Storytelling Case Study: Airbnb, NYC

- -By Nitasha and Prashasti

Objective

- Airbnb is an online platform using which people can rent their unused accommodations.

- During the covid time, Airbnb incurred a huge loss in revenue.
- People have now started travelling again and Airbnb is aiming to bring up the business again and e ready to provide services to customers.

Background

- For the past few months, Airbnb has seen a major decline in revenue. Now that the
- restrictions have started lifting and people have started to travel more, Airbnb wants to make sure that it is fully prepared for this change.
- So, analysis has been done on a dataset consisting of various Airbnb listings in New York.

Data preparation

- Cleaned data to remove any missing values and duplicates.

- Dropped insignificant columns.

- Identified outliers.

Most preferred Property type

- **Most preferred property type is**
- **'home/apt' and 'private room'**: More
- than 25,000 people opted to stay in
- 'Entire home/apt', whereas around
- 22,000 people opted to stay in private room.

- Data implies that mostly people use Airbnb while travelling with family.

- Only 1,160 times shared rooms have been booked by people which is very less percentage of total booked properties.

Room Type

Count of Room Type

25,409 — Entire home/apt
22,326 — Private room
1,160 — Shared room
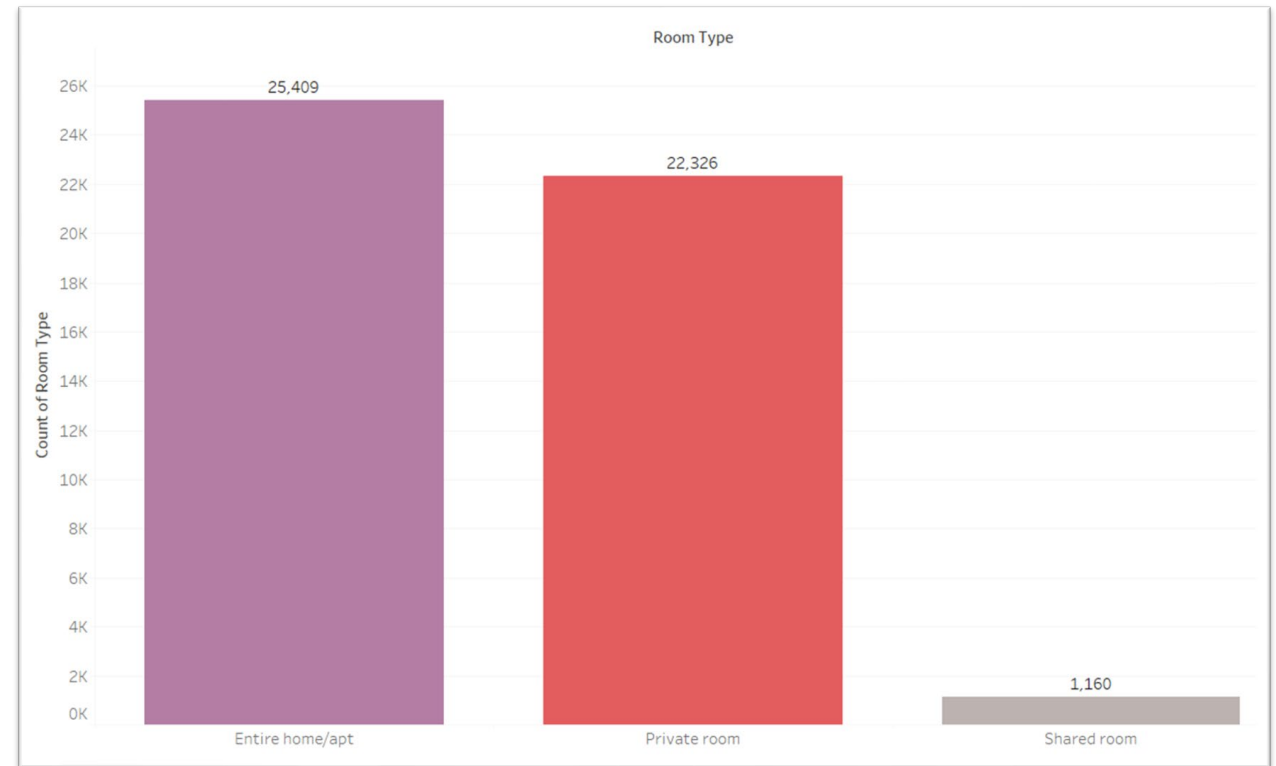
Top 10 hosts

- **Host Sonder** (id 219517861), has been booked most number of times i.e. 327.

- **Host Blueground** is the second popular host.

- Then there are other hosts like Kara, Ken, Pranjal, Jeremy and Mike that fall under top 10 hosts.
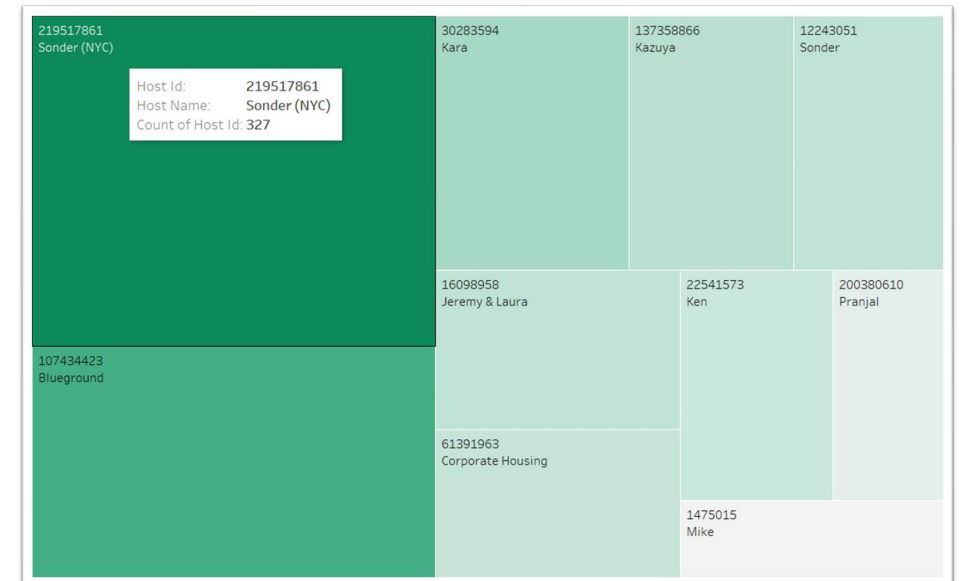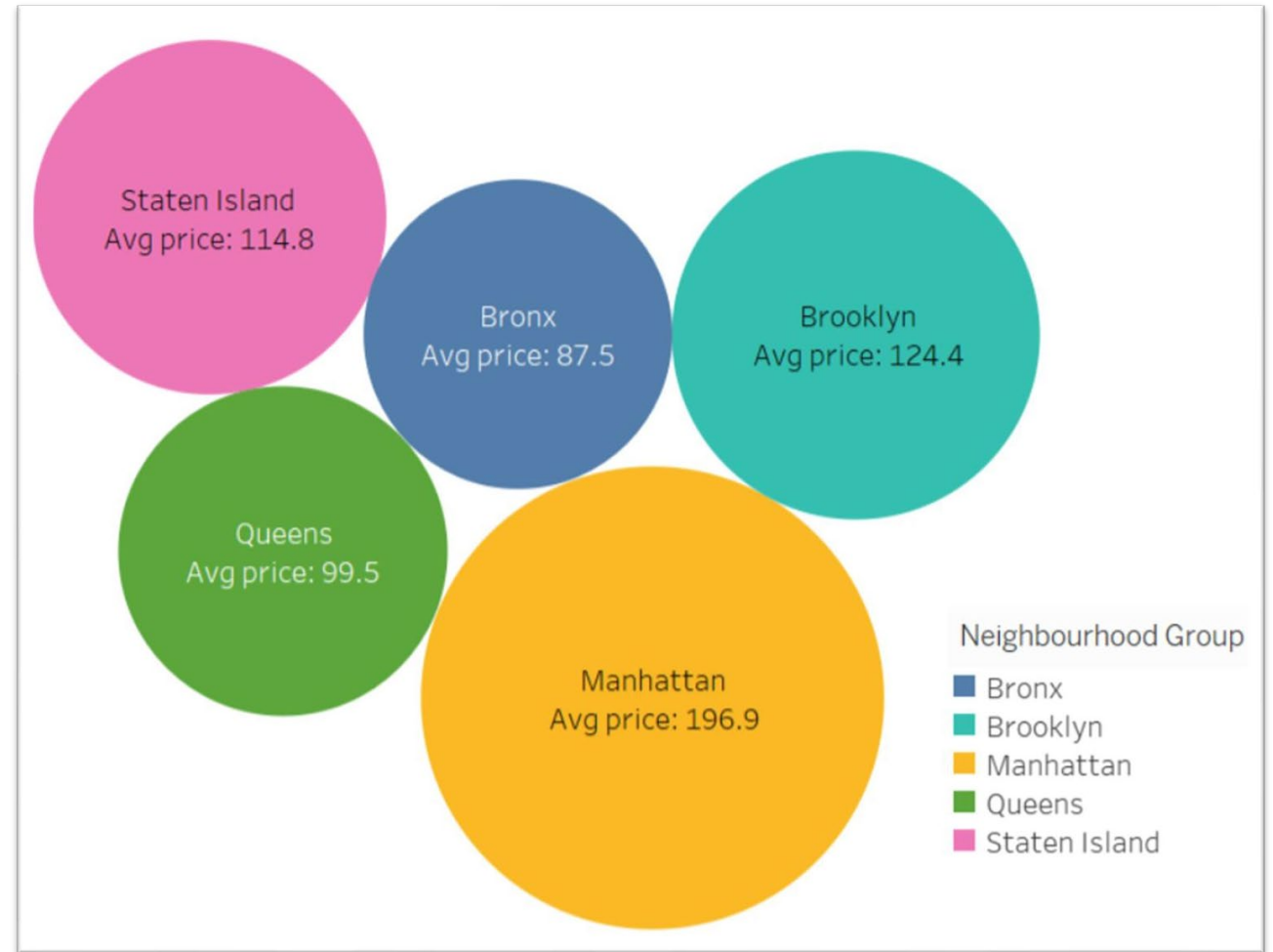
Preferred Room type w.r.t Neighbourhood group

- Manhattan and Brooklyn are top neighbourhood groups and mostly people prefer to book the entire home or private room.
- Manhattan has highest number of home/apt properties, i.e. 27% of total listed properties.

- Maximum number of private rooms

- are available in Brooklyn i.e. around

- 21% of total listed properties.
- Very less number of shared rooms are available in each Neighbourhood group.
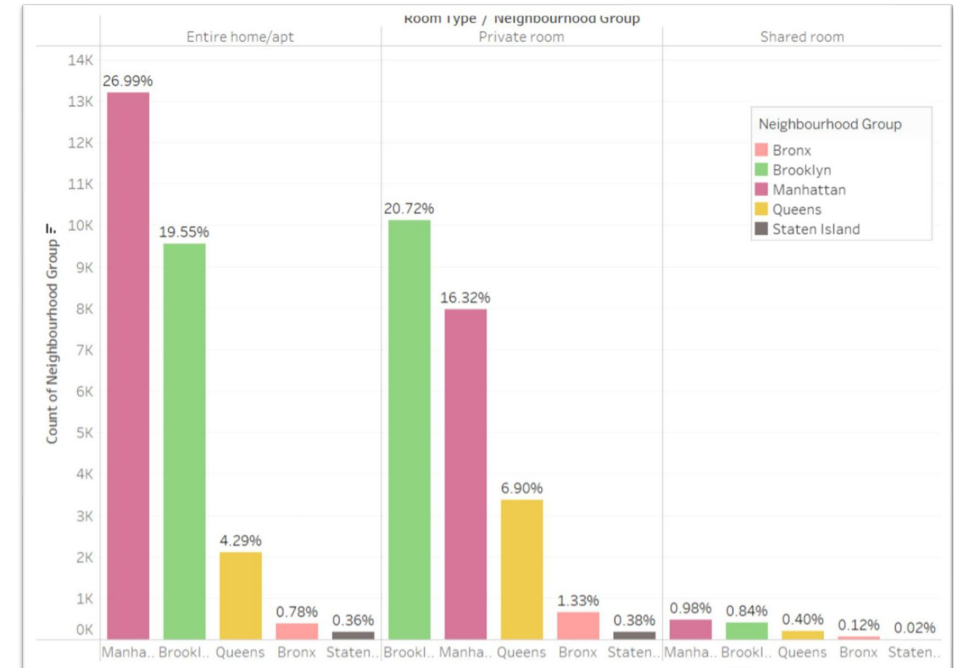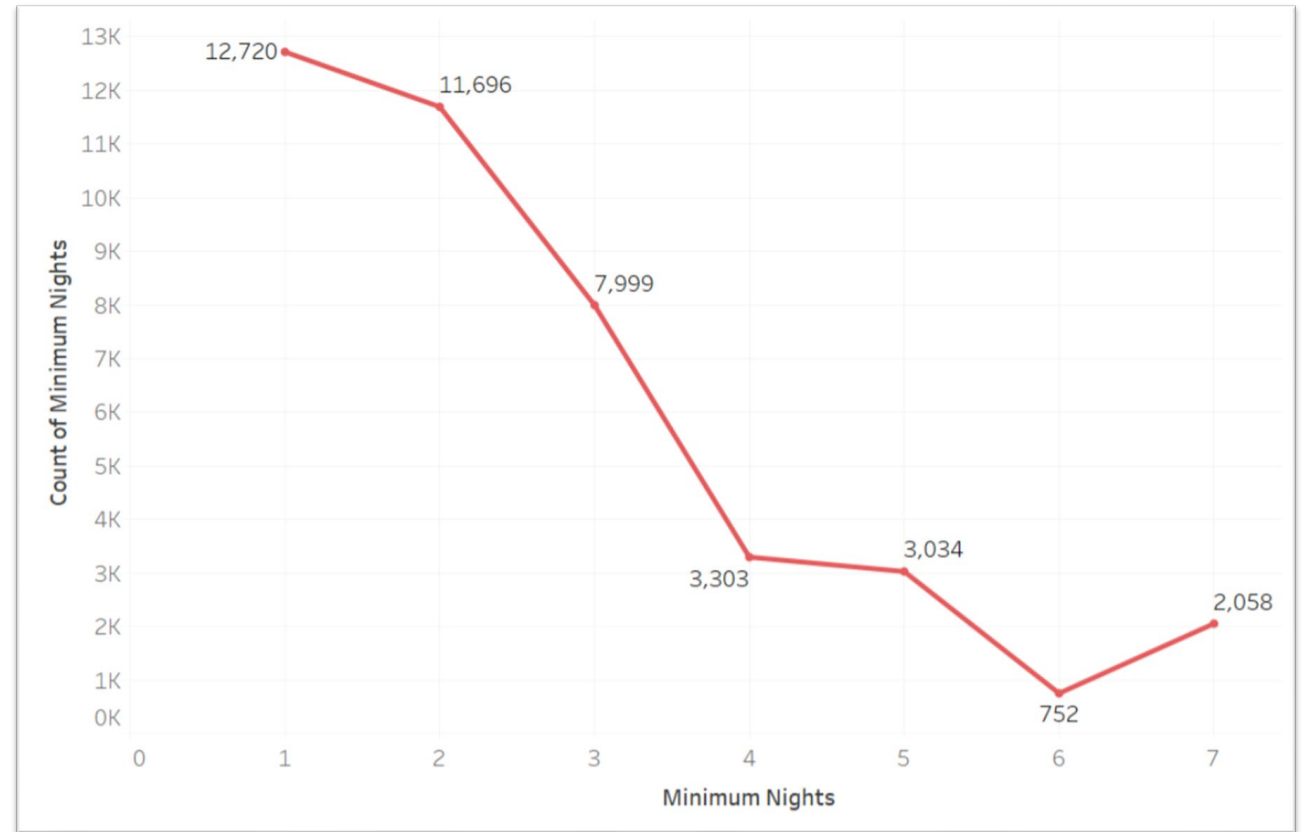
Average price of Neighbourhood groups

- The average price of listed properties in Manhattan is around 196.9, which is highest among all neighbourhoods.

- Average price for Brooklyn is second highest i.e. 124.4.

- Bronx appears to be an affordable neighbourhood as the average price is almost half then Manhattan's average price.

Staten Island
Avg price: 114.8

Bronx
Avg price: 87.5

Brooklyn
Avg price: 124.4

Queens
Avg price: 99.5

Manhattan
Avg price: 196.9

Neighbourhood Group
- Bronx
- Brooklyn
- Manhattan
- Queens
- Staten Island

Minimum night stays

- Around 12000 people choose to stay for minimum 1 night in Airbnb property.
- Approx. 11000 people choose to stay for 2 nights and 7000 people choose to stay for 3 nights in Airbnb property.
- Around 3700 customers booked Airbnb property for a month.
- Count of customers who stayed for long durations like 2 months or more is mostly below 100.

Preference of minimum night stays

- Number of reviews for Private room in Brooklyn is maximum and its average price is also less that Entire apartment.

- Number of reviews in each neighbourhood group for Private rooms is more that Entire apartment and Shared rooms.

- If a customer needs to choose Shared room, Manhattan could be a good option as the number of reviews for Shared rooms and home/apt are very similar
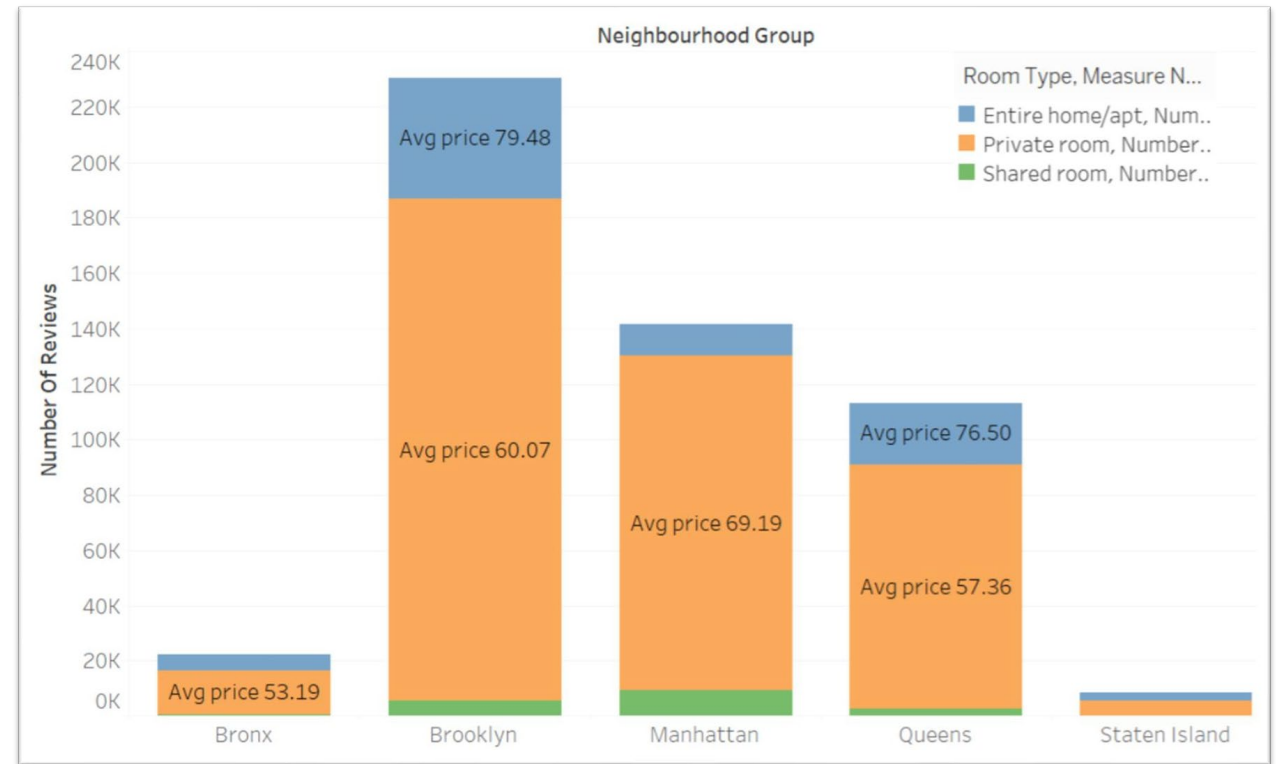
Neighbourhood vs Availability

- Availability of Bedford is highest
- ,and its price is on the lower side. It is a good choice for customers.

- After Bedford, Harlem follows the
- same trend.

- East village's availability low but it
- is costly.

- On the other hand, William's price
- is high and has average availability.

Properties in Neighbourhood group

- Manhattan & Brooklyn are popular choices among people.

- Most Airbnb properties are in Manhattan followed by Brooklyn.

- Staten Island holds least number of
- Airbnb properties.
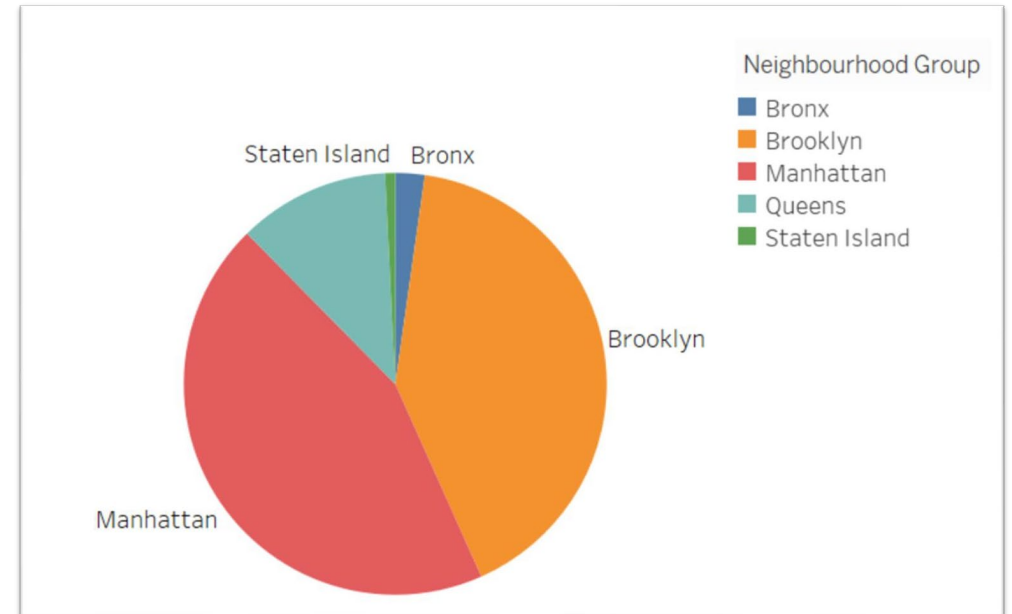
Data Methodology

- We performed detailed analysis on data using below steps:

  - Data cleaning
  - Exploratory analysis to identify preferred Host, Room type, Neighbourhood etc.

  - Derived insights from data using Tableau tool.