

# **Storytelling Case Study: Airbnb, NYC**

## **Presentation 1**

**By Group Members:-**

Kiran Ghadigaonkar, Prince Chaturvedi, Aadesh Birhade

# Problem Background and End Objective

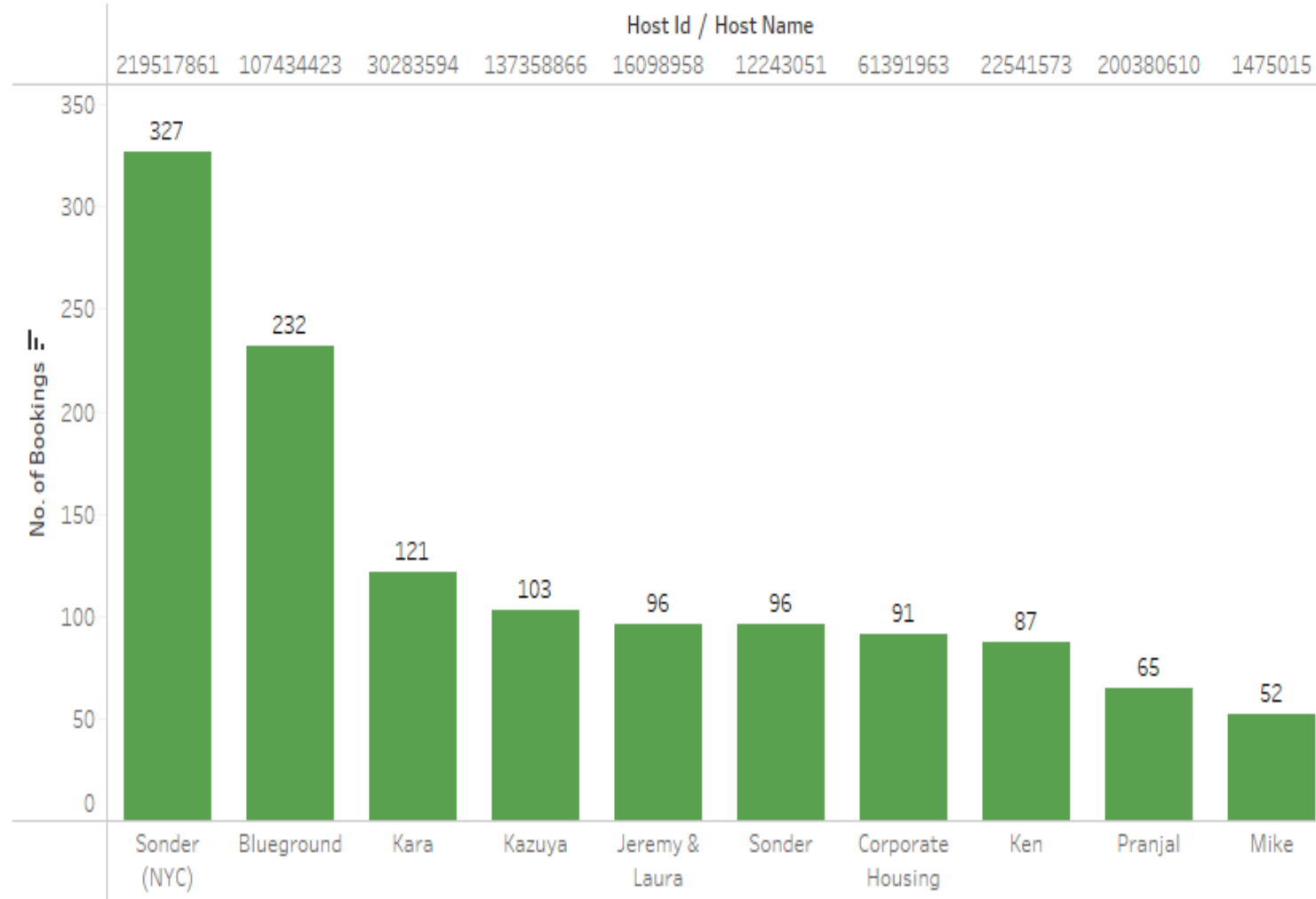
- Airbnb is an online marketplace that connects people who want to rent out their homes with people who are looking for accommodations in specific locales.
- For the past few months, during the Covid time, Airbnb faced a huge loss in revenue.
- Now that the restrictions have started lifting and people have started to travel more, Airbnb wants to make sure that it is fully prepared for this change.
- Analysis has been done on a dataset consisting of various Airbnb listings in New York.

# Data Preparation

- **Data Understanding**
- **Data Cleaning:** To identify and remove any missing values and duplicate values and dropped insignificant columns.
- **Outliers Treatment:** Identified outliers

# Top 10 Host

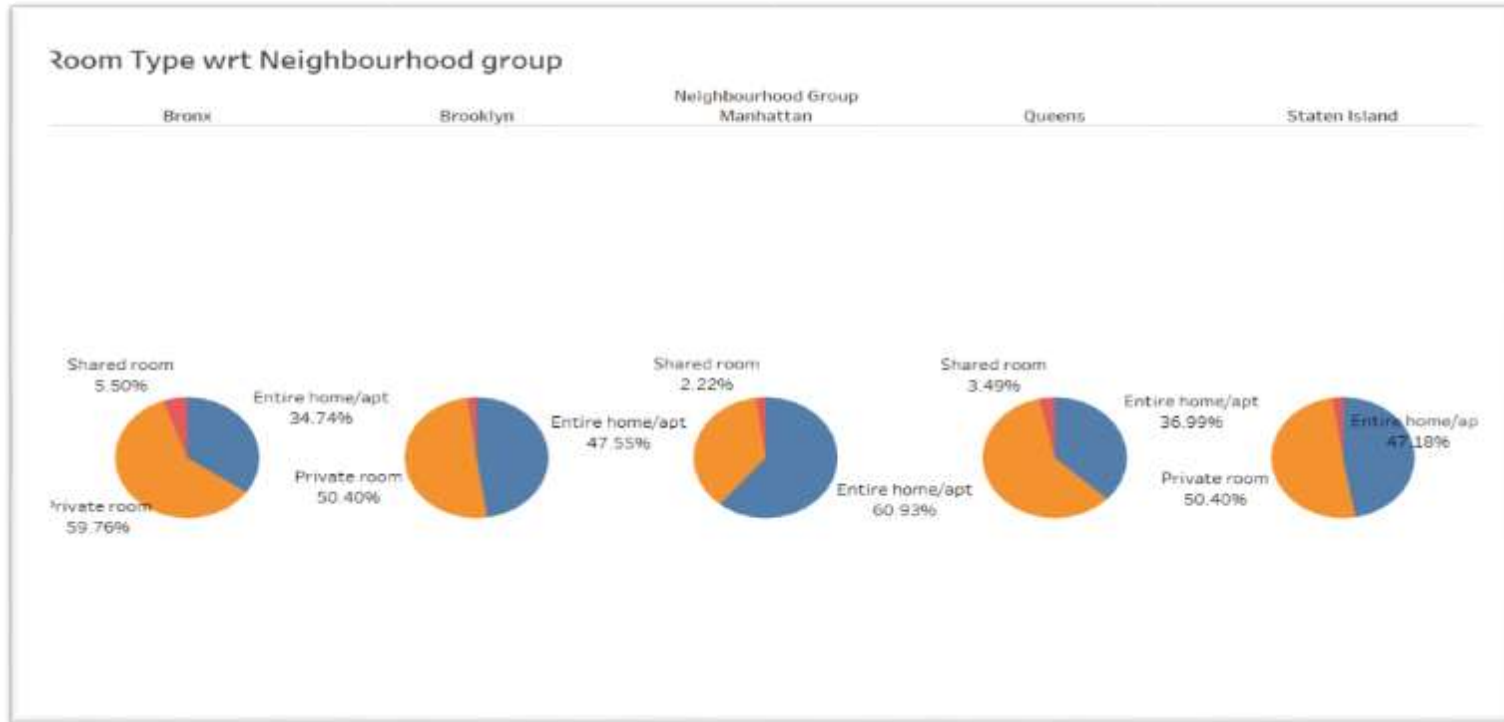
## Top 10 Host



As we can see that,

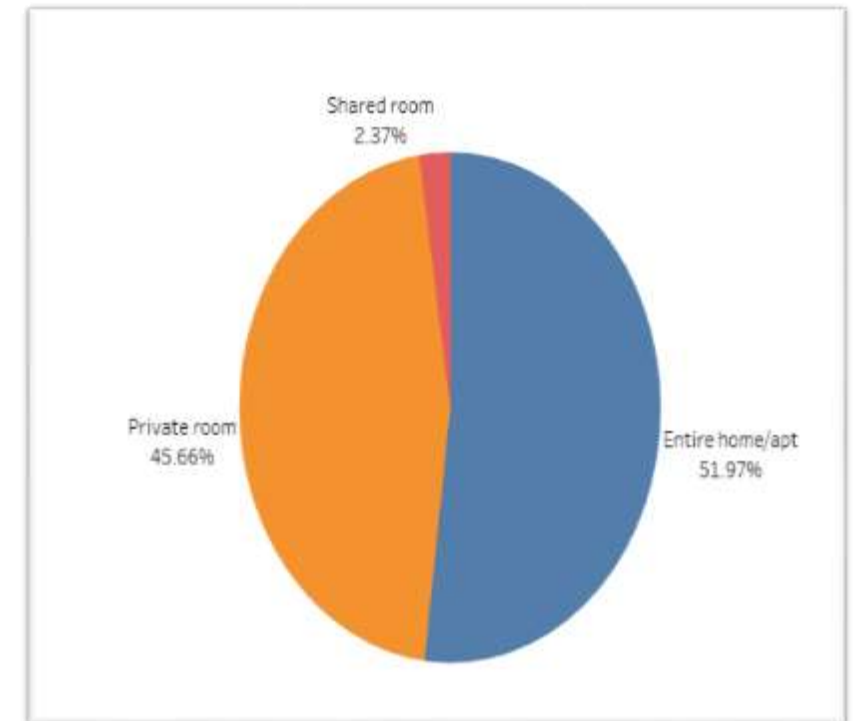
- Top Host **Sonder** with id 219517861, has the highest i.e. 327 no. of bookings.
- Second Host with a maximum no. of bookings is **Blueground**.

# Room Type w.r.t. Neighbourhood Group



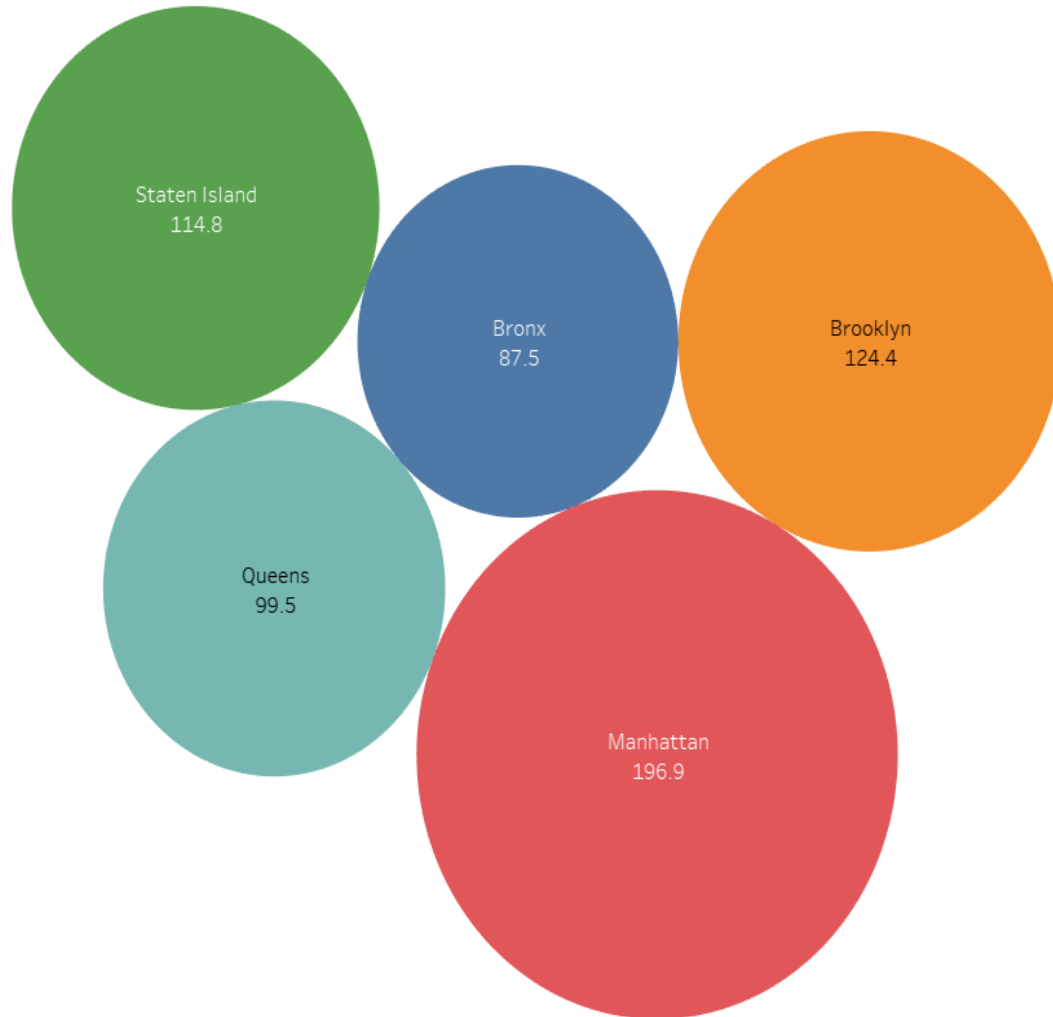
- There are three types of rooms:-
  1. Entire home or Apartment
  2. Private Room
  3. Shared Room.
- Manhattan has the highest (61%) contribution in Entire home or Apartment.
- Bronx and Queens have around 60% contribution in Private Rooms.

- Customer tends to prefer **Entire home or Apartment and Private rooms**.
- Airbnb needs to focus on increasing bookings for **Shared Rooms** by promoting some exciting offers or discounts.



# Price of Neighborhood Groups

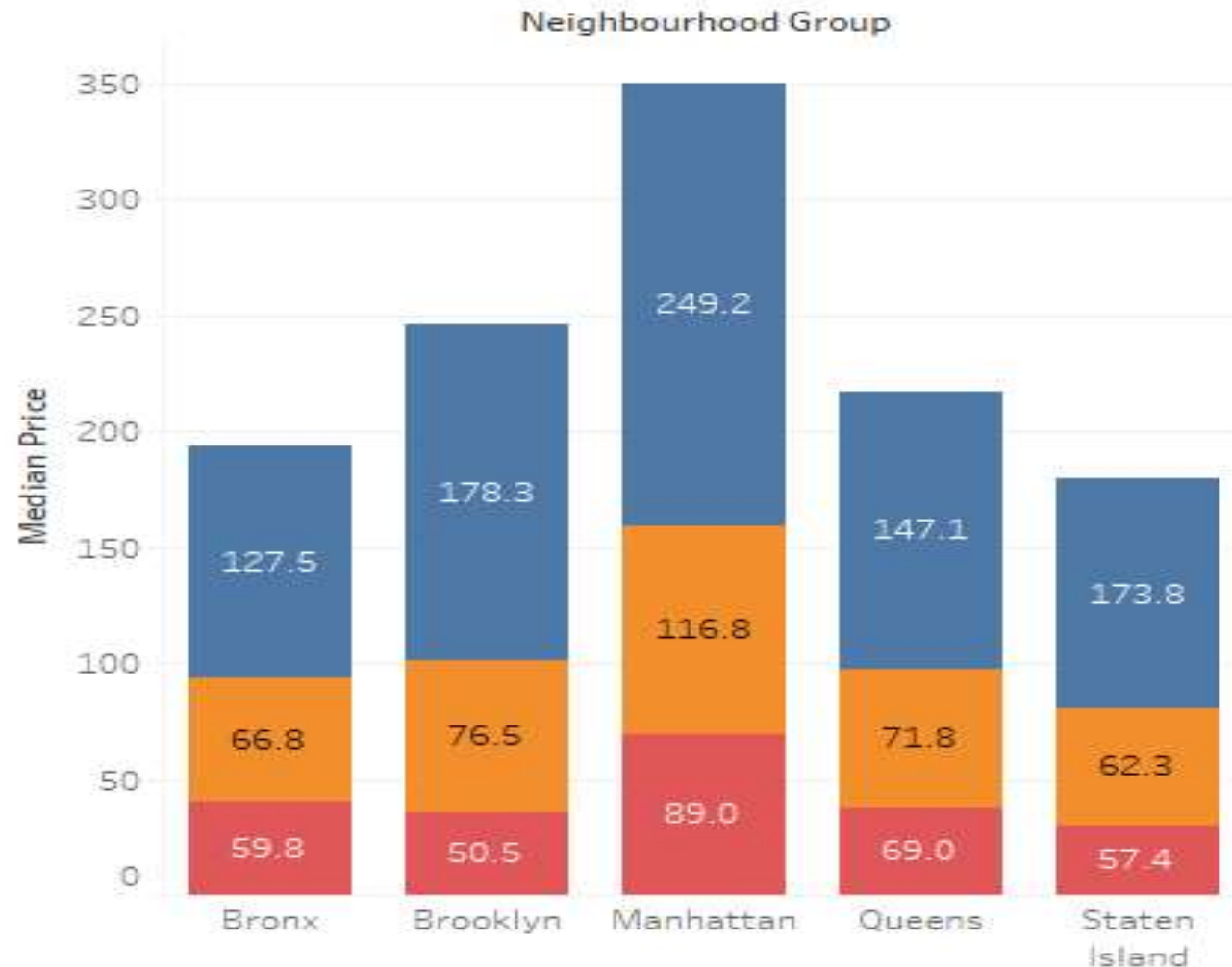
Avg Price Of Neighbourhood group



- Manhattan has the highest average price i.e. 196.9 amongst all neighbourhoods.
- Bronx seems like an affordable neighbourhood group as the average price is lowest than other neighbourhood groups.

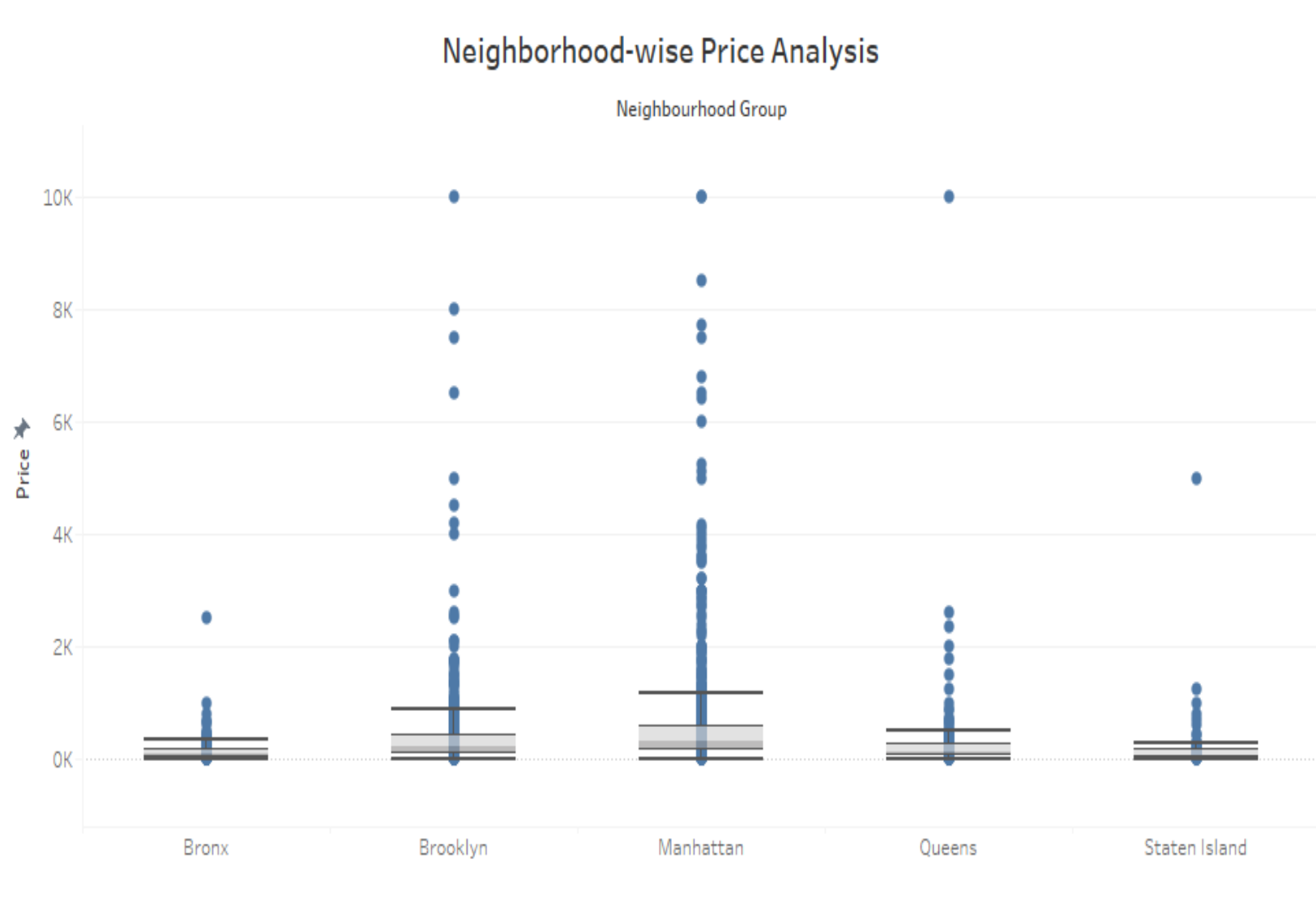
# Price w.r.t. Neighborhood Groups

Price Brackets in Neighbourhoods



- Entire home/apartment price is approximately more than double of private rooms.
- Manhattan is overall expensive.
- Below are the affordable options:-
  1. Entire Home or Apartment: Bronx
  2. Private Rooms: Staten Islands
  3. Shared Rooms: Brooklyn

# Neighborhood-wise Price Analysis



- Brooklyn and Manhattan have most of the outliers present.
- Bronx is the cheapest among all Neighbourhood groups.
- Manhattan has the highest range of prices.
- The median seems to be very close to the lower quartile with some outliers.



# Neighborhood vs Availability w.r.t. Prices

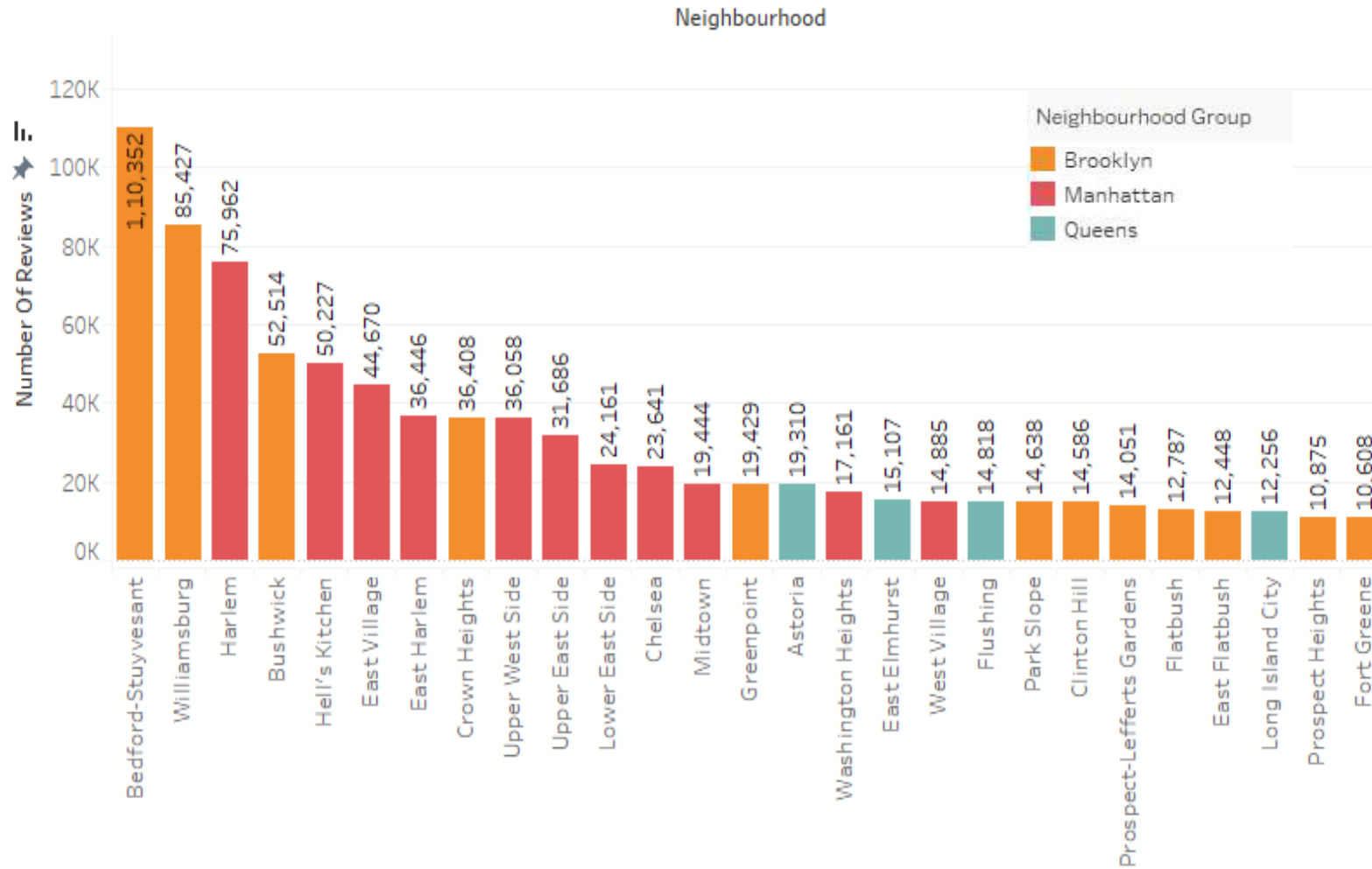
Neighborhood vs Availability



- **Bedford** neighborhood has the highest availability. So, It can be a good option for customers.
- Followed by Williamsburg also has good availability. This could be due to its expensive prices.
- Financial District has the lowest availability among all. Also, it has cheaper prices so this could be a budget-friendly option for customers.

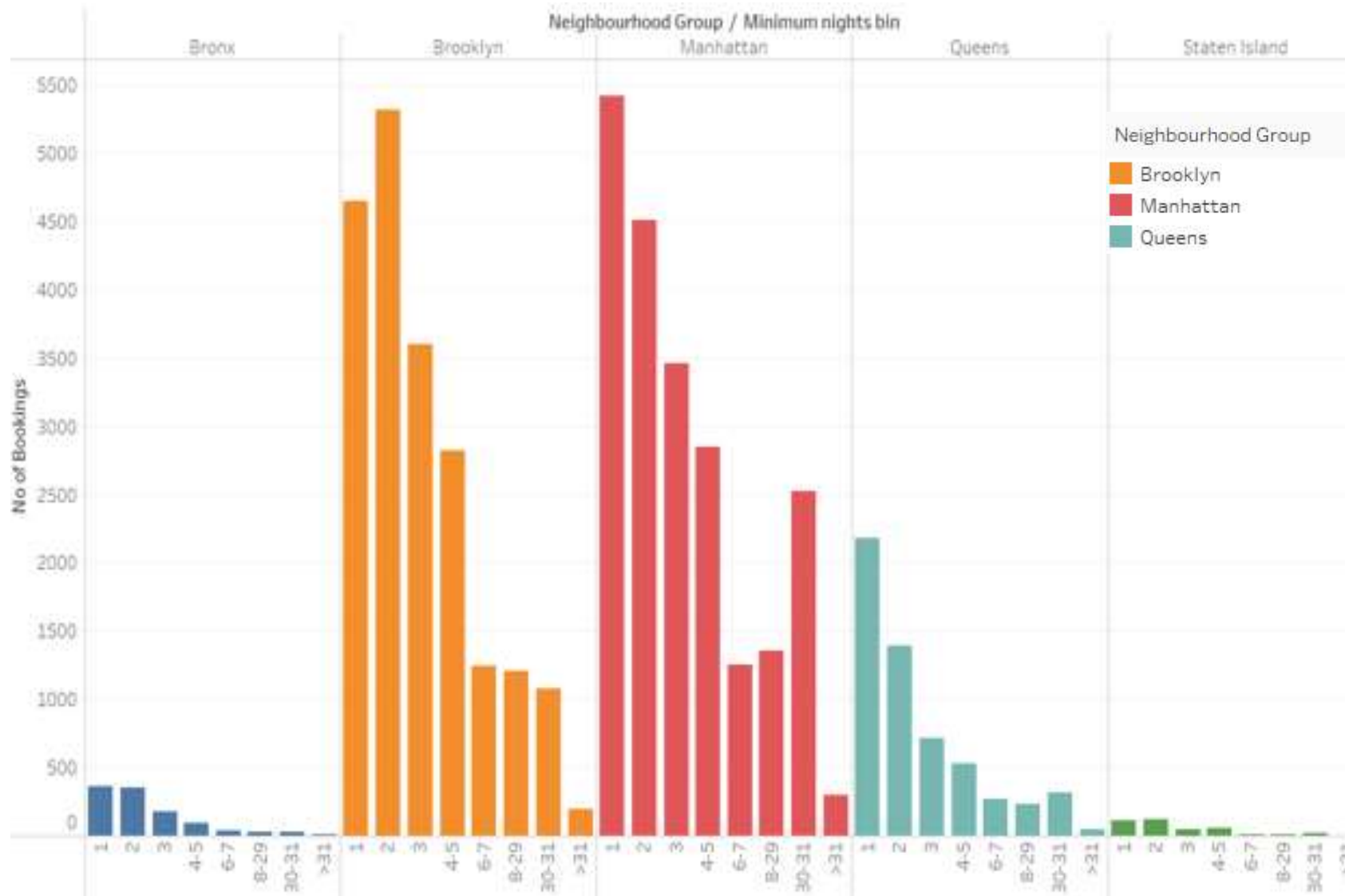
# Neighbourhood Popularity

Neighborhood Popularity



- As we can see that, **Bedford-Stuyvesant** from **Brooklyn** is the most popular Neighbourhood among all other neighborhood groups with 1,10,352 No. of reviews.
- Harlem** from **Manhattan** got the highest no of reviews and is the most popular neighborhood in Manhattan.
- The higher number of customer reviews shows **higher customer satisfaction** in the respective neighborhood.

# Bookings w.r.t. Minimum Nights



- The listings with Minimum nights 1-5 have the highest number of bookings.
- Manhattan & Brooklyn have a higher number of 30-day bookings as compared to the other neighborhoods. The reason could be tourists booked for long stays.
- We can see an increase in bookings in the first 30 days, this could be due to customers who rent out on a monthly basis.