

ABSTRACT

**APPLICATION OF FUZZY LOGIC IN THE RECOMMENDATIONS OF
UPGRADING MSMEs USING THE SUGENO METHOD AT THE
BENGKULU CITY COOPERATIVES SERVICE**

RISTIKA
Reg.Id 19010099

Informatics Study Program Thesis
Dehasen University Bengkulu

Micro, Small and Medium Enterprises (MSMEs) in the City of Bengkulu have developed and are under the auspices of the Bengkulu City Cooperatives Service, where every year they will be evaluated by the Bengkulu City Cooperatives Service to find out which MSMEs have advanced to class by looking at the number of workers, capital, assets and turnover per year. Upgrading MSMEs is an effort made by the government to improve MSMEs and encourage fiscal instruments so that small business owners can emerge from a difficult economy. So far, the data processing process for MSMEs moving up to class has been carried out by collecting data on all MSMEs in Bengkulu City and then providing an assessment for each MSME, it is known which MSMEs have been promoted to class. However, this processing is still done manually and takes quite a long time, sometimes the selection of MSMEs for promotion to class is not on target. The application of fuzzy logic in recommendations for MSMEs to be upgraded to class at the Bengkulu City Cooperative Service can help provide assessment results for MSMEs based on assessment criteria therefore MSMEs that are upgraded to appropriate or unfit classes are obtained. The Sugeno method will analyze MSME assessment data by looking at the amount of labor, capital and turnover of each MSME, which will then calculate the z value for each rule where there are 54 rule compositions used so that the final value for each MSME can be known. Based on the black box testing that has been carried out, the results show that the functionality of the MSMEs upgrading recommendation application at the Bengkulu City Cooperative Service runs well as expected and is able to analyze MSME assessment data using the Fuzzy Sugeno Method to determine recommendations for the suitability of MSMEs for upgrading.

Keywords: Fuzzy Logic, Upgrading MSMEs, Sugeno Method, Bengkulu City Cooperative Service

- 1) Student**
- 2) Supervisors**

