

# User Churn | Exploratory Data Analysis

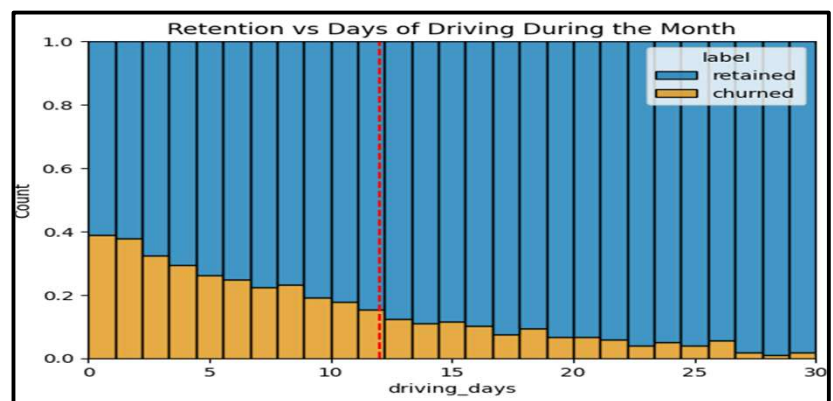
## Commission Prepared for the Waze Leadership Team

The Waze team is developing a data analytics project to identify and reduce monthly churn on the Waze app. Exploratory data analysis (EDA) will help Waze investigate the key factors contributing to churn, enabling targeted retention strategies. This report provides key insights and outlines how they will influence the future development of the project.

### Details

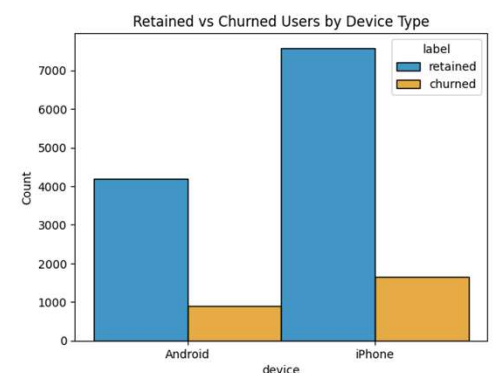
### Key Insights

- **The more users used the app, the less likely they were to churn.** While 40% of users who never used the app churned last month, none of those who used it daily did.
- **Distance driven per driving day had a positive correlation with churn.** The farther a user drove each day, the more likely they were to churn.
- **Number of driving days had a negative correlation with churn.** Users who drove more frequently were less likely to churn.
- **Most variables were either right-skewed or uniformly distributed.**
  - For the right-skewed distributions, this means that most users had values in the lower range for those variables.
  - For the uniform distributions, this indicates users were generally equally likely to have values anywhere within the range for those variables.
- **Several variables contained highly improbable or impossible outliers, such as 'driven\_km\_drives' and 'driving\_days'.**
- **Users of all tenures, from new to approximately 10 years, were relatively evenly represented in the data.**



Churn rate is highest for those that didn't use Waze much during the last month.

The proportion of churned users to retained users is consistent between device types.



### Next Steps

- Investigate discrepancies between 'driving\_days,' 'sessions,' and 'activity\_days.'
- Determine if specific groups of profiles within the dataset could provide insights into abnormally high driving and the reasons why long-distance drivers might churn.
- Plan to conduct a statistical analysis of the variables to determine their impact on churn and whether the effects are statistically and practically significant.