

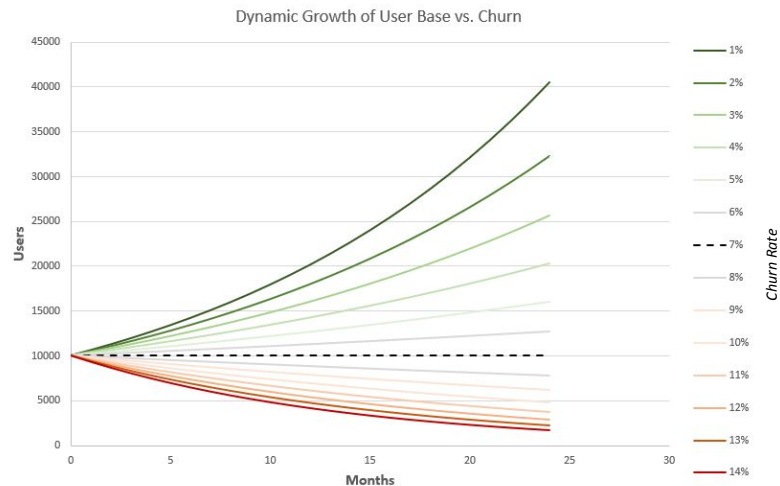
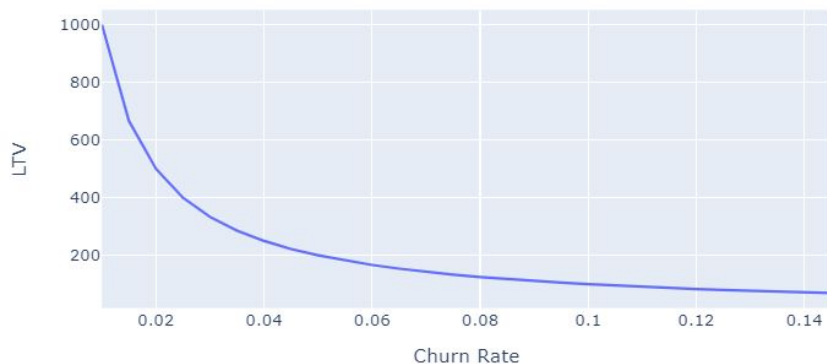
SyriaTel Churn Analysis

John O'Donnell

Purpose

Better understand churn to improve user retention

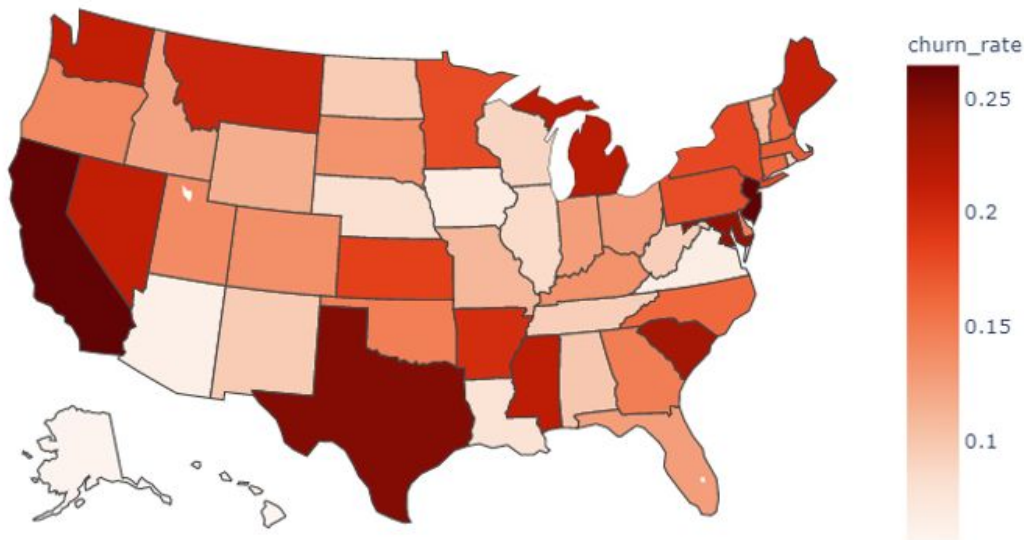
- Churn can make or break a subscription business
 - It dictates customer tenure, customer value, and growth of user base/revenue
- Better understanding churn allows us to make targeted actions to retain customers



Early Findings

Churn varies significantly across the United States

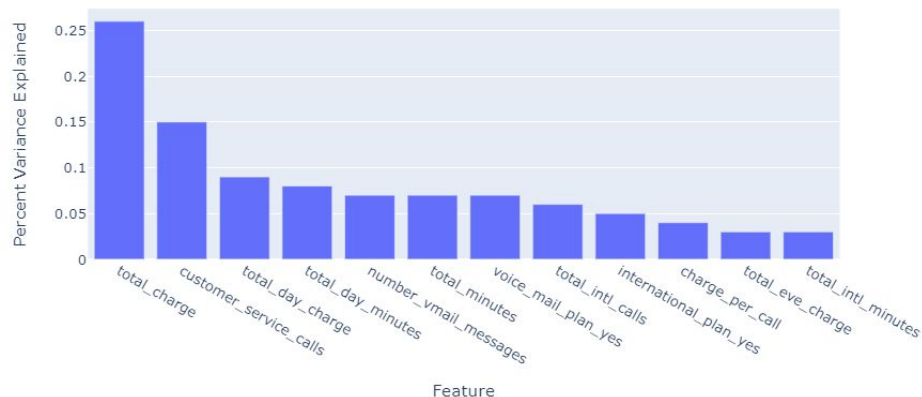
- **High Churn States:**
 - CA, TX, NJ
- **Low Churn States:**
 - HI, AZ, VA
- **Drivers:**
 - User differences
 - Service difference
- **Future Work**



Model Performance

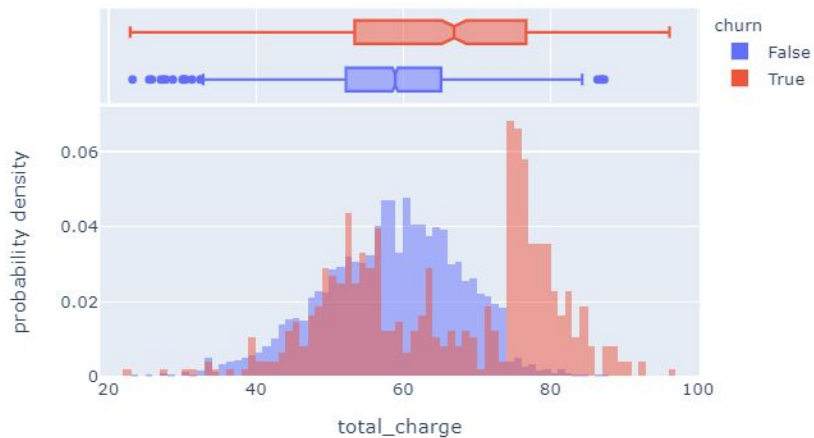
Benchmarking Performance

- Overall accuracy of prediction is $> 95\%$
- Model able to predict if a customer will not churn with 99% accuracy
- Model able to predict if a customer will churn with 85% accuracy
- Most important features were Total Charge and Customer Service Calls



Important Features

Total Charge and Customer Service calls



- Majority of customers charged > \$75 in a month will churn

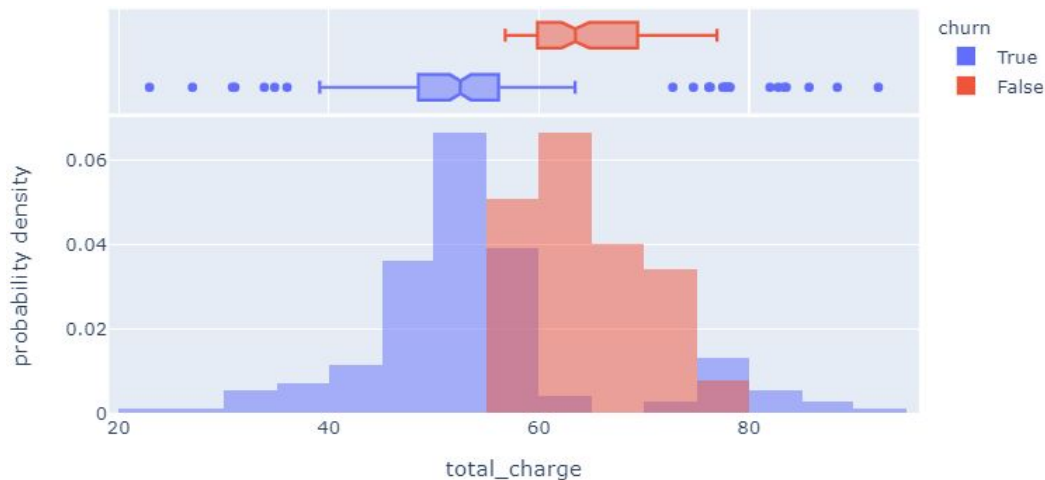


- Majority of customers placing 4 or more customer service calls will churn

Overcharging Frustrated Customers

Showing total charge for customers with >3 service calls

- Combining total charge and number of customer service calls clearly separates the groups
- A great way to churn a customer is to make them feel overcharged when they are feeling frustrated (> 3 customer service calls)



Recommendations

Pricing Strategy and Data Gathering

- Pricing:
 - Provide discounts to “frustrated customers”
 - Tier rate plan
 - Ex: After first 200 day minutes cost per minute drops in half
- Data Gathering:
 - More = always better
 - With more data a more simple and interpretable model can be used
 - Time-series data to track customer life cycle
 - Service data by state (coverage)
 - Service call information (length, time, subject)



Thank You

Questions?