Abstract

The most precious asset that a company has is its existing customers. So, the company tries to improve loyalty and satisfaction of the customers. Nowadays, to improve loyalty and satisfaction of the customers in telecommunication cellular business is hard to do because many new companies were born that offer various services. Because of this condition, the customers have many choices and churn easily. We need an accurate model of prediction to predict which customers have potency to churn. This churn prediction is made to help the company in avoiding bigger losses. Neural network method is used in this final project to predict which customers that have potency to churn. Feed-Forward Back Propagation, with simple architecture and could decrease errors, is the architecture training that used. The data which is used in this final project is Data Tournament. Comparing the result of prediction between Churn Prediction software and Tools Clementine 10.1 with CRT and Chaid algorithm is done in this final project too.

Keywords: *Churn Prediction*, *Existing Customer*, *Feed-Forward Back Propagation, Neural Network*, *tools Clementine 10.1*