ABSTRACT

Churn prediction is a study that is being discussed lately. Churn is a trend of customers moving or turning from one company to another. Churn prediction itself has a major problem that is the imbalance of data. Imbalances of data can cause difficulties in model development and performance in the classification to be low. The gap between the major classes (not churn) and the minor (churn) classes that cause data imbalances can be handled with a variety of techniques, one of which is sampling. In this final project authors use ADASYN (Adaptive Synthetic Sampling Approach), the basic idea of ADASYN is adaptively doing the addition of samples on the minor class based on the distribution of the class. And for the classification of authors using Support Vector Machine (SVM) method, SVM classification method is expected to maximize the performance of the prediction model. After testing using ADASYN and SVM prediction models, the best f1-measure obtained in this final project is 92.3833%.

Keyword: churn prediction, imbalance, kelas major, kelas minor, Support Vector Machine, SVM.