# User Churn Project

## Executive Summary

### Project Overview

This project is focusing on monthly user churn. Churn quantifies the number of users who have uninstalled the Waze app or stopped using the app during the last month. With the development of a churn prediction model that will help prevent churn and improve user retention as the main goal, thorough EDA procedures and visualizations were applied to identify relationships, trends, and data abnormalities.

## Key Insights

❖ Nearly all variables have either a **right-skewed** or **uniform distribution**.

❖ **Total user tenure** (up to ~9.5 years) follows a **uniform distribution** meaning that there is an **equal representation** of brand-new to long-term users.

❖ The **activity_days** distribution is nearly uniform with **~500 active users** on each count of days.

❖ ~250 users didn't open the app and ~1000 opened it but didn't drive, resulting ~750 using the app possibly either by mistake or for information purposes.

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

❖ **Positive correlation** between the number of km driven and churn.

❖ **Negative correlation** between driving days and churn.

❖ **Long-retained users** had **at least 40% of their total sessions** during the **last month**.

❖ Several variables had **highly improbable or perhaps even impossible** outlying values

## Details
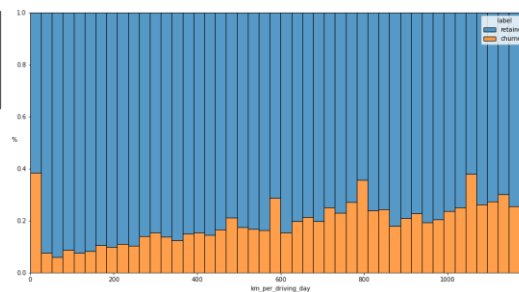


Although 40% of no-distance users churned, overall **the more km they drive the more likely to churn.**

On the contrary, **the more driving days a user has, the less likely to churn,** while 40% of zero-drives users churned, nobody who used the app for all 30 days churned.
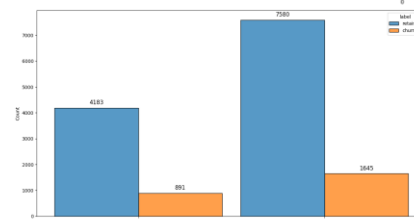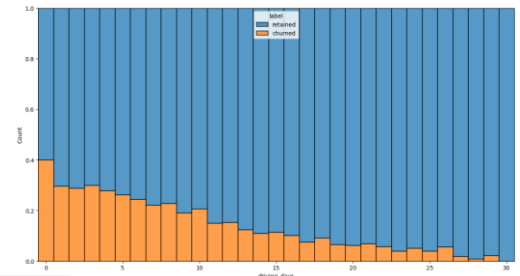


Finally, **churn is not related to the type of device** as the percentage of churn users is consistent between devices.



## Next Steps

→ Investigate **problematic discrepancies** between the variables of the number of sessions, activity days, drives, and driving days.

→ Proceed to more statistical analysis to **identify variables that influence churn levels.**

→ **Deeper analysis of user profiles** to find insights that justify why long-distance drivers are more likely to churn.