

CHAPTER III

RESEARCH METHODOLOGY

3.1 Problem Identification

This research is conducted in e-commerce provider in Indonesia. The case study is the transaction of e-commerce business in Tokopedia. Internet is a need and everything using it with their devices to have a transaction. The satisfaction of customer is the prioritize of the company to have a breakthrough on its competitors. Therefore, the service quality provided by Tokopedia should be fulfill the customers need.

Hence, this research is aimed to analyze the electronic service quality to be improving in Tokopedia as websites that contains transaction of product through devices as the e-commerce in this era. The method of this research is Electronic Service Quality (E-SRVQL) and Mamdani Fuzzy. The result of this research is developing the prioritize dimension's attributes of e-service quality.

3.2 Problem Formulation

This research focuses on attributes which is branch from dimension's electronic service quality analysis. The problem formulation is set as a basis to limit the research area and clearly define the issues that the researcher tries to address.

3.3 Literature Review

Inductive and deductive study are combination for the literature review. Inductive study is the previous researches that have similarities with the author's thesis and deductive

study is the basic theory of the research. The previous studies have the difference method and subject, therefore, the purpose is to have dissimilitude of research to avoid plagiarism and basic theory are mainly to be comprehensive of the method and formula used in the research. The references of the research either inductive or deductive are gained from the articles with the keyword of electronic service quality, E-SRVQL in Tokopedia, Fuzzy Mamdani, and satisfaction customer.

3.4 Data Collection

Data that being used in this research are primary and secondary data. Primary data would be mentioned in the Table 3.1.

Table 3.1 Primary and Secondary Data

Type of Data	Source	Data
	Historical data	Perception Parameter Input
Primary data	Expert data	Fuzzy Rules
Secondary Data	Literature	E-SRVQL Dimensions

3.5 Data Processing

The data processing flow is shown on the Figure 3.1. The research flow follows the flow of method that is used from the start until the end of the research.

3.6 Discussion

After the data is being proceed, the discussion would be conducted to examine the result of Electronic Service Quality (E-SRVQL) to have the priority of the attributes after processing in Mamdani Fuzzy method, thus, improvements and control to prevent the unsatisfied customer.

3.7 Conclusion and Suggestion

In conclusion and suggestion, the problem formulations which are formulated are being answered. There are also several suggestions made for the company and future related researches.

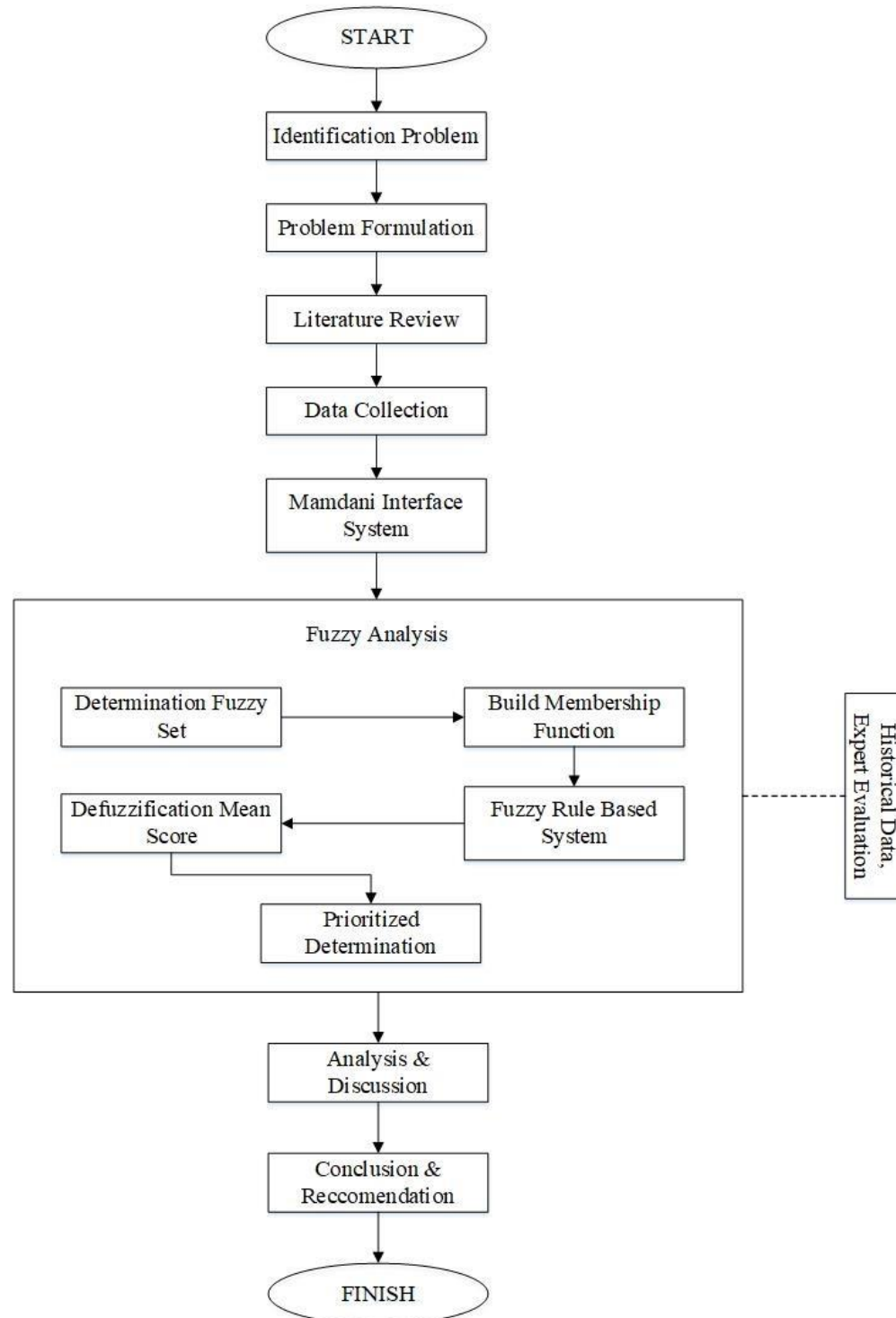


Figure 3.1 Flowchart Research

Based on the figure above, it is explained the research flow that researcher do, which is identification the problem in Tokopedia that relates to the growth of technology where everything goes to internet and e-commerce of Tokopedia need an improvement to reach the customer perception. The problem formulation is what is the perception of customer based on attributes, and what should the manager do to fix the problem, then the researcher collect the literature that has similarities to this research which is e-service quality aspect and fuzzy logic as the method to solve the prioritize attributes later on. The data collection divided into two which is primer and seconder data, primer data included historical data from previous researcher and expert data to determine the rules, secondary data is the literature from journal and article that already being validated. After that the data processing goes from make the membership function, create fuzzy rule, defuzzification, and we have the final score of dimension then the researcher derivate to its attributes to giving the suggestion for manager what should the company do to improve the electronic service quality.