Telecom Churn Case Study

Business Objective

Problem statement:-

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

Retaining high profitable customers is the main business goal here.

Steps to be followed:-

Reading, understanding and visualising the data

Preparing the data for modelling

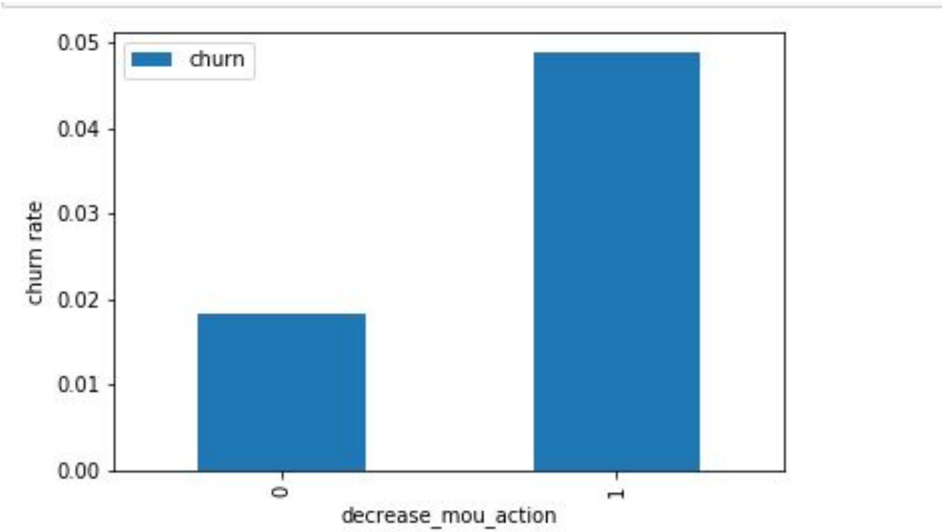
Building the model

Evaluate the model

EDA

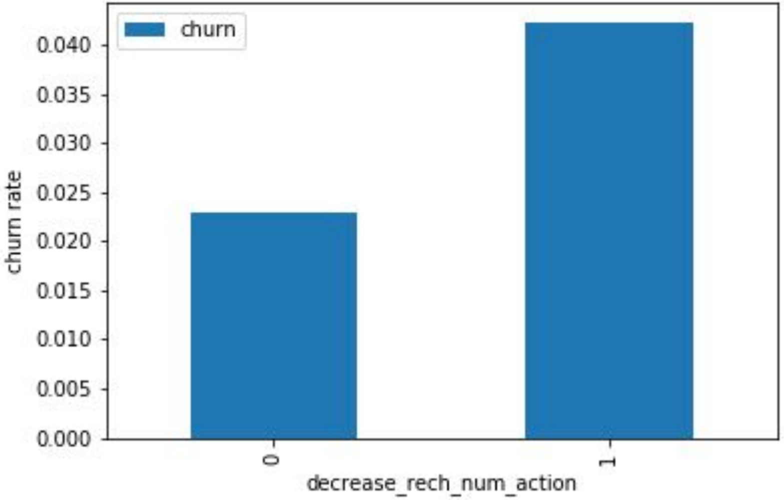
Analysis

The churn rate is more for the customers, whose minutes of usage(mou) decreased in the action phase than the good phase.



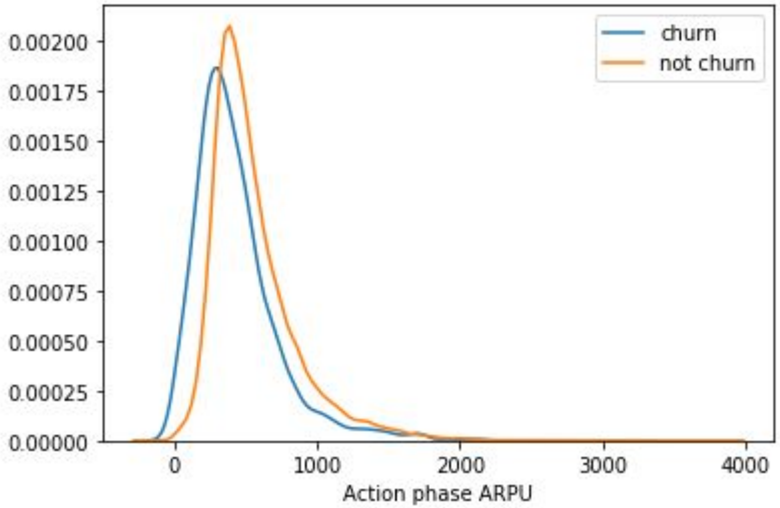
Analysis

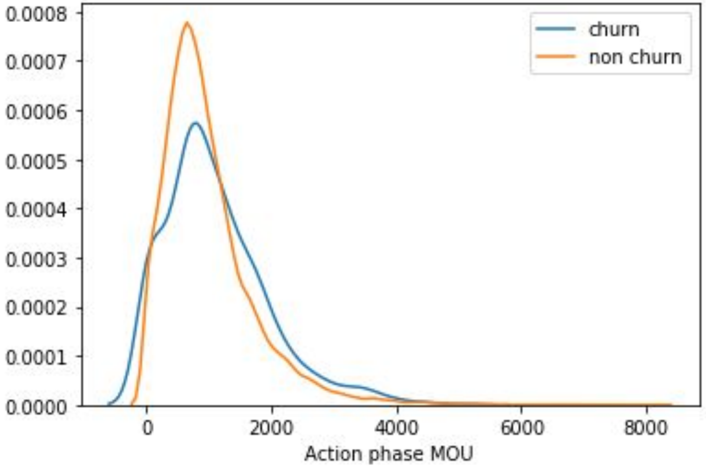
The churn rate is more for the customers, whose number of recharge in the action phase is lesser than the number in good phase.



Analysis of the average revenue per customer (churn and not churn) in the action phase-

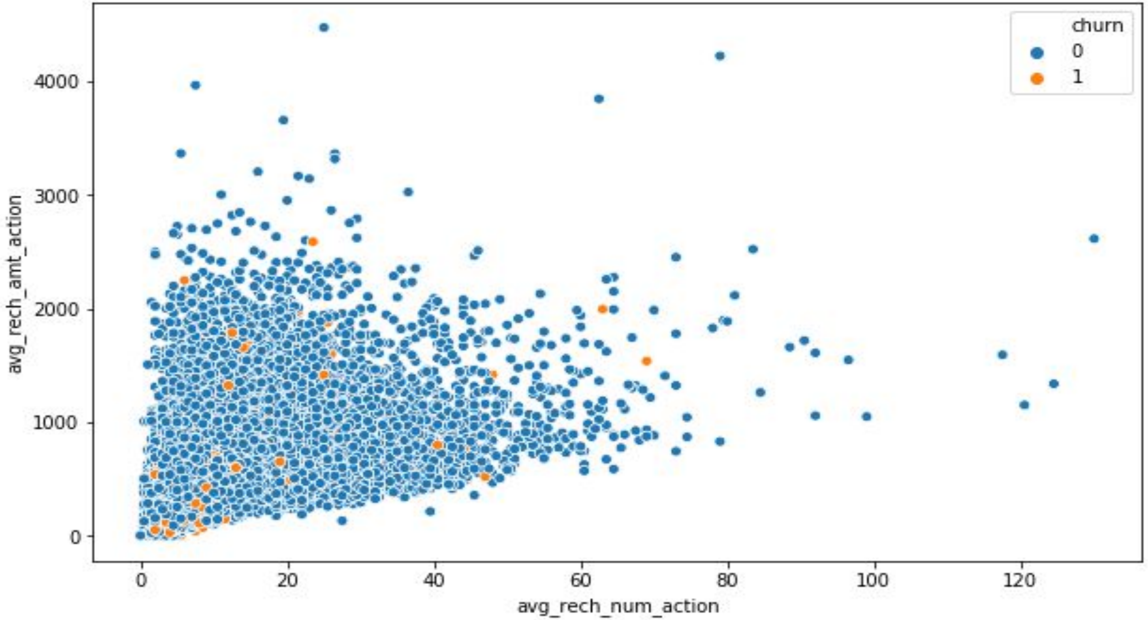
Average revenue per user (ARPU) for the churned customers is mostly fall under 0 to 900. The higher ARPU customers are less likely to be churned.RPU for the not churned customers is mostly fall under 0 to 1000.





Analysis

The below pattern that the recharge number and the recharge amount are mostly proportional. More the number of recharge, more the amount of the recharge.



RCA

`60 components` explain almost more than 90% variance of the data. So, we will perform PCA with 60 components

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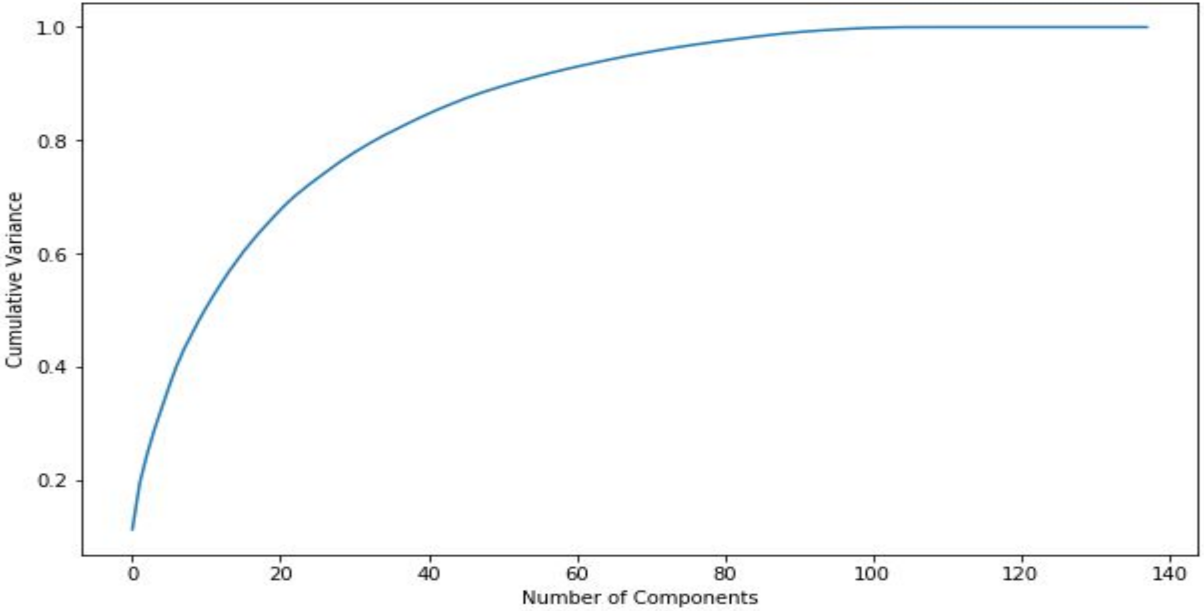

Recommendations

1. Targeting Customer Behavior in August.
2. Target customers with less usage of incoming local and outgoing ISD calls.
3. Target customers whose outgoing and incoming calls are charged in July and August.
4. Customers with increased value-based costs in the action phase are more likely to churn.
5. High monthly 3G recharge in August is a potential churning target.
6. Customers with decreasing STD incoming minutes and 2G usage are more likely to churn.
7. Positive coefficients (0.7135) indicate increasing roaming outgoing usage is a churning factor.