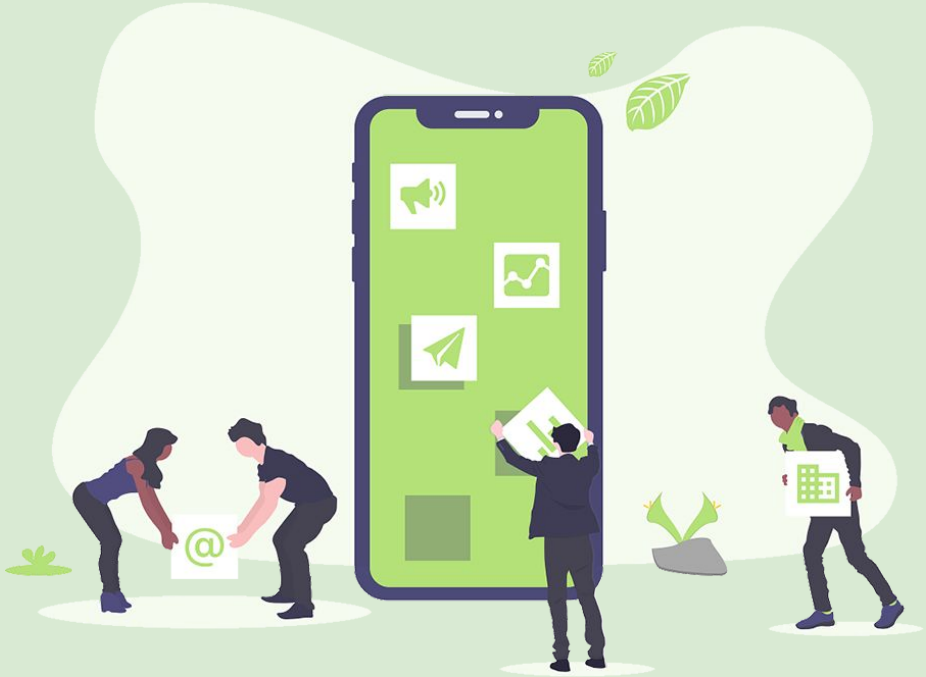
SyriaTel Customer Churn



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

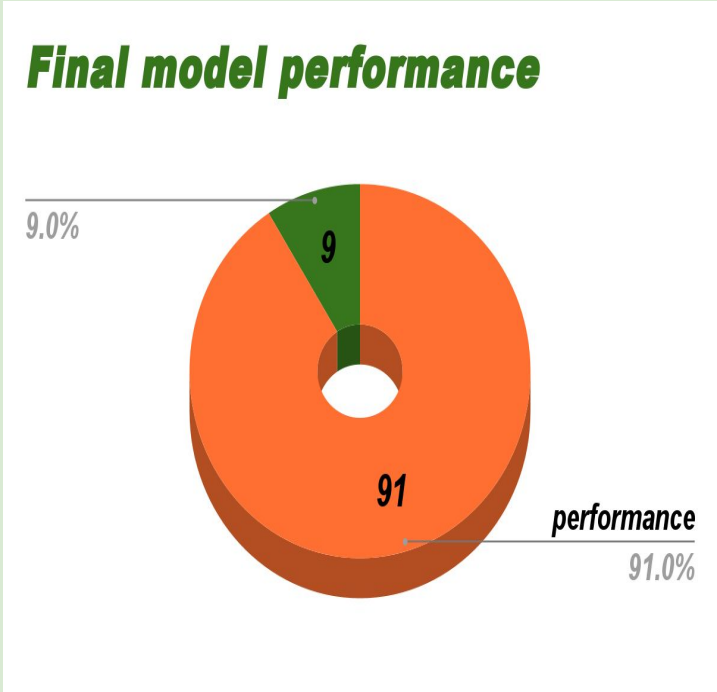
- The data is collected from Churn in Telecom dataset.
- Included information about customer activity data (features) and churn (target).
- The database contains 3333 rows (customers) and 21 columns (features).

Modeling

Model Decision tree classifier with hyperparameter tuning.

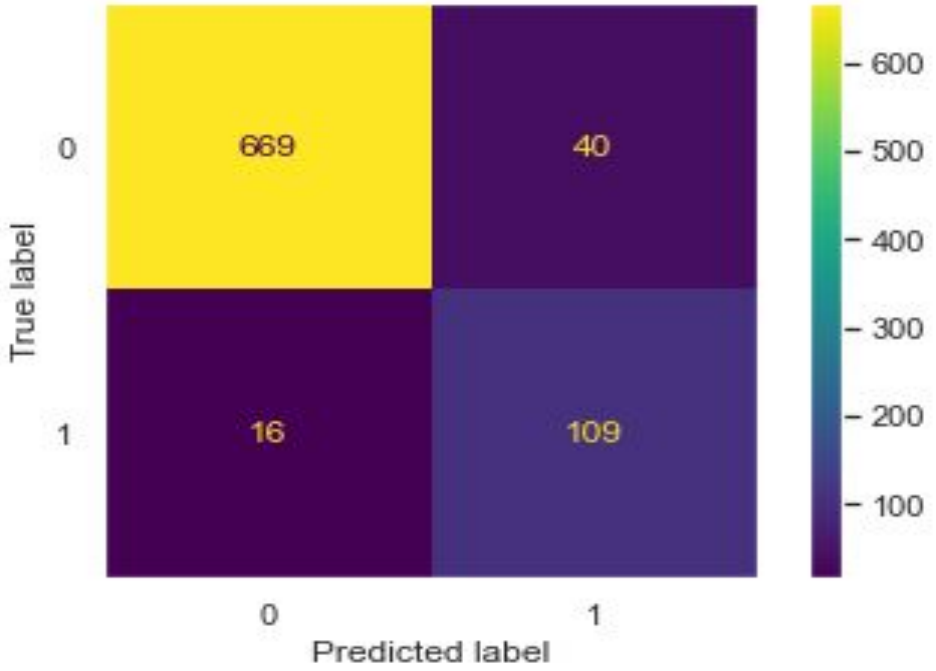
Features Included 62 features

Performance 90%

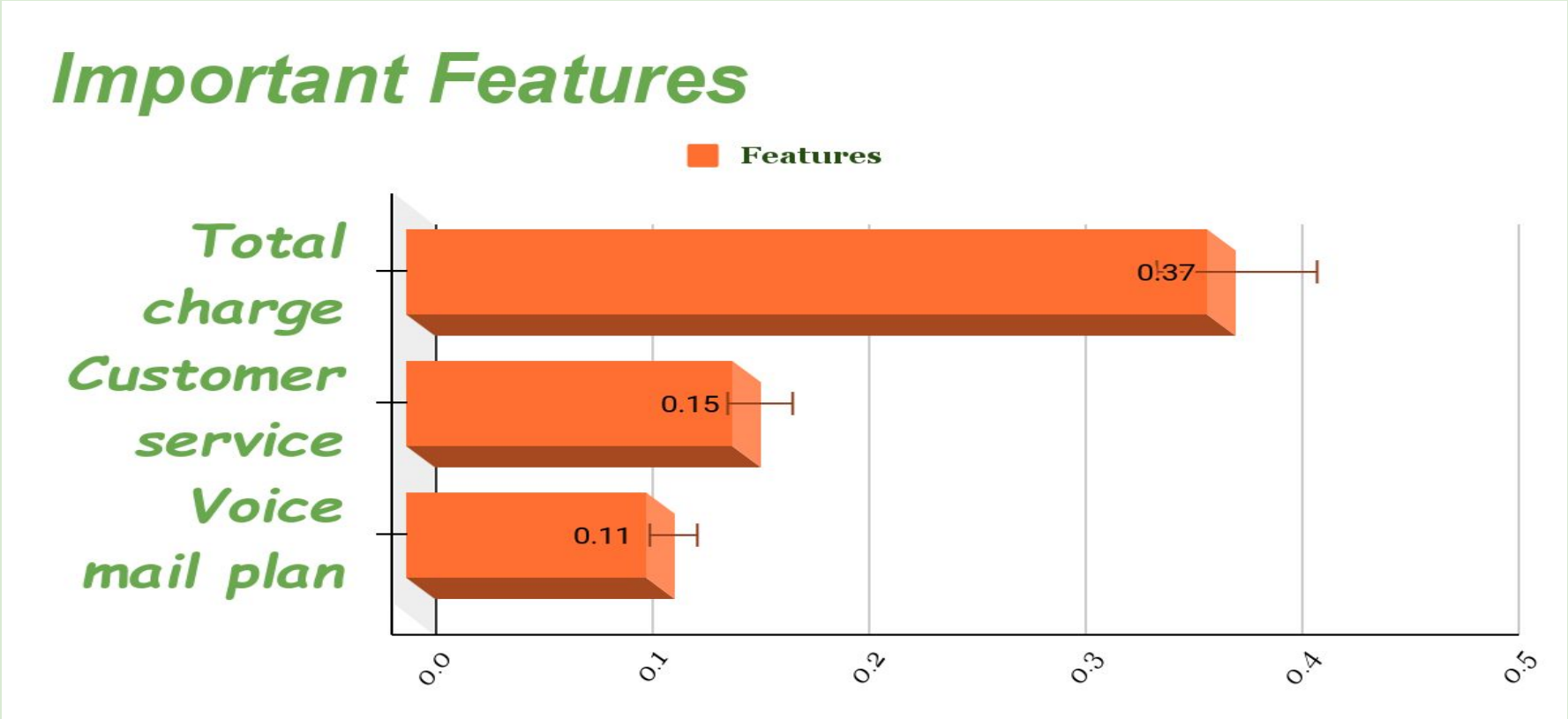


Evaluation

- The model predicts that 108 customers will churn.
- The model predicts that 17 customers will still subscribe to Syriatel services.
- All these predictions are true



Evaluation


Important Features
Features
Total charge
Customer service
Voice mail plan
0.37
0.15
0.11
0.0
0.1
0.2
0.3
0.4
0.5

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?

You can find me at:

- mays802004@gmail.com

- https://github.com/maysasaad