Abstract

*The competition in Telecommunication Industry in Indonesia is very tight, it can be seen from many promotion by each provider to get consumer more than before. This phenomenon of competition have to be learned in order to acquaint the profile of the customer who potentially buy some products in order to increase the revenue of the company. Data Mining as a knowledge for analyzing data and finding rules in the data is expected to be able to transform the result from the big exctracted data to interesting pattern information to support decision making and also solving the problem of predicting potential customer. Data Mining technique that is used to solve that problem is classification, classification is a model making process to predict class lable based on the records in training dataset and also testing dataset to predict the value of the new unknown class. This Final Task which the topics is "**Data Periode Optimation Using Decision Tree for Predicting Potential Customer with Clementine**" is used to analyze and decide the optimal period of the data for predicting potential custome based on Decision Tree method.*

Keywords: *data mining, classification, Decision Tree C5.0, training dataset, testing dataset, classifier.*