Understanding Waze User Churn | Preliminary Data Summary

Prepared for: Waze Leadership Team

Overview

My analysis explored user behavior patterns within Waze's dataset, focusing on churn rates, device usage, and high-mileage drivers. Key insights include: retained vs churned users, missing data considerations, and recommendations for further analysis.

Problem

Understanding why certain users stop using Waze is crucial for improving user retention. My initial analysis investigates whether things like trip frequency, total mileage, and/or device type correlate with churn.

Solution

Sifting through Waze's dataset. my findings suggest that high-mileage drivers are more likely to churn. I did not find any correlation with the device type of the churned users.

Details

- **Missing Data:** I found 700 missing values in the 'label' column out of 14,999 rows (~4.67%). The nulls followed the overall data distribution, suggesting no underlying issue.
- **Churn vs. Retained:** Churned users took an average of six more trips an drove approximately 400 more miles than retained users.
- **Device Usage:** 65% of users were iPhone, 35% Android. Churn rates did not differe between groups
- **Statistical Considerations:** I used median opposed to mean for averages to negate any outliers (one driver drove 21183 km)

Next Steps

- Recommend Waze collect additional data on "super-drivers" (high-mileage users)
- Investigate other churn predictors (user interaction with app or external factors)
- Explore potential product enhancements tailored to high-mileage drivers