

Waze App User Churn

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PRESENTATION AGENDA

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Project Overview



About Company

Waze is a navigation app that helps drivers around the world get to where they need to go, in the most safe and efficient amount of time.



The Problem

The main problem the company is having is user retention



The Goal

The goal of the project is to build a model that will predict if a user will 'remain' or 'churn'.

Solution Process



Data

- The data used was provided by the Google Advanced Data Analytics Professional Certificate program. It contains synthetic data created in partnership with Waze.
- The original dataset contains 13 features and 14,999 entries



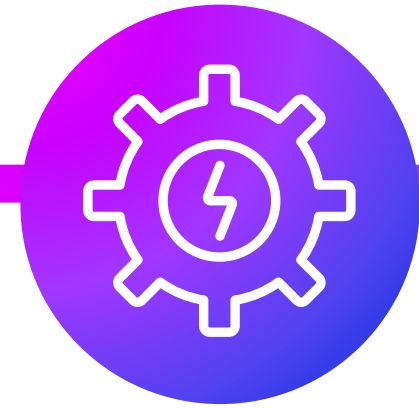
Analytical Approach

- Use Supervised Machine Learning Models
- Random Forest and XGBoost Model



Modeling Prep

- The data was split into training, test and validation sets (60/20/20 split)



Model Performance

- Check evaluation metrics (Accuracy, Precision, F1 and Recall scores)
- Confusion Matrix

Model Comparison

Random Forest Model

Precision Score

46%

Recall Score

13%

F1 Score

20%

Accuracy Score

82%

XGBoost Model

Precision Score

44%

Recall Score

17%

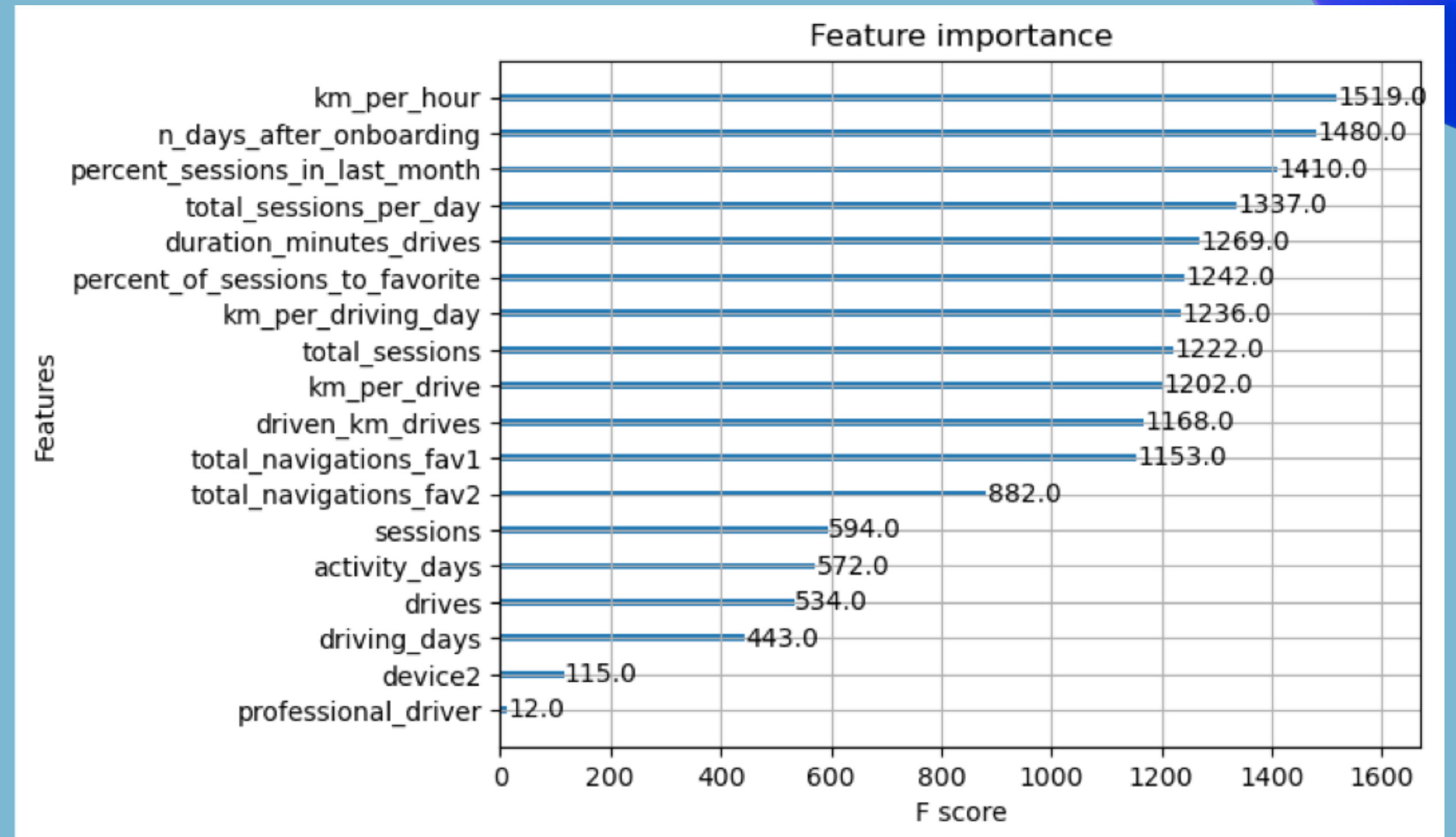
F1 Score

25%

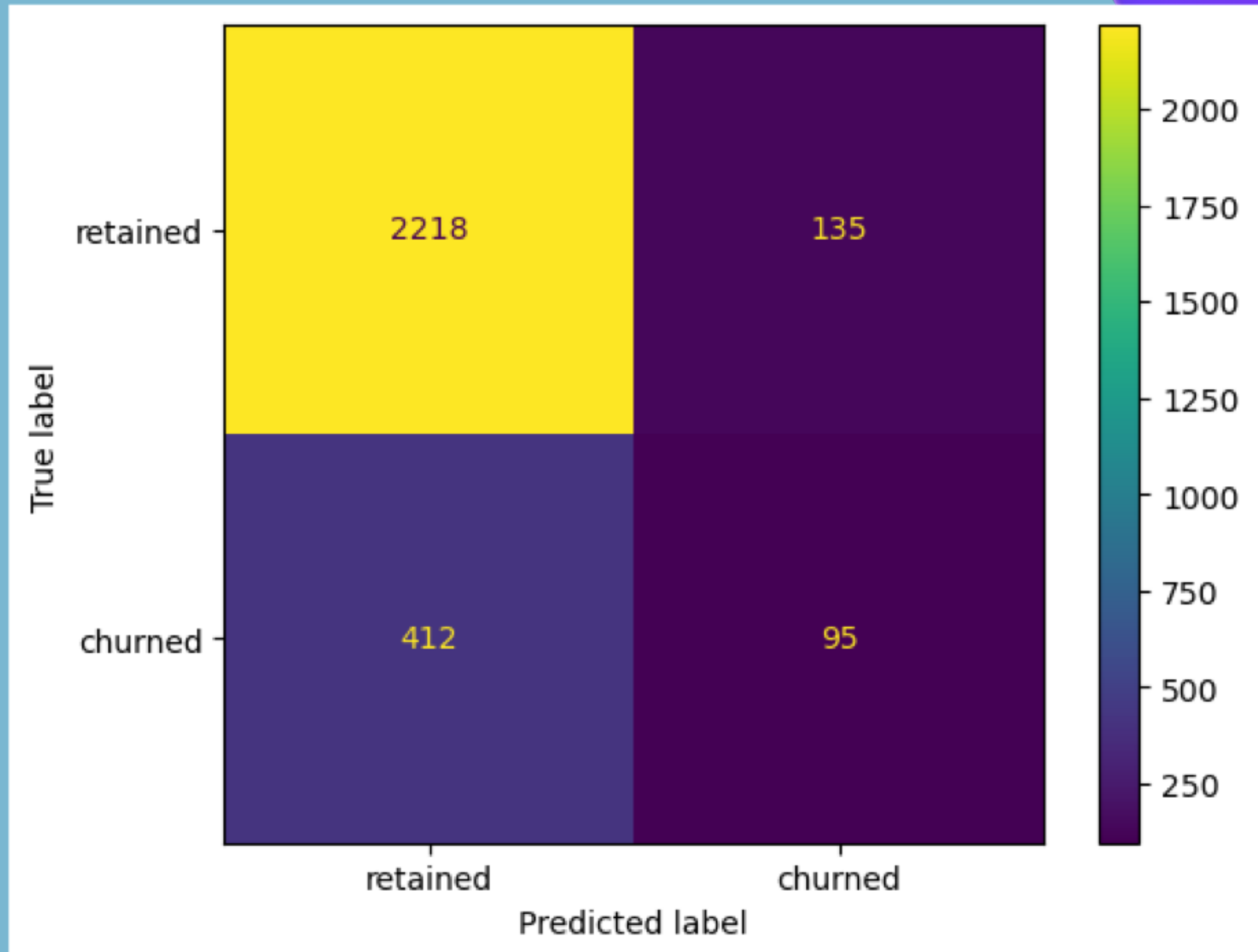
Accuracy Score

82%

Key Findings



Key Findings



Recommendations

RECOMMENDATION 1



The model created is not a good predictor model for user churn, due to its low performance scores.

RECOMMENDATION 2



Gather more data that shows how users specifically interact with the app as well as drive level information on users

RECOMMENDATION 3



Reconstruct the model with different combinations of predictive features

THANK YOU