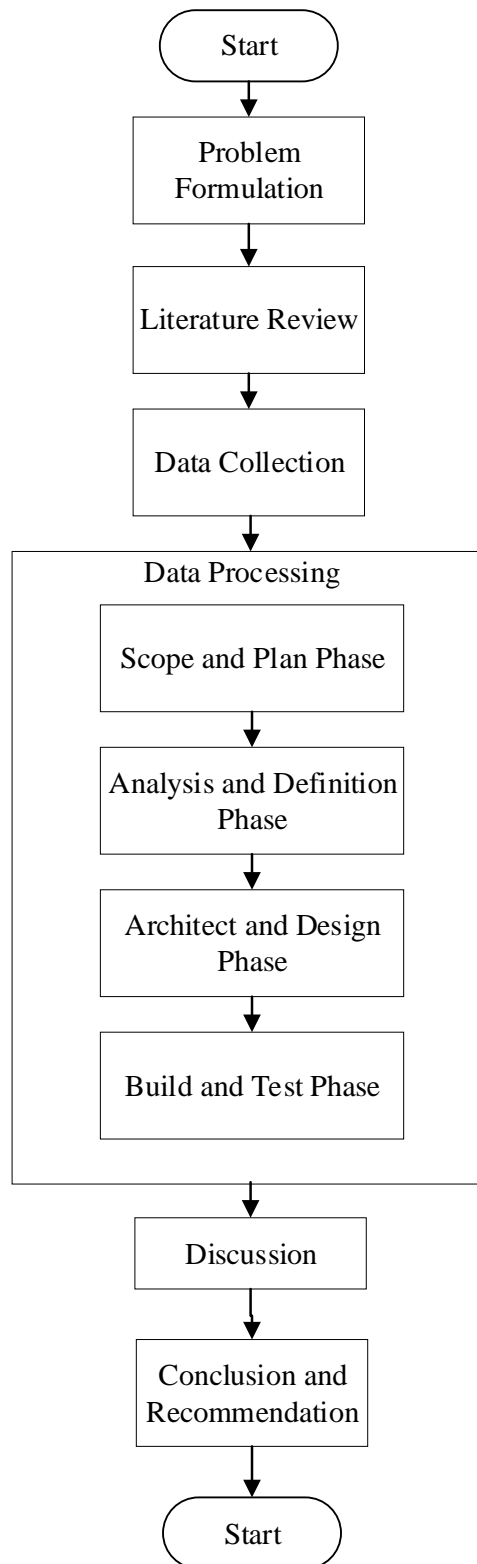
Figure 3.1 Research Flowchart