# Abstract

Churn (stop of service) is a common phenomenon in the telecommunication industries. With the increasing competition among the telecommunications industries, customers can have more options in determining the needs of telecommunication. Therefore telecommunications company will certainly perform a variety of actions to gain new customers and retain existing customers. From a business view, the cost required to attract new customers will be more greater than the cost to maintain existing customers. Therefore, the efforts to prevent churn is certainly a concern for telecommunications companies. In this research, a case study is used which is a data telkom speedy  customer churn  period 2010-2013 for the city of Bandung and around.

Problem-solving approach that will be used in this study using techniques Characteristic Rule Mining. Is a technique to find the set of rule inter combination of items contained in the dataset. Advantages of this technique we can find hidden relationships between items and information in the form of rule can be more easily understood by the end user. While the algorithm will be use is single-layer algorithm Supervised Neural Network (SSNN). SSNNs algorithm success rate on the testing data is 100% with a minimum support 0.25 and using support tendency 0.5.

**Keywords** : *Neural Network, Rule Mining, Characteristic Rule, Churn Costumer dataset, Profiling Churn*