Waze User Churn Hypothesis Testing Summary

Overview

The data team is developing a data analytics project aimed at increasing overall growth by reducing monthly user churn on the Waze app. Churn is defined as the number of users who have uninstalled the Waze app or stopped using the app. **This report offers information on the project status and results of Milestone 4, which impact the future development of the overall project**.

Objective

Target Goal: Develop a two-sample hypothesis test to analyze and determine whether there is a statistically significant difference between mean number of rides and device type – Android vs. iPhone.

Impact: Statistical tests, such as the one conducted for Milestone 4, enable the Waze data team to make inferences about the populations from which the data was drawn and help them learn more about their user base.

Results

Based on the calculations, 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 drives between Android users and iPhone users.

Average Number of Drives
Android - 66
iPhone - 68
Averages rounded up to nearest whole number.

Next Steps

Due to the results rendered from this specific hypothesis test, the Waze data team recommends running additional t-tests on other variables to learn more about user behavior.

Additionally, since the user experience is the same, temporary changes in marketing or user interface may be impactful rendering more data to investigate user churn behavior.