## **ABSTRACT**

## APPLICATION OF AHP AND SMART METHODS ON WEB-BASED BROILER FEED SELECTION (CASE STUDY OF CENTRAL TAPANULI REGENCY)

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Broiler production growth is influenced by several factors, namely chicken strain, gender, and environmental factors. Feed is the environmental factor that has the most influence on the growth of Broiler Chickens. There are problems with broiler feed which is still high in price and the amount of chicken feed on the market. One strategy that can be used to determine the selection of broiler feed is to compare several chicken feeds, and then perform calculations to determine the best feed based on feed type, price, nutrient content, and raw materials. The strategy carried out will use the AHP (Analytical Hierarchy Process) and SMART (Simple Multi Attribute Rating Technique) methods which are included in the Decision Support System method. The results of the calculation of this research will be made into a website system that can finally be accessed by broiler farmers and make a comparison of the results of the two methods to find out the difference in the calculation results of each method. The results of this study used 7 types of chicken feed namely 511, 201, Jaggung, Maggot, Comfeed Broiler BR-1, Buras Crumble, and Bran. After the calculation process using AHP and SMART, the results showed that Merk Pakan 511 has the highest rank in both methods with a score of 0.234849 in AHP and 67 in SMART, and Pakan Maggot has the lowest rank in both methods with a score of 0.032147 in AHP and 60.75 in SMART.

KeyWord: DSS, AHP, SMART, Broiler Chicken, Central Tapanuli