



Insights from Airbnb Analysis from Pre- COVID Period

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Agenda

- ▶ Objectives
- ▶ Background
- ▶ Key Finding
- ▶ Recommendation
- ▶ Appendix:
 - ▶ Data Source
 - ▶ Data Methodology
 - ▶ Data Model Assumption

Objective

- ▶ Improve strategies to revive the business the business in the post-COVID period.
- ▶ Understand the key-insights from AirBnB NYC business in pre-COVID period.
- ▶ Estimate customer preferences for the post-COVID period travel.

Background

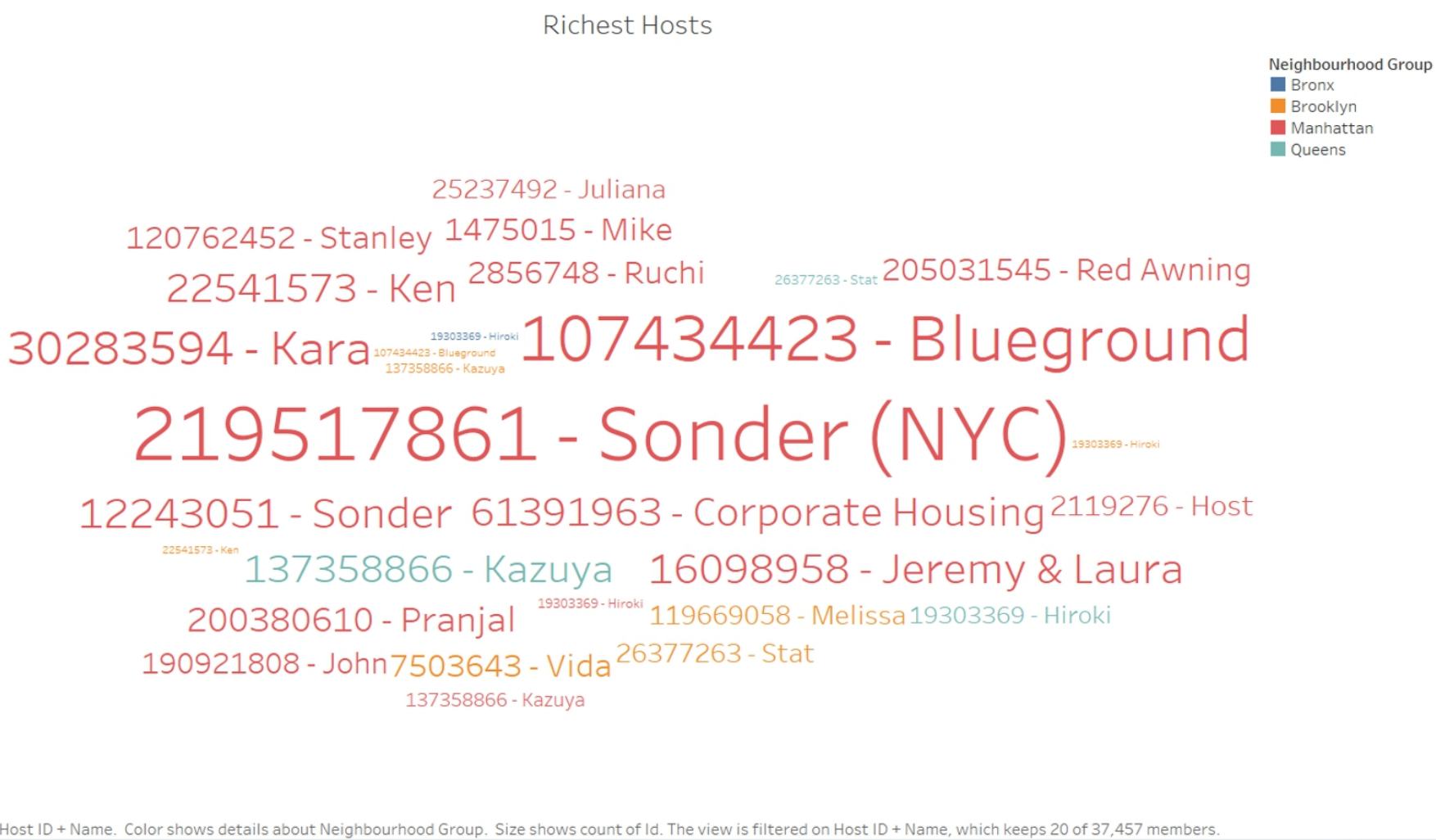
- ▶ The COVID-19 pandemic affected Airbnb business due to travel restriction.
- ▶ The revenue took the largest hit in NYC in the Q2 in 2020.
- ▶ Now the travel restriction are lifted, the business should be operated to recover the loss.

Objective of the analysis of the Airbnb NYC data

- ▶ Customer preference and rating of different hosts of Airbnb in were analyzed.
- ▶ The data was analyzed to derive key insights from the Pre-COVID period.
- ▶ The insights will be used to take decisions for the NYC Airbnb business for travel in post-COVID period.

Richest hosts in NY area

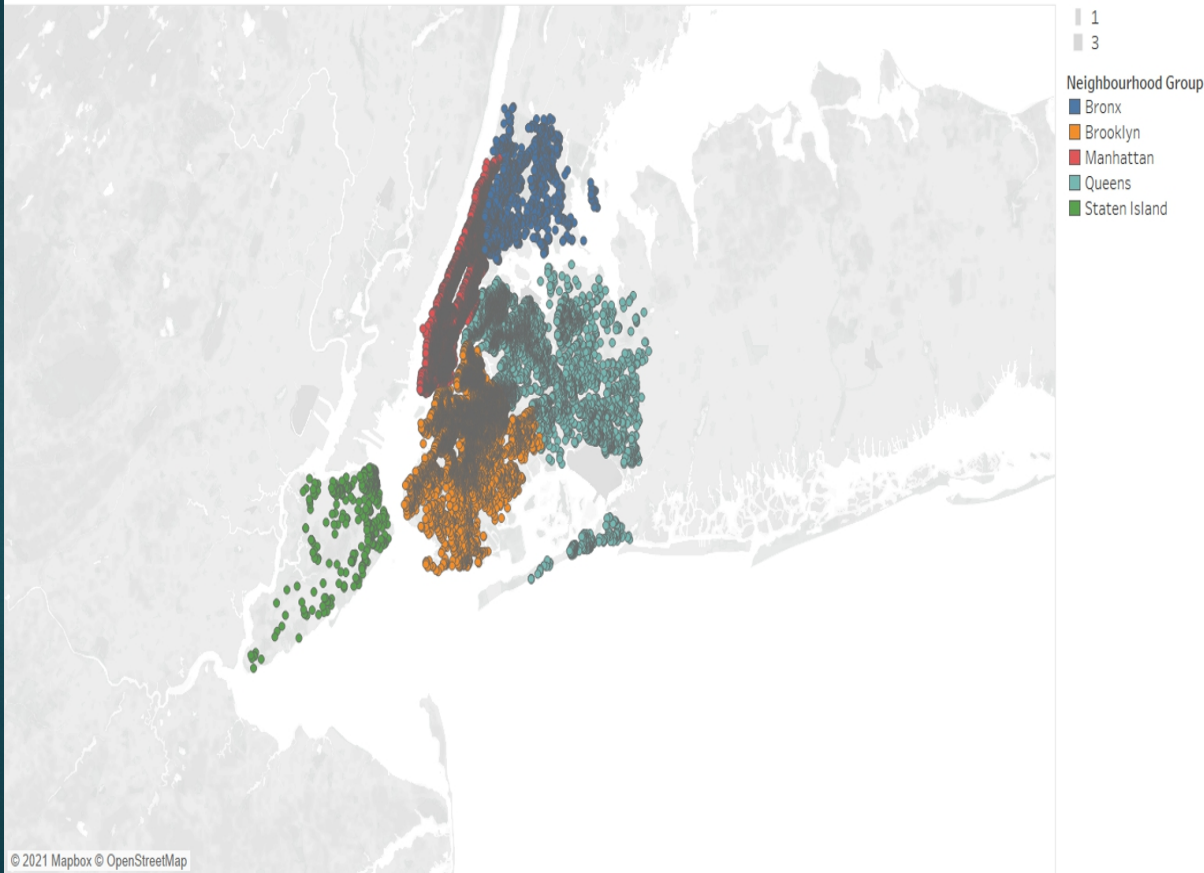
Hosts from the **Manhattan** area have the most number of listings. Sonder (NYC), Blue ground and Kara being on the top. **Sonder (NYC)** has a staggering **327** listings. The 4th being **Kazuya**, which interestingly has listings in **Queens, Manhattan and Brooklyn**.



Map - Most Listings & Average Price

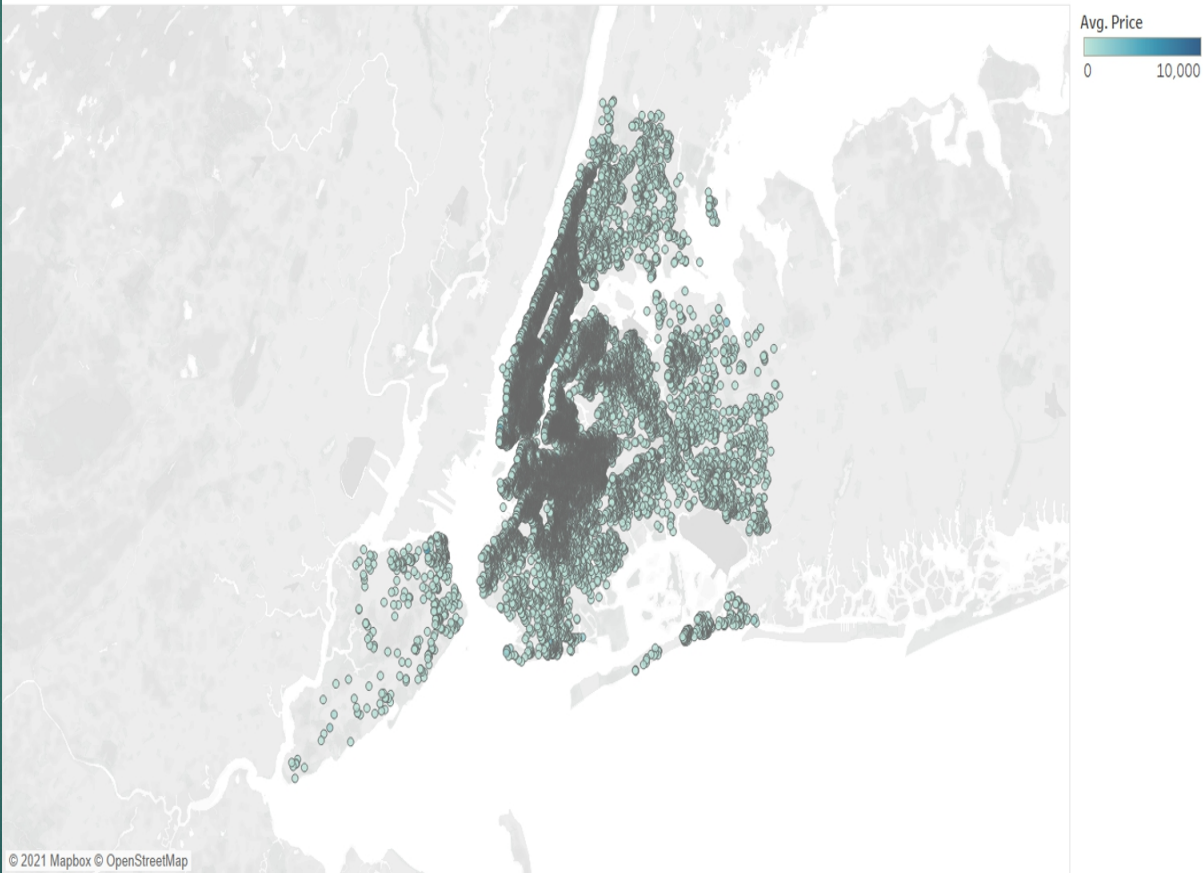
Both in terms of most listings and average price, it is evident from the graph that **Manhattan** is at the top, followed by **Brooklyn**.

Most Listings



Map based on Longitude and Latitude. Color shows details about Neighbourhood Group. Size shows count of Id.

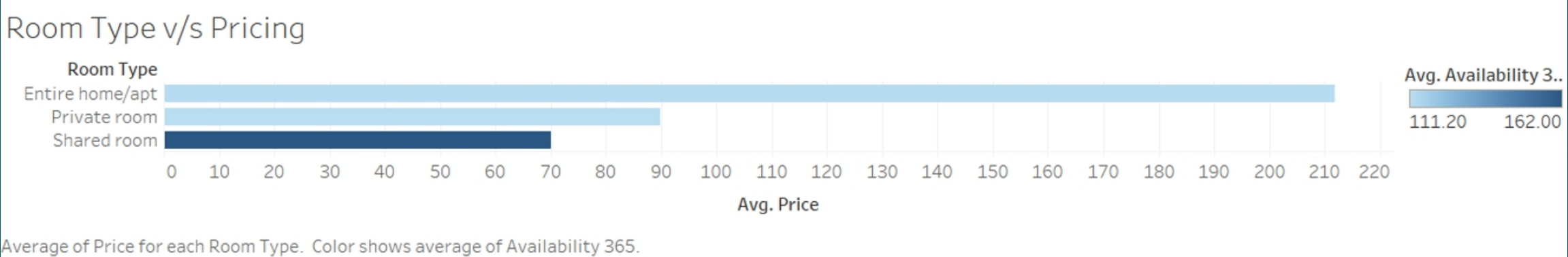
Average Price



Map based on Longitude and Latitude. Color shows average of Price.

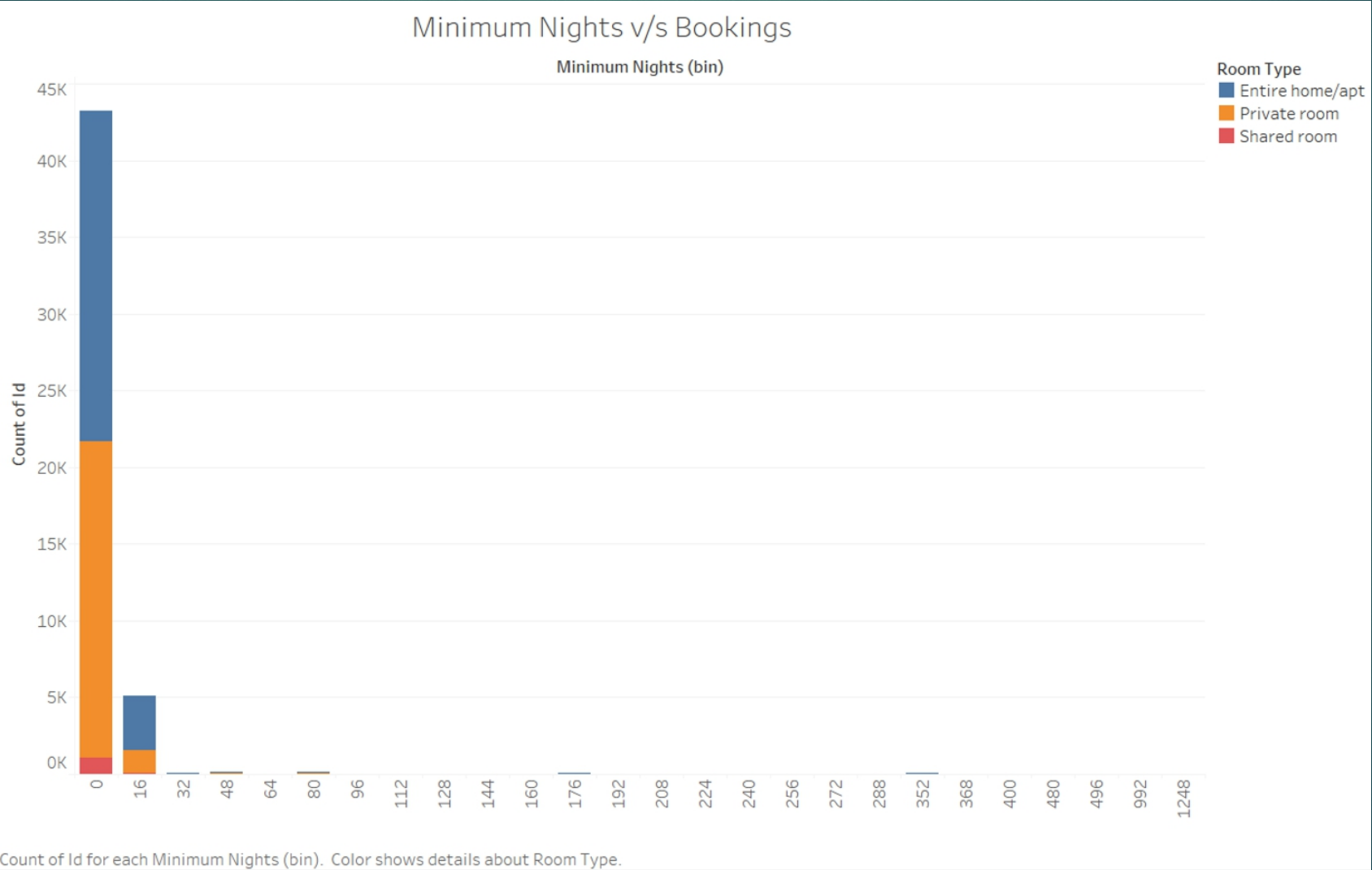
Room type v/s Pricing v/s Availability

Apartments and private rooms should be made available for **more number of days** in a year as the company is losing out on **high revenue** potential. Entire homes/apartments are the most expensive and shared rooms are the cheapest, for obvious reasons. However, when it comes to availability, the **shared rooms** are available for **little less than half a year** on average, whereas **apartments** and private rooms are available only for a **little more than a quarter** of a year on average.



Minimum Nights v/s Listings

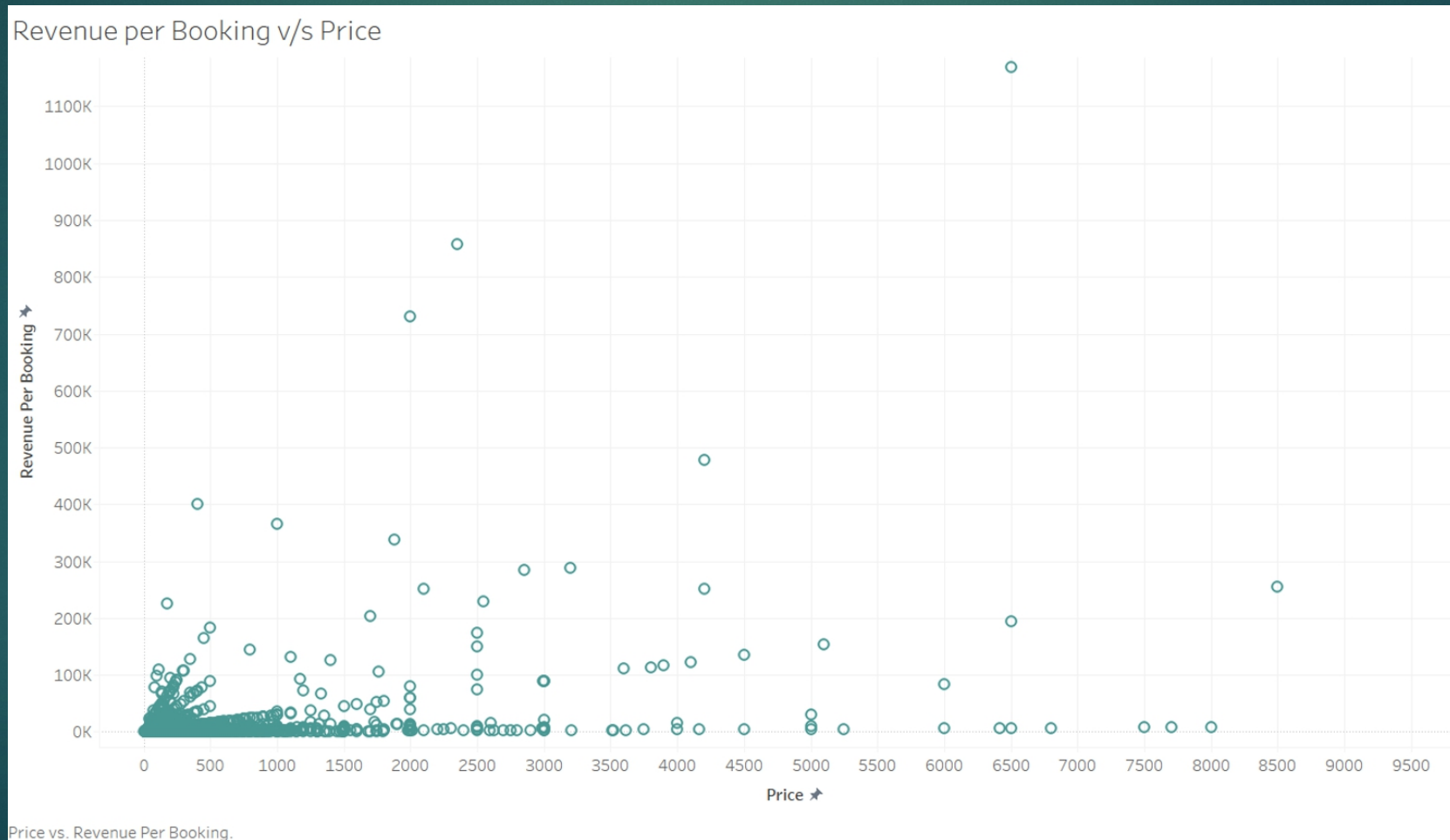
Hosts imposing a **higher minimum nights** should be encouraged for going easy on the criterion, to get more bookings. Listings with minimum nights criterion less **than a fortnight** are the **most** (approx. **43k** listings), which means there is a huge market for **shorter duration** stays. Those with **15 days to a month** of criterion are approx. **5k** listings, which is a huge drop. Hence, hosts should be encouraged to have this criterion preferably **less than 15 days**.



Revenue v/s Price

Assumption: Since we do not know the number of nights the guests have stayed, we will consider the variable “minimum nights” to calculate the revenue per booking.

Premium properties should either **increase the availability** (more days per year) or **increase the minimum nights** criterion as many of them don't seem to be making much revenue per booking. The scatter plot shows us a lot of **high price listings** at the **bottom** of our plot which is not good for the business.



Recommendation

- ▶ Manhattan and Brooklyn areas are preferred neighbourhoods area. Hence those areas should be targeted.
- ▶ Apartments and private rooms should be made available for more number of days in a year as the company is losing out on high revenue potential
- ▶ Hosts imposing a higher minimum nights should be encouraged for going easy on the criterion, to get more bookings.

Appendix

- ▶ The important variable in the data dictionary are neighborhood_group, room_type, price , location & reviews.
- ▶ Data methodology has been included with the presentation in the file folder.
- ▶ We have used AirBnB data from the year 2019.



Thank You