

User Churn Project | Two - Sample Hypothesis Test Results

Prepared for: Waze Team

Project Overview

This project is part of a larger effort at Waze to increase growth. In order to help prevent user churn on the Waze app, it is important to analyze the relationship between the mean number of rides and device type. The main question at this stage of the project: “Is there a statistically significant difference in the mean number of rides between iPhone® users and Android™ users?”

Details

Key Insights

- According to the calculations, drivers who use an iPhone to interact with the application have a higher number of drives on average.
- Two-sample t-test showed that there is **no** statistically significant difference in the mean number of rides between iPhone users and Android users of Waze.

The initial data was imported, and an exploratory data analysis was conducted. The average number of drives for each device type was calculated:

```
device
Android    66.231838
iPhone     67.859078
Name: drives, dtype: float64
```

After conducting a two-sample t-test, we found that the p-value (0.1434) was greater than 0.05 (the significance level), so we failed to reject the null hypothesis.

Next Steps

Explore other factors that influence variation in the number of drives, and run additional hypothesis tests to better understand user behavior. Different temporary changes in marketing or user interface for the Waze app may provide more data to investigate churn.