A New Approach for Customer Churn Prediction in Telecom Industry

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Authors:
Saumya Saraswat, Akhilesh Tiwari

Abstract

Since its inception, the field of Data Mining and Knowledge Discovery from Databases has been driven by the need to solve many practical problems. With the rapid development of telecommunication industry, the service providers are inclined more towards expansion of the subscriber base. To meet the need of surviving in the competitive environment, the retention of existing customers has become a huge challenge. In the survey done in the Telecom industry, it is stated that the cost of acquiring a new customer is far more that retaining the existing one. Therefore, by collecting knowledge from the telecom industries can help in predicting the association of the customers as whether or not they will leave the company. The required action needs to be undertaken by the telecom industries in order to initiate the acquisition of their associated customers for making their market value stagnant. This paper describe a framework that was proposed to conduct for the churn prediction model using Naïve Bayes algorithm for classification task and then apply Elephant Herding Optimization algorithm for solving optimization task. Elephant Herding Optimization is a metaheuristic algorithm. The proposed methodology thereby generates optimal customers who will leave the service provider which is
beneficial for any enterprise in the current scenario for effective decision making and perform appropriate steps to retain those customers.

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