Waze User Churn Project

Preliminary Data Overview

OVERVIEW

The Waze data team is actively working on a data analytics project with the goal of boosting overall growth by addressing monthly user churn on the Waze app. In this context, churn refers to the count of users who have either uninstalled the Waze app or discontinued its usage.
This report provides an initial data summary and outlines the project's current status, with a focus on the key insights obtained during Milestone 2.

PROJECT STATUS

Milestone 2 - Compilation of Summary Information
Objective: Explore user data to identify significant relationships among variables.

Approach:

1. Constructed a dataframe.
2. Assigned each row to a unique observation and each column to a distinct variable.
3. Gathered initial statistical insights.
4. Investigated user behavior patterns.

Outcome: Our team identified crucial relationships among variables, providing a foundation for deeper analysis of user data.

NEXT STEPS

- ➔ Our team advocates for the collection of additional data from super-drivers. Their distinct driving patterns may signify specific needs that the Waze app currently does not address, potentially differing from those of typical drivers.
- ➔ The immediate follow-up action involves conducting comprehensive Exploratory Data Analysis (EDA) and crafting data visualizations. These visuals will serve to elucidate the data's narrative and provide valuable insights for shaping future project decisions.

KEY INSIGHTS

- This dataset primarily consists of retained users, accounting for 82% of the total, while churned users make up the remaining 18%.
- The dataset encompasses 12 distinct variables, including object types, floats, and integers. Notably, the label column contains 700 missing values, with no evident pattern to the omissions.
- Churned users, on average, recorded approximately 3 more drives in the last month compared to retained users.
- Retained users displayed a more consistent pattern of app usage, being active on over twice as many days as churned users in the last month.
- The median churned user outperformed the median retained user in terms of distance and duration, driving approximately 200 more kilometers and spending 2.5 more hours on the road during the last month.
- Churned users exhibited a distinct usage pattern, with more drives condensed into fewer days, resulting in longer and farther trips. This suggests the existence of a unique user profile that warrants further exploration.
- Notably, the median churned user drove an average of 608 kilometers each day they were active last month, representing nearly 250% of the per-drive-day distance covered by retained users.
- It's essential to recognize that the users represented in this dataset are notably active drivers, and this data likely deviates from the typical driving patterns observed among the general population.