

Abstract

The concepts which have been used to create decision supporting system, one of them are Decision Tree Learning (DCT). Algorithm ID3 and CART are a part of DCT, concept from both of the algorithm will produce a generation from decision tree and it will become a rule. This research built a system that can analyze implementation of employees' working assessment by using algorithm ID3, and CART. Data that used is obtained from company X about employees' working assessment to make a recommendation about annual financial aid.

In this research obtained performance from ID3, and CART, for precision value on highest achievement there is in each algorithm they are ID3 in distribution part 70% training data, and 30% testing data, whereas for distribution precision value on CART is 80% training data, and 20% testing data. For the highest achievement recall value in algorithm ID3 is 50% training data, 50% testing data, whereas for the highest recall achievement value on CART is 30% training data, and 70% testing data. For the accuracy value in algorithm ID3 is 70% training data, and 30% testing data, whereas for the highest recall value on CART is 80% training data, and 20% testing data. In this research ID3 is dominant which has performance value is better than CART.

Keywords: ID3, CART, Decision Tree, Decision Support Systems (DSS).