

Capstone Project

Submission

Team Member's Name, Email and Contribution:

Baishnavee Mahato

Email – mbaishnavee@gmail.com

Data Understanding Feature Analysis

- States
- Area Codes
- Call Data
- Churn

Data Visualization

- Count plot
- Box plot
- Cat plot
- Dist plot
- Crosstab
- Heat Map
- Scatter plot

Conclusion

Technical documentation

Please paste the GitHub Repo link.

Github Link : <https://github.com/mbaishnavee05/EDA-Telecom-churn-analysis>

Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)

INTRODUCTION

Orange S.A is a French Multinational telecommunication corporation with many different customers subscribed to their services and the key task is to find the causes that influence customers to churn and suggesting the factors for retention of customers.

In this EDA project, I was provided with Orange's Telecom churn dataset which consists of various details about area, account, calls and minutes etc.

APPROACH

- Initially, I imported the data set and carried out the descriptive analysis over the data set to understand the information of data available.
- Checking for missing and duplicate values in the dataset provided.
- Analysing the all the variables of the data set with respect to churn data, to determine the possibilities and factors for Churn.
- Used data visualization with different kind plots to explore the correlation with churn and different variables.
- Predicted and explored some factors that are influencing customer to churn.

CONCLUSION

From the above steps and analysis, I concluded that :

- Most Customers with international plan active have higher churn rate compared to customers without international plan reasons may be because the customers are unhappy with the higher tariff charges or network problems.
- Area and Account length have no relation with churn, hence these columns can be deleted or it can be said that the data is redundant.
- Few states have higher churn compared to others, for which network problems may be reason or competitors offering low tariff.
- Call to the service centre increases proportionally churn rate increases. Customers who called customer service less than 3

times have a lower churn rate than that of customers who have called customer service 4 or more times.

- Customers with higher day call mins has higher churn rate compared to other, could be because of the higher charges which is quite obvious.