

User Churn Project | Two-Sample Hypothesis Test Results

Prepared for: Waze Leadership Team

Overview

The Waze data team is currently developing a data analytics project aimed at increasing overall growth by preventing monthly user churn on the Waze app. As part of the effort to improve retention, Waze wants to learn more about users' behavior. **This report offers information on the project status and results of Milestone 4, which impact the future development of the overall project.**

Objective



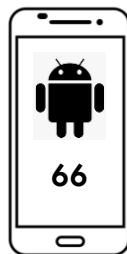
Target Goal: Develop a two-sample hypothesis test to analyze and determine whether there is a statistically significant difference between mean number of rides and device type – Android vs. iPhone.



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

Average Number of Drives



Note: The mean number of drives shown here – 66 for Android and 68 for iPhone – have been rounded up.

- 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 rides between iPhone users and Android users.**

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.