Business Problem Overview

In the telecom industry, customers are able to choose from multiple service providers and actively switch from one operator to another. In this highly competitive market, the telecommunications industry experiences an average of 15-25% annual churn rate. Given the fact that it costs 5-10 times more to acquire a new customer than to retain an existing one, customer retention has now become even more important than customer acquisition.

Business Objectives

For many incumbent operators, retaining high profitable customers is the number one business goal.

To reduce customer churn, telecom companies need to predict which customers are at high risk of churn.

Data Analysis and Modeling

In this project, we will analyse customer-level data of a leading telecom firm, build predictive models to identify customers at high risk of churn and identify the main indicators of churn.

Targeted Retention Strategies

Insights

The analysis shows that customers with decreased minutes of usage (mou) and recharge activity in the action month have a higher churn rate.

Retention Strategies

- Offer personalized discounts or promotions to encourage customers to recharge and increase their usage.
- Provide proactive customer service and support to address any issues or concerns that may be causing decreased usage and recharge activity.
- Develop targeted marketing campaigns to promote the benefits of increased usage and recharge activity, such as rewards programs or exclusive content.

Analysis of August call usage for churn and non-churn customers.

For churn customers, the minutes of usage for the month of August is mostly populated on the lower side compared to non-churn customers.

The ISD outgoing minutes of usage for the month of August for churn customers is densely populated around zero, while for non-churn customers it is slightly higher than churn customers.

The monthly 3g data for August for churn customers is mostly populated around 1, while for non-churn customers it is spread across various numbers. Similarly, we can plot each variable which has higher coefficients and churn distribution.