User Churn Analysis Project

Prepared on behalf for the Waze leadership team

Overview

The Waze data team is building a data analytics project to mitigate user churn by applying EDA methodologies to make data-driven decisions and help improve user retention. This report focuses on the key insights obtained from Milestone 3, which influences the future development of the overall project.

Problem

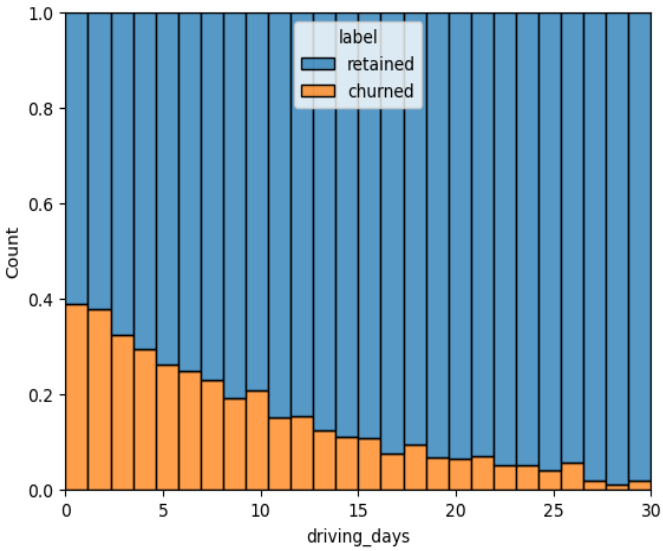
In the previous Milestone, exploratory data analysis helps investigate the statistics of user churn like obtaining the average distance driven per day and the total number of sessions averaged, but numbers alone cannot fully explain the root causes of user churn.

Solution

The goal of this Milestone is to generate data visualizations to analyze the trends of user churn to digest essential information on user churn, like boxplots and histograms to analyze the locality of total number of sessions and percentage of users who churned and retained.

Details

- More than half of the users tend to have less sessions, drives, total sessions, distance driven, and duration driven, as indicated in the right skews of the boxplots and histograms.
- Almost 40% of the users who churn do not have any driving days recorded at all. The more driving days accumulated, the less likely the users will churn.
- The number of driving days is inversely affected by the number of activity days. As the number of activity days increase, the number of driving days decrease, and vice versa.
- The higher the mean daily distance, the higher the user churn rate.



Next Steps

- Clean up or fix any discrepancies for the number of sessions, driving days, and activity days
- Go further in conducting deeper statistical analysis to obtain possible factors of user churn