Waze User Churn Project

Executive Summary

Overview

The data analysis team at Waze has been asked to create a machine learning model to accurately predict user churn. Waze is determined to reduce user churn, improve user retention and facilitate business growth.

Objective

The goals of the project are:

- Build a dataframe for the churn dataset
- Examine data type of each column
- Gather descriptive statistics

Results

1. There were a total of 700 rows that contained missing values for the ‘label’ variable. There was no major difference between the rows that had missing values in comparison to the rows that did not.
2. The reason for calculating the median and not the mean is that you don't want outliers to unduly affect the portrayal of a typical user.
3. 64.5% of users had iPhones, 35.5% of users had Android devices
4. There were 4.6 times more retained users than churned users, retained users used the app on over twice as many days as churned users in the same time period, the median churned user drove ~200 more kilometers and 2.5 more hours during the last month than the median retained user, churned users had more drives in fewer days, and their trips were farther and longer in duration.
5. Out of all churned users, 64.95 were iPhone users and 35.1% were Android users.

Next Steps

1. Collect more data on churned users as they appear to be long-haul truck drivers whose needs are not satisfied by the Waze app.