



SyriaTel Churn Analysis

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Determinants of
Churn

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OVERVIEW

SyriaTel, a telecommunication company with customers across the United States.

It is suffering from a loss of valuable customers to competitors.

Our team is hired to build a classification model and determine the primary features that lead to the churn of customers.

The datasets include 3333 customers in 51 states (including D.C.) on a monthly basis.

OUR APPROACH



Perform exploratory data analysis on current data



Build up baseline model using logistic regression



Apply multiple machine learning algorithms to build the best classification model



Find the primary determinants of churn

PRIMARY DETERMINANTS



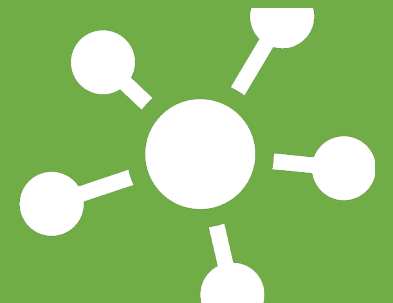
International Plan and
Voice Mail Plan

Customer Service Calls

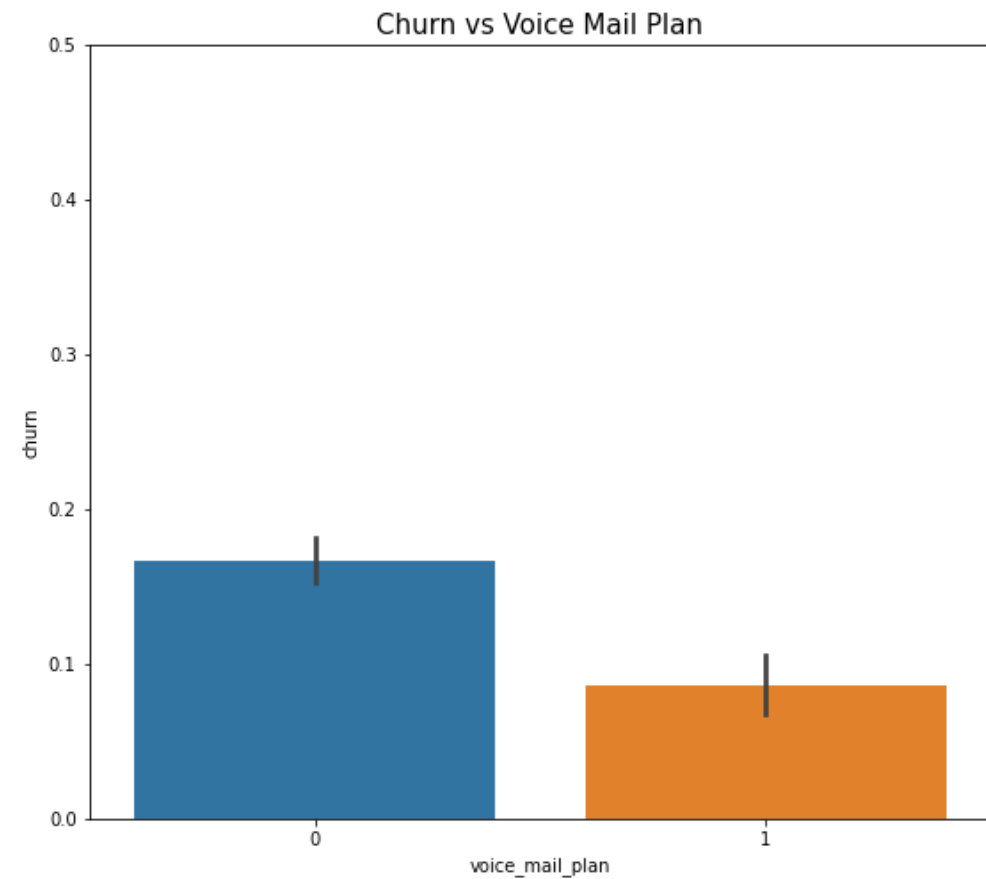
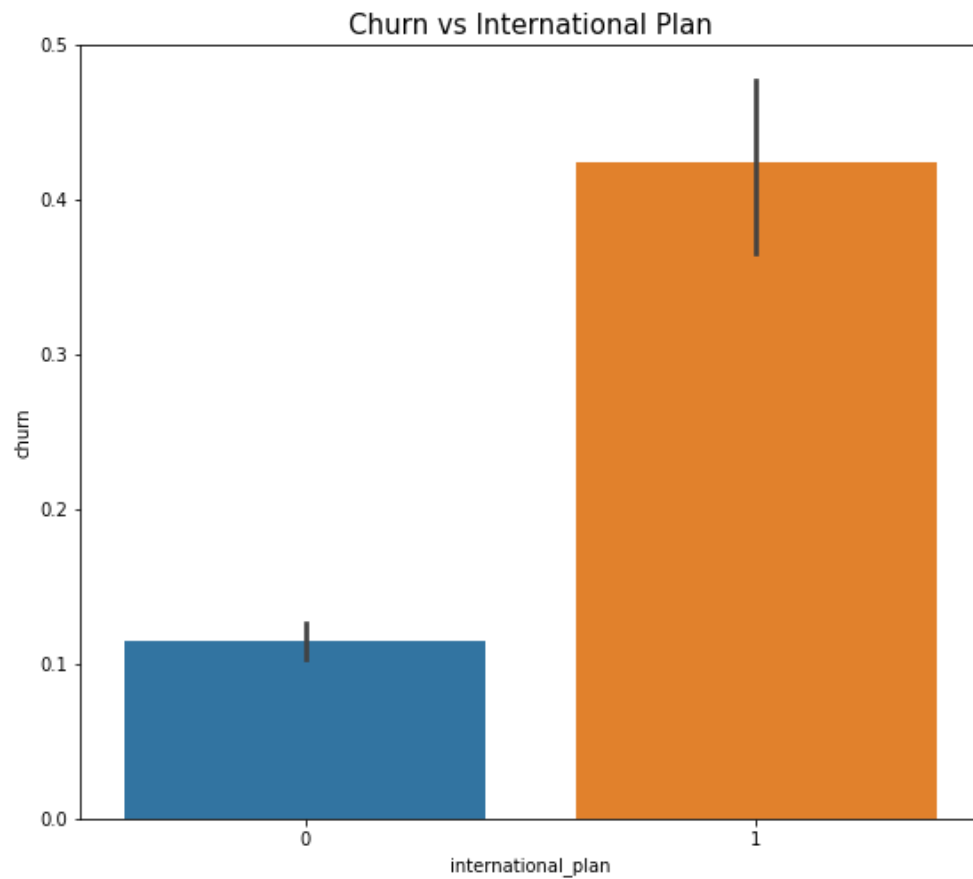


Monthly Charges

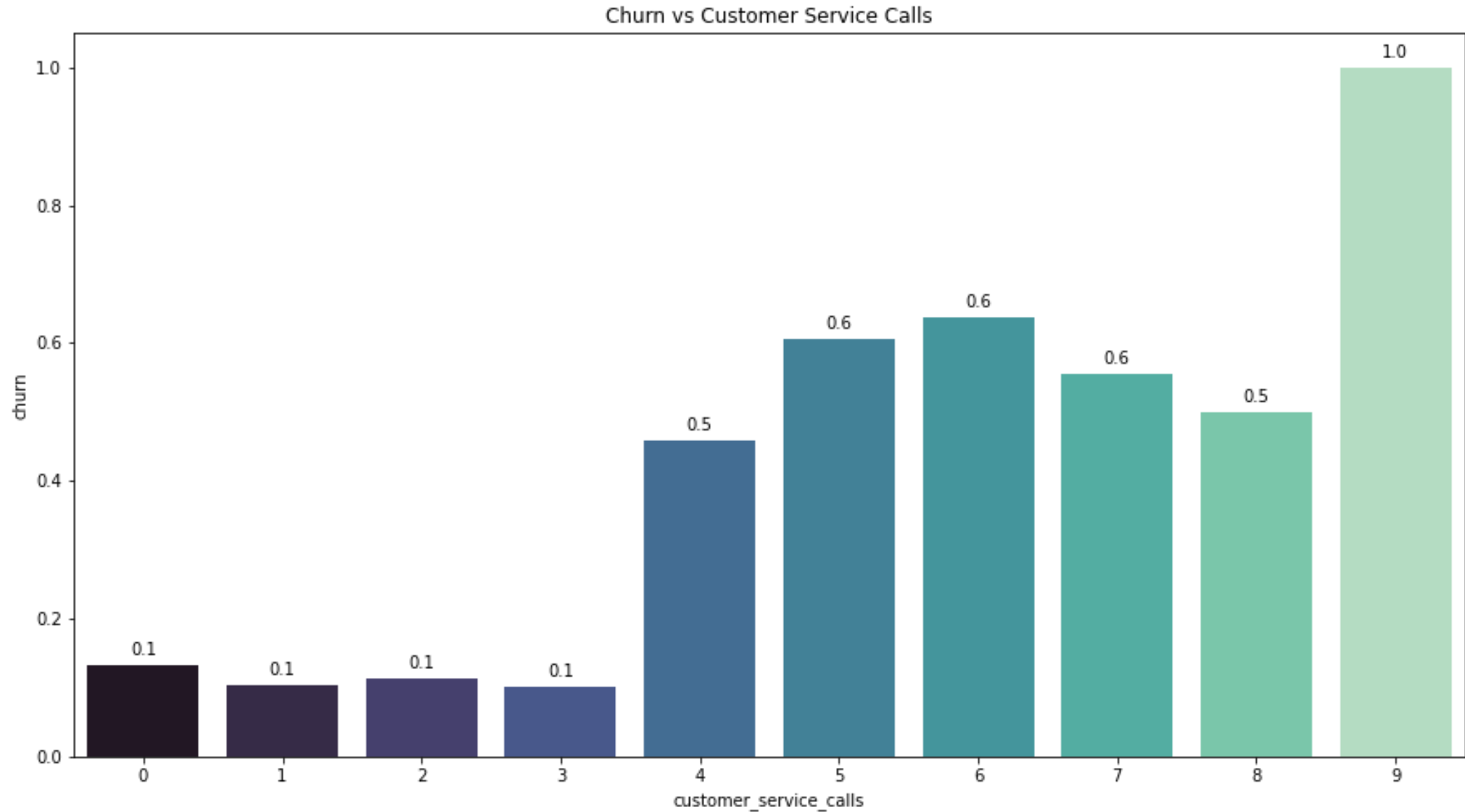
Total Day Minutes



INTL PLAN & VOICE MAIL PLAN



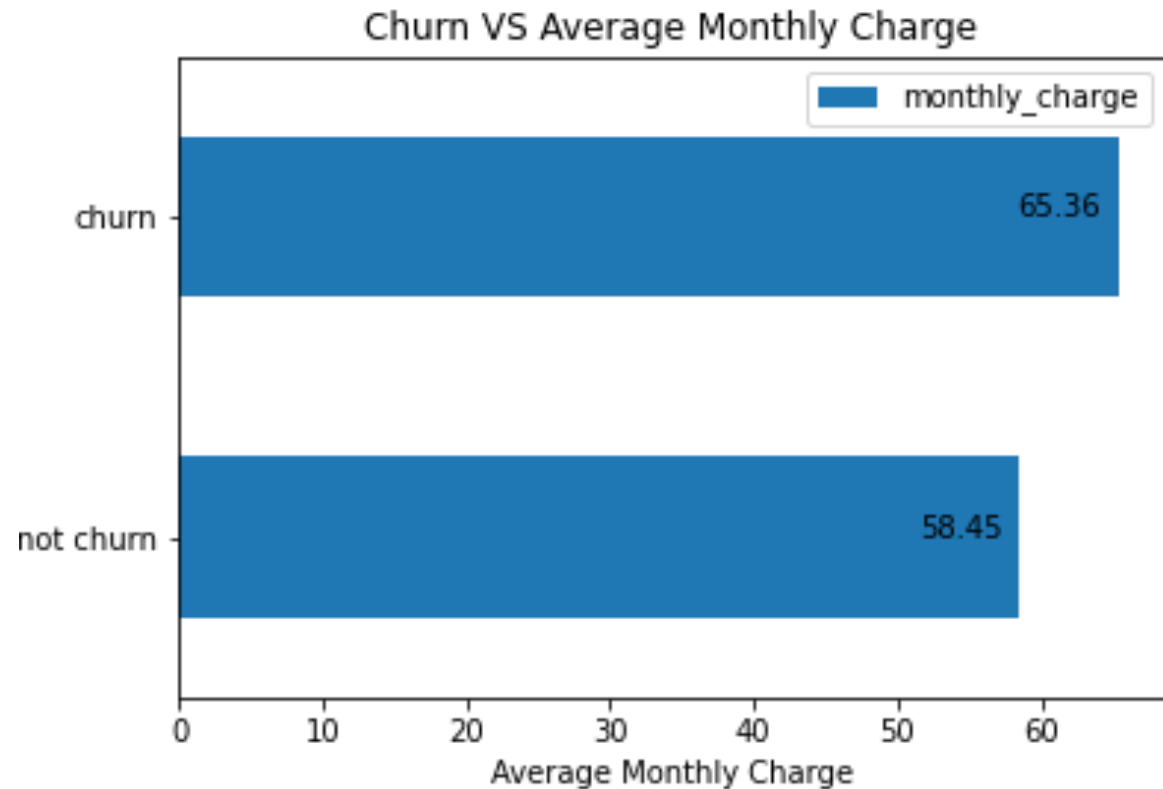
CUSTOMER SERVICE CALLS



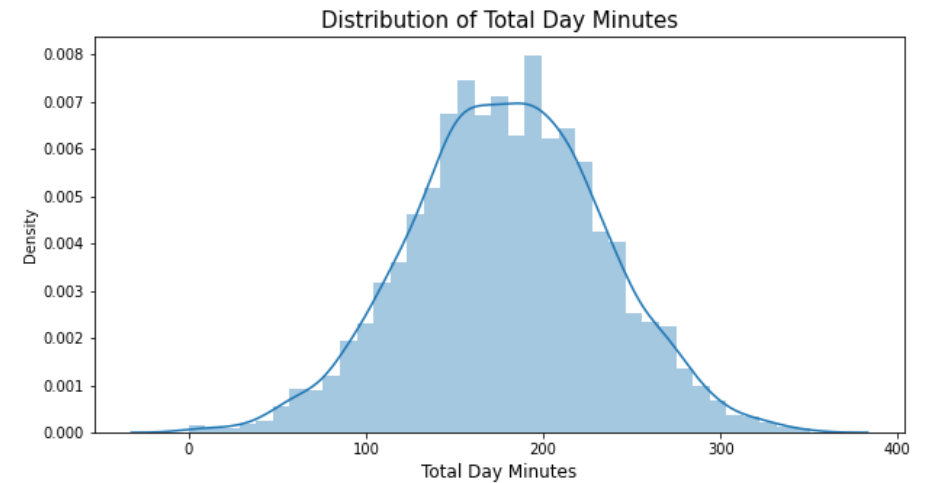
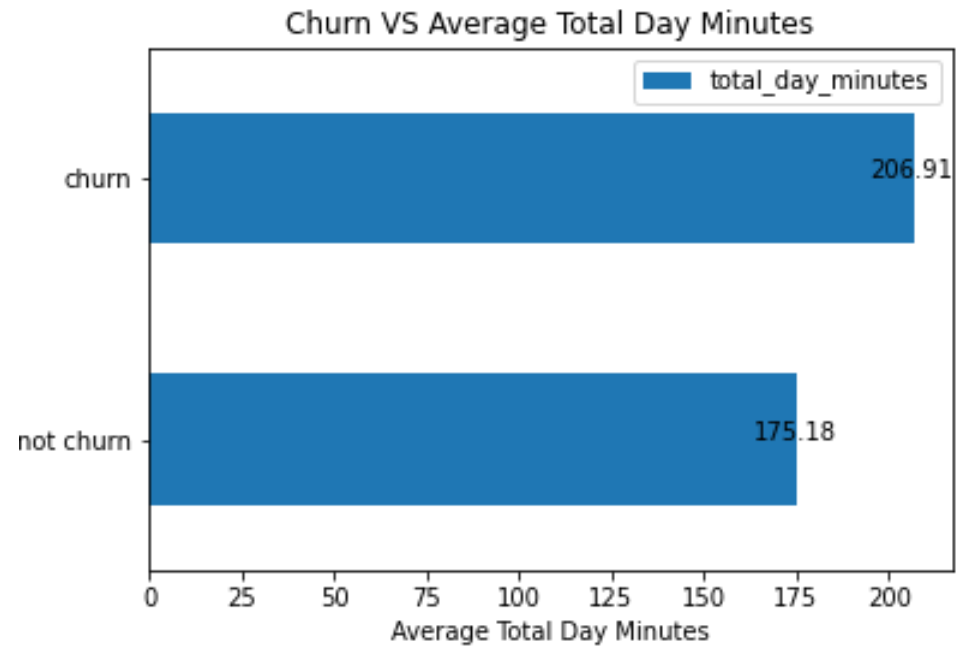
MONTHLY CHARGE

Monthly Charge
= Total Day Charge
+ Total Eve Charge
+ Total Night Charge
+ Total Intl Charge

Average Monthly Charge = \$59.5
Max Monthly Charge = \$96.2
Min Monthly Charge = \$22.9



TOTAL DAY MINUTES



RECOMMENDATIONS



Market research on competitors and industry benchmark



Customer experience measurement and design



Partnership with local carriers



Thank you!