

Capstone Project Submission

Instructions:

- i) Please fill in all the required information.
- ii) Avoid grammatical errors.

Team Member's Name, Email and Contribution:

- 1) Puneet Subhanji
Email - puneetsubhanji@gmail.com
 - Data Understanding
 - Feature Analysis
 - States
 - Area Codes
 - Account Length
 - Call Data(Day,Evening,Night)
 - International Calls
 - International Charges
 - Voicemail Plan
 - Number Vmail Messages
 - Customer Service Calls
 - Churn
 - Feature Engineering
 - Missing Value
 - Duplicate Value
 - Null Value Check
 - Data Visualization
 - Box plot
 - Dist plot
 - Crosstab
 - Count plot
 - Heat Map
 - Correlation Matrix
 - Scatter plot
 - Donut Plot
 - Research Analytics
 - Technical Documentation

Please paste the GitHub Repo link.

Github Link:- <https://github.com/PUNEETSUBHANJI/Exploratory-Data-Analysis-of-churn-dataset>

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

PROBLEM

Orange S.A is a French MNC telecommunications corporation with many different customers subscribed to its services and the key task is to find the causes that influence customers to churn and suggest the factors for retention of customers. In this EDA project, we were provided with Orange's Telecom churn dataset which consists of various details about area, account, calls and minutes etc.

APPROACH

- ❖ **In order to grasp the contents of the data provided, I first imported the data set and performed a descriptive analysis over it.**
- ❖ **Checking the provided data set for duplicate and missing values.**
- ❖ **Analyzing all the variables of the data set (such as Area-code, Account, Plan, Calls, Minutes, Charges etc) with respect to churn data, to determine the possibilities and factors for Churn.**
- ❖ **Used data visualization using several plot types to investigate the relationship between churn and various characteristics.**
- ❖ **Predicted and analyzed a few elements that are causing customers to churn.**

CONCLUSION

- ❖ **Some states have higher churn rate than other, for which network issues could be the reason because if the contender company had low tariff for calls then utmost of the states would have shown the approx same churn rate**
- ❖ **Area, account length, evening and night calls have no relationship with the churn rate, but as the number of calls to the customer service center rises, the churn rate does as well. Therefore, it is obvious that the company must offer excellent customer service and resolve customer issues to prevent churn by gathering feedback.**
- ❖ **Customers with foreign plans have a greater rate of churn than those without international plans, which may be due to high tariff costs or network problems. As a result, the company has to address these issues and offer less expensive or competitive international plans and coverage.**
- ❖ **Customers with voicemails more than 20 (approx.) and customers with higher day call minutes have higher churn rate compared to others so company should focus on providing discounts or offers, also they can offer customized service with different plans based on customer needs.**