MACHINE LEARNING MODEL THAT PREDICTS USER CHURN

EDA REPORT

OVERVIEW

The Waze data team is currently developing a data analytics project aimed at increasing overall growth by preventing monthly user churn on the Waze app.

Thorough this EDA enables Waze to make better decisions about how to proactively target users likely to churn.

KEY INSIGHTS

- **The more days users used the app, the less likely to churn;** While around 40% of the users who had 0 days of use for the app at all last month churned, nobody who used the app 30 days churned.

- **The longer 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.

- **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.
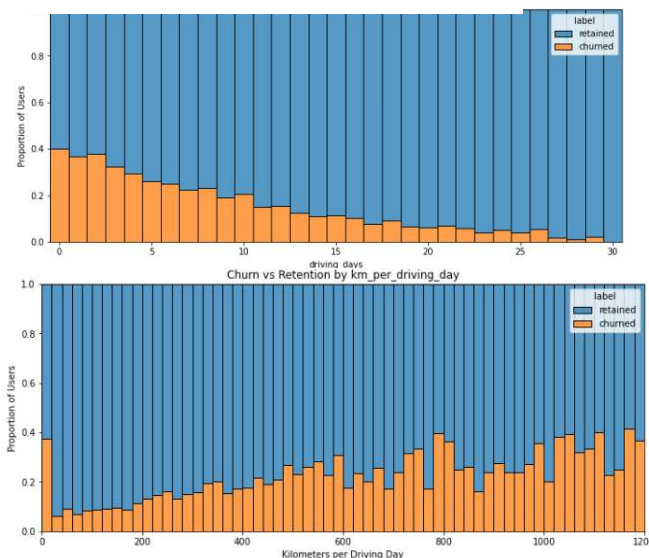
NEXT STEPS

➔ **Investigate the erroneous or 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.**