TELECOM CHURN PREDICTION ANALYSIS

Agenda

Recommendations

Problem Statement

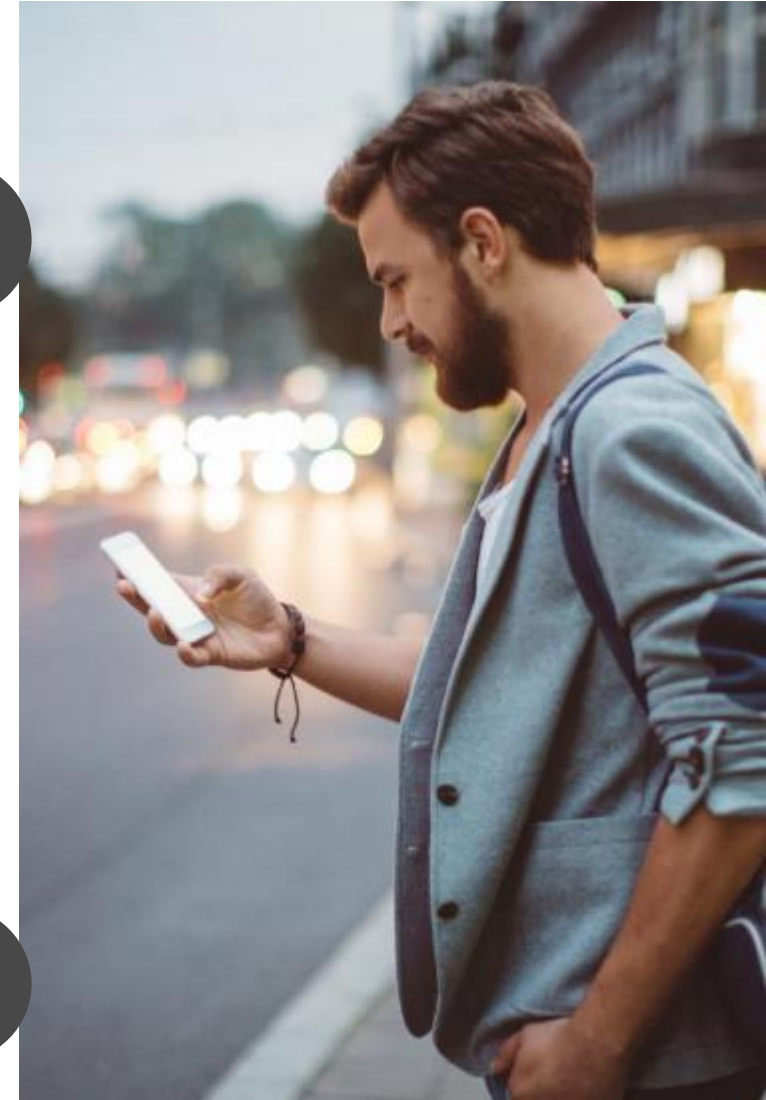IMPLEMENT

Approach

Models

Findings

Analysis

PROBLEM STATEMENT

Lot of customers has started switching to different telecom service provider. The company has decided to investigate what is causing customers to leave the company.

OBJECTIVES

The business objective is to predict the churn customers in the last month using the data from the previous 3 months. To complete this task successfully, understanding typical customers behavior.

FINDINGS
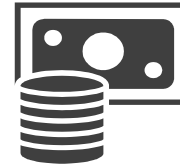
Analyzing the data from different variables, we found that out of 100,000 customers only 30038 customers retain their services. The ratio of the churn customers seems to be around 41.92%.
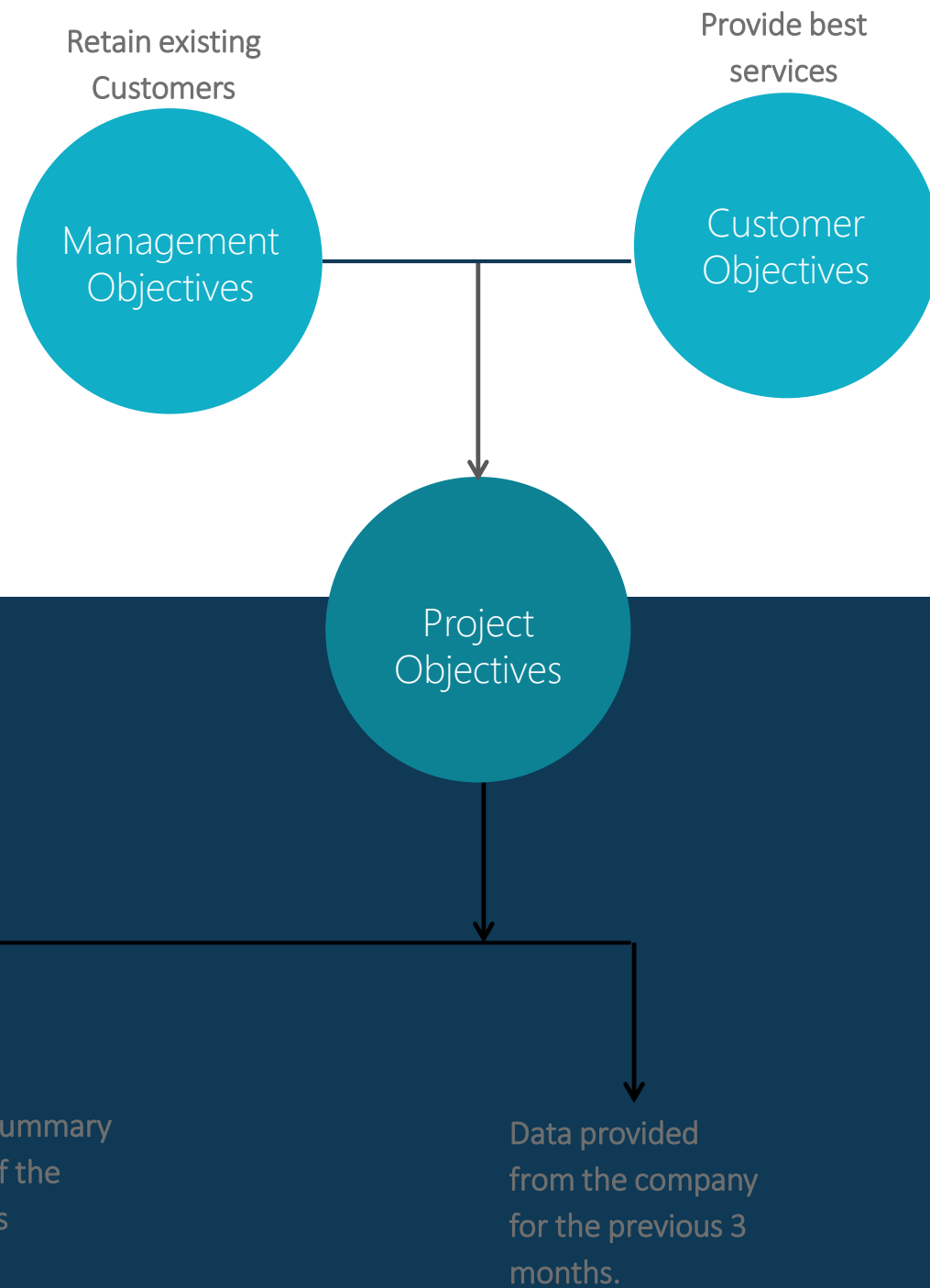
IMPLEMENTATION

Implemented different machine learning models and neural networks to test the churn customers with different features. Where we used the best model with accuracy score of 0.77.

RECOMMENDATIONS

Be proactive with communications. Define a new roadmap for customers. Give offers that customers are willing to have by taking feedback.
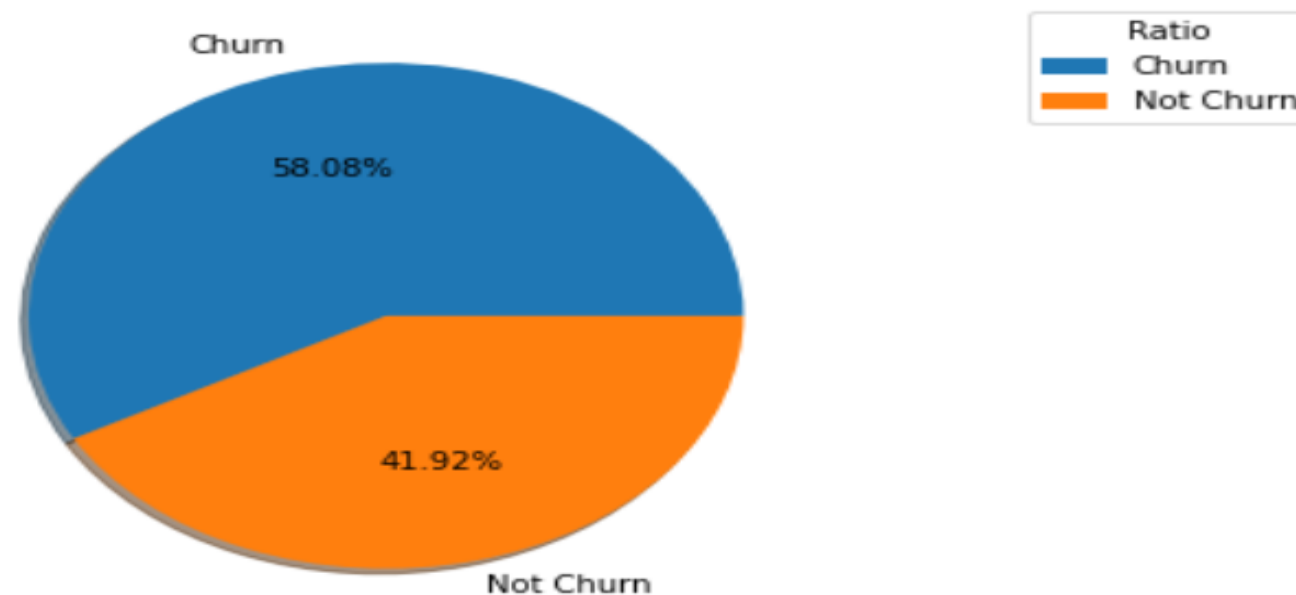
CUSTOMERS NOT CHURN

17446, 58.08%

Customers who are using the services on their regular basis are low than customers that are about to churn.
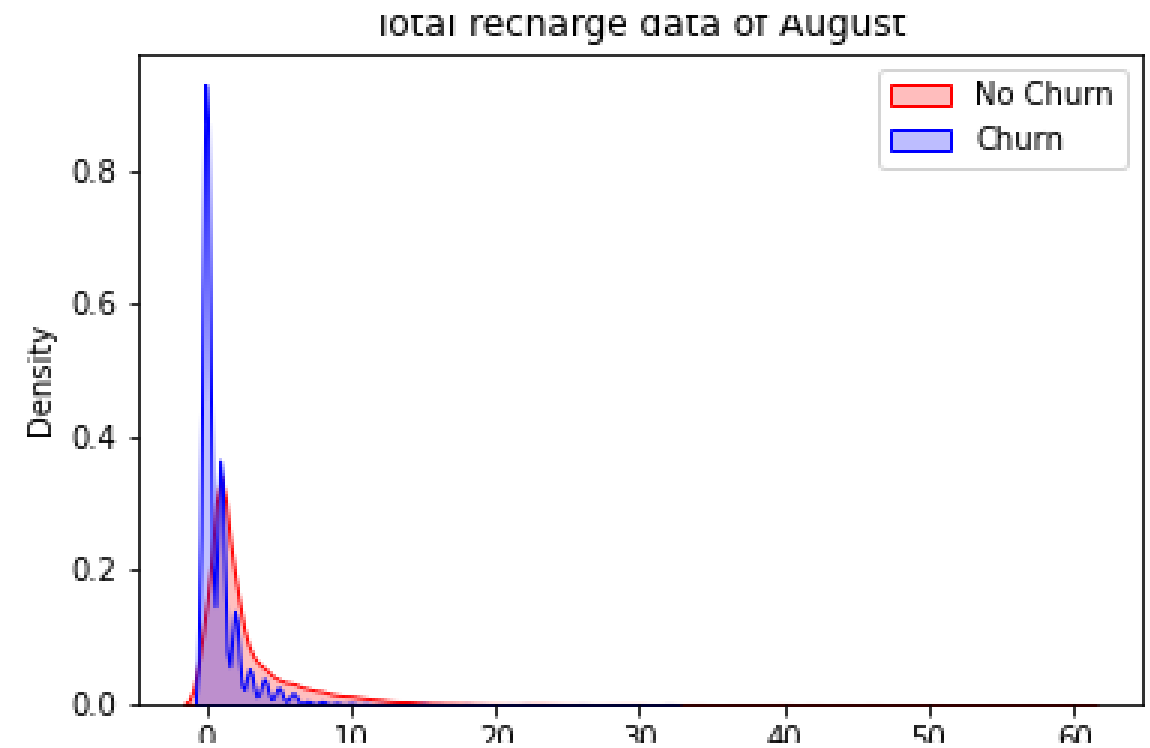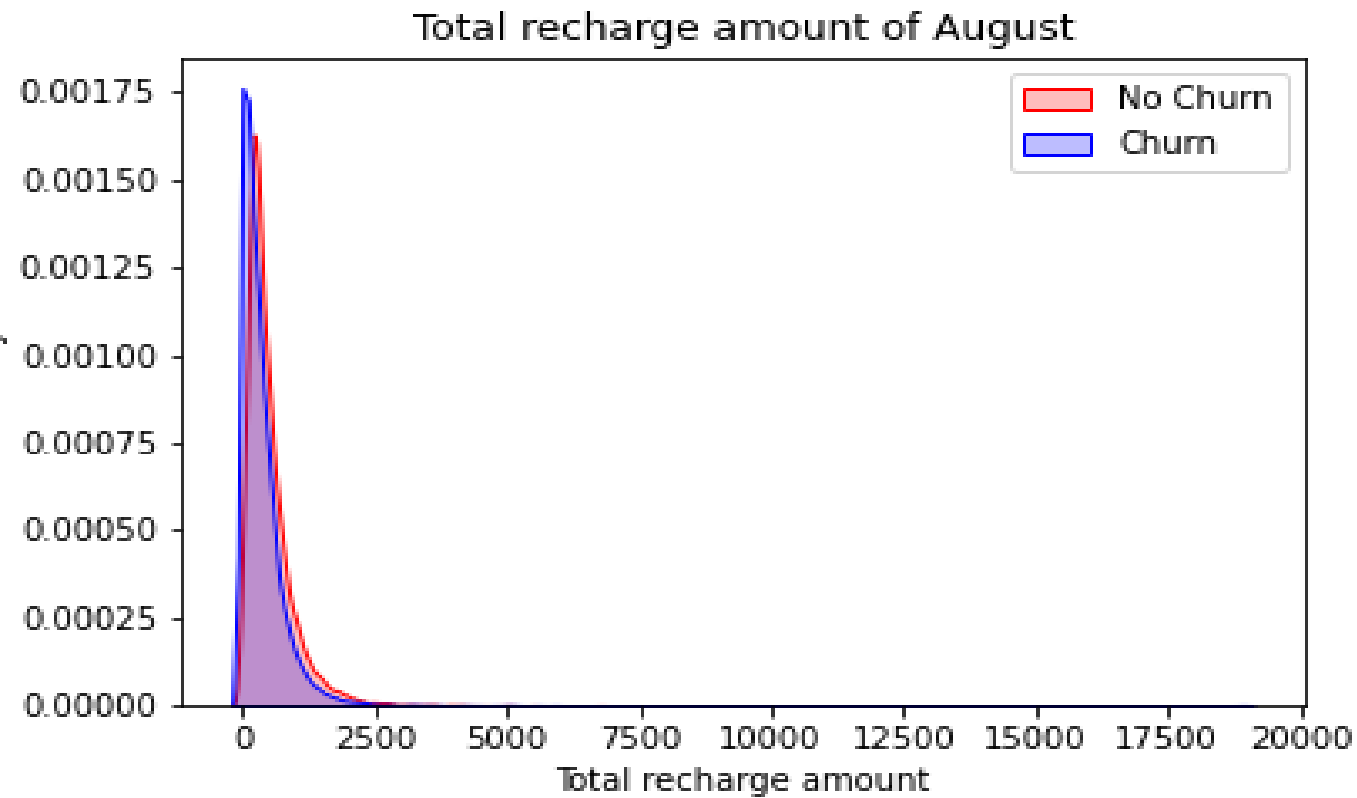
CUSTOMERS CHURN

12592, 41.92%

On an average of all the 100,000 customers, the above mentioned number of customers are about to churn. Which seems to be a high.

Ratio of customers churn vs Ratio of customers not churn

Churn

Ratio
Churn
Not Churn

58.08%

41.92%

Not Churn

Total recharge amount of August

Total recharge data of August

RECHARGE

❑ Here it is evident that total recharge amount in august month for customers who churn is very low.

❑ At the same time total data recharge in august month for customers who churn is also very low.

LAST DAY RECHARGE

Here we can see that in august month last day of recharge amount for customers who churn is very low.

The last day of recharge amount for August for the churn customers are very much populated around 1, whereas of non churn customers, it spreaded across various numbers.
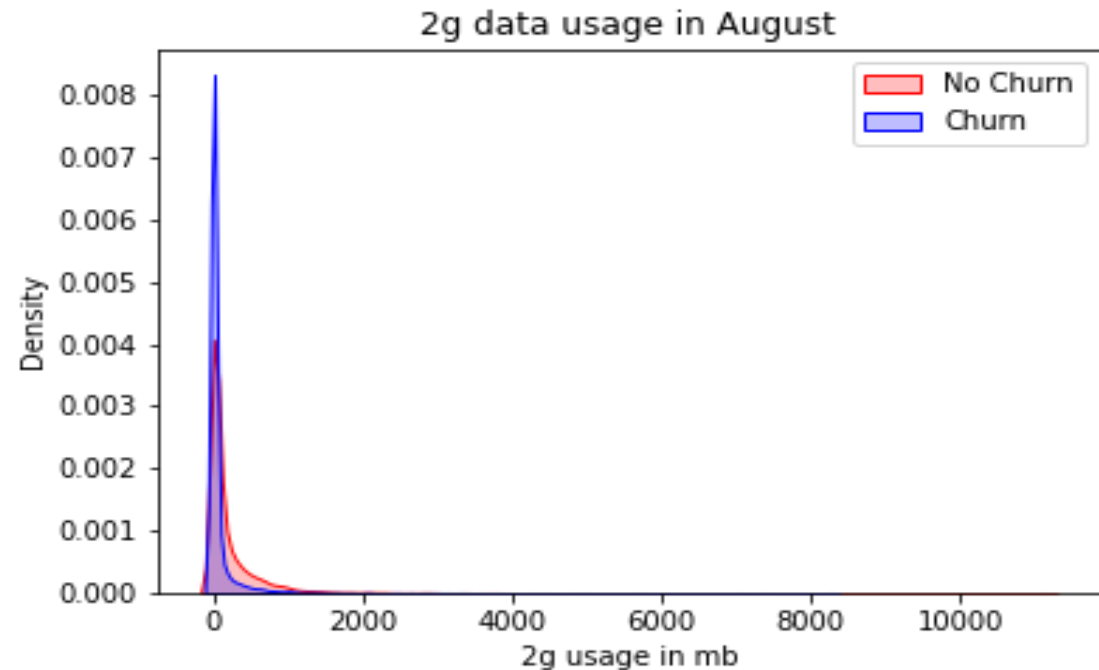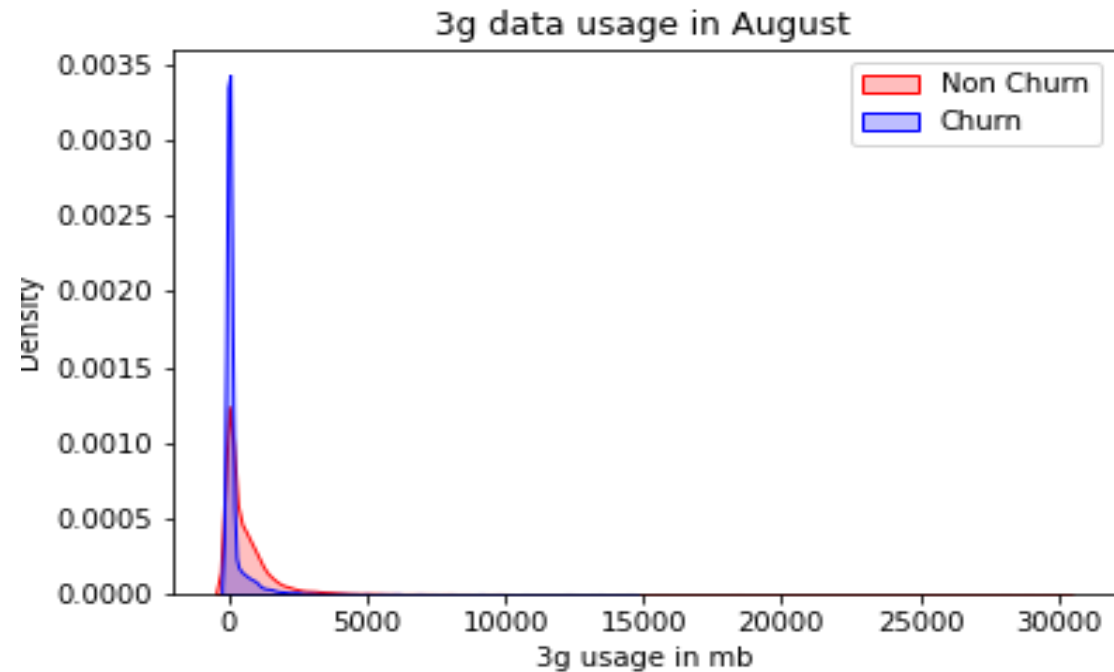

Last day of recharge amount in August
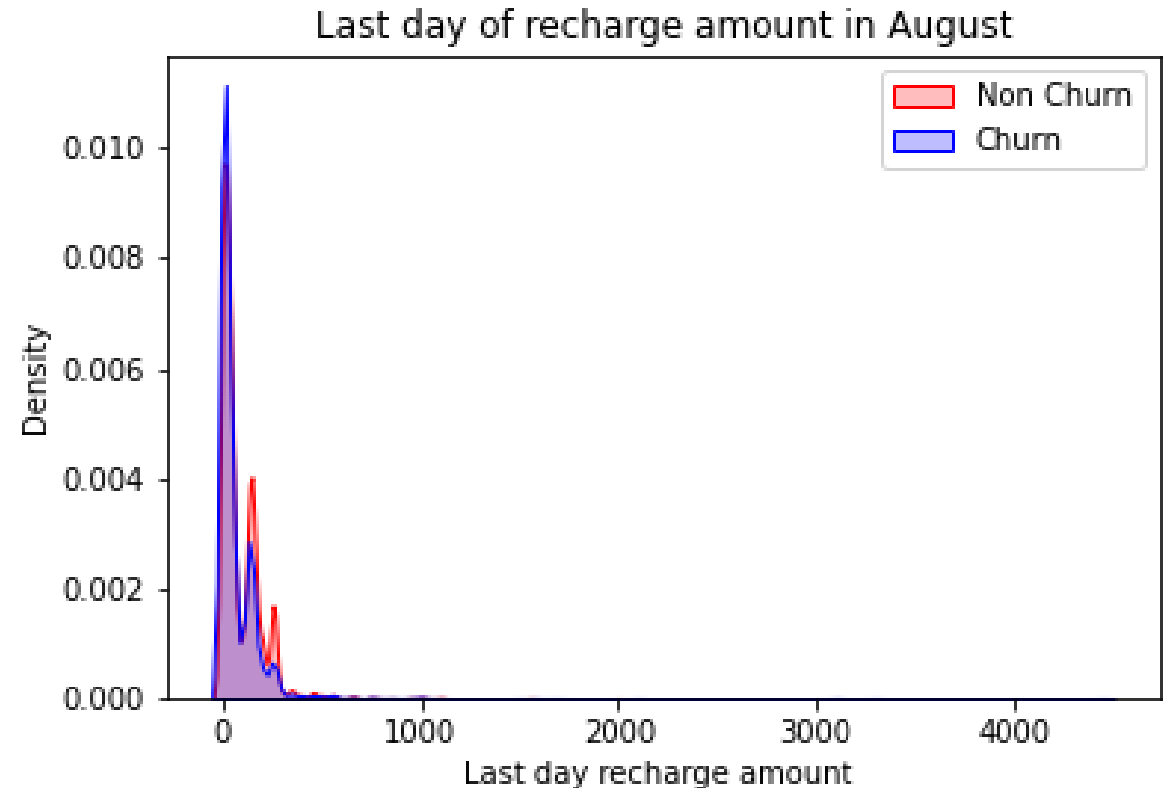
2G AND 3G DATA USAGE

Here we can see that 3g data usage in august month for customers who churn is nearly 0.

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At the same time 2g data usage in august month for customers who churn is also nearly 0.
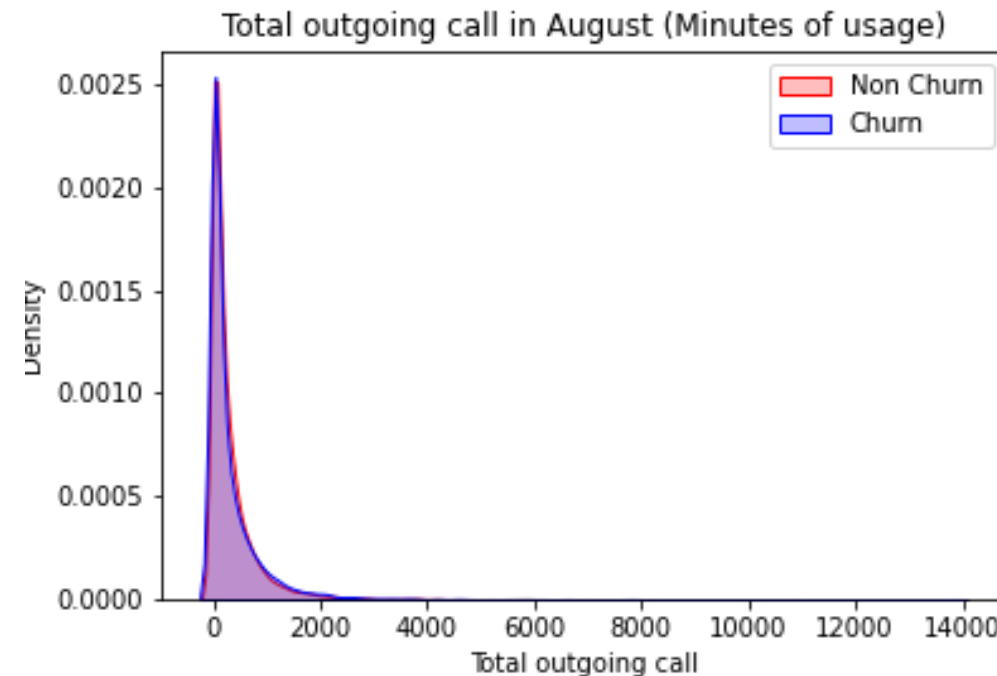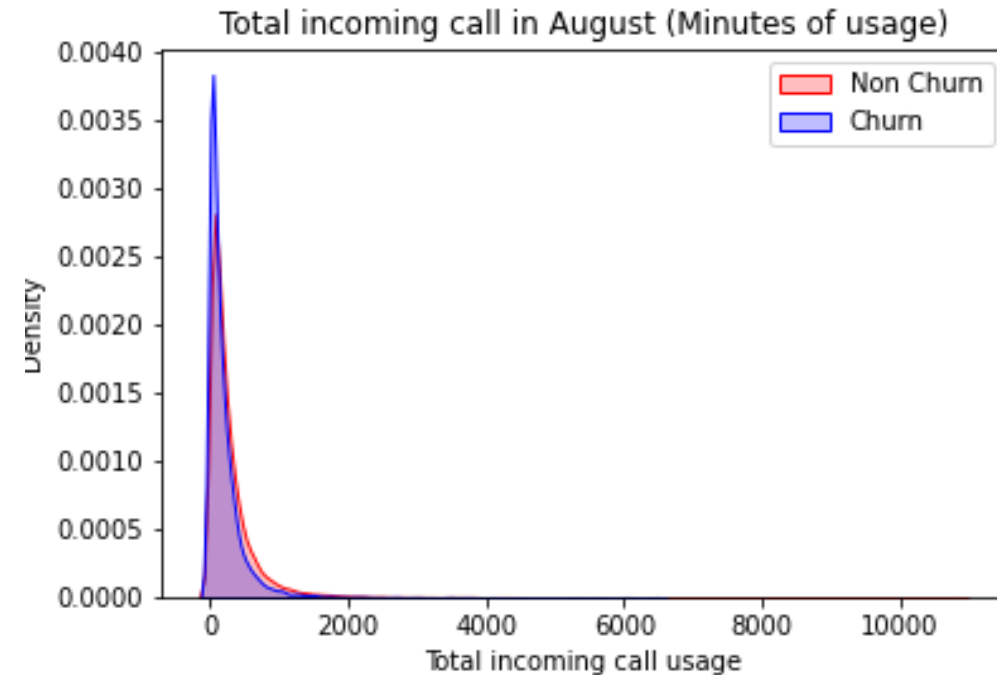
TOTAL
IC CALLS&OG CALLS

We can see that total incoming call usage is nearly 0 in august month for customers who churn.

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Whereas, total outgoing call usage is also nearly 0 in august month for customers who churn.
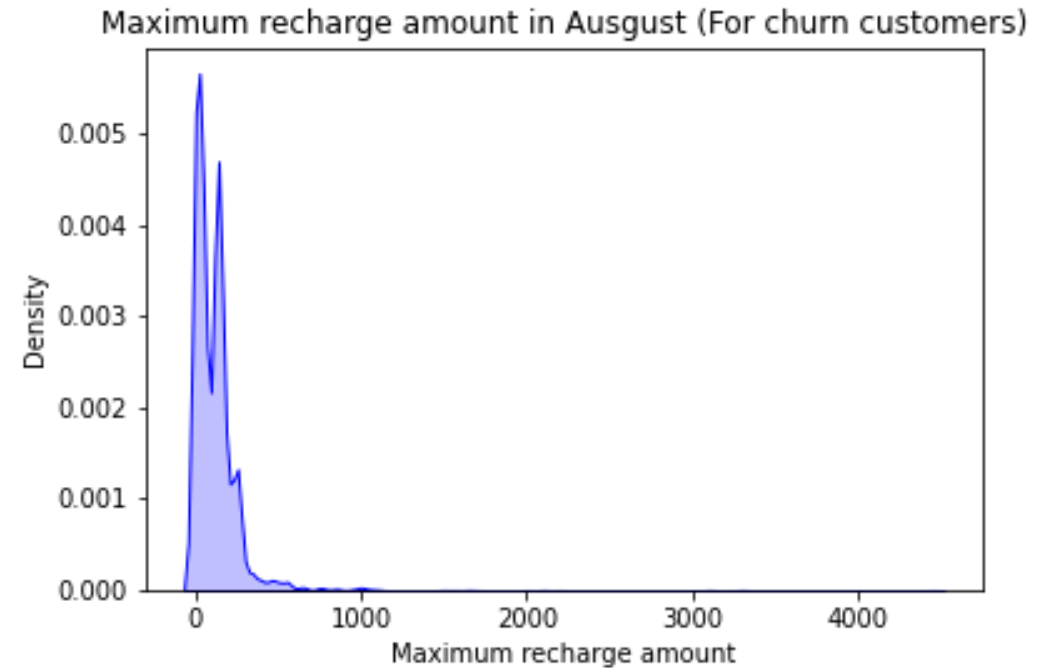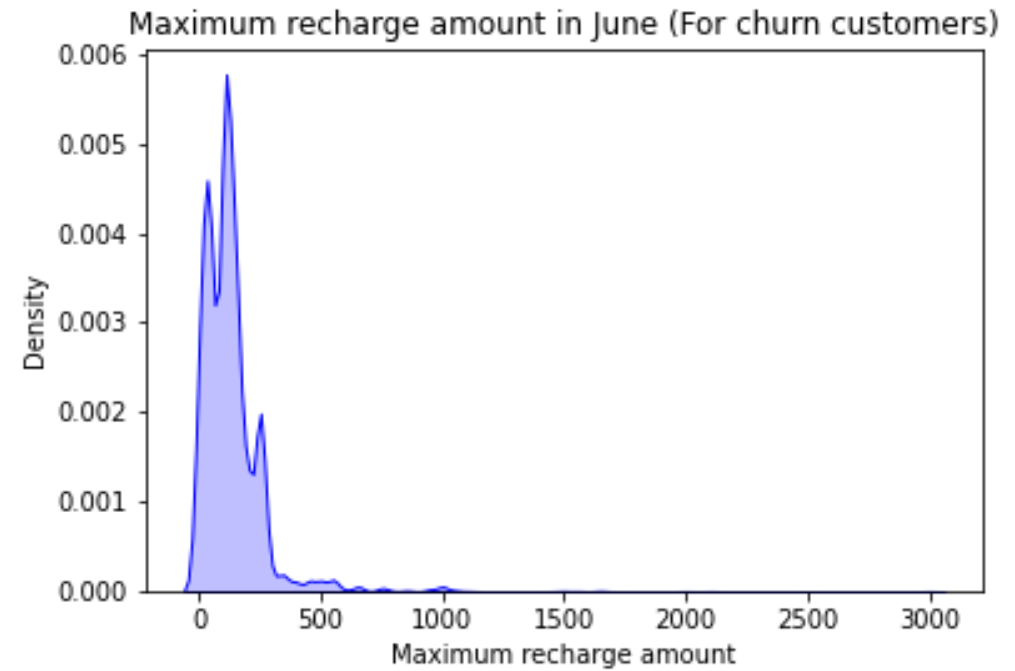
MAXIMUM RECHARGE AMOUNT

Here we can see that in June month maximum recharge amount for churn customers is spread across.

Whereas, in August month density of maximum recharge amount for churn customers is highest at nearly 0.

SUGGESTIONS

- ✓ Sudden drop in Minutes of usage might be because of the unsatisfactory customer service or because of poor network or unsuitable customer schemes/plans. Efforts shall be made to provide better network and focus on customer satisfaction.
- ✓ Customized plans should be provided to such customers to stop them from churning.
- ✓ Based on the usage / last recharge, routine feedback calls to understand the customer satisfaction regarding services can be made to understand their grievances & expectations. Appropriate action should be taken to avoid them from churning.
- ✓ Various attractive offers can be introduced to customers showing sudden drop in total amount spent on calls & data recharge in the action phase to lure them.
- ✓ Promotional Offers can also be very helpful.
- ✓ Further recommendations are provided.

HOW TO REDUCE CUSTOMER CHURN

Be proactive with communication.

Ask for feedback often.

Define a new roadmap for customers.

Analyze churn customers before turning into another services.

Stay focus and competitive.

THANK YOU