SyriaTel Customer Churn

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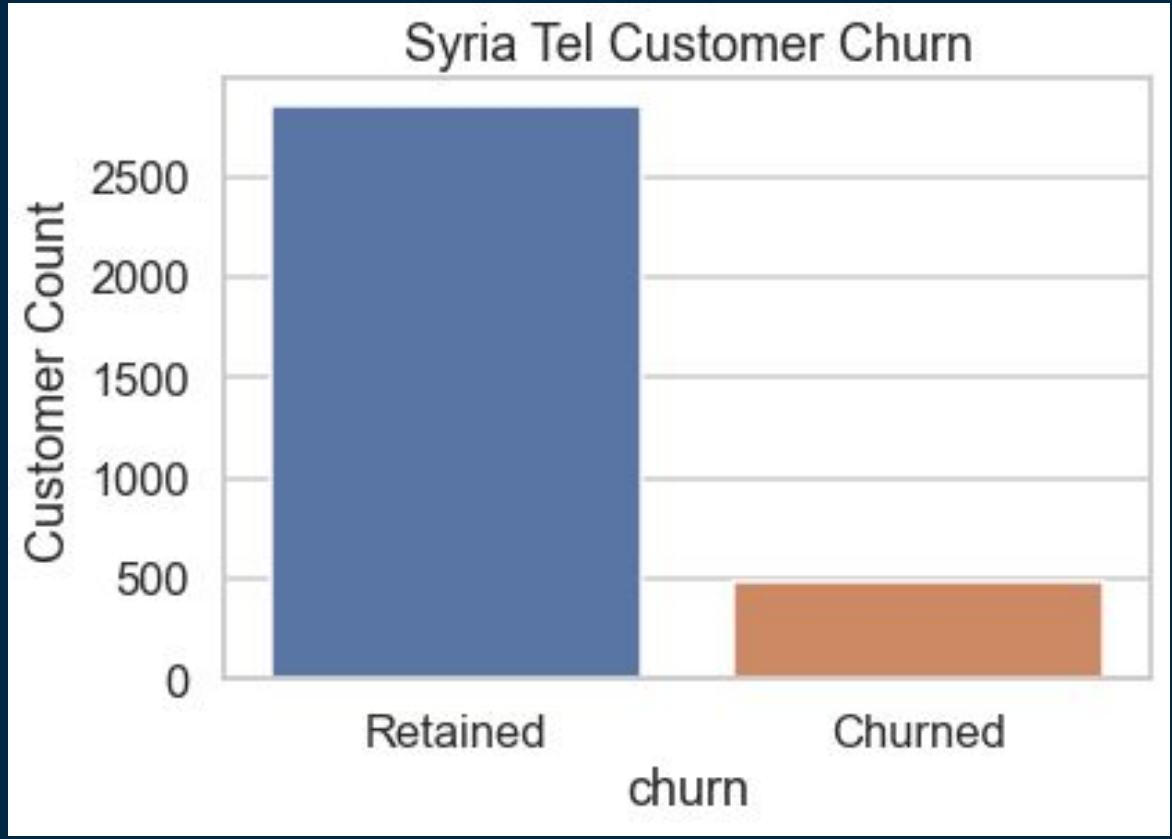
Project Goals

- Identify Potential Customers who may leave SyriaTel
- Create a Model that Identifies Those Customers without Many Misidentifications
- Reach Out to the Unhappy Customers with Possible Discounts.

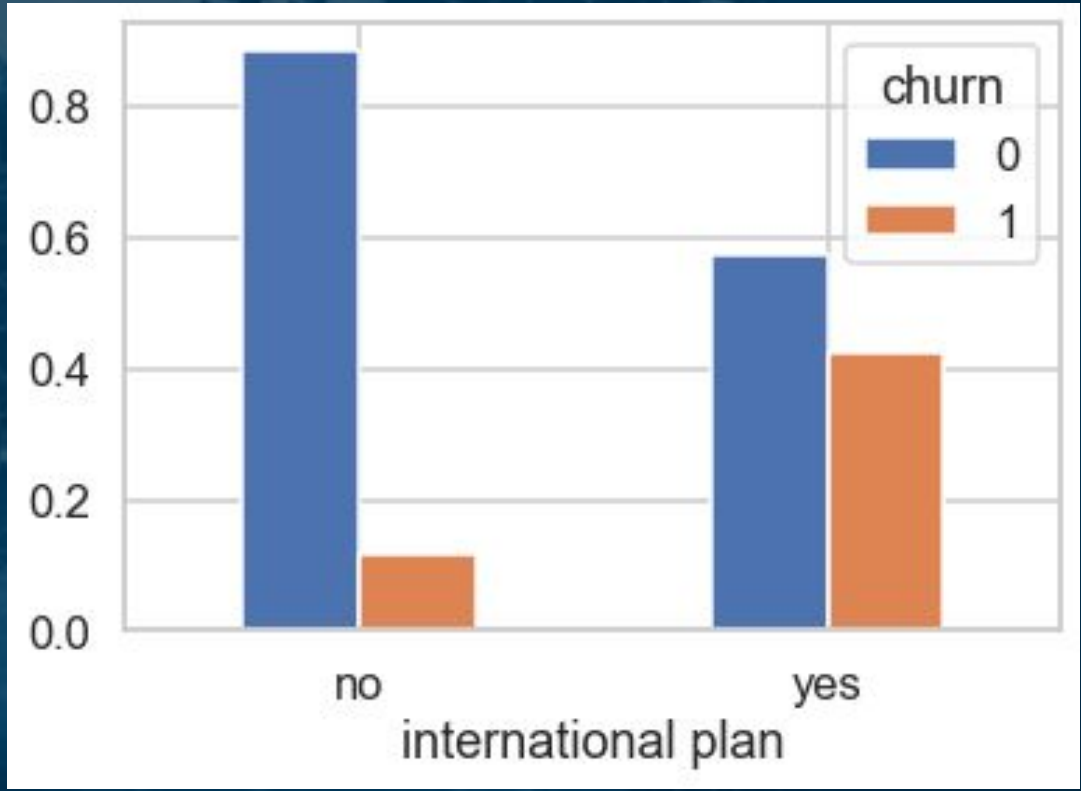
Current Problem

SyriaTel is Losing 14% of their Customers



WHO ARE THE CHURN CUSTOMERS?

- International Plan Churn at a Rate of 42% vs 6% for Non-International Plan Customers



Data Used

- 3330 Entries of Customer Data
- Data is divided into categorical features and numeric features
- Features include Charges, Minutes, and Location.

Modelling Process

- Analyze Data
- Process Data for Modelling
- Evaluate Data Based on Desired Metrics
- Choose Model Based on Score Metrics

Model Metrics

Recall vs Precision

Final Scores:

Recall - 88.6%

Precision - 100%

Accuracy - 98.5%

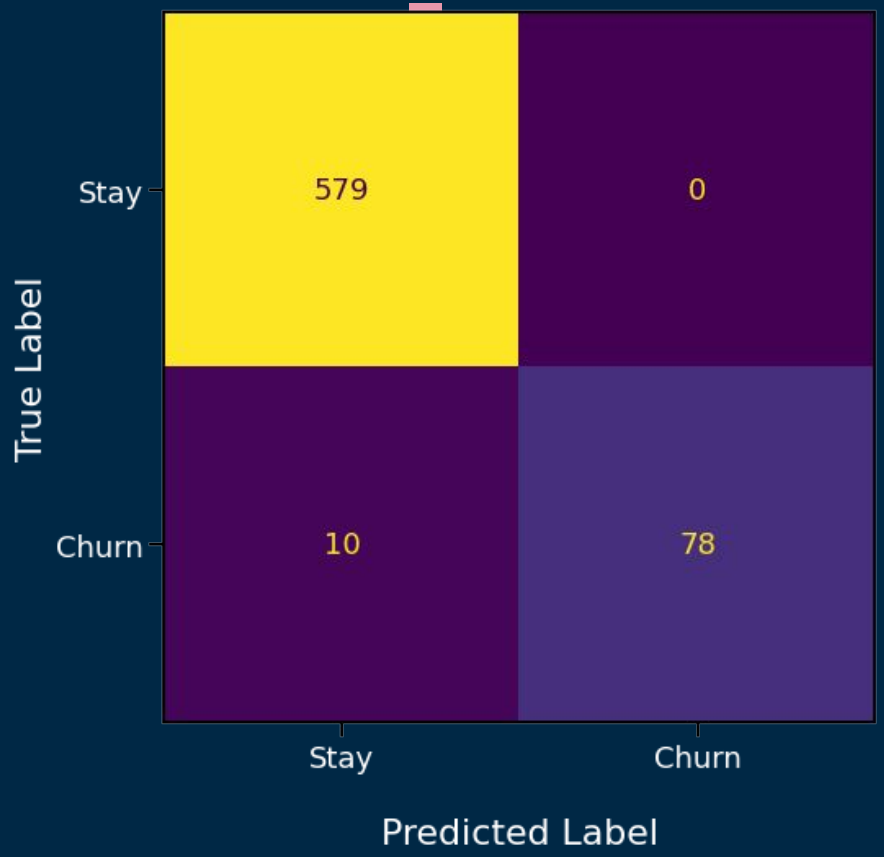
Recall - How many TRUE churn customers did the model capture

Precision - Of the Churns PREDICTED, how many are actually TRUE

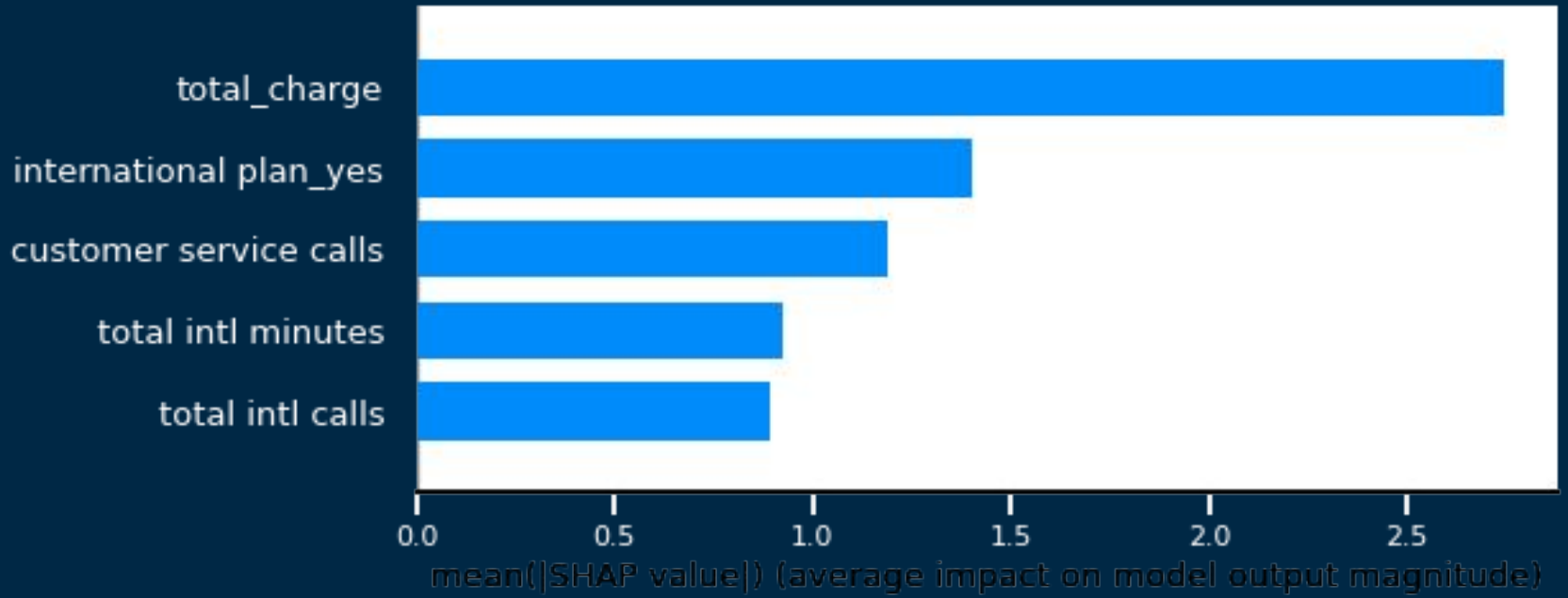
Model Score

XGBOOST MODEL missed 10 CHURN CUSTOMERS

XGBOOST MODEL DID NOT MISTAKE A RETAINED AS A CHURN



Predictors of Churn



Recommendations

- Target Potential Churn Customers with Offers and Discounts
- Look to International Customers - they showing a higher churn rate.
- Pay attention to unhappy customers.