

# Telecom Churn Case Study

DSC 45



# Analysis Approach

Problem Statement

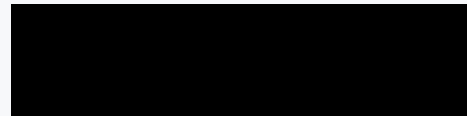
Data Preparation

Feature Correlation

Top Feature affecting Customer Churn

Action Suggested

# UNDERSTANDING CUSTOMER CHURN



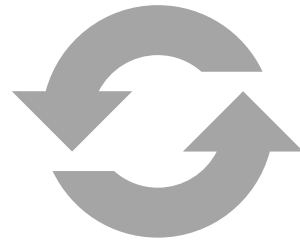
## Problem Statement

- Predict whether the customer will churn or not in Churn Phase while analysis the Data of customer in Action Phase. Churn to be predicted of High Value Customer as 80% of the revenue is contributed by these 20% of total customer.
- High value Customers are those whose recharge value is greater then 70% of average recharge value Customer data is of period June to Sept, where sept period is of churn phase customers

# Understanding Customer



**Good' phase:** In this phase, the customer is happy with the service and behaves as usual.



**Action' phase:** The customer experience starts to sore in this phase



The **'Churn' phase:** In this phase, the customer is said to have churned.

# Customer Impacting Business

upGrad



Total Data Available – 99999 Customers



High Value Customers (80% Revenue from 20% of the customer) **70th percentile** of the average recharge amount in the first two months (the good phase).

# Data Features



Incoming and  
Outgoing calls



Roaming Calls



Mobile Internet  
Usage Volume



Different Service  
Schemes

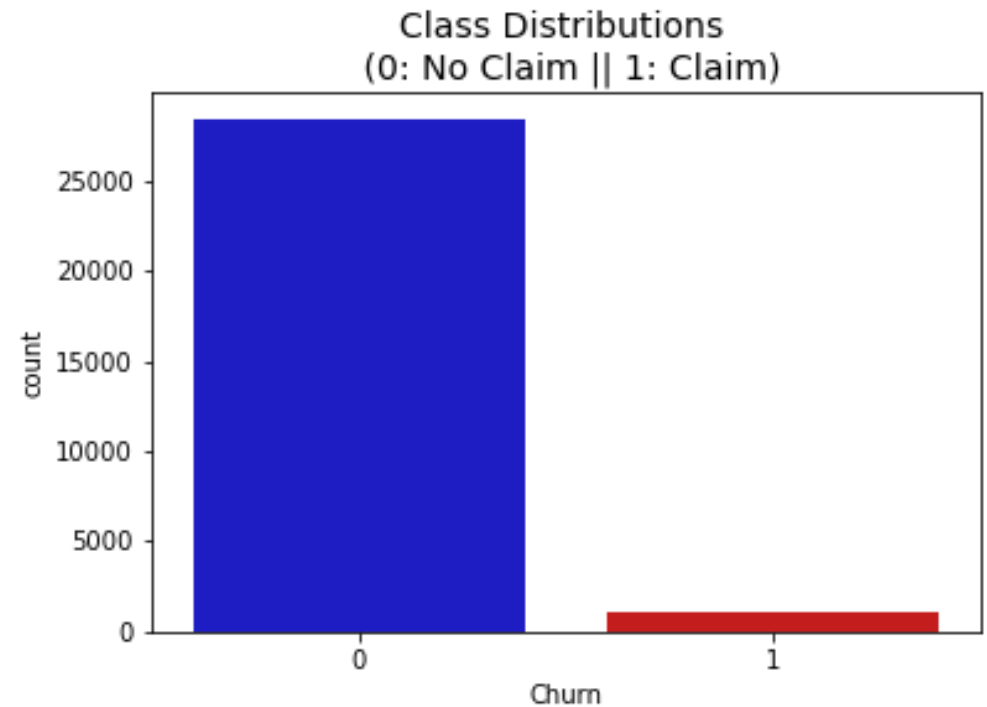


Average  
Recharge Values

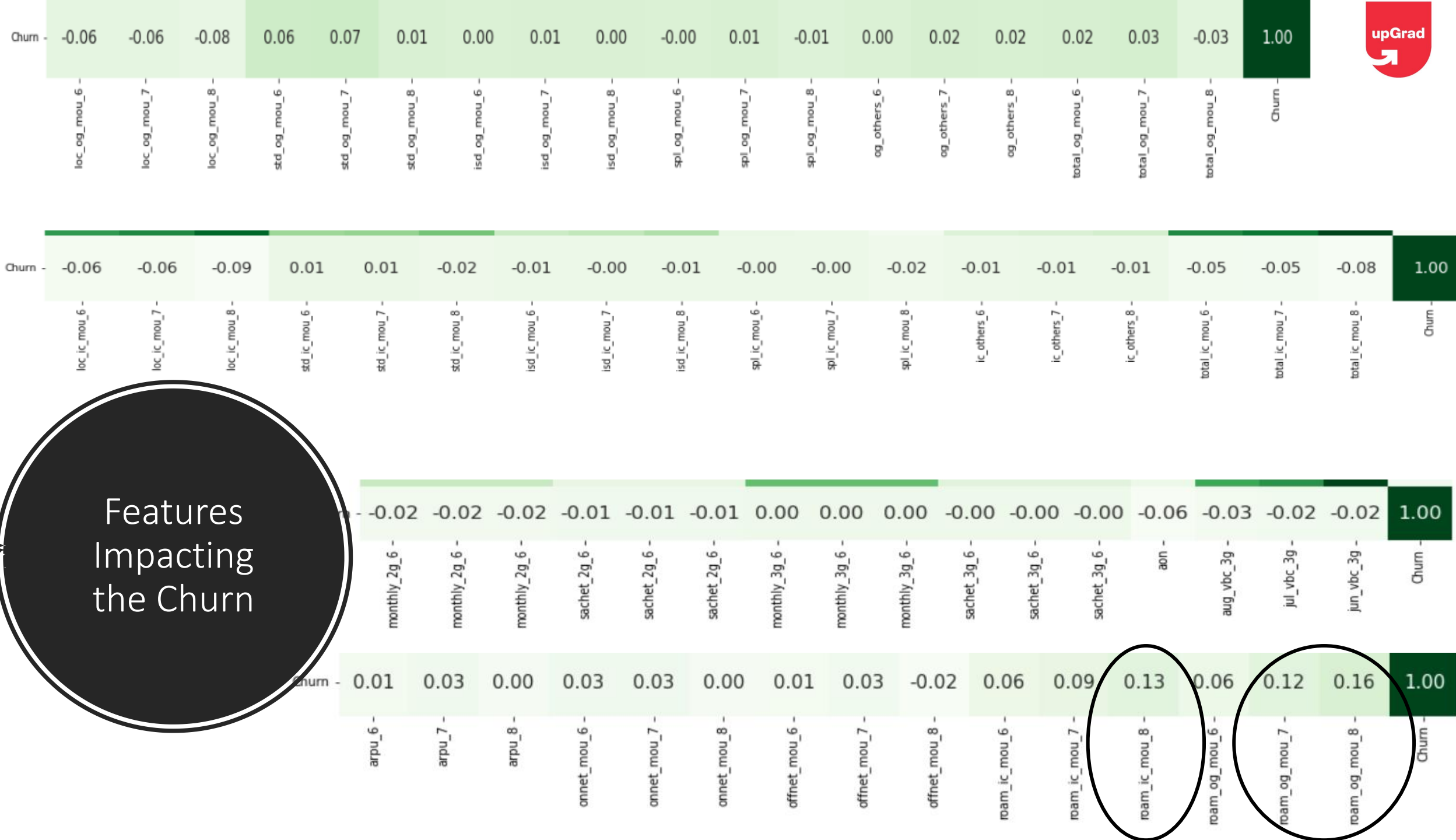


# Customer Churn

3.5% Customer Churn in the Month of September



Features Impacting the Churn







# Top 10 Features Impacting Churn

1. Roaming calls in the month of Aug
2. Local Incoming and Outgoing calls in Aug
3. Last recharge in Aug

roam\_og\_mou\_8

roam\_ic\_mou\_8

loc\_ic\_mou\_8

last\_day\_rch\_amt\_8

loc\_og\_mou\_8

total\_ic\_mou\_8

total\_og\_mou\_8

spl\_og\_mou\_7

roam\_og\_mou\_7

Aon

roam\_ic\_mou\_7

spl\_ic\_mou\_6

spl\_og\_mou\_8

max\_rech\_amt\_8

offnet\_mou\_8

# Action Suggested

1. Roaming calls to be monitored continuously and service provided
2. In the Action phase only customer reducing the calls to be given attractive offer on their next recharges
3. Last recharge amount to be compare to the last 3 months average