

# SYRIATEL CUSTOMER CHURN

## OVERVIEW

The utilization of SyriaTel customer data serves the purpose of investigating the underlying factors contributing to customer attrition. This attrition, or customer churn, can stem from various sources, including competitive offers from rival companies, unresolved customer service problems, and individual customer preferences. Through the identification of potential churners, SyriaTel can proactively implement strategies to retain customers, ultimately enhancing overall customer satisfaction.

# Business Understanding

- ▶ Business problem
- ▶ The business challenge facing Syria Tel revolves around a substantial customer churn rate. A significant number of customers are discontinuing their service for diverse reasons, which, in turn, is adversely affecting the company's revenue and market standing. To mitigate this issue, Syria Tel seeks to pinpoint potential churners and initiate measures to retain these customers, with the ultimate goal of enhancing overall customer satisfaction.

# Project Objectives

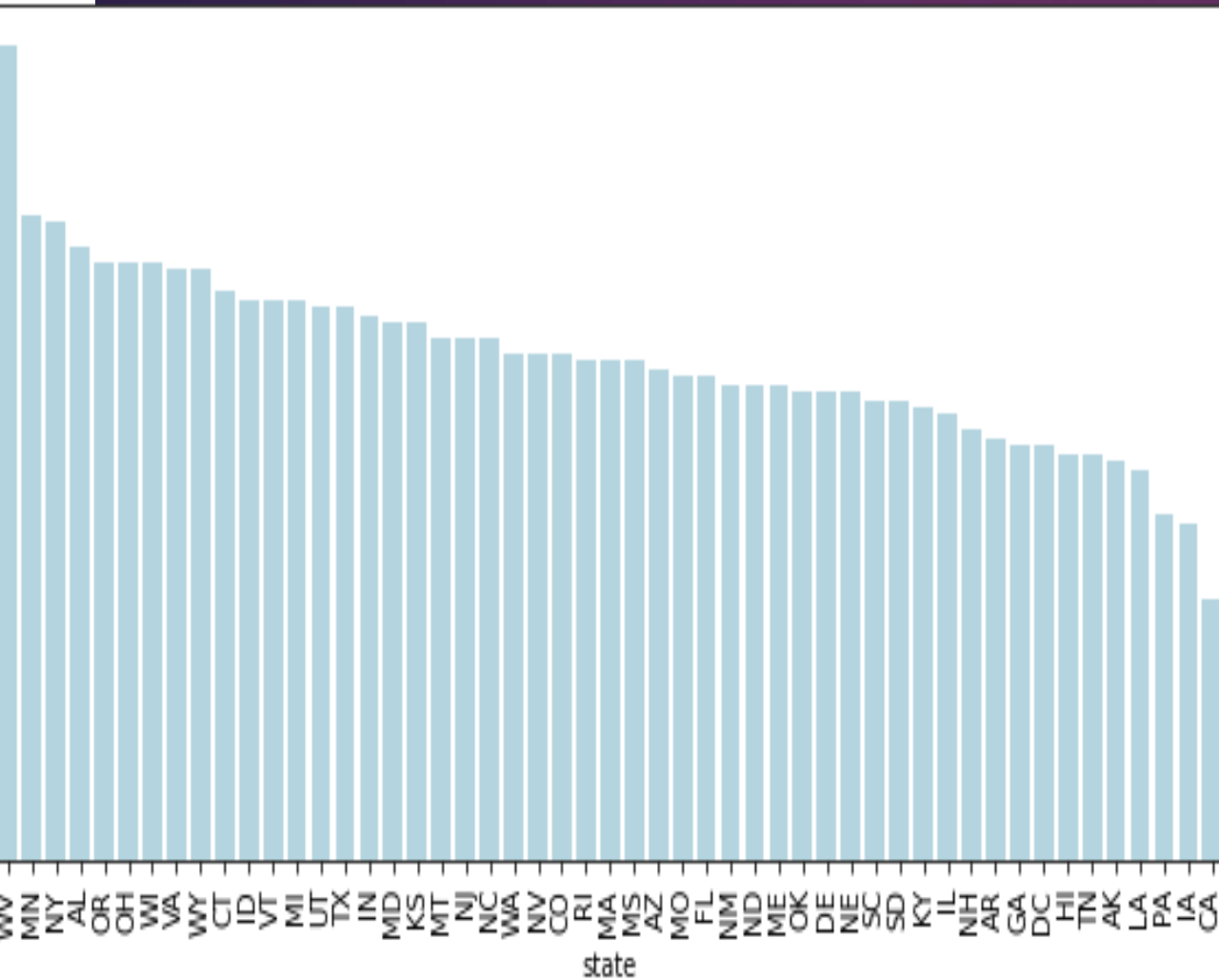
- ▶ Core Objectives:
  - ▶ 1. Churn Rate Mitigation: The central aim is to curtail the customer churn rate by leveraging predictive analytics to identify individuals at risk of leaving and enacting proactive retention strategies.
  - ▶ 2. Enhance Customer Satisfaction: Gaining insights into the drivers of churn will empower Syria Tel to enhance service quality, elevate customer support standards, and optimize pricing plans to bolster overall customer satisfaction.
  - ▶ 3. Revenue Augmentation: Through the retention of a larger customer base, Syria Tel can augment its revenue streams and fortify its position in the market.
  - ▶ I will employ data science and machine learning methodologies to construct a predictive model capable of discerning potential churners. This model will scrutinize customer data and make predictions regarding the likelihood of churn. This proactive approach will enable Syria Tel to take targeted actions aimed at customer retention.

# Data understanding

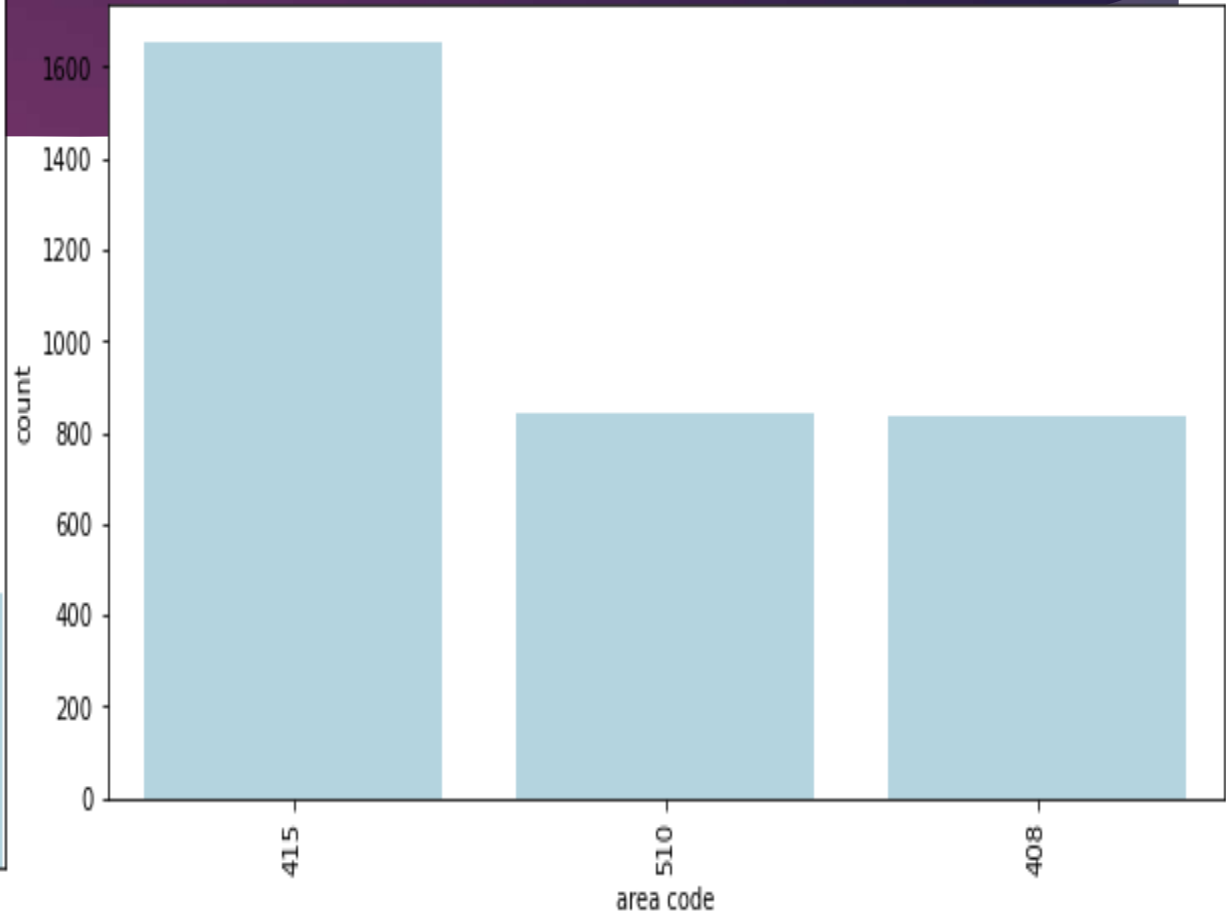
- ▶ We will work with customer churn dataset from Kaggle. The dataset has 3333 rows and 21 columns

# Data analysis

Distribution of state



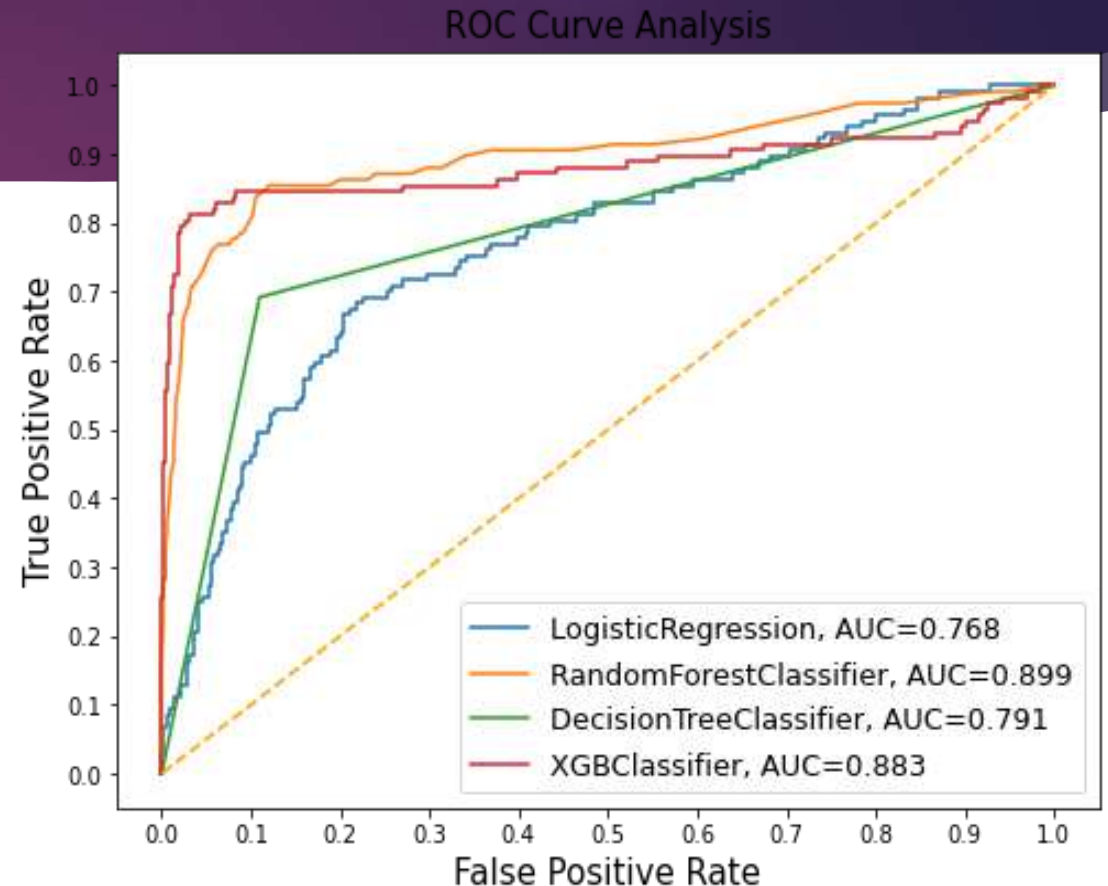
Distribution of area code



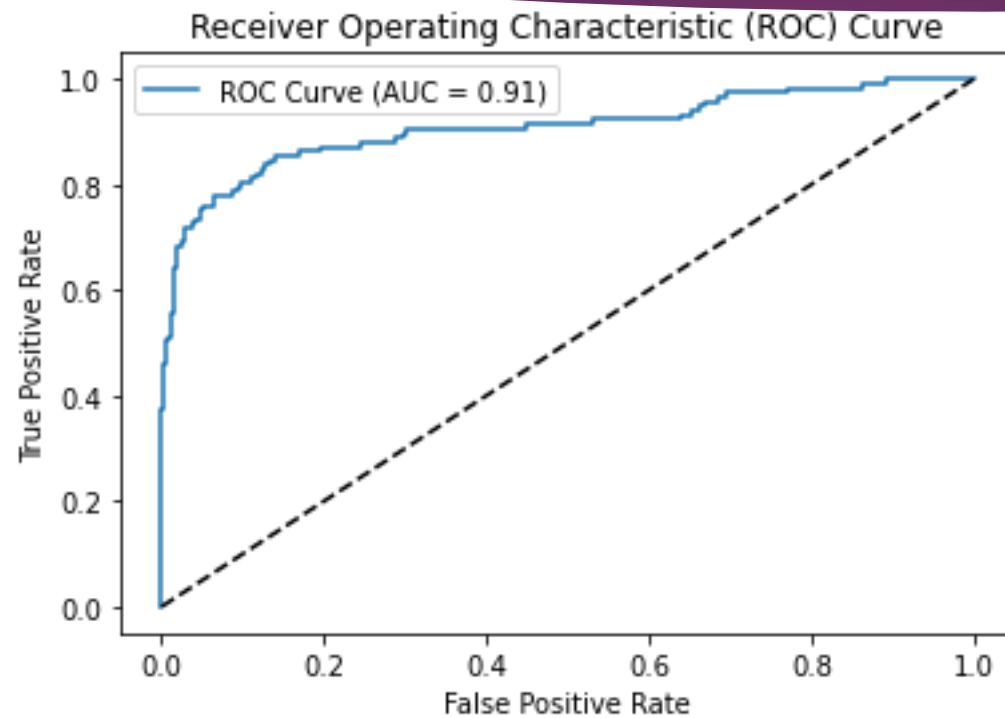
# Modelling; used the following algorithms during modelling

- ▶ LogisticRegression
- ▶ XG Boost
- ▶ DecisionTreeClassifier
- ▶ Random Forest Classifier

We also used AUC ROC and Recall metrics for further evaluation.




# Model Tuning Results



# Recommendations

- ▶ 1. Targeted Discounts: Offer discounts to customers in area codes 415 and 510 to encourage loyalty.
- ▶ 2. Enhanced Customer Service: Invest in improved customer service to reduce calls and boost satisfaction.
- ▶ 3. Pricing Structure Evaluation: Review pricing plans to address concerns about high charges.
- ▶ 4. Customer Retention: Focus on retention strategies in high-churn states.
- ▶ 5. Voicemail Plan Enhancement: Enhance the voicemail plan's value proposition for higher adoption.





Thank you  
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