Waze User Churn Project

Milestone 3 - EDA

Project Overview

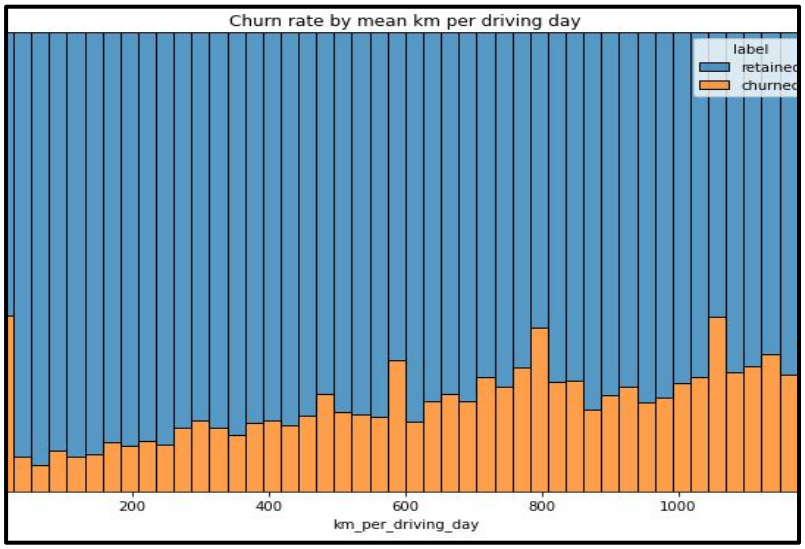
Waze leadership has asked the data team to build a machine learning model to predict user churn. The model is based on data collected from users of the Waze app. **This report offers details and key insights from EDA, which impact the future development of the overall project.**

Key Insights

- Analysis revealed that the overall churn rate is ~17%, and that this rate is consistent between iPhone users and Android users.
- **Users of all age from brand new to ~10 years were relatively evenly represented in the data.**
- **Distance driven per driving day** had a **positive** correlation with user churn. The farther a user drove on each driving day, the more likely they were 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.
- **Nearly all the variables were either very right-skewed or uniformly distributed.**
- **Several variables had highly improbable or perhaps even impossible outlying values**, We will replace those impossible value using 95 percentile of the variable.

Details

Users who drive longer distance having a increasing churn rate.



Next Steps

- Investigate the root cause of the missingness and make sure it won't interfere with the statistical inference and modeling.
- 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.