CHAPTER 3
RESEARCH METHODOLOGY

3.1. Problem Identification

Problem identification is the initial action taken in this research. The main objective is to find an object and its problem to be solved. To identify the problem, some questions need to be asked. Making an interrelation diagram is needed to plot the answers so that the root cause of the problem can be seen.

The chosen object is a retailer located in Toraja Utara, South Sulawesi. This retailer will then be called as Retail X. Afterward, some questions will be asked to the owner related to the problem he faced. Answers gained from the interview result will be plotted as the interrelation diagram.

3.2. Literature Review

The second step is a literature review. Some articles which have related problem will be reviewed. The articles can be gained from international journals from an online source like Proquest. Selected articles are better to have a similar method with the research to solve the problem. The proper keyword will lead to suitable articles. Proper keyword means keyword which is related to the problem and method. Aspects to consider in reviewing the journals are the name of the article and journals, the name of authors, the year of published, the publishers, the problem to be solved, and the methods used to solve the problem.

3.3. Data Gathering

After problem and method are chosen the next step is to find the appropriate data. The owner gave sales data from June 2015 until February 2016 and also the purchased items data from the same periods. The data from each month selling covers transaction number, product purchased and its amount, and subtotal for each transaction. A set of Merchandise Budgeting result from the same period is also given by the owner. This Merchandise Budgeting result is done by the previous researcher.

3.4. Merchandise Planning

3.4.1. Category Management

Category management consists of some category chosen from consumer needs. Each category will have a sub-category, segment, and sub-segment. Element in the category management is subjective, brand and price can be added. Category management will have its smallest element that is the stock keeping unit (SKU). Data from the category management is needed for doing the next step namely Open-to-Buy.

3.4.2. Open-to-Buy

The open-to-buy method is needed to know the amount of money needs to allocate for each category. Inputs required are beginning of month stock (BOM Stock), ending of month stock (EOM Stock), planned sales, and monthly reduction. Those inputs are obtained from the result of the Merchandise Budgeting. From the category management result, percentage sales of each category will then assist the OTB calculation.

3.5. Data Analysis and Conclusion

After all the data is already processed with the appropriate method, a conclusion then can be drawn. Before jump into the conclusion, it is better to analyze the result from each calculation. The brief of analysis is then can be converted into a conclusion.
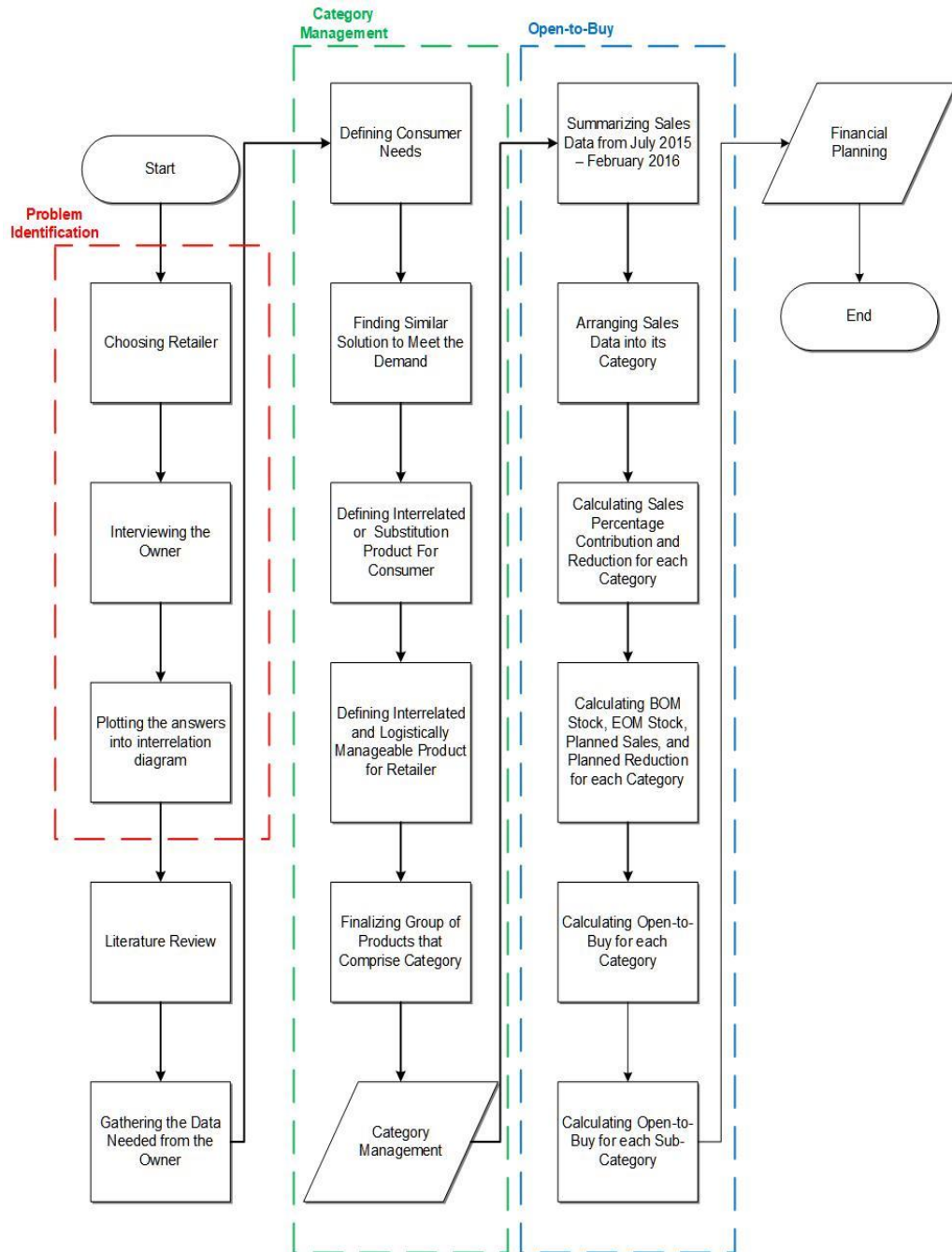
A brief explanation of research methodology can be seen in figure 3.1.

Figure 3.1. Flowchart of Research Methodology