

**CUSTOMER CHURN PREDICTION MODEL
FOR A LEADING TELECOMMUNICATION COMPANY
IN SRI LANKA**

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Abstract

One of the major pain points which telecommunication companies are facing is the higher number of customer churn which is currently around 4% .Due to saturated telecommunication market it has led to a fierce competition among the operators. Apart from the sentimental value that a customer has for his/her current mobile number, considering other operators that provide quality networks and packages becomes more attractive. In that sense, data users have more freedom to select another convenient operator as they do not have the weight of an existing number. Therefore, customer churn is a common problem among the operators and distinguishing the possible churn customers in prior is a challenge due to lack of information and accurate models to predict.

In order to overcome this problem, there are two options; either retention incentive schemes conducted throughout the entire customer base or focus on the new customer acquisition plan. Both the options are costly and will not have significant gain over action taking for high probability of churning customers in near future. It is less costly to focus on customer retention rather than customer acquisition. Recent studies show that acquiring a new customer is 5 times costly than retaining an existing customer.

Churn prediction models have been a hot research topic in recent years. There are many research materials on this topic locally as well as globally. However, there is a research gap on predicting customer churn models with available customer transactions and network data as the current methods mainly rely on surveys. An accurate churn prediction model largely depends on complete and quality historical data. Currently operators are unable to grasp all the necessary data about customers and only take actions based on the assumptions made with available information and ground staff knowledge from the sales and customer service teams.

Objective of this research is to fill the gap of the customer churn identification model to help the telecommunication companies to proactively identify the customers who