

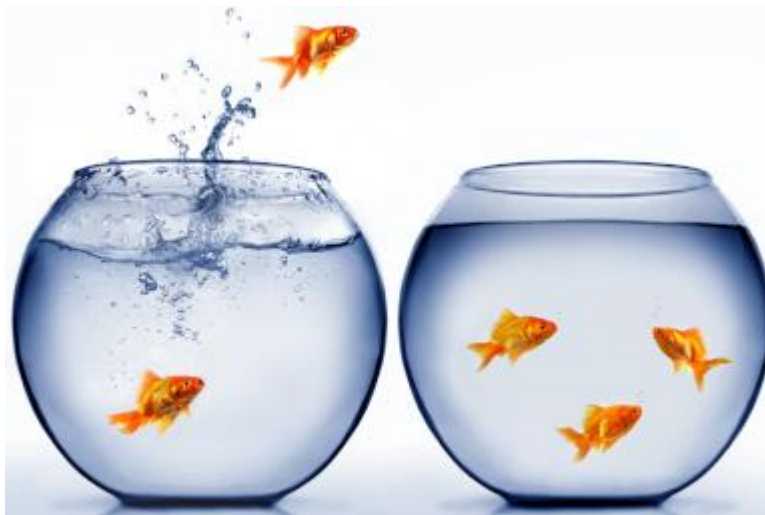
# How Can SyriaTel Reduce Customer Churn?

Sam Dedes, Jon Hickey, Jeff Accomando  
October 23, 2020



# Overview

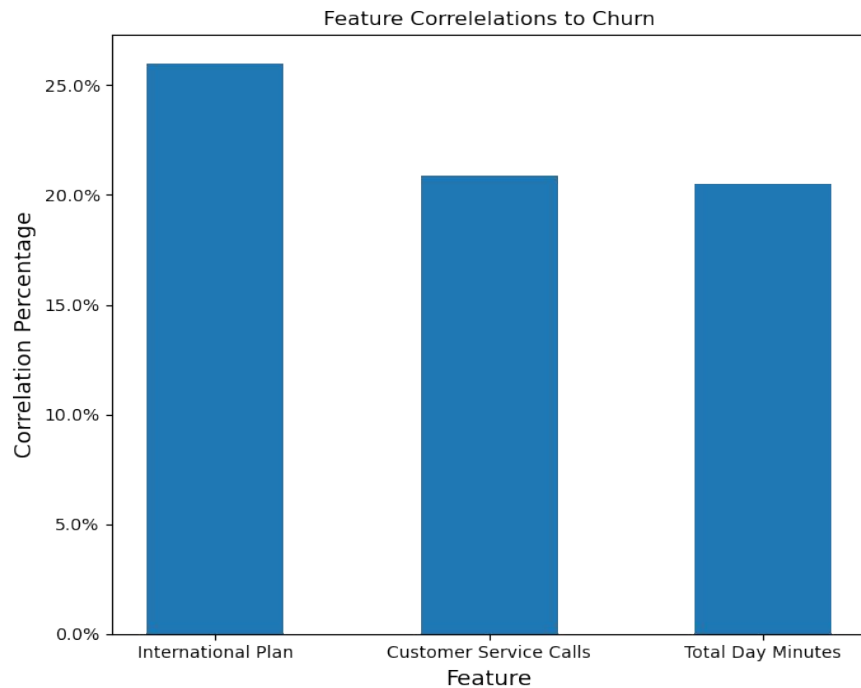
- Can you predict that they are going to leave?
- Act early before it's too late!



*Image by towarsdatascience.com*

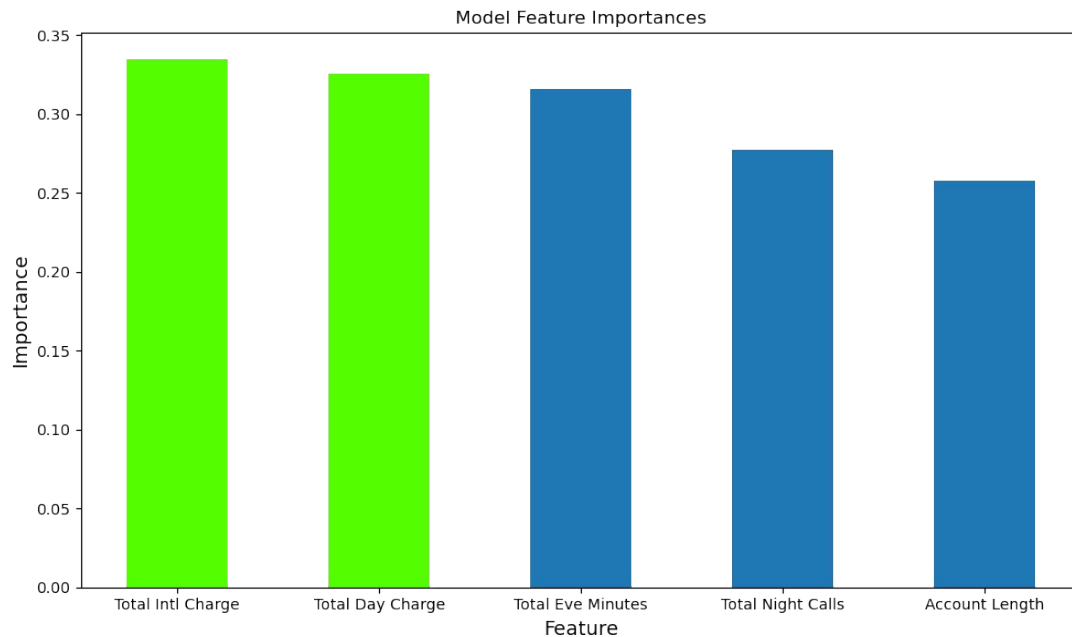
# Data Analysis

More than 3000 customer accounts across the United States



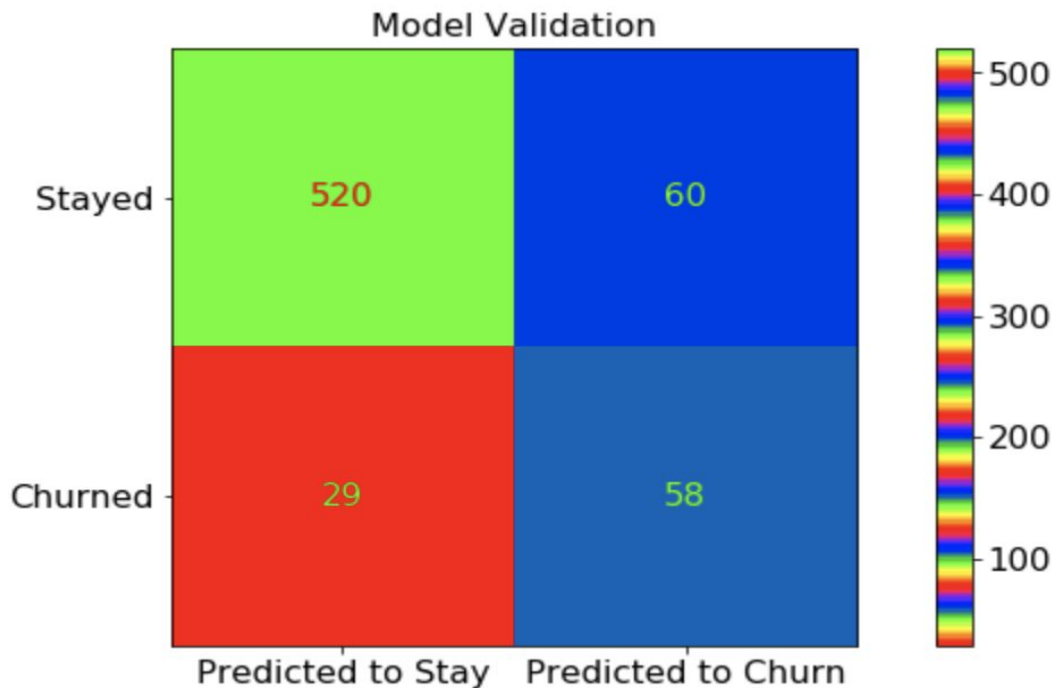
# Model Analysis

Top five feature importances



# Model Analysis

Model predictions against test data



# Recommendations & Next Steps

- International Plans
- Total Day Minutes and Charges
- Customer Service Calls
- Hire us for more analysis



# Thank You!

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<https://github.com/Jaccomando>



# Appendix

F1 Scores across Models for both Training and Testing Data for model validation

Train Data	F1 Score
<b>KNeighbors</b>	0.484554
<b>RandomForest</b>	0.616238
<b>ExtraTrees</b>	0.648183
<b>DecisionTree</b>	0.491618

Test Data	F1 Score
<b>KNeighbors</b>	0.355152
<b>RandomForest</b>	0.298128
<b>ExtraTrees</b>	0.617906
<b>DecisionTree</b>	0.414153