

User Churn Project | Exploratory Data Analysis

Prepared for: Waze Leadership Team

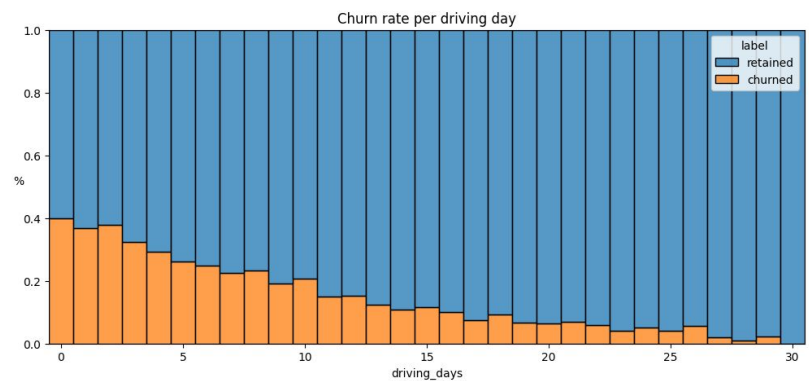
Project Overview

The Waze data team is working on a data analytics project to curb monthly user churn and boost overall growth of the app. Through comprehensive exploratory data analysis (EDA), Waze aims to better target potentially churned users, enhancing retention and overall satisfaction. This report presents insights derived from data visualization.

Key Insights

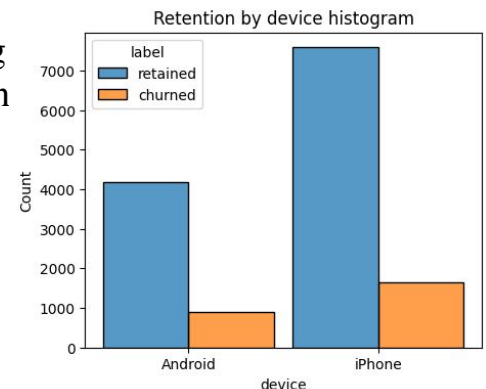
- Users who utilized the app more frequently exhibited lower churn rates. In contrast, 40% of those who abstained from using the app last month churned, whereas none of the users who engaged with the app for 30 consecutive days churned.
- Distance driven per driving day had a positive correlation with user churn. the users who drove farther each day are more likely to churn.
- Number of driving days had a negative correlation with churn. Users who drove more days of the last month were less likely to churn.
- Users of all tenures from brand new to ~10 years were relatively evenly represented in the data.
- Nearly all the variables were either very right-skewed or uniformly distributed.
 - For the right-skewed distributions, this means that most users had values in the lower end of the range for that variable.
 - For the uniform distributions, this means that users were generally equally likely to have values anywhere within the range for that variable.
- Several variables had highly improbable or perhaps even impossible outlying values, such as: driven_km_drives, activity_days and driving_days.

Details



Churn rates peak among infrequent Waze users in the previous month.

The ratio of churned to retained users remains consistent across device types.



Next Steps

- ➔ **Further Investigate the erroneous and problematic discrepancies between number of sessions, driving_days, and activity_days.**
- ➔ **Continue to explore user profiles with the greater Waze team. this may glean insights on the reason for the long distance drivers' churn rate.**
- ➔ **Plan to run deeper statistical analyses on the variables in the data to determine their impact on user churn.**