Waze User Churn Project | Regression Modelling

Executive Summary Report

OVERVIEW

Waze is currently developing a project to predict and minimize user churn rates in hopes to promote overall growth. A user is considered to have churned when they have either uninstalled or stopped using the Waze app. A binomial logistic regression model was built during this stage of the project

PROJECT STATUS

The target for this part of the project is the creation of a binomial logistic regression model with the provided data.

The methods used to during this stage were:

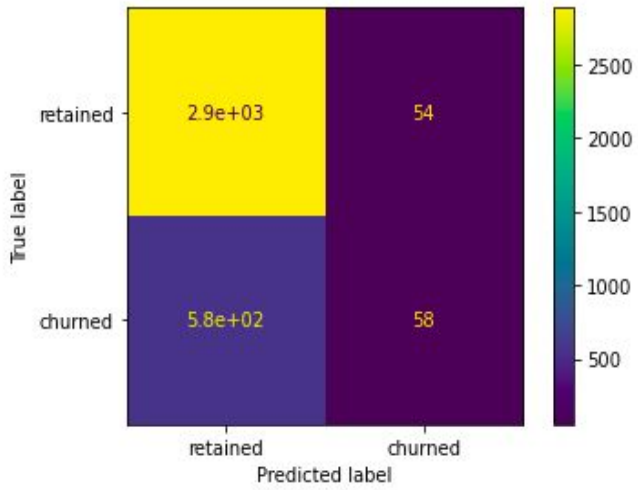
- Feature selection based upon business scenarios and stakeholder interest
- Assessed multicollinearity of features
- Building of regression model
- Assessment of model performance

NEXT STEPS

The results provided from the creation of this binomial logistic regression model tells us that we believe the next steps should be additional exploration of the data.

This model should not be utilized to make business decisions on how to minimize user churn rates, instead it should serve as a sign that additional features that correlate to user churn should be identified.

KEY INSIGHTS



- The most impactful feature in this model was without a doubt activity_days.
    - activity_days had a negative correlation with user churn rate
- Previous EDA has shown that user churn rates and distance driven per day are positively correlated, in this model distance driven per day was the second least important feature
- The overall precision of this model is lackluster, 53% of the positive predictions were correct. The model also showcased a low recall with only 9% of churned users being identified.
- Although a binomial logistic model is evaluated on its provided precision, accuracy and recall scores in our particular case recall is extremely important as it shows how many users have churned.