

Waze User Churn Project - Preliminary Data Summary

Executive Summary Report I Milestone 2

Project Overview

The Waze data team is working on a data analysis project to boost growth by reducing user churn (defined as users uninstalling the app or ceasing its use). This report delivers a preliminary overview of the data, outlines the current project status and highlights key findings from Milestone 2 that will shape the project's future trajectory.

Details

Key Insights

- In the dataset, 82% of users are retained, while 18% have churned.
 - The dataset comprises 12 unique variables of various types, with 700 missing values in the label column. No evidence indicates these omissions are non-random.
 - Churned users made on average three more trips in the final month than retained users, while retained users accessed the app more than twice as frequently as churned users in the last month.
 - Median churned users drove around 200 additional kilometers and spent 2.5 more hours driving compared to retained users during their last month.
 - Churned users tended to drive more often but on fewer days, with their trips being both longer in distance and duration. This may indicate a distinctive user profile that warrants further investigation.
 - Churned users drove on average 698 kilometers per day during their last active month (~240% of the distance driven by retained users on their driving days).
 - The data reflects a group of drivers who use Waze heavily, suggesting this may not represent typical driving behavior.
- The primary goal is to investigate user data to identify critical relationships between key variables.
 - Regarding our approach to the problem, a dataframe was constructed, where each row represents an individual user and each column denotes a specific variable. Initial statistics were compiled and an analysis of user behavior was carried out.
 - Significant relationships between variables were identified, which will guide the next stages of user data analysis.
 - Preliminary testing was conducted on potential new features, including the frequency of drives, the distance per drive and the total distance driven daily.

Next Steps

1. The team suggests gathering additional data on high-frequency drivers. It is possible that their frequent driving behavior is related to why the Waze app is not fulfilling their specific needs, which might be distinct from those of the average driver.
2. The immediate next step involves conducting an in-depth exploratory data analysis (EDA) and creating data visualizations to better understand the story behind the data and inform future decisions.