

# MACHINE LEARNING MODEL THAT PREDICTS USER CHURN

## Two-Sample Hypothesis Test Results

### Overview

This report offers information of Milestone 4.

Currently team is nearing the midpoint of user churn project. So far, we've completed a project proposal, and EDA for Waze's user data. We've also used Python to create data visualizations.

### Objective

Main objective: Analyze the relationship between mean amount of rides and device type. This include a statistical analysis of ride data based on device type. Ate the end was analyzed whether there is a statistically significant difference in mean amount of rides between iPhone® users and Android™ users, through conduction a two-sample hypothesis test (t-test),

### Results

Average Number of  
Drives



66



68

- Drivers who use an iPhone to interact with the application have a higher number of drives on average.
- **The t-test results concluded there is not a statistically significant difference in mean number of rides between iPhone users and Android users. (pvalue  $\approx 0,14$ )**
- (null hypothesis: There is not a statistically significant difference in the average number of drives between drivers who use iPhones and drivers who use Androids)

### Next Steps

- We recommend conducting additional t-tests on other variables to gain deeper insights into user behavior.
- Furthermore, since the user experience remains consistent across the platform, implementing temporary changes to marketing strategies or the user interface could yield valuable data to better understand and model churn dynamics.