# SYRIATEL CUSTOMER CHURN ANALYSIS

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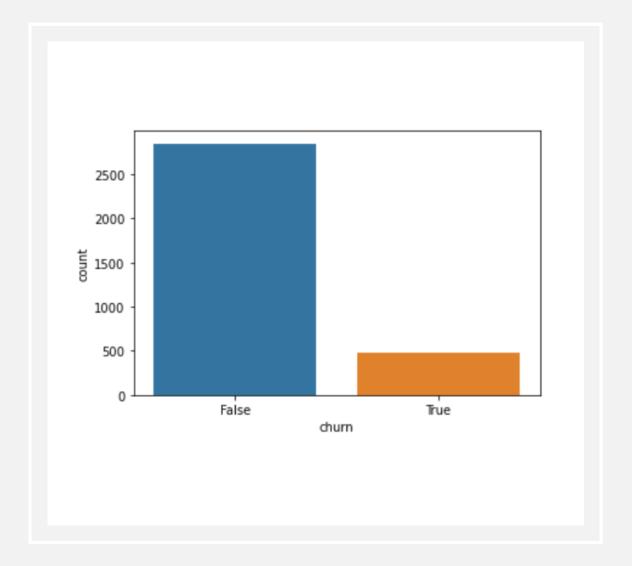
- Data
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### **DATA**

- Outlier were dropped.
- Features with a correlation 0.9 or greater were dropped.
- One-hot encoding performed on categorical features.
- Numerical features were scaled.
- SMOTE applied to resolve class imbalance

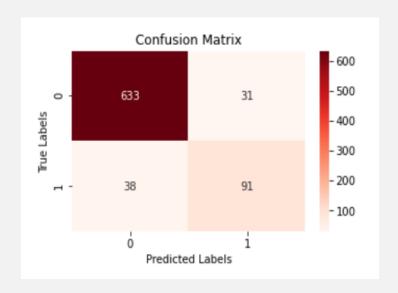
## **CHURN ANALYSIS**

- Dataset with information on approximately 3,300 customers.
- 14.5% have churned. They have left SyriaTel and taken their business elsewhere.

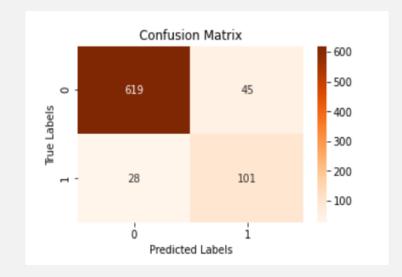


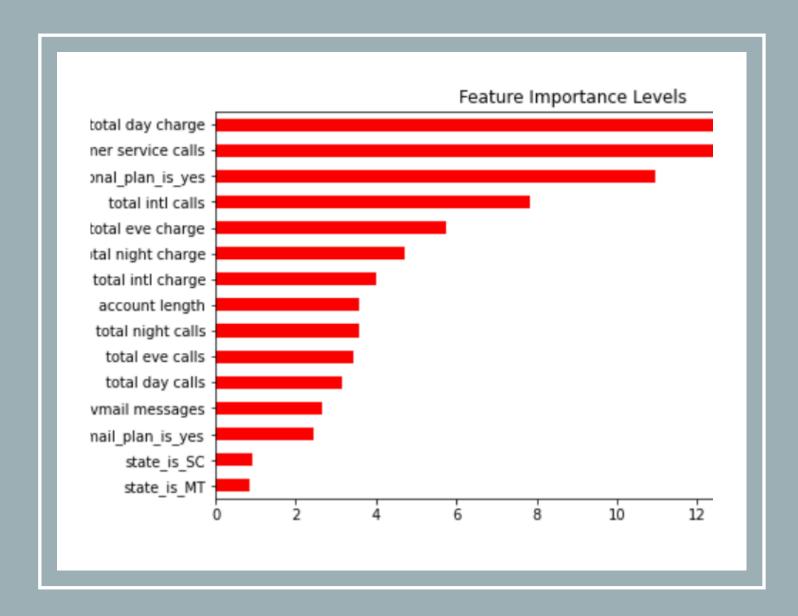
## **MODELING ANALYSIS**

#### Original Model



#### Hyperparameter Tuned Model





## MODELING RESULTS

#### **SUGGESTIONS**

- Offer a discount to customers who have made more than 2 phone calls within 6 months.
- Start an internal forum where customer service representatives document the common reasons customer call Syriatel. Next step is to have conversations on strategic solutions that can resolve those issues.
- Start SyriaTel Sundays. A rewards program in which the company partners with external vendors and offers treats/discounts to customers.