Abstract

Data is very important for many companies. With data mining, which digging information from data, this data can be more useful for development of its company. One most important data in telecommunication company is Calling Detail Record, that contains transactions of calling in network. In this final task, CDR that describe behavior of customer in every region, will processed by data mining techniques, classification with *ensemble method*.

Ensemble method is used to increase performance of classification process, that use base *classifier* to prodeuce hypothesis from its model. This final task implements bbosting, with C45 decision tree as base *classifier*.with this method, all of hypothesis from C45 would be combined to get final hypothesis, so that the performance will be better then classification without boosting.

The results of *testing* show that boosting clearly improve the performance of classification with C45 decision tree. It is because in boosting, data that hard to classify get more chance to be classified in the next iteration. So that *classifier* learns more from this data.

Keywords: boosting, C45 algorythm, AdaboostM1, AdaboostReg, iteration,CDR