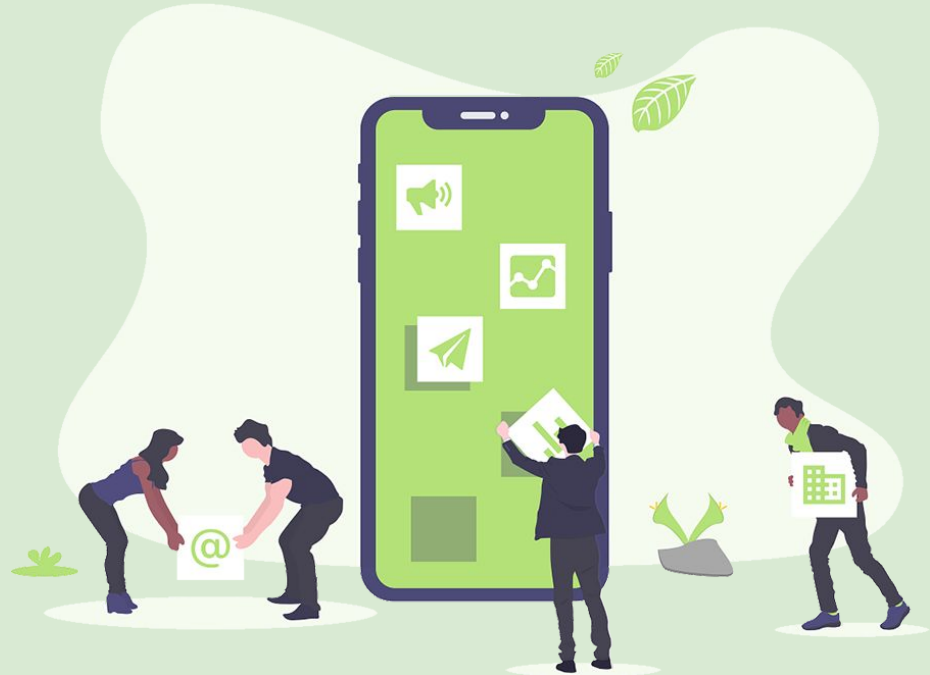


SyriaTel Customer Churn

BY: Mays Alkhwitar



Overview

- Business Problem
- Data Understanding
- Modeling
- Evaluation
- Recommendations

Business problem



Problem

SyriaTel a telecommunications company wants to predict whether a customer will stop doing business with them .



Solution

Develop a classification algorithm to reducing how much money is lost when customers left the company.

Data



The data is collected SyriaTel Telecom Churn Dataset from Kaggle



Included information about customer activity data (features) and churn (target).



The database contains 3333 rows (customers) and 21 columns (features).

Modeling

Model

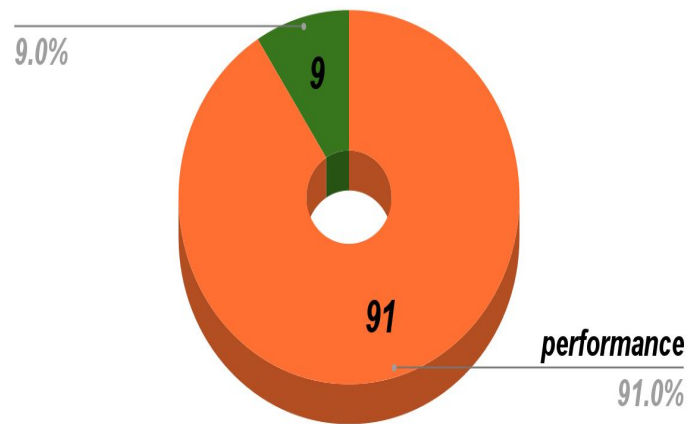
Decision tree classifier with hyperparameter tuning.

Features

Included 62 features

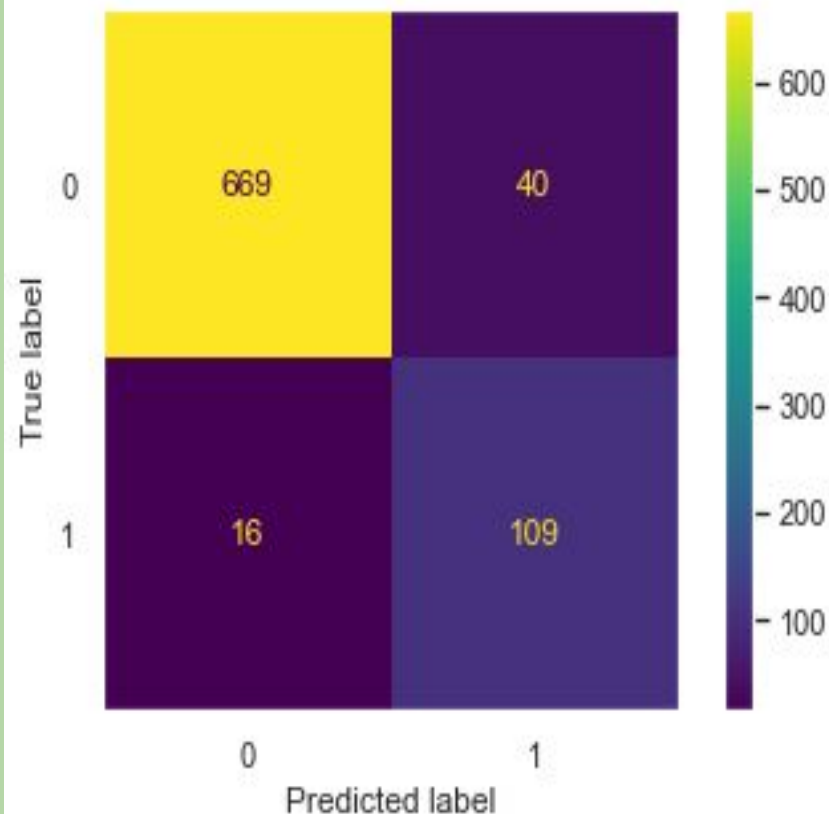
Performance 91%

Final model performance



Evaluation

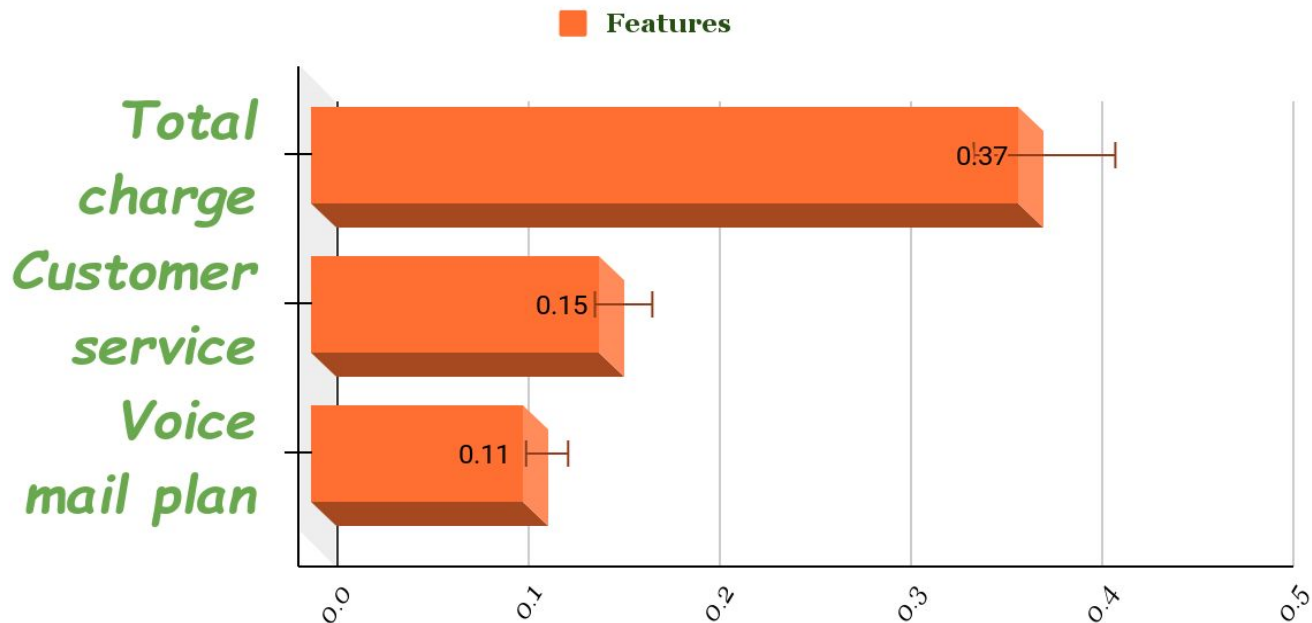
- Model evaluated based on performance and recall.
- The model recall(model sensitivity) is 87%.
- The model predicts that 109 customers will churn weather 16 will still subscribe to Syriatel services.
- Consider the impact of false negative predictions 669.



Evaluation

Features affect the relationship between the clients and the company.

Important Features



Recommendations

Total charge

Higher prices have a positive effects on customer churn

Flexible and affordable billing will improve customer satisfaction.

Customer service calls

- Poor customer service
- Long wait times
- Ineffective self-service options

- Evaluation of frontline teams
- The company needs to solve any bottlenecks.

Voicemail plan

A voice message that a caller leaves when the person they call is busy

- Improve the software
- Affordable monthly prices

Thanks!

Any questions?

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