

# Capstone Project Submission

## Instructions:

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

### **Team Member's Name, Email and Contribution:**

#### **1) Akash Patil**

**E-mail:** [akashpatil1678@gmail.com](mailto:akashpatil1678@gmail.com)

- Data analysis.
- Approach towards multiline graph.
- Frame work of project.
- Histogram plot.
- References papers.
- Heat map and Bar plot.

#### **2) Aparna Patil**

**E-mail:** [aparnapatil0404@gmail.com](mailto:aparnapatil0404@gmail.com)

- Data visualization.
- Sorting of values.
- Pi-plot and Multiline plot.
- Project summery template.
- PPT and Technical documentation

#### **3) Akshay Arsude**

**E-mail:** [akshayarsude1997@gmail.com](mailto:akshayarsude1997@gmail.com)

- Data sorting.
- Approach towards plan.
- Graphical representation.
- Bar plot and Heat map.
- Technical documentation.

### **Problem definition:**

Customer churn-shifting from one service provider to the next competitor in the market, is a key challenge in highly competitive markets and is very much observed in telecommunication sector. Customer churns are those targeted customers who have decided to leave a service provider, product, or even a company and shifted to the other competitor in the market.

### **EDA on given Data set**

Digging into data we understand that

- There is no null value in the data set.
- In state column there are total 51 unique states.
- Total 20 columns with values such as float, integer, Boolean and object.
- Dependent variable should be considered as Churn.
- Graphical representation according to various columns and with manipulation of columns.

- By manipulation of columns we can find average price for day, evening, night, international.

From the analysis it is observed that customers who use more minutes in days have tendency to churn same for international customers users and the state with high churn percentage are NJ and CA but looking into calls done for customer care are very less. Means people are not calling to customer care and moving towards churn. In addition to that when customer place a request for churn customer care should approach to them and solve the problem.

### **Conclusion**

From the given data and after performing EAD and comparison with the all the elements we say that there are some factors which company should take care in consideration.

- States with high percentage of Churn are not approaching towards customer service center. Instead when port request is put by some customers customer service should approach them.
- There is mix match churn rate for voice mail plans and voice mail messages.
- People with international plan who use more international minutes are moving towards churn.
- Due to high day charges people who use day minutes more are moving towards churn. As of that we would like to suggest take fix price for all types of times or lower the charges for day and increase for evening and night.
- For a telecom company it is necessary to approach towards customers on ground level and within certain period of time launch new schemes.
- States where customers churn rate is high increase advertisement in that area and increase customer service centers.

**Please paste the GitHub Repo link.**

Github Link:- <https://github.com/akshayarsude1997/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)**