

SYRIATEL COMPANY



Project: SyriaTel Company Customer Churn





Problem Statement:

Build a classifier model to predict SyriaTel Customer churn.

Project Overview:

This project analyzes SyriaTel data and builds models that predict customer churn.



Business Understanding:

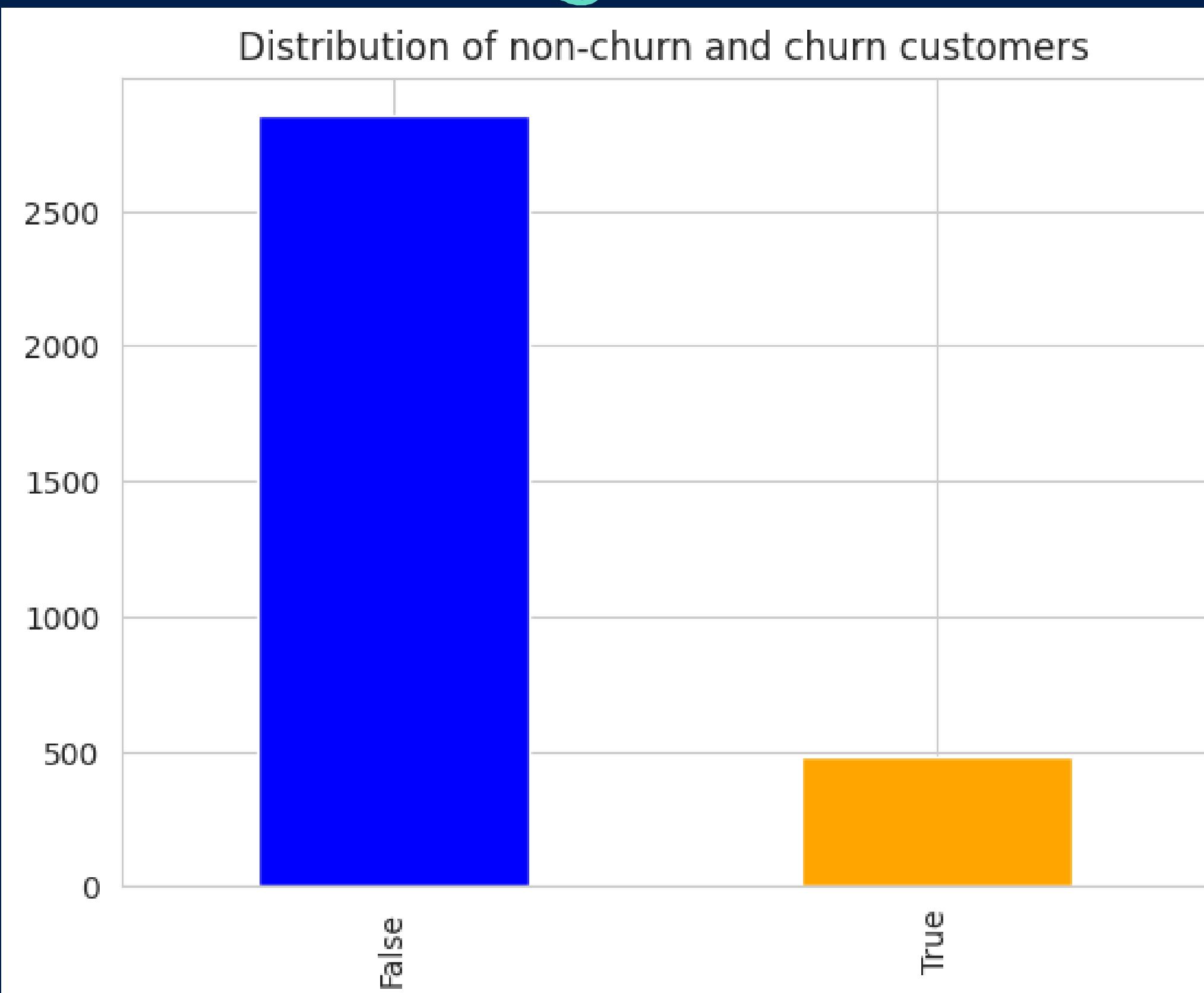
Studies show that acquiring new customers is 6 to 7 times more expensive than retaining an old one. Existing customers are also beneficial to the company as they can refer their family and friends. This makes retaining customers our main goal.



Data Understanding:

Data origin - Kaggle.
Contains 3333 rows and 21 columns

True for customers that left and
Falses for those who stayed.

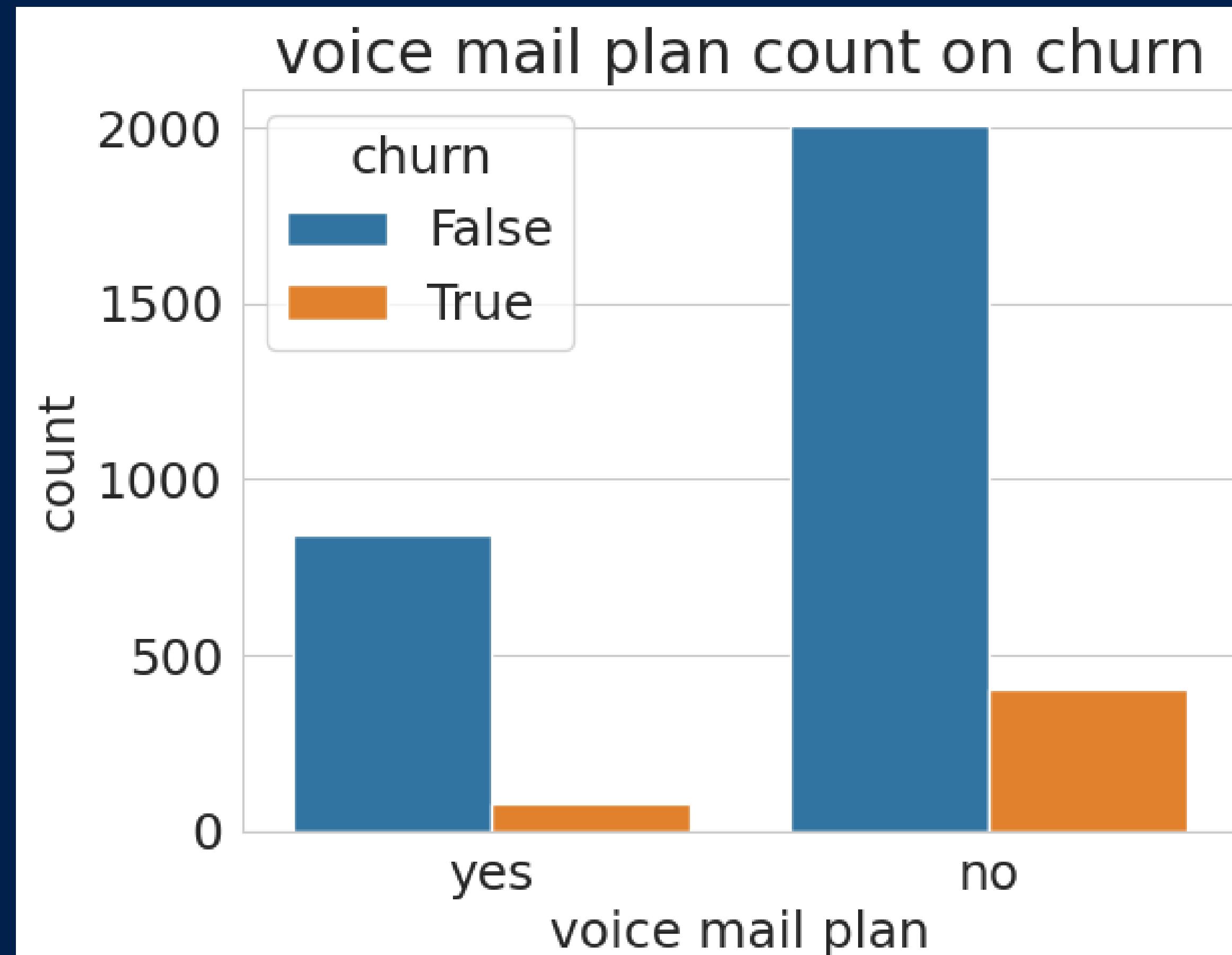




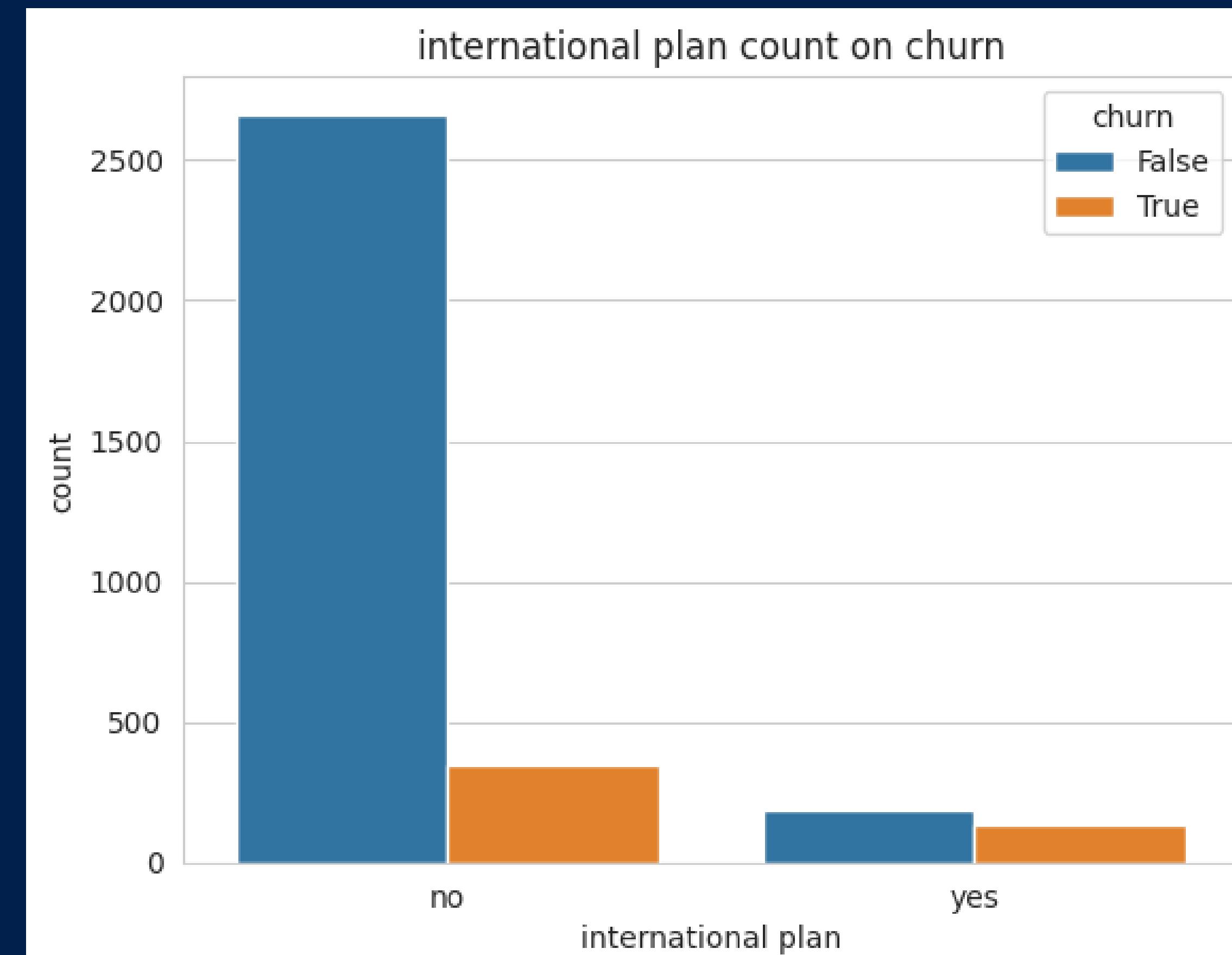
Objectives:

- Develop a predictive model that predicts customer churn
- Come up with recommendations for customers predicted to churn.

Voice Mail Plan Analysis

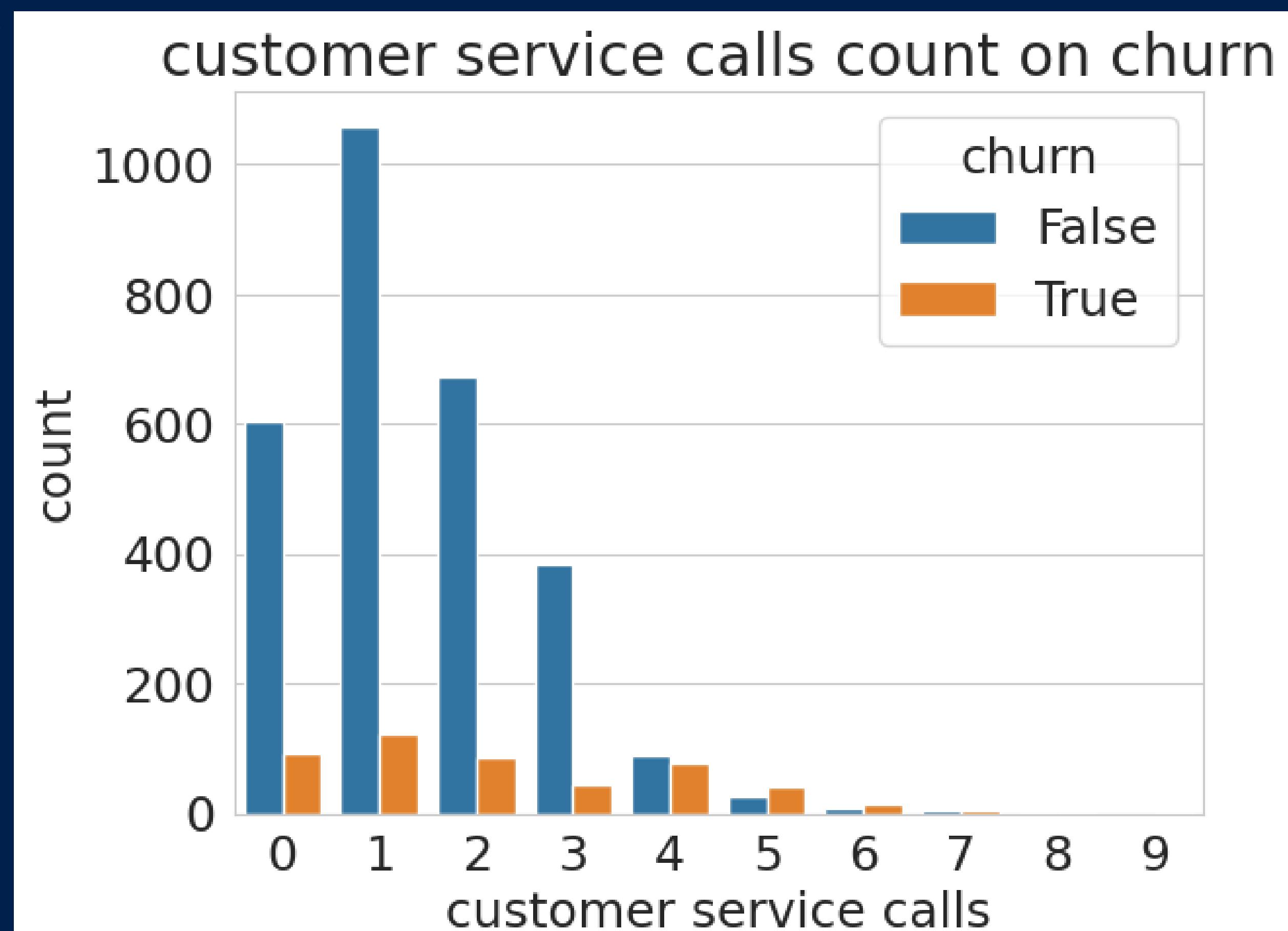


International Plan Analysis

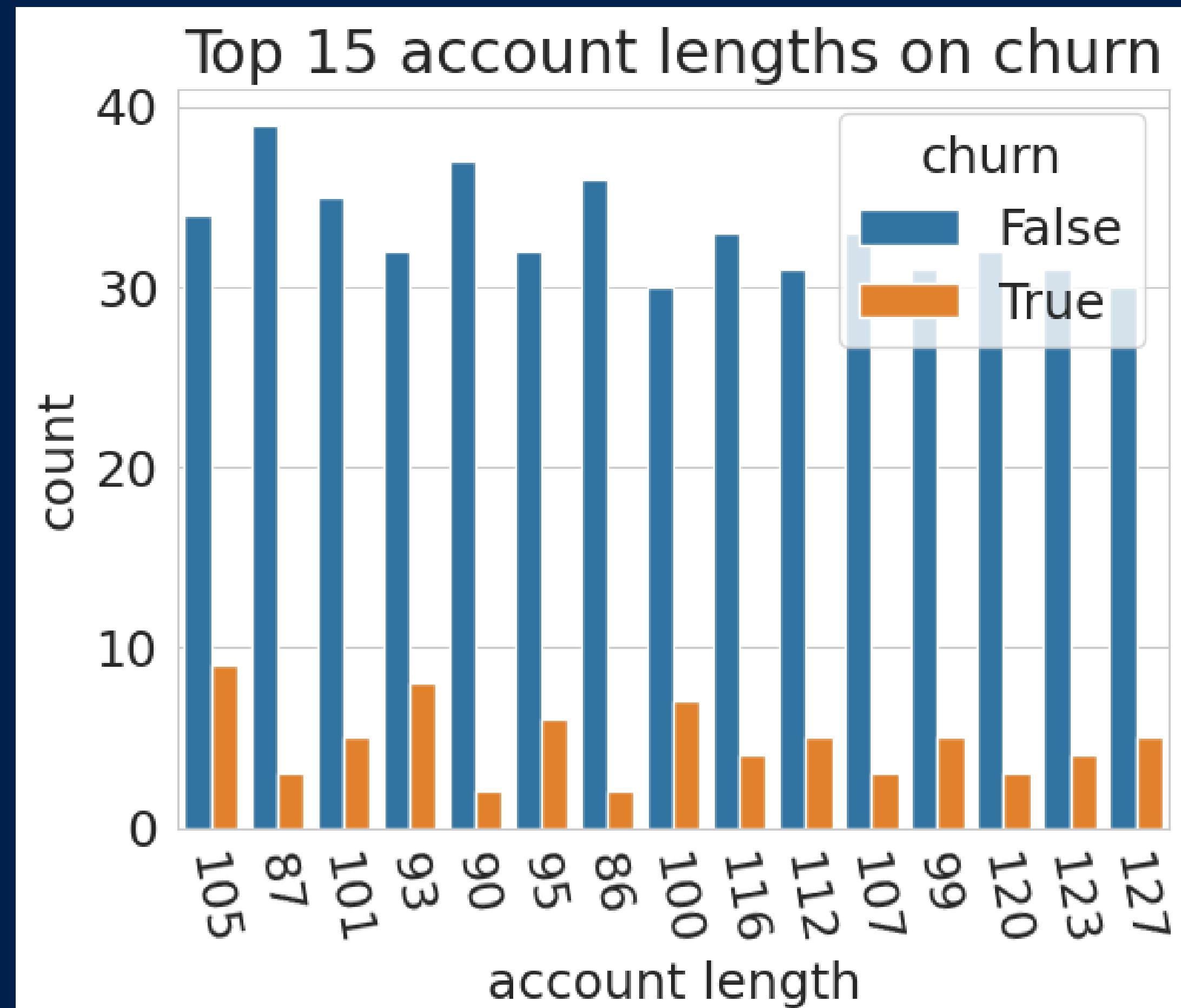


Customer Service Calls

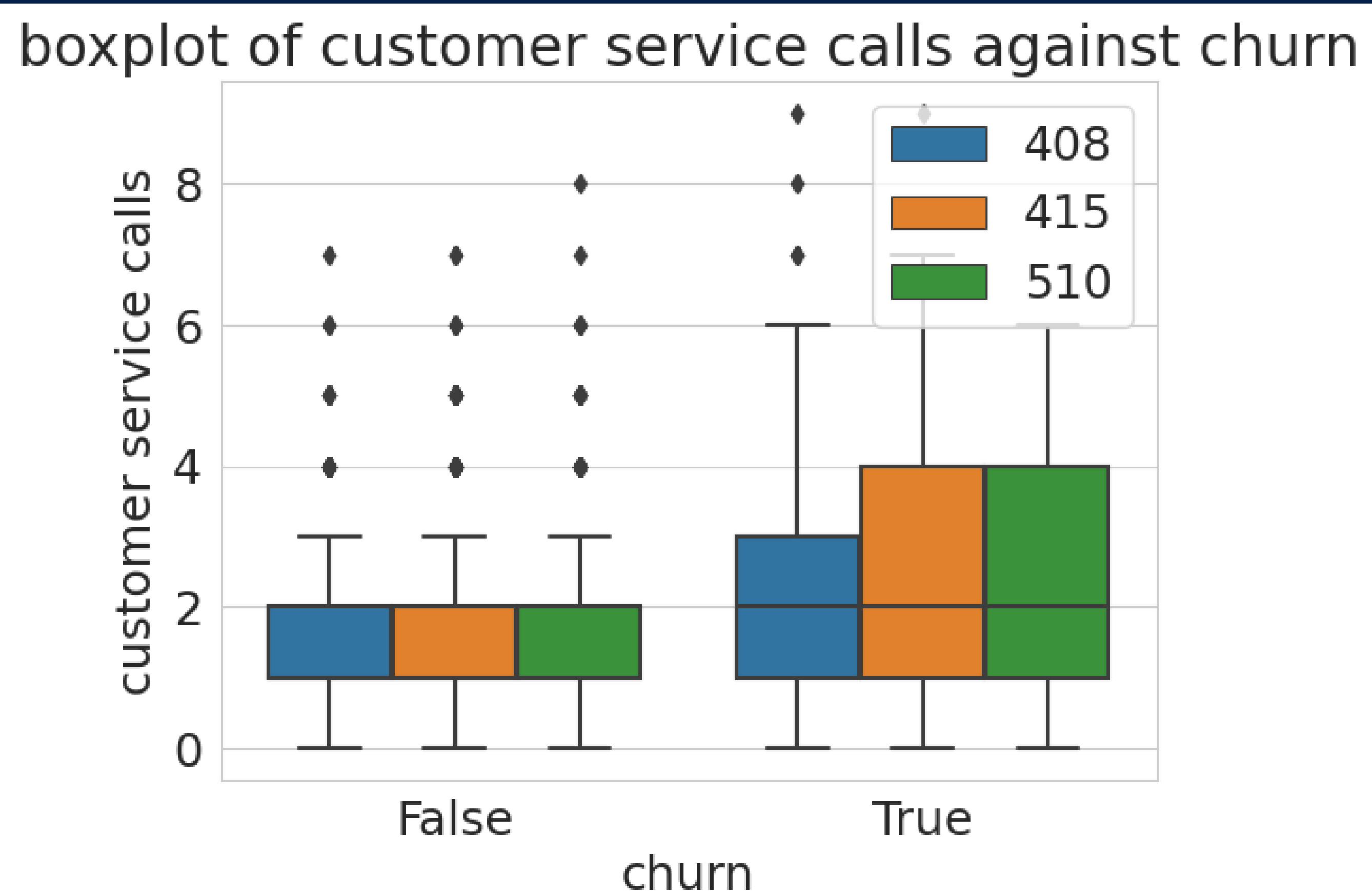
Analysis



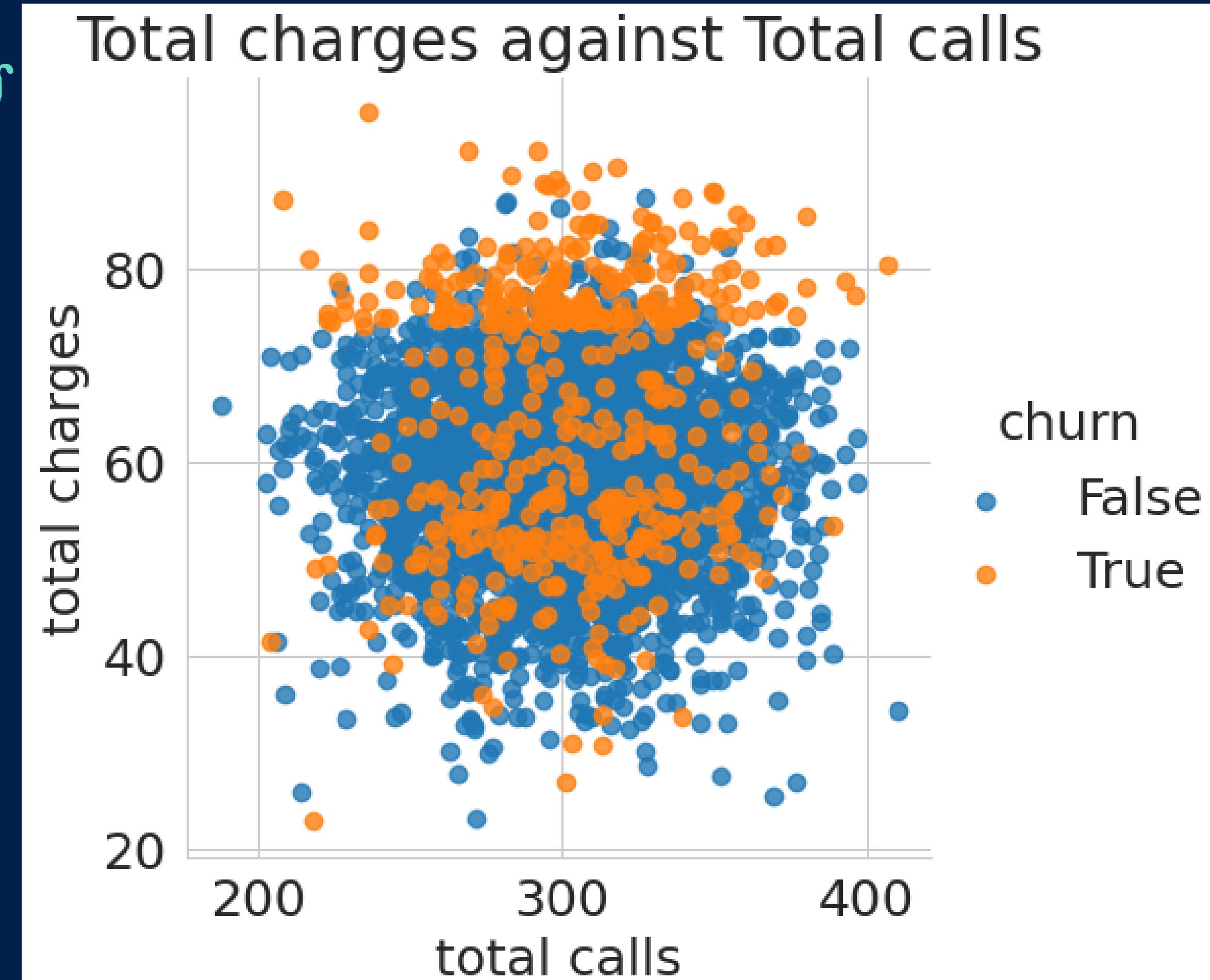
Account length *Analysis*

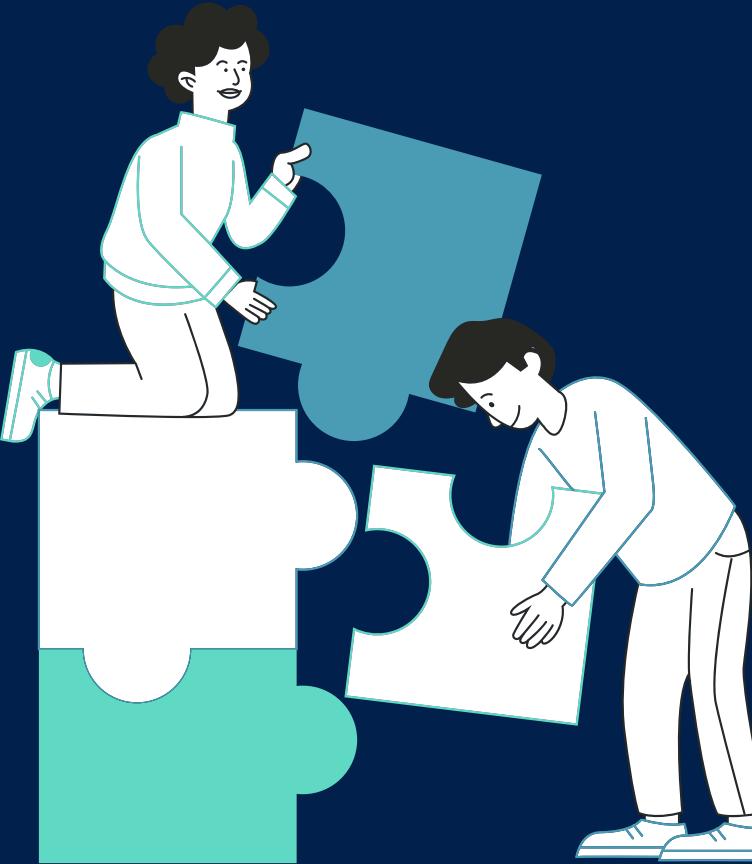


Customer service calls boxplot



Total charges and Total calls analysis



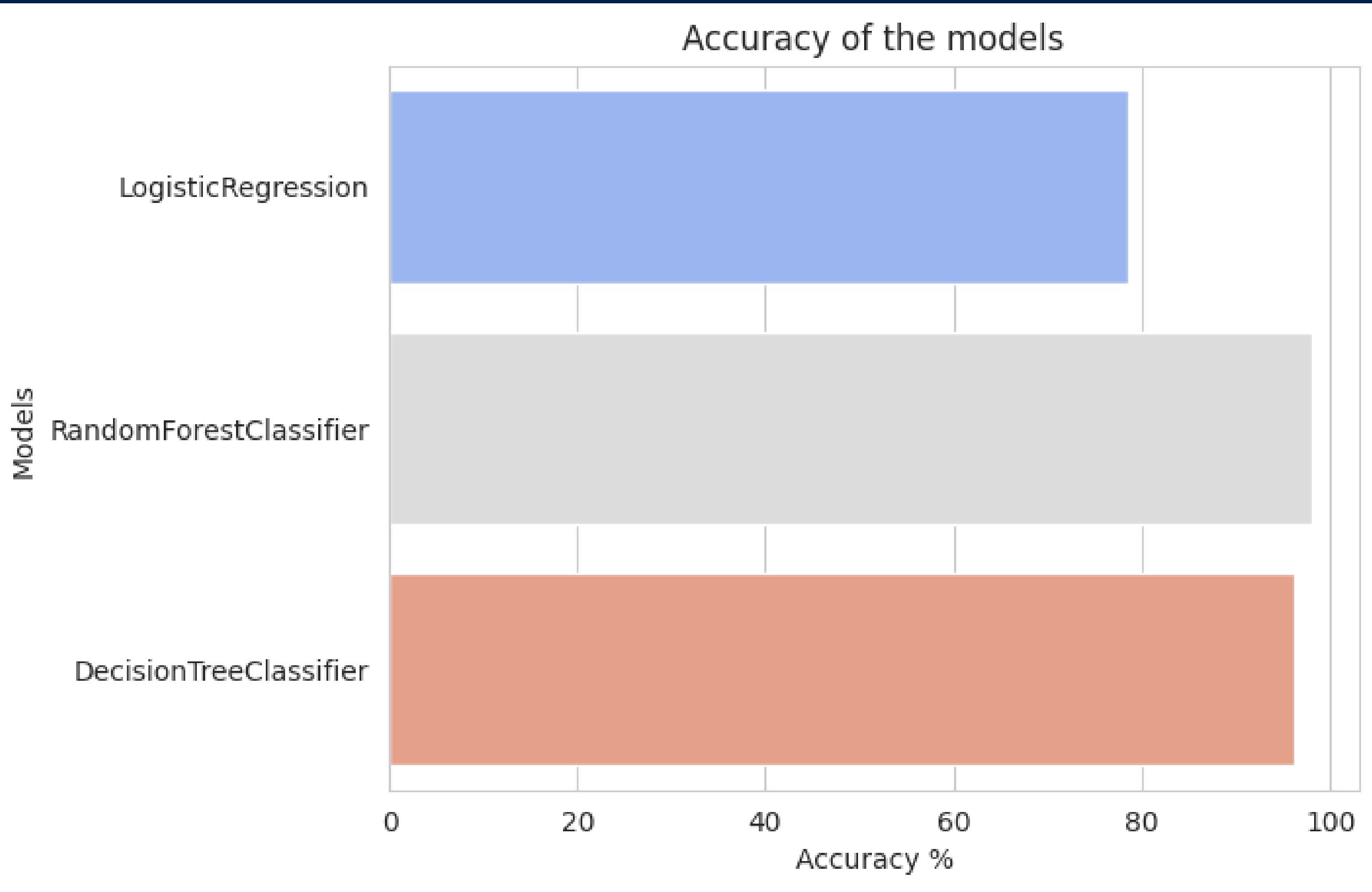


Models:

- Logistic Regression
- Random Forest / Decision Trees
- Hyperparameter Tuning of the models



Model Evaluation:





Recommendations:

- The best model to use is the Random Forest Classifier
- Train customer care agents..
- Invest more in states with high churn
- Reward customers with high total costs

Conclusion:

- Customer service is important and it can make or break a business.
- Good customer service means a better resolution and satisfaction and that will prevent a customer from churning
- Customers who spend more will feel more appreciated and recognized when they are rewarded.