Waze User Churn Project | Two-Sample Hypothesis Test Results

Executive Summary

Overview

In hopes of reducing monthly user churn the Waze data team is currently developing a data analytics project to learn more about user behaviour. This executive summary contains information about statistical testing completed on the dataset.

Objective

Conduct a two-sample hypothesis test to determine if there is a statistical significance in the observed difference between mean number of drives based on device type. Statistical tests such as the one performed at this stage of the project will let our team to gain more insights allowing for inferences about the user base.

Results

The initial data assessment showed that Waze users that owned an iPhone on average went on a higher amount of drives than Android users.

```
device_type
1     67.859078
2     66.231838
Name: drives, dtype: float64
```

(device 1 - iPhone, device 2 - Android)

Upon completion of the the t-test we failed to reject the null hypothesis due to our P value being larger than our chosen significance level of 5%. The rejection of the null hypothesis means that there is not a statistically significant difference between the average drives between iPhone and Android users.

Next Steps

Based on the results of this specific hypothesis test we recommend running addition statistical tests on other variables to allow for more information on user behaviour. Alongside the additional statistical testing, changes to other user experience factors may provide more variables to lead to the understanding of user churn behaviour.