

Applying Iterative Design Principles to a Live Product





Step 1
Select KPIs
&
Evaluate Previous
Multivariate
Experiment Results

Select KPIs for Flyber Analyses

Calculable KPI as per the available data

Acquisition KPI (USERS) - The “open” type event would give us an insights on number of users opening the app or website. By counting number of users who opened the App, we can calculate how many users we have acquired.

Activation - It is “search” event type KPI measure. By calculating how many users searched a ride from total number of users who opened the App or website we can have the estimate on Activation KPI.

Revenue - “begin_ride” event will help to measure revenue KPI. By calculating how many users booked the ride we can calculate the revenue and conversion rate as well as.

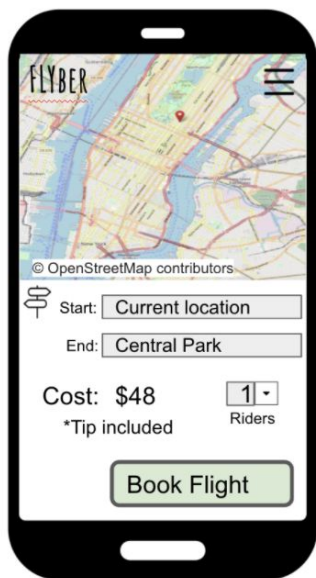
(KPI - Not calculable as per available data)

Retention KPI - Can be used to determine how often users are using the ride.

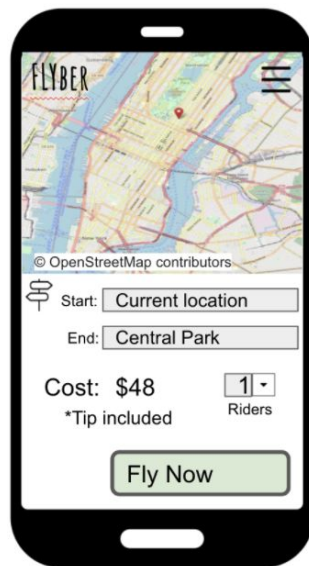
Referral KPI - We need to have a feedback survey which will show us how customers are satisfied and are ready to recommend to others.

Describe the First Multivariate Experiment

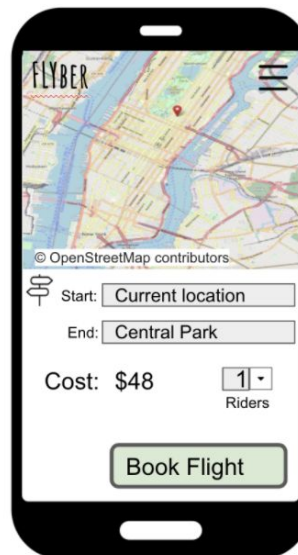
Control



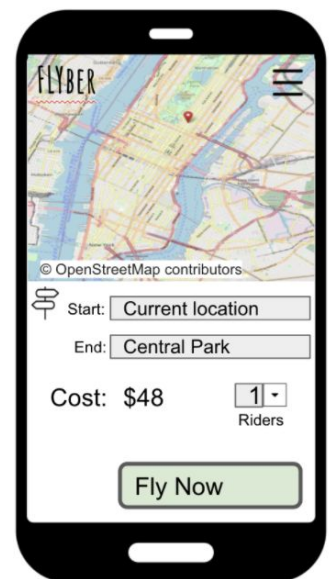
Experiment 1



Experiment 2



Experiment 3



Review Multivariate Test Results: Visualization

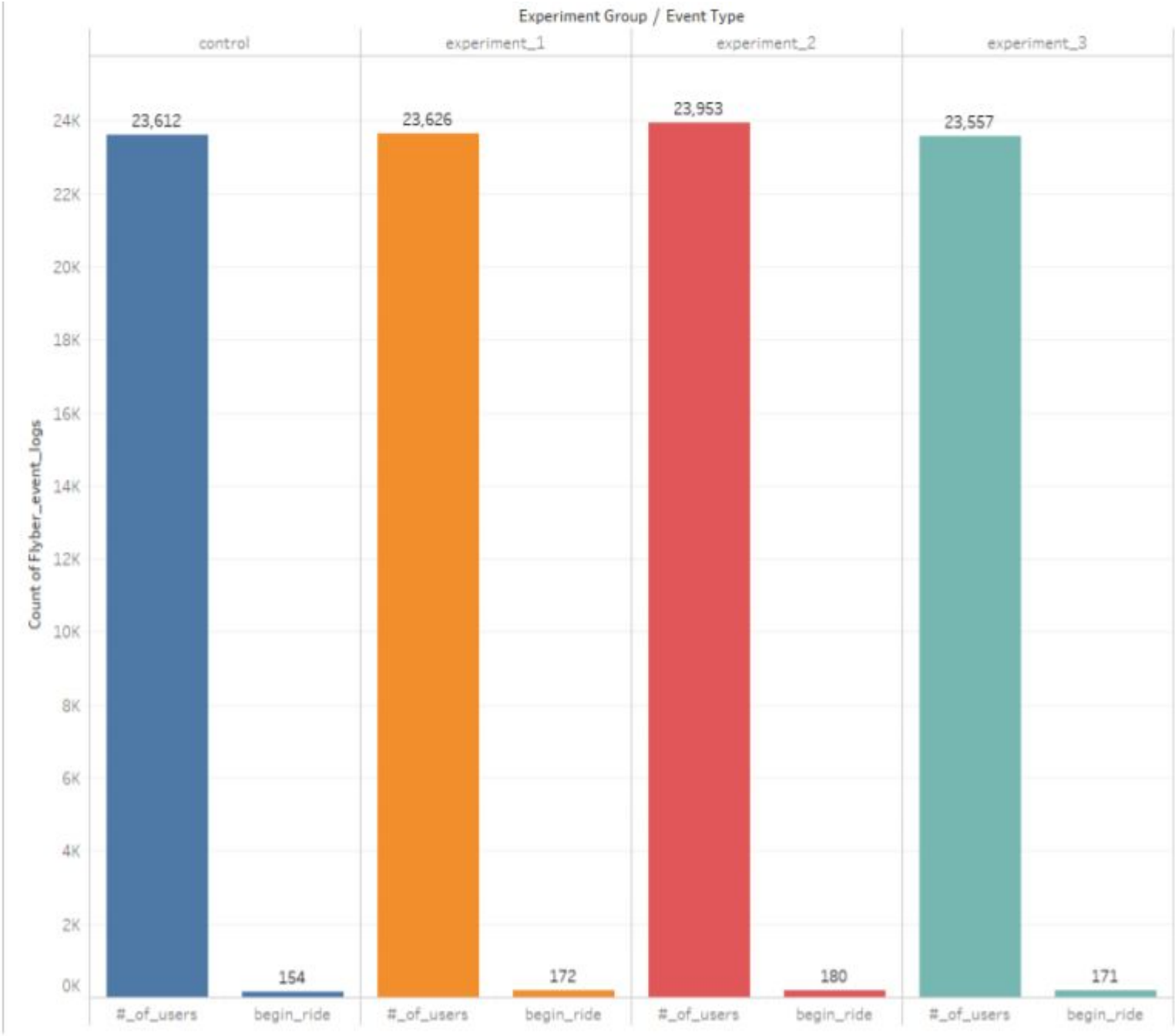
- Provide a visual representation of the impact of the experiment on the conversion rate of users booking a flight (out of all users opening the app)

Elements tested on the images are:

- 1) **Call to Action text message :** There are two call to action button - “Book Flight” and “Fly now”
- 2) **Text message:** There is a text message under cost which shows whether tip is included or not.

Control group: Users can see “tip included” under cost and CTA of “book flight” or “Fly now”.

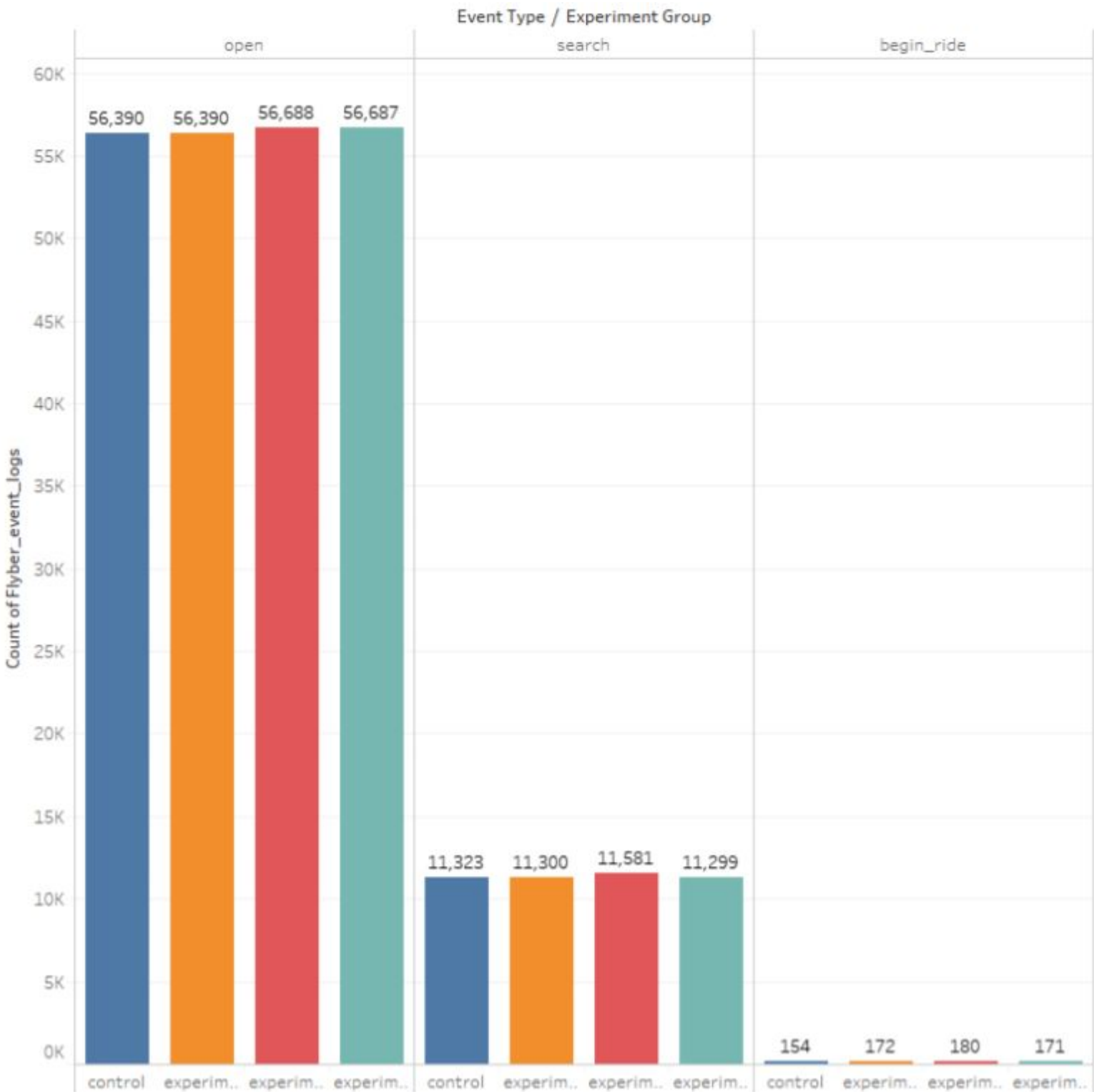
Conversion Rate of users booking



Conversion Rate in different experiments

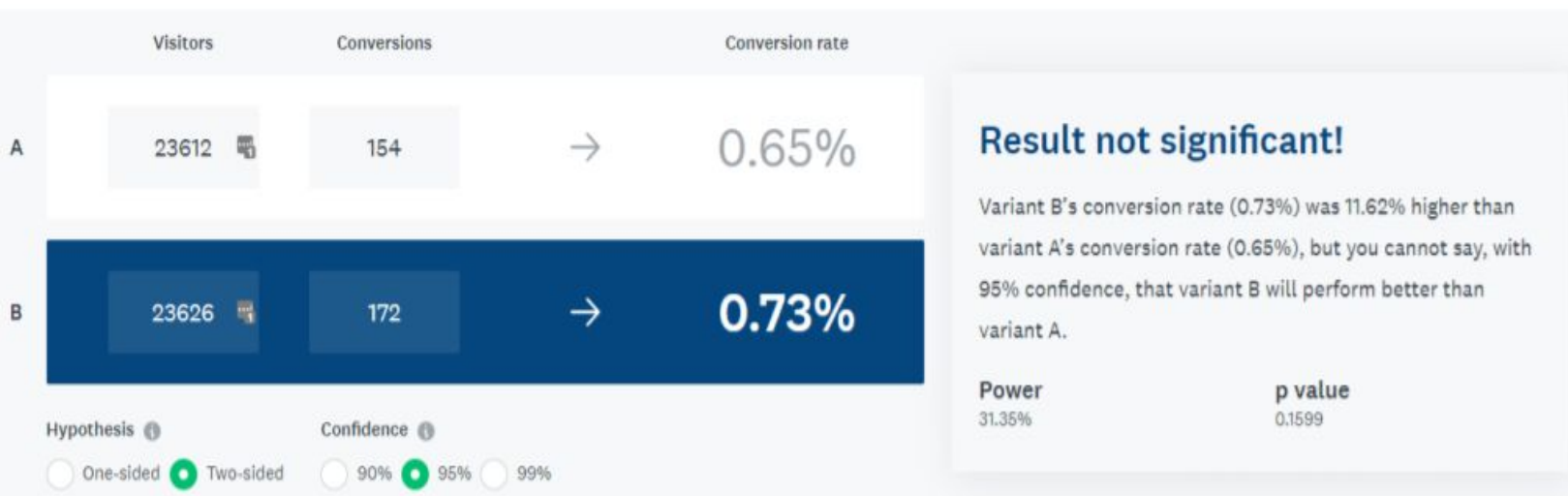
| Event Type | Experiment Group | | | |
|------------|------------------|--------------|--------------|--------------|
| | control | experiment_1 | experiment_2 | experiment_3 |
| #_of_users | 23,612 | 23,626 | 23,953 | 23,557 |
| open | 56,390 | 56,390 | 56,688 | 56,687 |
| search | 11,323 | 11,300 | 11,581 | 11,299 |
| begin_ride | 154 | 172 | 180 | 171 |

Conversion Rate For Each Event Type During Each Experiment

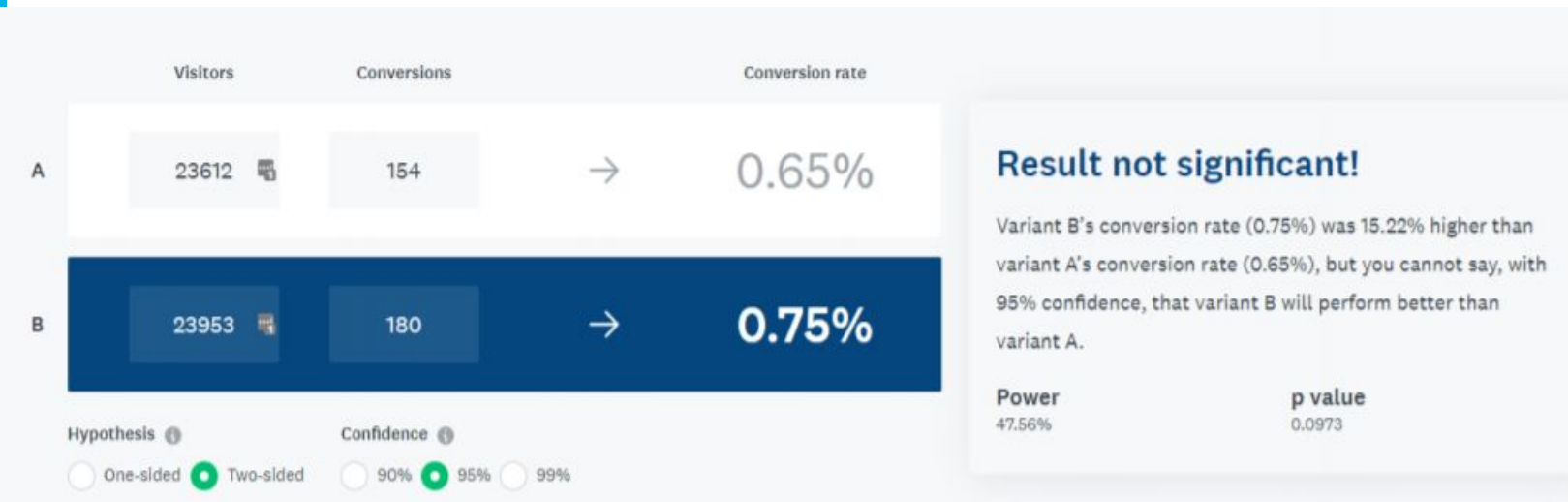


- Conversion happens when “begin_ride” is selected.
- Initially, number of users in each group is inferred and then number of conversions in each group.
- Confidence level is 95% and two tailed test is carried.

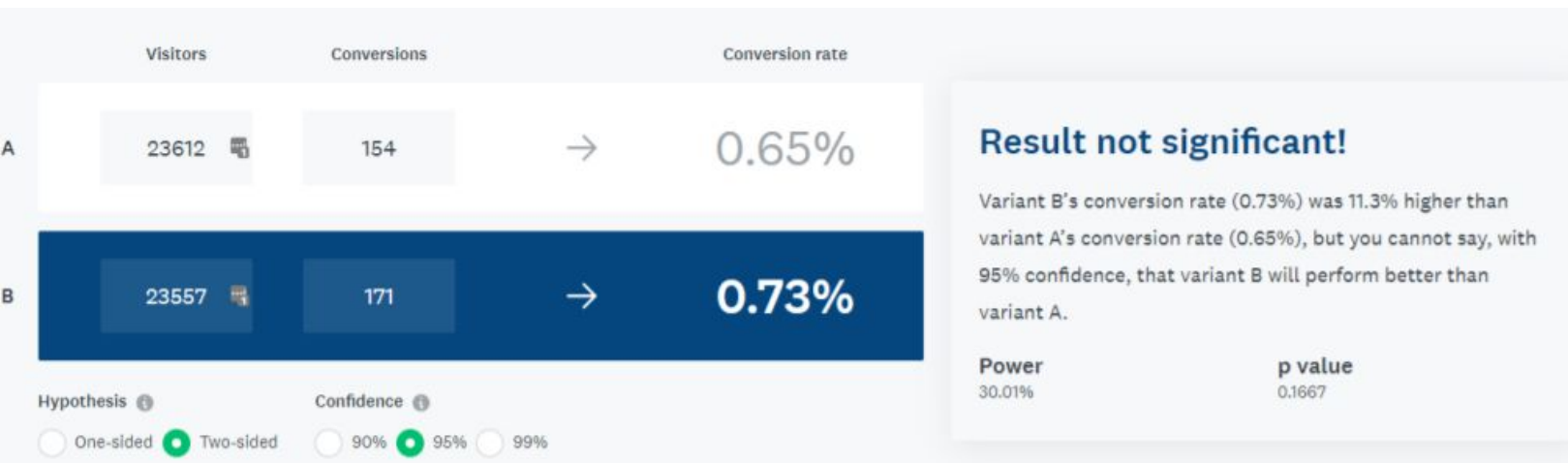
Control Vs Experiment 1



Control Vs Experiment 2



Control Vs Experiment 3





As per the statistical significance calculations, I would recommend to have the old design and run new test designs.



Step 2

Funnel & Cohort Analyses

User Funnel

There are three steps a user can take.

- 1) Open the App
- 2) Search for the ride
- 3) Begin ride

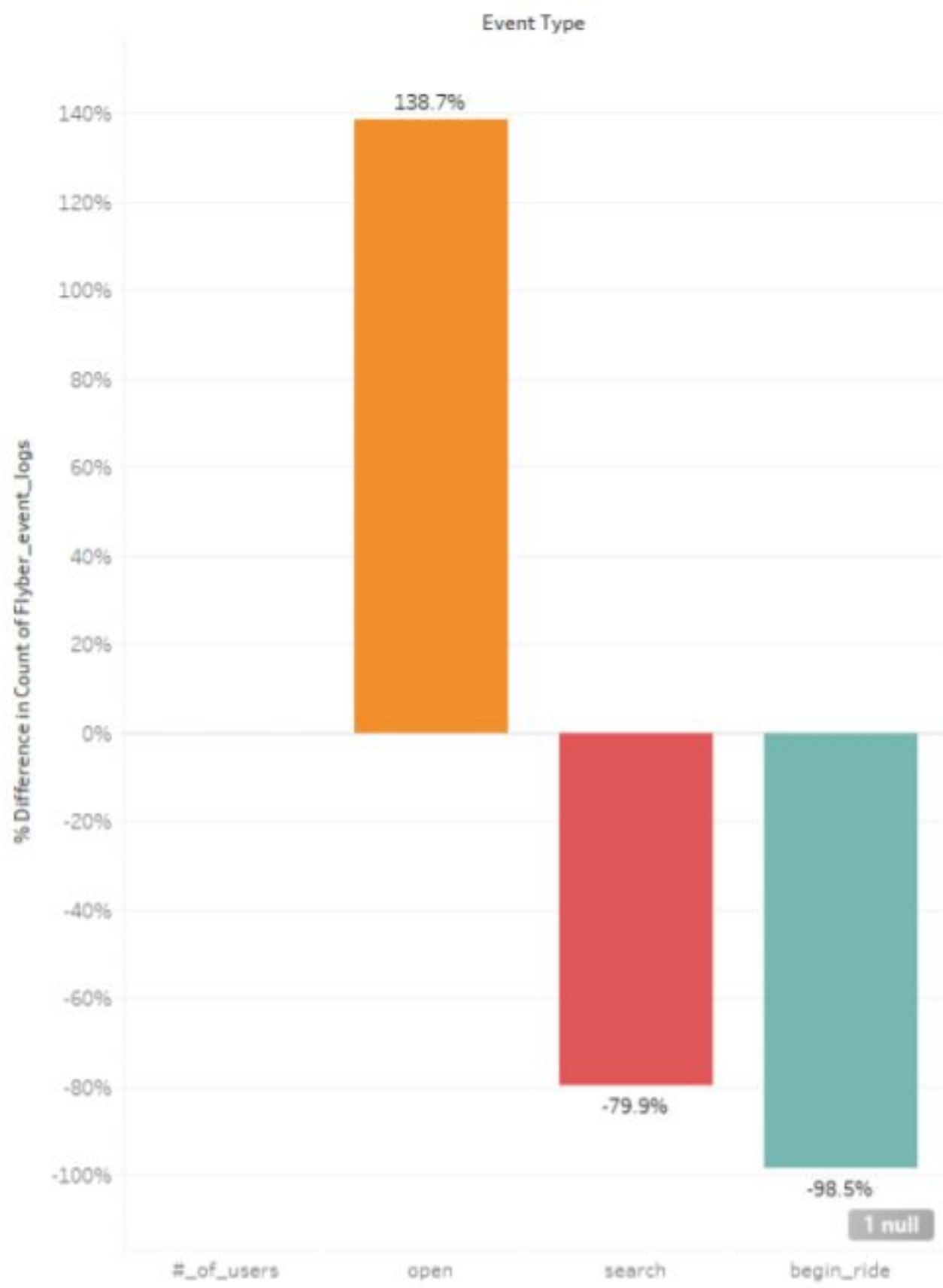
User Dropoff Funnel

| Event Type | |
|------------|---------|
| open | 226,155 |
| search | 45,503 |
| begin_ride | 677 |

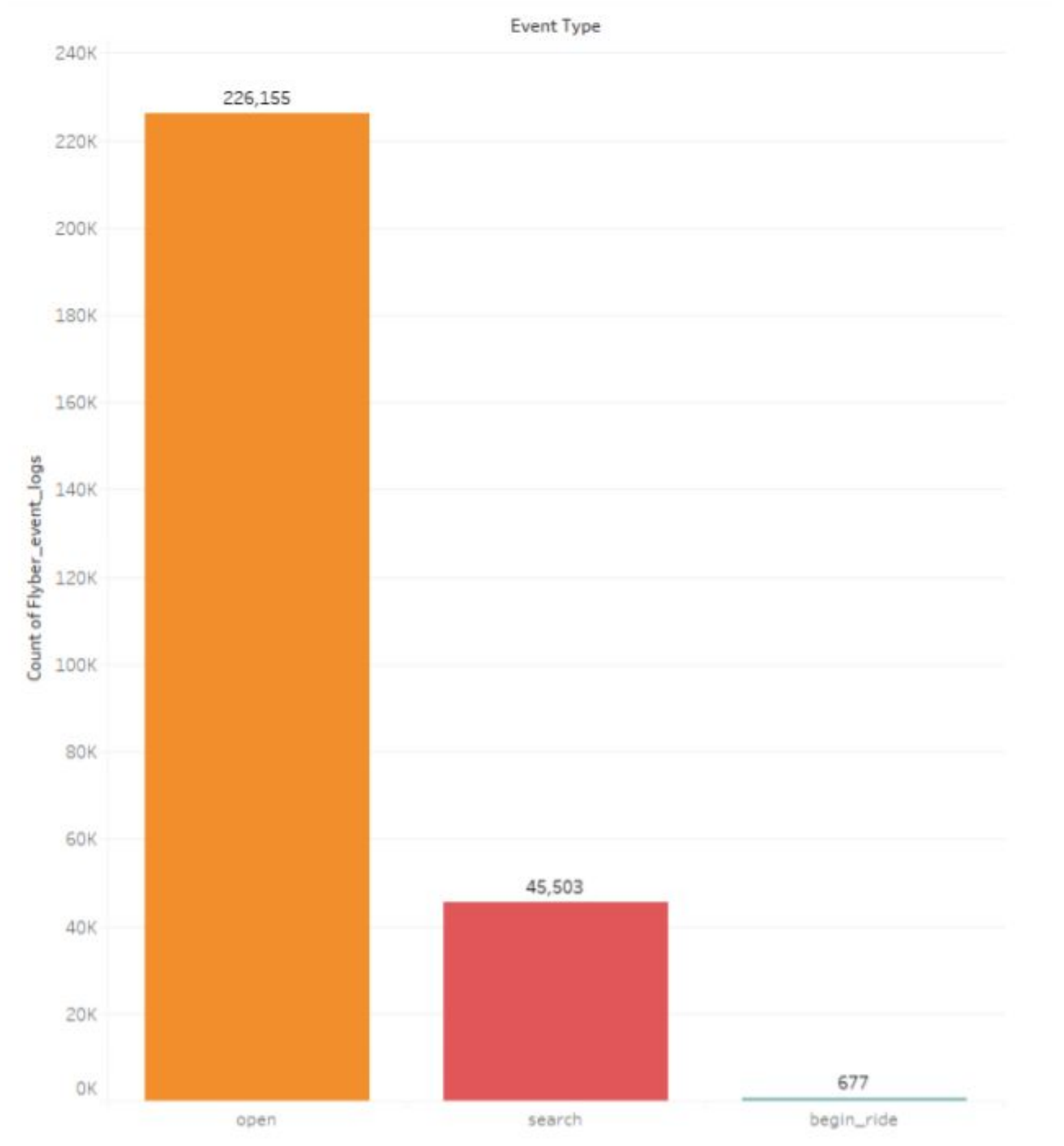
User Dropoff Percentage Funnel

| Event Type | |
|------------|---------|
| open | |
| search | -79.88% |
| begin_ride | -98.51% |

User Flow Steps Funnel



User Dropoff Funnel



User Segments

- For each demographic attribute, identify the segment group with the largest number of users

The 2 Demographic groups attributes are:

→ Age

→ Neighborhood

Users Segment Age Group

| Users Segment Age Group | |
|-------------------------|---------|
| Age | |
| 18-29 | 57,364 |
| 30-39 | 38,356 |
| 40-49 | 95,168 |
| 50+ | 176,195 |

Users Segment Age Group

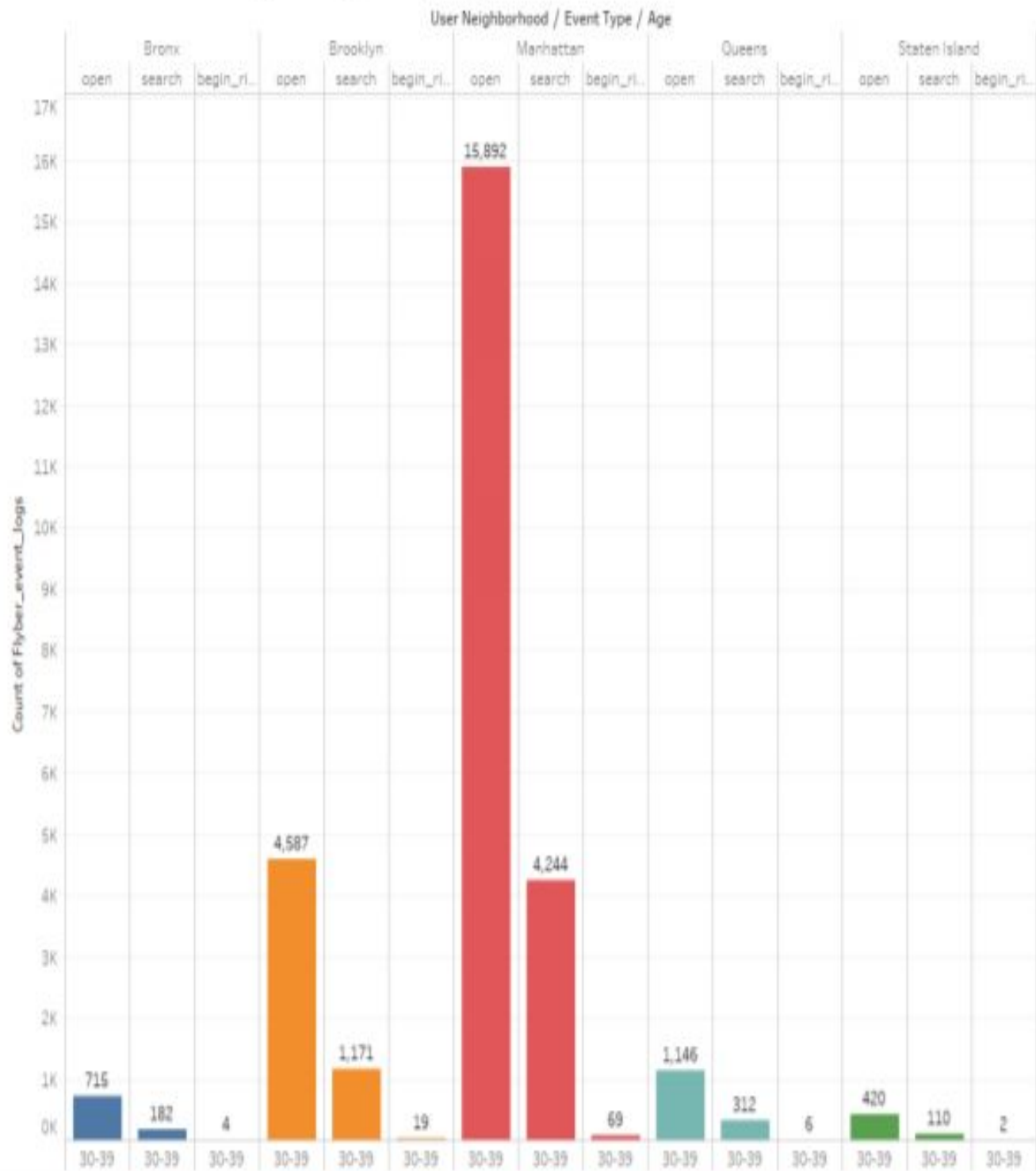
| Users Segment Neighborhood | |
|----------------------------|---------|
| User Neighbor... | |
| Bronx | 10,802 |
| Brooklyn | 73,880 |
| Manhattan | 257,259 |
| Queens | 18,088 |
| Staten Island | 7,054 |

→ For Age attribute, age group of 50+ has the largest number of users = 176,195

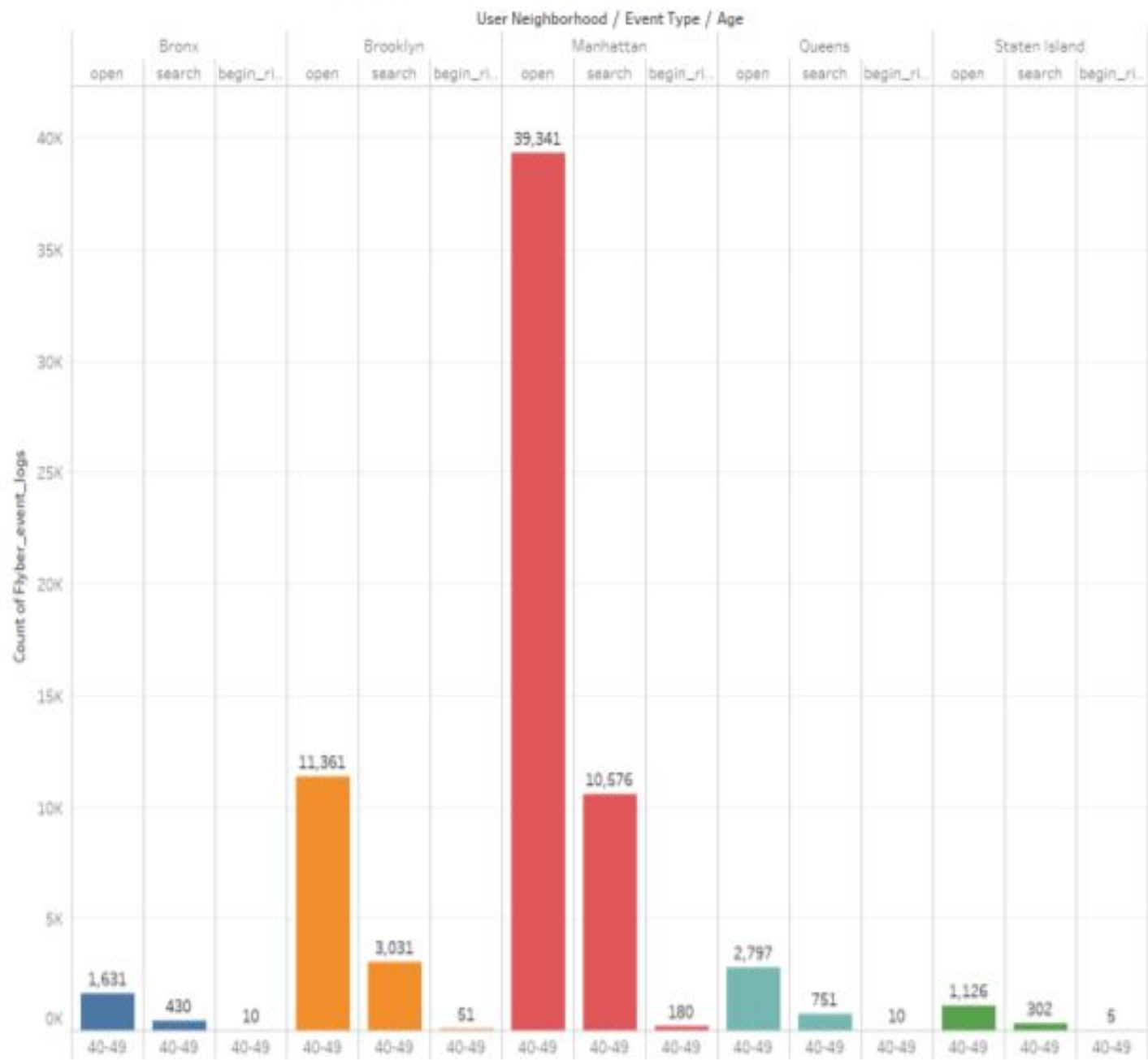
→ For Neighborhood attribute, Manhattan has largest number of users = 257,259

Identify Opportunities for Improvement

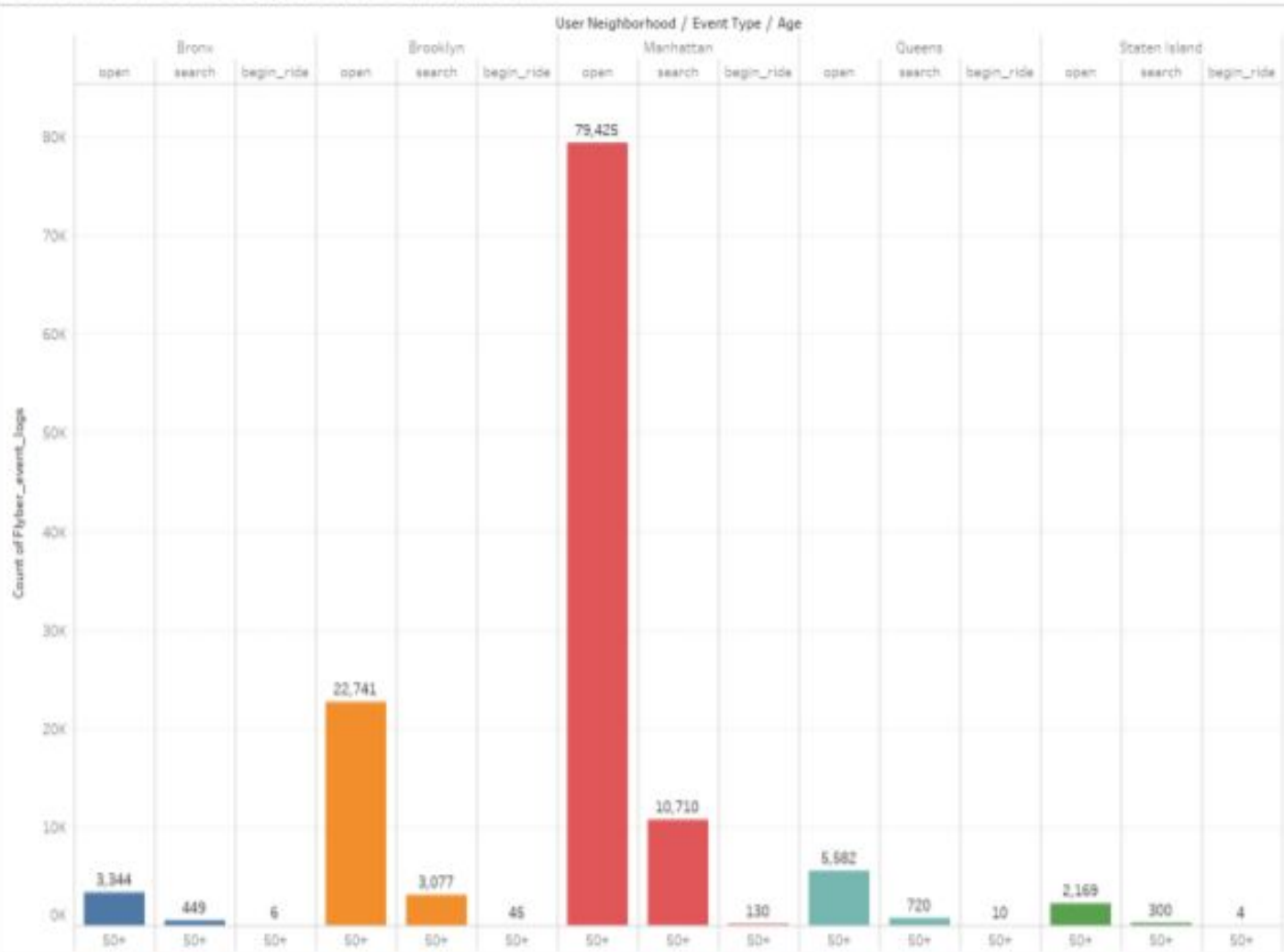
User Behavior based on Age Group (30-39)-Neighborhood



User Behavior based on Age Group (40-49)-Neighborhood



User Behavior based on Age Group (50+)-Neighborhood



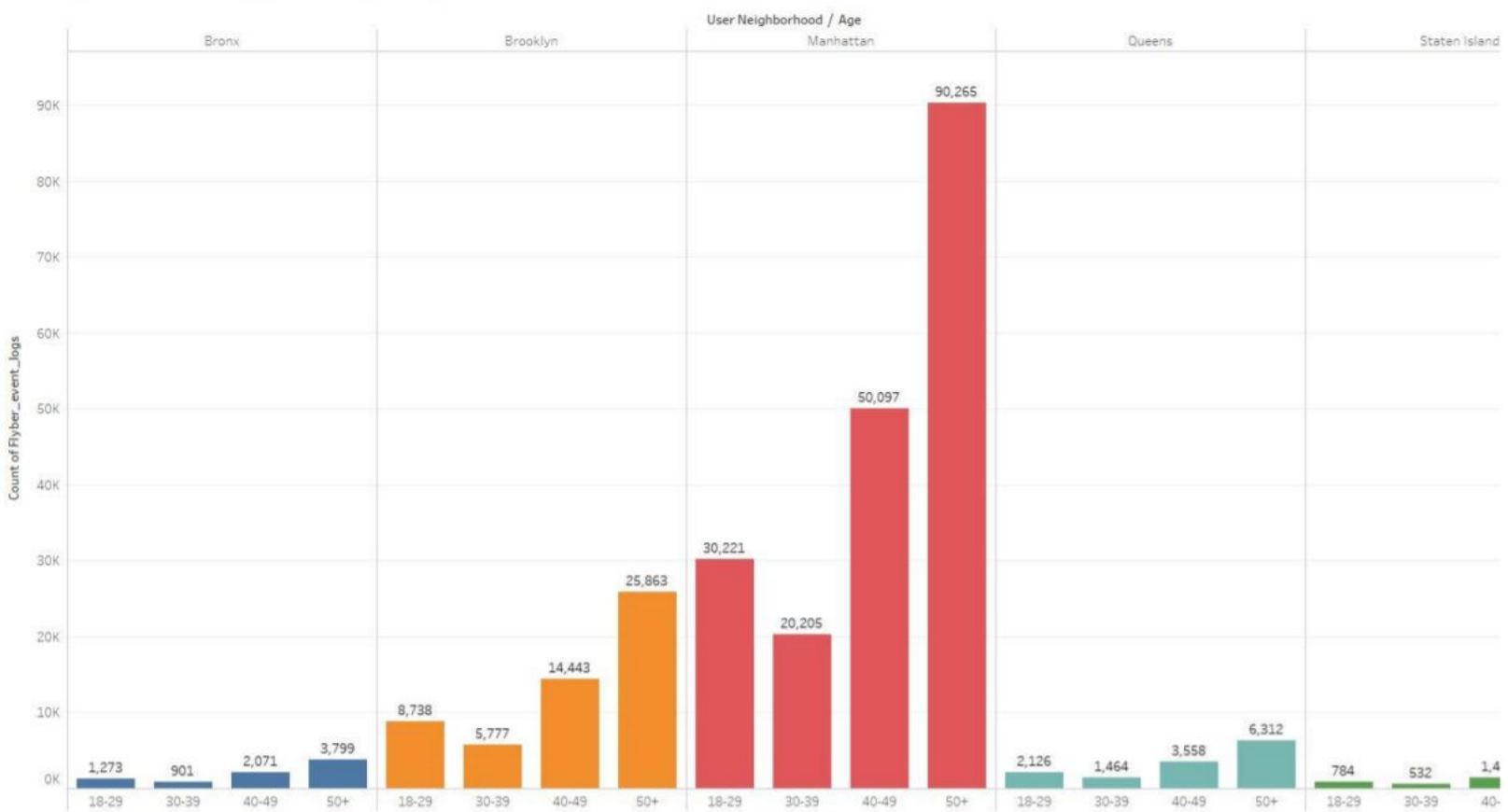
As per my analysis, Manhattan has the largest flyber users while Brooklyn has second highest. This is irrespective of any age group.

It is deduced that, we have highest drop off from search to begin ride. We should look into this matter on why do we have huge drop off.

User drop off at each event and age segment

| Event Type | Age | | | |
|------------|---------|---------|---------|---------|
| | 18-29 | 30-39 | 40-49 | 50+ |
| open | | | | |
| search | -69.31% | -71.01% | -66.62% | -78.09% |
| begin_ride | -98.55% | -98.29% | -98.16% | -98.61% |

User behavior based on Age - Neighborhood





Step 3

Hypothesis & Next
Steps

Review Qualitative Data

- Hypothesis about customer need is represented.

→ We were able to provide a faster transportation service as the most interviewees are saving time.

→ The App usage has to be simplified further since biggest user segment is 50+ . The interview shows that user were unable to read instructions with ease.

→ The UI/UX is the area where development is needed as the drop off at the begin rides.

Evidence for this Hypothesis

→ Louis Jones - Age 70 I have a personal car service on call. My assistant books Flyber whenever I'd be travelling during peak NYC traffic hours. Time is money and Flyber saves me time! But I let my assistant actually book the Flyber because the first few times I tried booking, the instructions were too small

→ Robbie Gates – Age 67 Honestly, I thought about using Flyber to surprise my grandson or granddaughter with a visit to one of their sporting games. Luckily my daughter was around to help me book the ride. I usually just use Uber because it remembers my addresses and has all my favorite places saved, so I guess I always just open that up since it is so convenient and saves me time. Though now that I say that, I really should use Flyber again since it would save more time when it comes to fighting traffic!

Evidence for this Hypothesis

→ Charlie Johnson - Age 75: I call up our local pilot, Bob. He's not always available but I don't need to fiddle around with an app and hitting tiny buttons. He knows where I tend to be and where I want to go.

Suggested Features & Experimentation Plan

- We believe in improving the user experience and to make App easy to use. Because of the UI/UX the bounce rate and drop off is higher. Since, we have largest user segment of Age 50+, we need to make user experience better so that we can have easy and smooth flow.

It is highly recommend to experiment with larger buttons and Text size. In addition to this, we would suggest two more features.

- 1) Addition of navigating and booking through Voice enabled features.
- 2) Add starting location, destination to Shortcut list. Hence, user won't have to input the most used address every time.

Suggested Features & Experimentation Plan

→ It is highly recommended to increase the font size.

- For **experiments**,

Control Group :

Start: Current Size

End: Current Size

Book Flight: Current Size

Experiment 1:

Fly now: Medium Size

Start : Medium Size

End: Medium Size

Voice Navigation and Booking feature Enabled

Shortcut feature Added to save location history

Experiment 2:

Fly now: Medium Size

Start : Medium Size

End: Medium Size

Voice Navigation and Booking feature Enabled

Experiment 3:

Fly now: Large Size

Start : Large Size

End: Large Size

Voice Navigation and Booking feature Enabled

Shortcut feature Added to save location history

Experiment 4:

Fly now: Large Size

Start : Large Size

End: Large Size

Voice Navigation and Booking feature Enabled

The age group that should be exposed to this experiments is 50+ and check whether the changes have an impact or not.

Two metrics for new suggested features :

→ How many users used the new feature, voice navigation and booking to navigate and/or book the ride.

→ How many users saw the “shortcut list” and saved there most used address.



Appendix

Raw Data

Additional Info

You could include supporting or additional information that can support your previous slides but isn't necessary for every person to see that looks at your slides.