

Capstone Project Submission

Instructions:

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

Team Member's Name, Email, and Contribution:

Team Member's Role:-

- **Sanjaya Kumar Khadanga**

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- o Data Understanding
- o Feature Analysis
 - Calls Data, international call, voice mail call, No. of voice mail
- o Feature Engineering
 - Null value check
- o Data Visualization
 - Donut chart, box plot
- o Multivariate Analysis
 - Correlation matrix
- o Research Analytics
 - Technical documentation

- **Bibhuti Bhusan Sahu**

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- o Data Understanding
- o Feature Analysis
 - Area code, account length, state
- o Feature Engineering
 - Missing value
- o Data Visualization
 - Count plot
- o Multivariate Analysis
 - Heat map
- o Research Analytics
 - Technical documentation

- **Balaram panigrahy**

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- o Data Understanding
- o Feature Analysis
 - Customer service call, churn
- o Feature Engineering
 - Duplicate value
- o Data Visualization

- Scatter plot
- o Multivariate Analysis
- o Research Analytics
 - Technical documentation

Please paste the GitHub Repo link.

Github Link:- <https://github.com/Bibhuti-MLAI/EDA-Project>

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

PROBLEM STATEMENT:

The telecom's churn dataset has been analyzed for the existing customers. The data has been analyzed to explore whether a customer is going to churn or not depending upon various features affecting churn.

APPROACH:

- First approach is data and feature understanding where each and every feature is been analyzed for the predicting variable
- Feature Engineering and feature selection
- Data Visualization with different types of plots
- Univariate analysis with count plot and donut chart
- Bivariate analysis box plot and Scatter plot
- Multivariate analysis Heat map and correlation plot

CONCLUSION:

- Those customers are spending more in international calls and those are getting more numbers of voice mails they are likely to churn more. So, company need to be got in touch with them and give a smaller number of voicemails to them
- State wise churn also been visualized in the count plots and that should have to be resolved by the company to reduce the churn rate
- Customers are not getting good response as it is shown by the customer calls data, those customers are trying to reach out to customer care are likely to churn so that needs to be resolved