# Revival of Airbnb NYC Business in the Post Covid period

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# Agenda

- Objective
- Background
- Key Findings
- Recommendations
- Appendix
  - Data sources
  - Data methodology
  - Data model assumption

# Objective


- Our goal is to increase the revenue by analysing following various attributes :-
  - What are the neighbourhood to target
  - What is the pricing range being preferred by customers
  - Various kind of properties that exist w.r.t customer preferences
  - Adjustment in the existing properties to make it more customer oriented
  - What are the most popular localities and properties in New York
  - How to get unpopular properties more traction
  - Which type of Host to acquire more

- Improve our shared understanding of the market conditions and Customers

- Provide recommendations to Head of Acquisitions and Operations and Head of User experience of New York

# Background

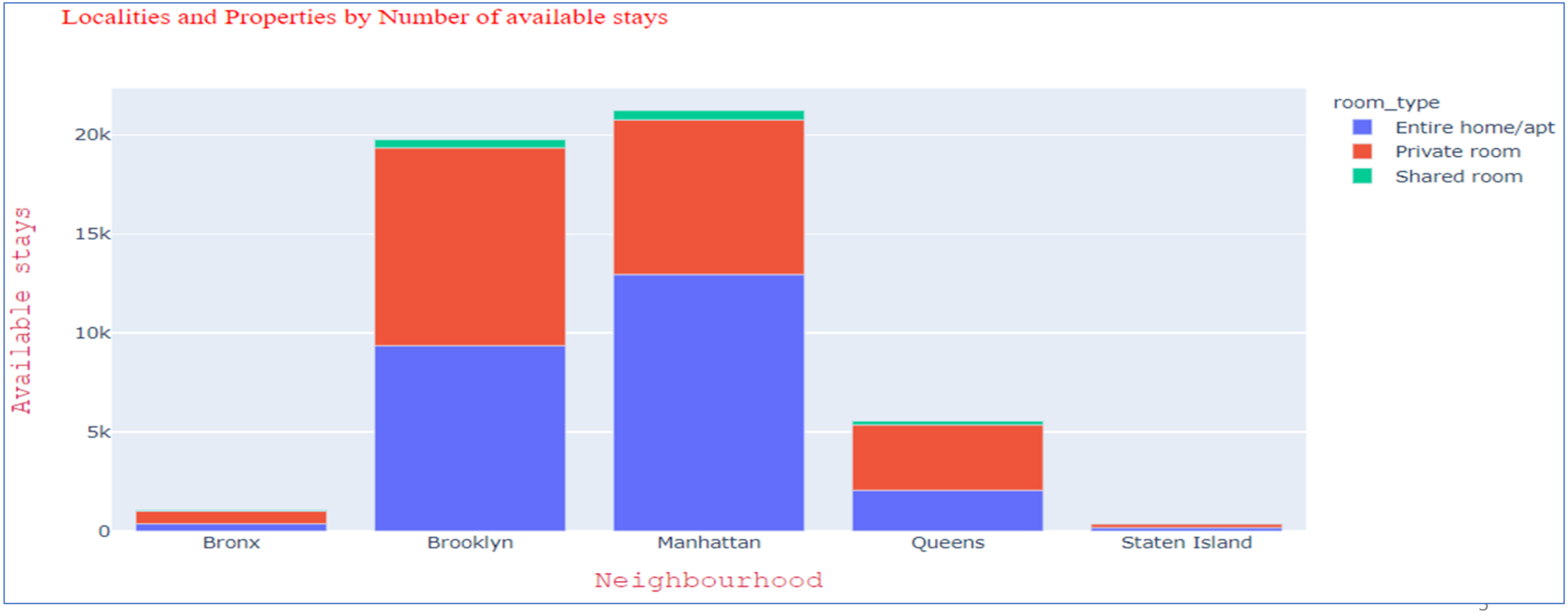
- Airbnb has seen a major decline in revenue due to pandemic.

- As the effect of pandemic has started to decline and the restrictions have started to lifting and people have started to travel more, Airbnb wants to make sure that it is fully prepared for the change

- The different leaders in Airbnb wants to understand some important insights based on various attributes in the dataset so as to increase the revenue

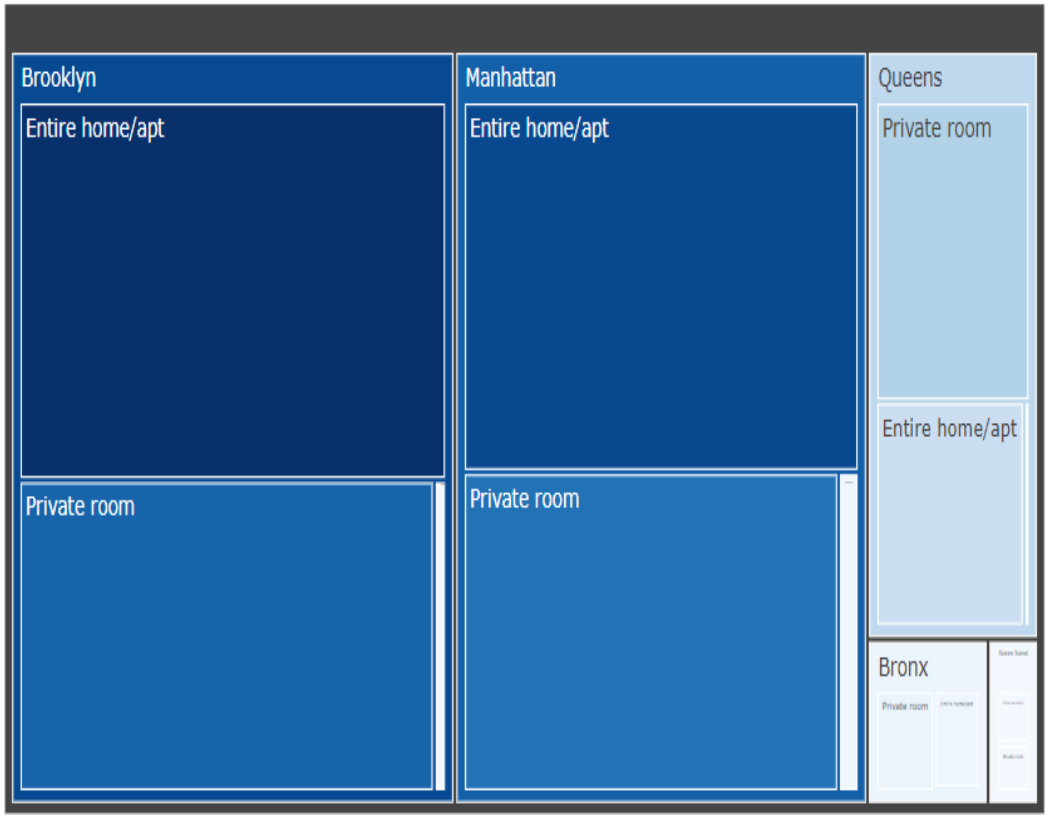
# Key Findings I

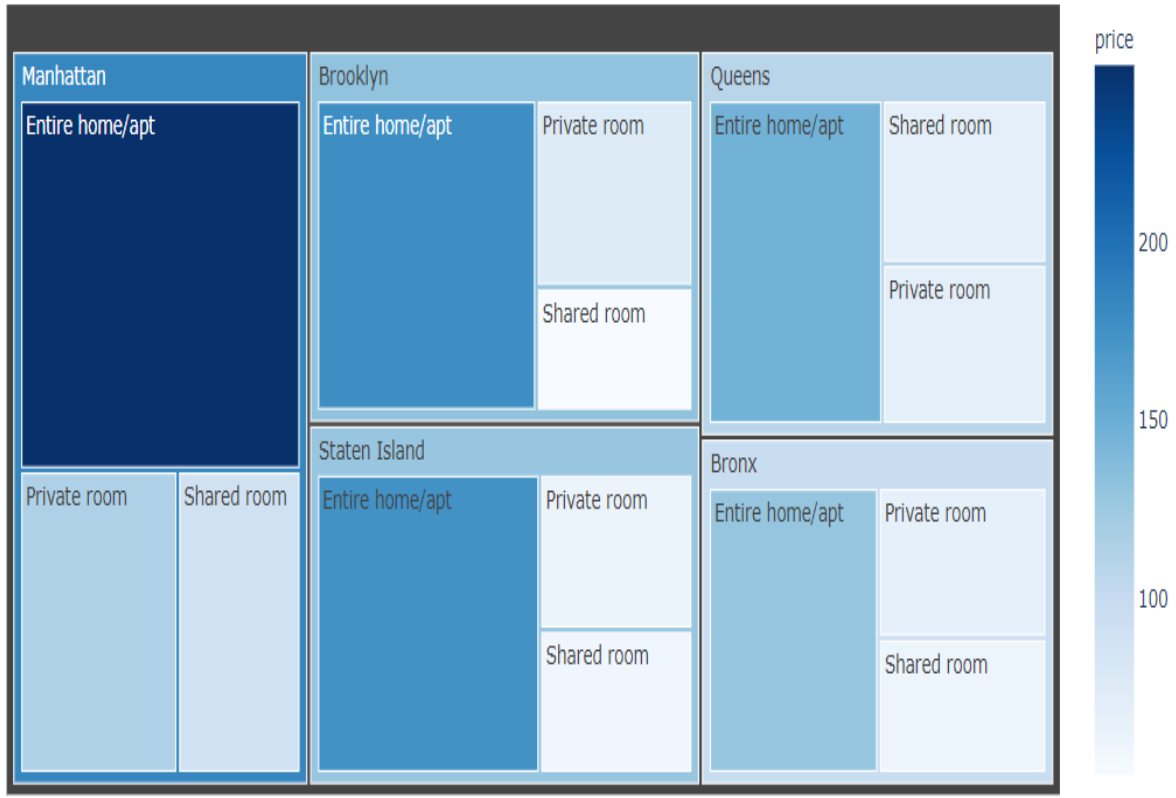
- **Shared rooms** are very less in number compared to the other two types of listings
- In **Manhattan**, more number of **Entire homes/apartments** are available for stays
- In Brooklyn, more number of **Private rooms** are available for stays



# Key Findings II

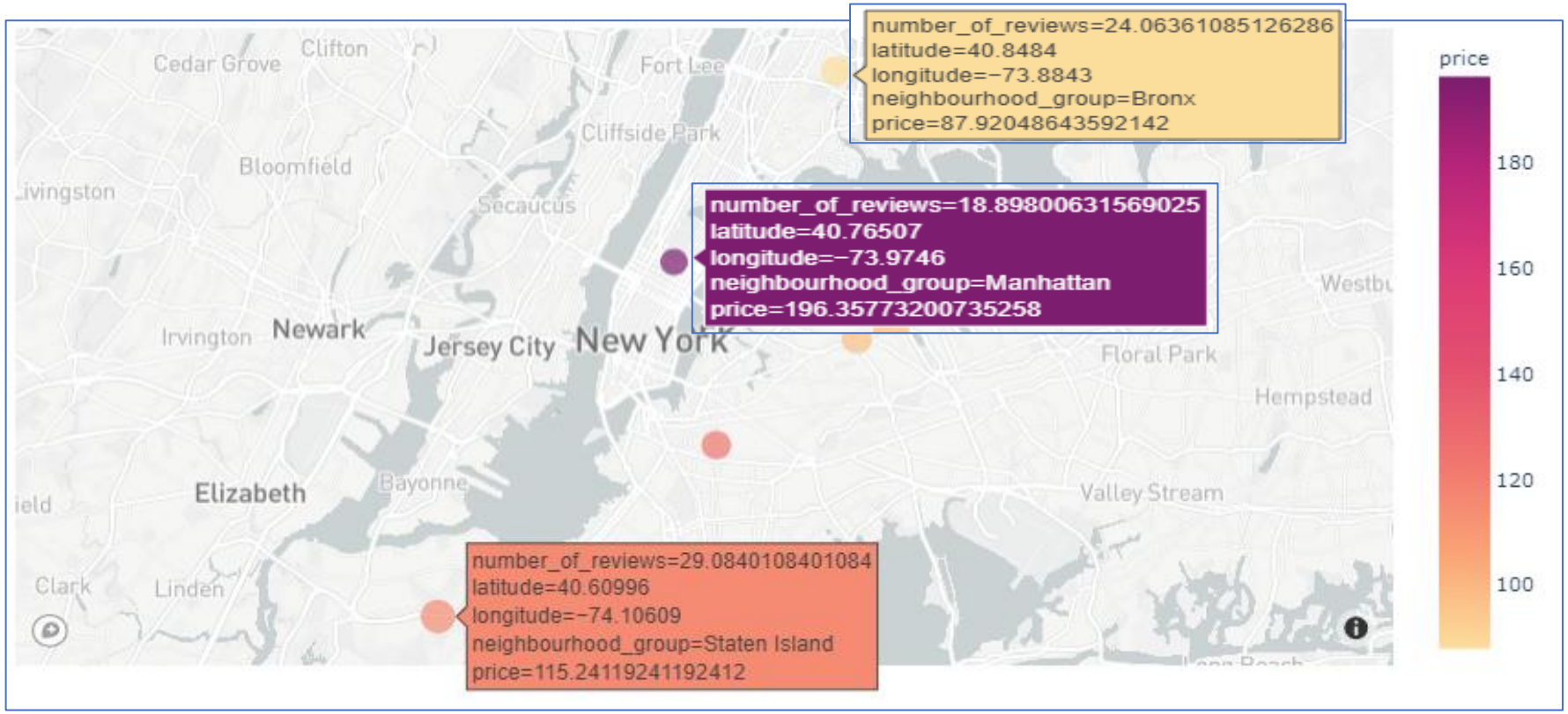
- **Bronx and Staten Island** have very less number of listings
- In **Queens, Bronx and Staten Island**, **Private rooms** are being preferred than homes/apts
- In **Queens, Staten Island and Bronx**, even the **shared rooms** are costing equal to **private rooms**



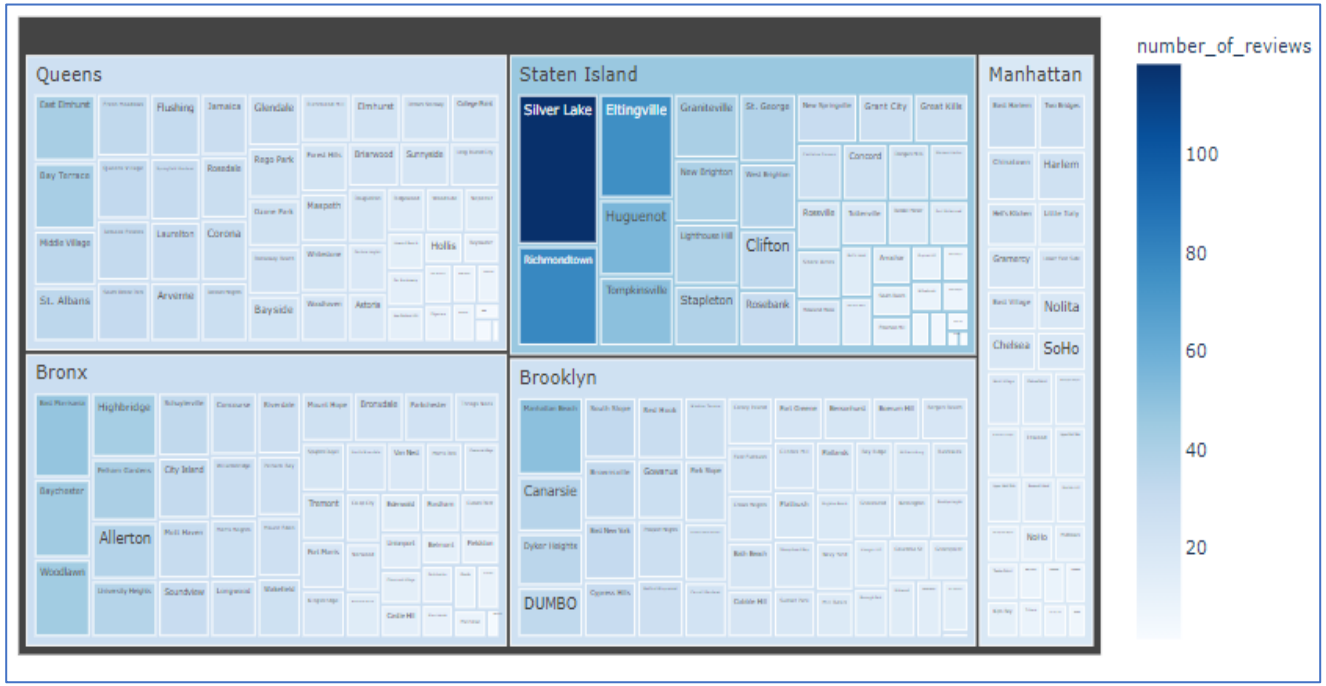
# Key Findings III

- **Manhattan** is the borrow with **highest average price**
- **Brooklyn and Staten Island** is the borrows with **next highest price**
- Queens and Bronx is little cheaper compared to the other borrows



# Key Findings IV

- The most preferred neighbourhoods in the entire Newyork city are :-
  - ❖ **Silver Lake (Staten Island)**
  - ❖ **Richmondtown (Staten Island)**
  - ❖ **Elting ville (Staten Island)**
  - ❖ **East Elmhurst (Queens)**
  - ❖ **Manhattan Beach (Brooklyn)**




- Most of the people prefer the listings that cost less than **$ 2000** per night

# Recommendation I


- Since Manhattan is most preferred city on the basis of reviews as well as price and Manhattan has most number of homes and apartments for stay, so it becomes a crucial business destination for the company

- During this pandemic period where people have less in their pockets to spend, prices can be slashed and kept around $ 2000 per night to give momentum to the business and these prices are generally preferred by the customers

- It’s better to convert the shared rooms to private rooms in Brooklyn and Manhattan as private rooms are most preferred

# Recommendation II


- As Queens and Bronx have rooms with cheaper price, we can consider this as business opportunity to acquire more rooms and run the marketing campaign to increase the visibility of these two borrows

- Increase number of rooms in
  - Silver Lake (Staten Island)
  - Richmondtown (Staten Island)
  - Elting ville (Staten Island)
  - East Elmhurst (Queens)
  - Manhattan Beach (Brooklyn)

# Appendix

## Data Sources :-

- Here is a snapshot of our Data Dictionary
  - Host details such as host id, host name along with name of the stay and the listing ID based on type of rooms, location and area
  - Rooms type such as Private rooms, Entire Home/Apt, Shared rooms with prices of each kind of rooms along with minimum nights stayed by the customer and number of reviews provided by each customer along with last review date, reviews per month, availability of each type of room in neighborhood
  - Various areas comes under have been categorized into 5 neighborhood groups named Bronx, Brooklyn, Manhattan, Staten Island and Queens
  - Exact location of each neighborhood through latitude and longitude coordinates

- We have used the following data source
  - AB_NYC_2019

Continued…….

# Appendix

## Data Methodology :-

- We conducted a thorough analysis of AirBnb dataset. The process included :-
  - Cleaning the data set using visualization technique like boxplot, distplot to remove outliers
  - We did EDA through Univariate and Bi-variate analysis using countplot, distplot, scatterplot
  - We created various visualization to derive insights for further recommendation

Continued…….

# Appendix

## Data Assumption :-

- It is assumed that the company was achieving the desired revenue before Covid19 period
- Companies strategy will be based on the assumption that the travel will increase once things are in place post covid
- We also assumed that company has no plans to expand its business in new territories
- We have done analysis on missing value percentage and there were 21% of missing values in reviews_per_month and last_review but as the percentage was not much, we have not done any imputation

```
id                                0.0
name                              0.0
host_id                           0.0
host_name                         0.0
neighbourhood_group               0.0
neighbourhood                     0.0
latitude                          0.0
longitude                         0.0
room_type                         0.0
price                             0.0
minimum_nights                    0.0
number_of_reviews                 0.0
last_review                      21.0
reviews_per_month                21.0
calculated_host_listings_count    0.0
availability_365                  0.0
dtype: float64
```

Continued.....

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