

# SyriaTel Customer Churn ML Analysis



# Overview

Business  
Problem

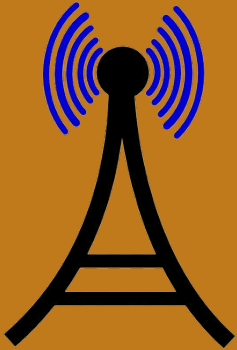
Data  
Understanding

Modeling

Evaluation

Recommendations

Next Steps



# Business Problem



SyriaTel wants to lower the churn rate of customers in their company. They want to know which customers are going to churn and find out what factors affect churning.

If SyriaTel can find out what drives customers to churn, they can work towards preventing them from doing so.

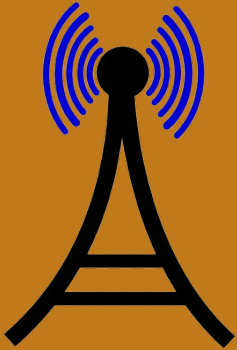


# Data Understanding

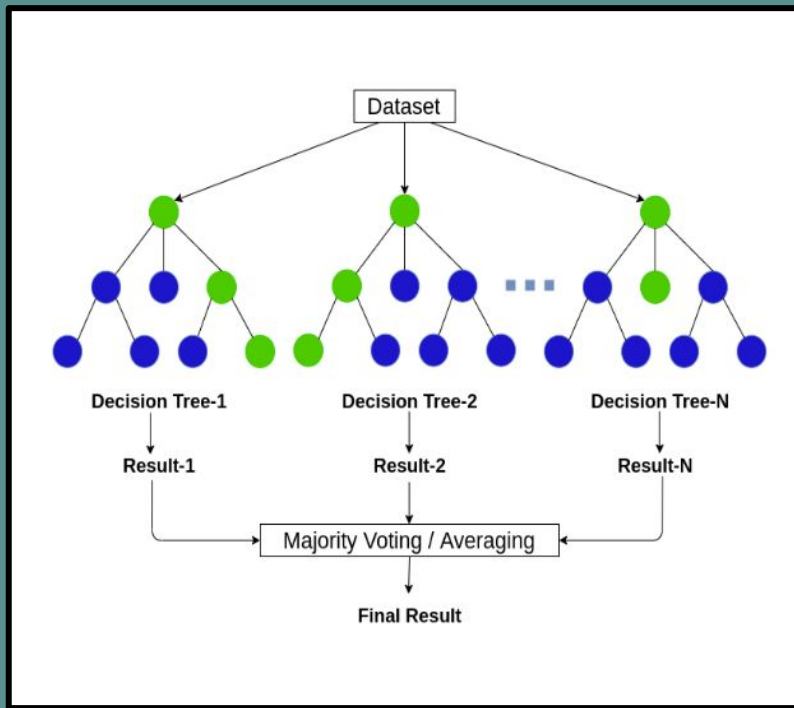
The dataset was from the SyriaTel dataset. It contained the following:

- ❖ 3333 rows of data
- ❖ 21 columns that included the target column

The target was **churn** which included whether a customer **had churned** or **not**. The goal was to find out what caused the customers to churn.



# Modeling



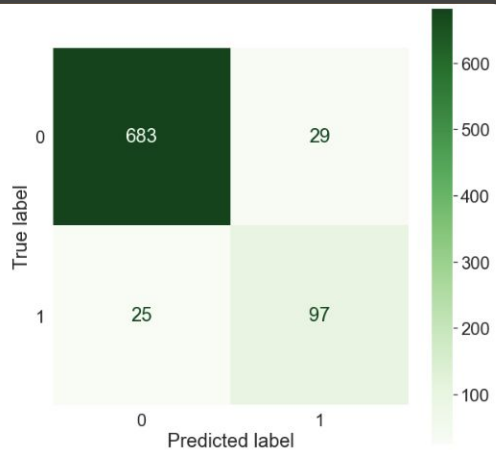
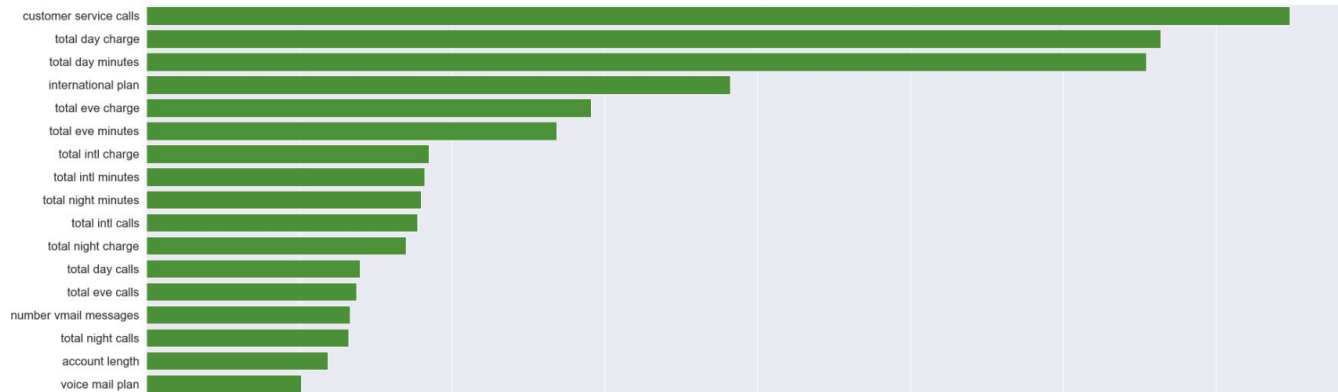
Model: **Random Forest Classifier**

The primary score that was of focus was **Recall**.

Score: **80%**



# Evaluation



# Recommendations

After working with several models to predict the outcomes of churn data, the final model made predictions and showed the important factors that affect customer churn in the company. The top 3 features that the model stated were:

- Customers who make multiple customer service calls
- Customers' total day charges
- Customers' total day minutes



The company should focus on customers who fall into one, two or even all of these categories and develop strategies to retain these customers.

# Next Steps

- ❖ Performance check of the model starting with high churn states.
- ❖ More customer data can be added to improve the model.
- ❖ Break down top features into subcategories to narrow even further reasons for churn.





# Thank you!

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