Abstract

Telecommunication industry competition is rapidly grow up as soon as technology development . A lot of companies in telecommunication operator have grew up to join in this competition. Various of services and facilities have been offering to draw a lot of customers. So, it's easy to customer to have a churn. Limited staff is the problem to contact all customer who have churn potential. So, we need a system of data mining including assorted technique for prediction that customers have potency to churn or not churn. This final project used combination of Fuzzy and Data Mining Evolutionary Learning (one of variant Genetic Algorithm) to build classification in determining the customer. This method is used because it can effectively find the rules and handle missing value. Case study used in final project is churn prediction in mobile telecommunication's customer.

Keywords: *churn*, *data mining*, *fuzzy, genetic algorithm, data mining evolutionary learning*, *F-APACS.*