

## Abstract

Churn prediction is a method to predict behaviour of customers who potentially for being churn. Data which is used in churn prediction have the imbalance characteristic. The accuracy of common classification method will decrease when it used on imbalance data. Classification result will be inclined to part data which has greater composition side.

One method to handle this problem is use Support Vector Machine(SVM) method. This method has some variant which is SVM without *pruning* (SVM balance and SVM imbalance) and SVM with *pruning*.

The analysis in this final exam is knowing how the effect of pruning SVM and SVM without pruning method to accuration of churn prediction by counting *lift curve*, *top decile*, and *gini coefficient* as accuration of churn prediction model, and also counting *F-measure* as accuration of imbalance case .

The result from this research show that *pruning* SVM method can't increase accuration of SVM without pruning method. The best method from several variant of SVM to solve churn prediction problem is SVM imbalance.

**Keywords:** *churn prediction, imbalance, pruning, evaluation.*