# Waze app User Churn Project | Two-Sample Hypothesis Test Results Executive Summary Report



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#### **Overview**

The data team at Waze has embarked on a critical project aimed at addressing the pervasive challenge of user churn through the development of a machine learning model designed to predict and, ultimately, mitigate this phenomenon. The objective is to understand underlying patterns and correlations in user behavior that may foretell churn, thereby enabling proactive measures.

### Objective

- **Goal:** Utilize two-sample hypothesis testing to determine whether a statistically significant difference exists in the mean number of rides between users using Android versus iPhone.
- **Impact:** Identifying a significant discrepancy in ride usage between Android and iPhone users could unveil platform-specific user behaviors enabling targeted marketing to enhance user engagement and satisfaction.

#### **Results**

#### **Average Number of Drives**





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

- → Calculations reveal that, drivers who use an iPhone to interact with the application have a slightly higher number of rides on average.
- → t-test results indicate that no statistically significant difference exists in the mean number of rides between iPhone and Android users.

## **Next Steps**

- Examine additional metrics and user interactions within the app to identify subtle distinctions or trends that may inform user engagement strategies, and conduct further t-tests as needed.
- Explore platform-specific features, preferences, or pain points that might be leveraged or addressed to enhance the user experience and potentially drive increased usage and reduce churn on both platforms.