

Winter Analytics

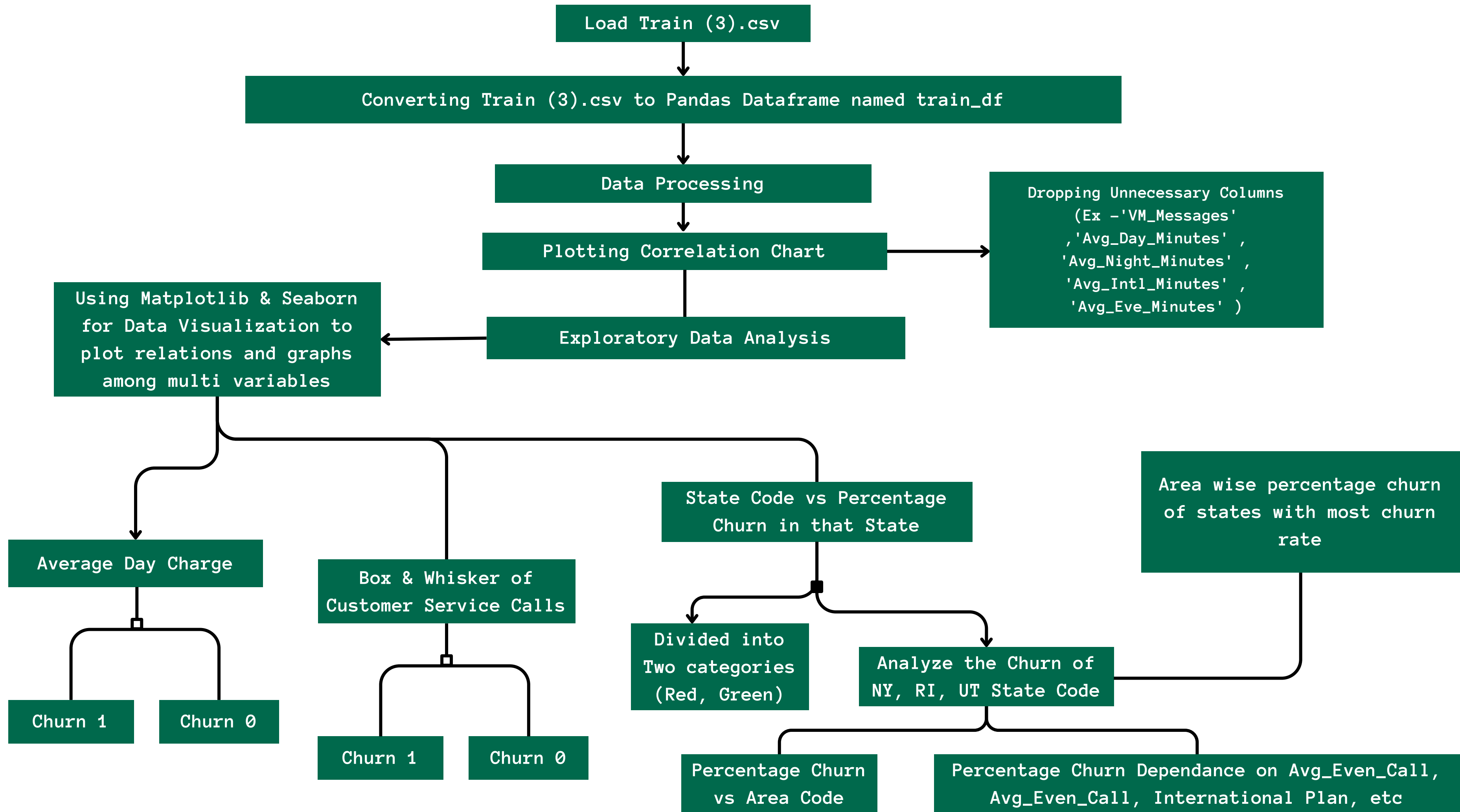
By SocBiz IITR



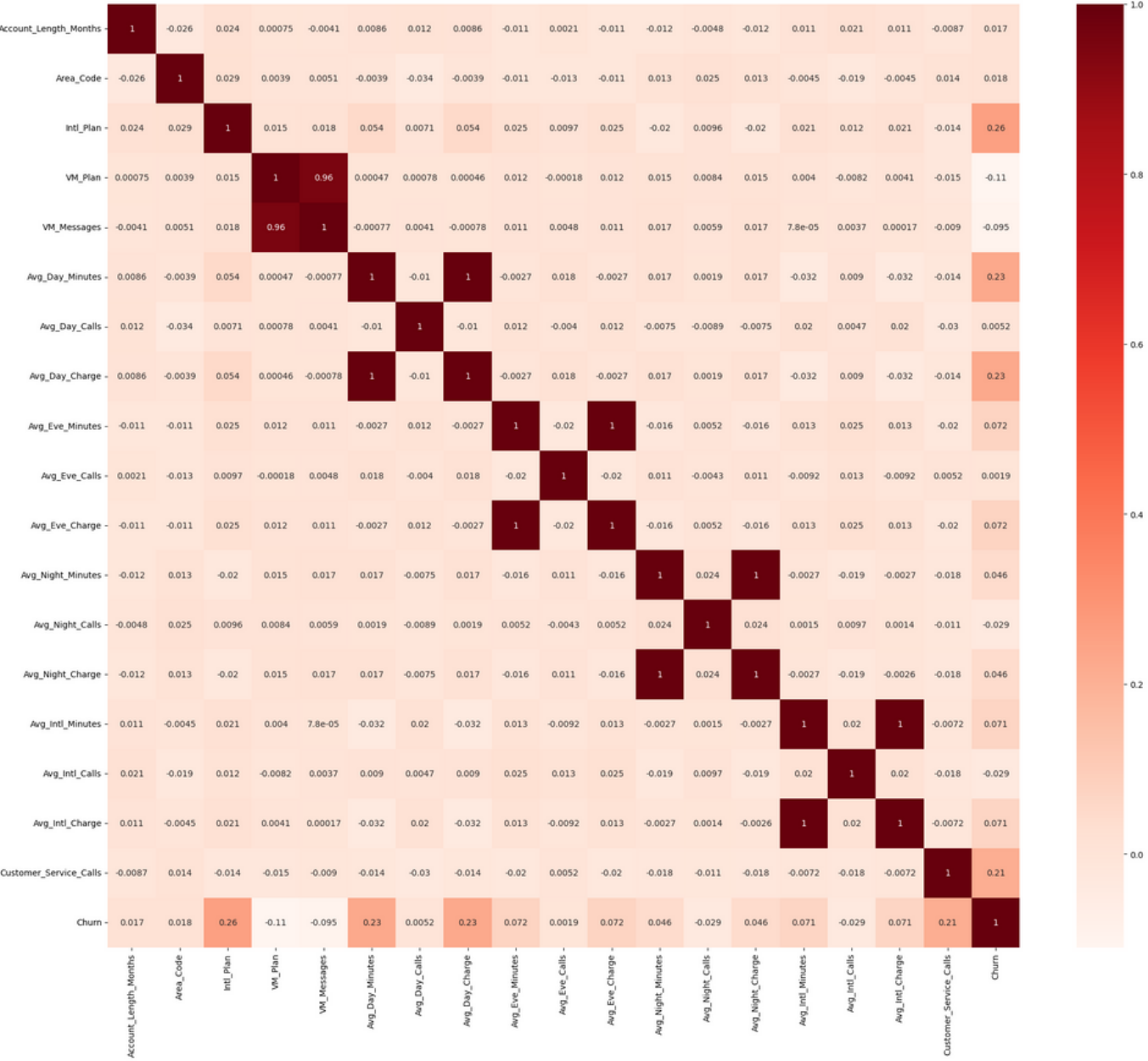
CONSULTING | PRODUCT | ANALYTICS

Presented by

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- Someone who didn't contributed

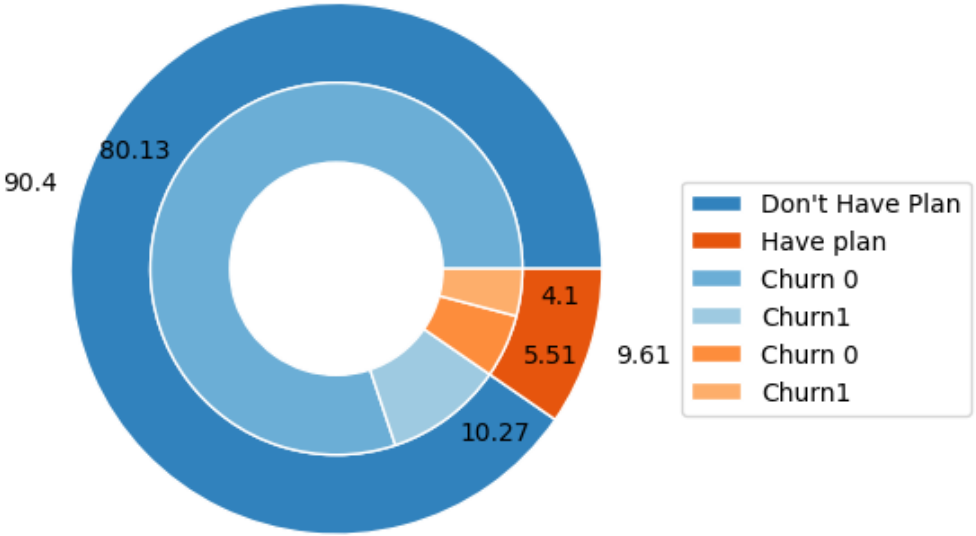


Correlation Analysis



- We have dropped few columns because they were **CORRELATED** with some other factor as shown in the graph namely:
 - VM_Messages
 - Avg_Day_Minutes
 - Avg_Night_Minutes
 - Avg_Intl_Minutes
 - Avg_Eve_Minutes
- As per correlation chart the churn rates mainly depends on
 - 26% - Intl plan
 - 23% - Avg_Day_Charge
 - 21% - customer service calls

International Plan and churn Graph

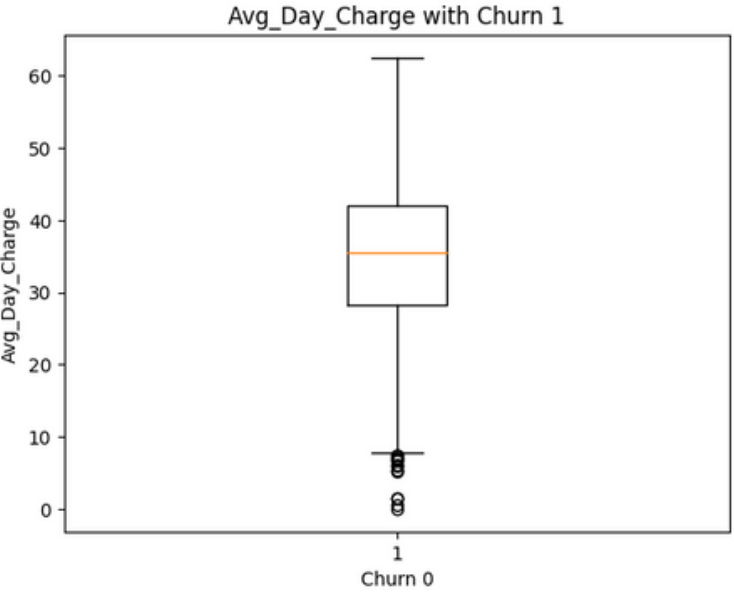
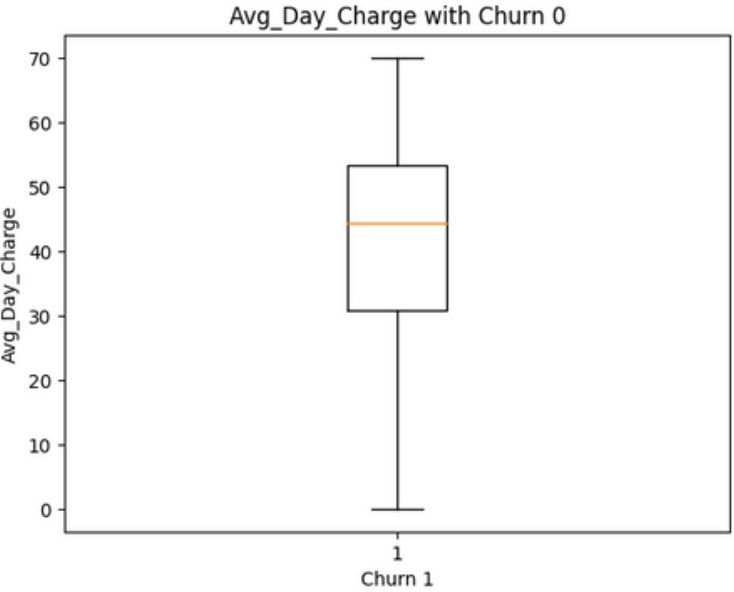


Dependance of Churn on International Plan

Total 9.61% People subscribe to International Plan, among which 57.33% have positive Churn.

Dependance of Average Day Call on Churn –

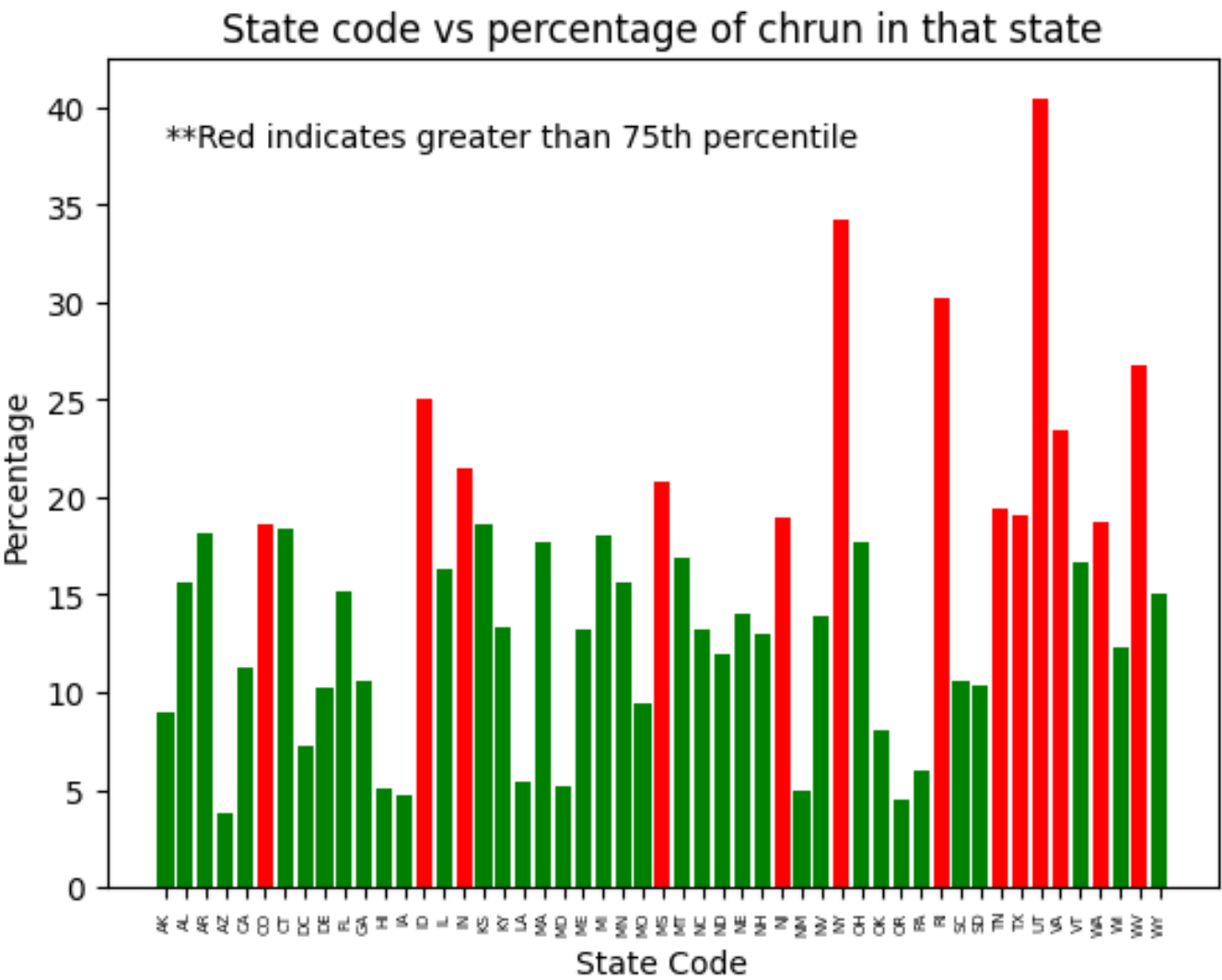
Values with **High Average Day Call** have trend of **Positive Churn**



The median of the Avg_Day_Charge with Churn 0 is: 35.59

The median of the Avg_Day_Charge with Churn 1 is: 44.28

State code vs Percentage of Churn in that State



**Here State having more than 75th percentile churn rate are in Red colour

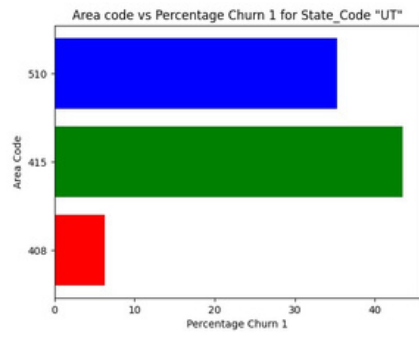
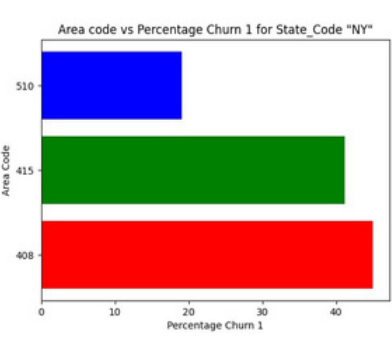
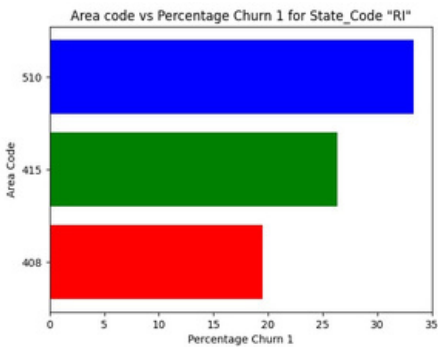
Top 3 State Code having more Churn Rate are :

- NY
- RI
- UT

Analysis of Churn Rate

Area wise Percentage Churn of states with most Churn Rate

Area Code→ State Code↓	510	415	408
RI	34%	27%	19%
NY	19%	41%	45%
UT	35%	43%	6%



Overall the dataset the Churn rate Percentage in this area is nearly – 14–15%,
But here, in this areas it's very high comparing with them

Also after plotting the Correlation Analysis graph for these 3, info we get –

In State Code 'NY' :

- Churn dependence on Average Evening Call is : 20%

In State Code 'RI' :

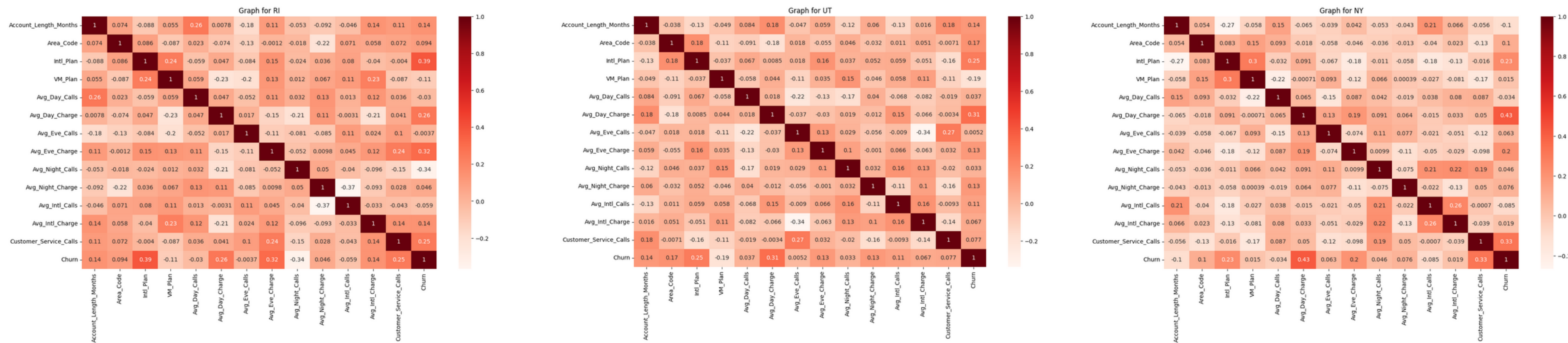
- Churn dependence on Average Evening Call is : 13%
- Churn dependence on Average Night Call is : 13%
- Dependance on Account Length Months :
 - Median of Account Length that have Churn 0 : 98
 - Median of Account Length that have Churn 1 : 104

It shows High Account Length Months tend to Positive Churn.

In State Code 'UT' :

- Churn dependence on Average Evening Call is : 32%
- Churn dependence on International Plan is : 13%
- Dependance on Account Length Months :
 - Median of Account Length that have Churn 0 : 98
 - Median of Account Length that have Churn 1 : 104

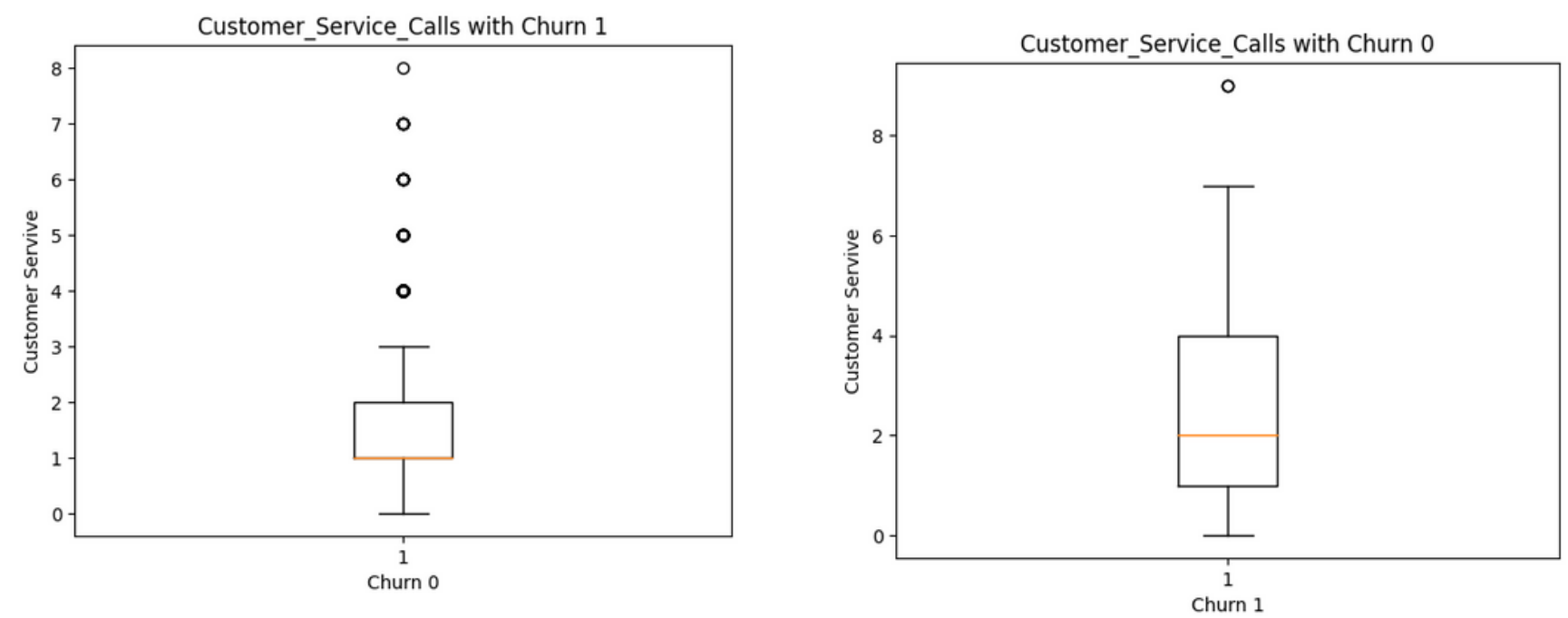
It shows High Account Length Months tend to Positive Churn.



Correlation Graph for State Code – ‘NY’, ‘RI’, ‘UT’

Dependence of Customer Service on Churn –
Values with High Average Day Call have trend of
Positive Churn

The median of the Avg_Day_Charge with Churn 0 is: 1
The median of the Avg_Day_Charge with Churn 1 is: 2



Thankyou