Storytelling Case Study: Airbnb, NYC

Presentation 2

By Group Members:-

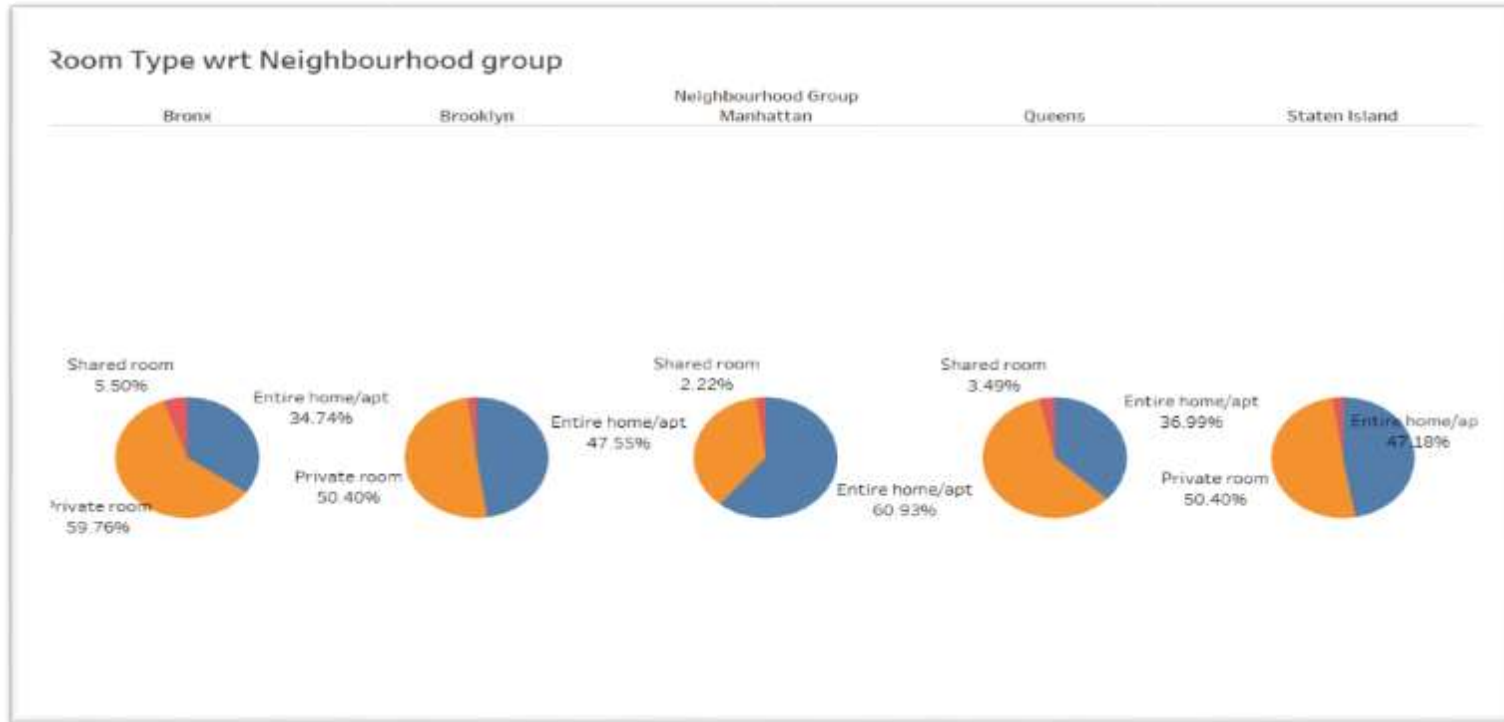Kiran Ghadigaonkar, Prince Chaturvedi, Aadesh Birhade

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

Room Type w.r.t. Neighbourhood Group

Room Type wrt Neighbourhood group

Neighbourhood Group

| Bronx | Brooklyn | Manhattan | Queens | Staten Island |

Shared room 5.50%
Entire home/apt 34.74%
Private room 50.40%
Private room 59.76%

Shared room 2.22%
Entire home/apt 47.55%

Shared room 3.49%
Entire home/apt 36.99%
Private room 50.40%
Entire home/apt 60.93%

Entire home/ap 47.18%

- 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.

- There are very less Shared rooms present in each neighborhood.

- 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.

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.
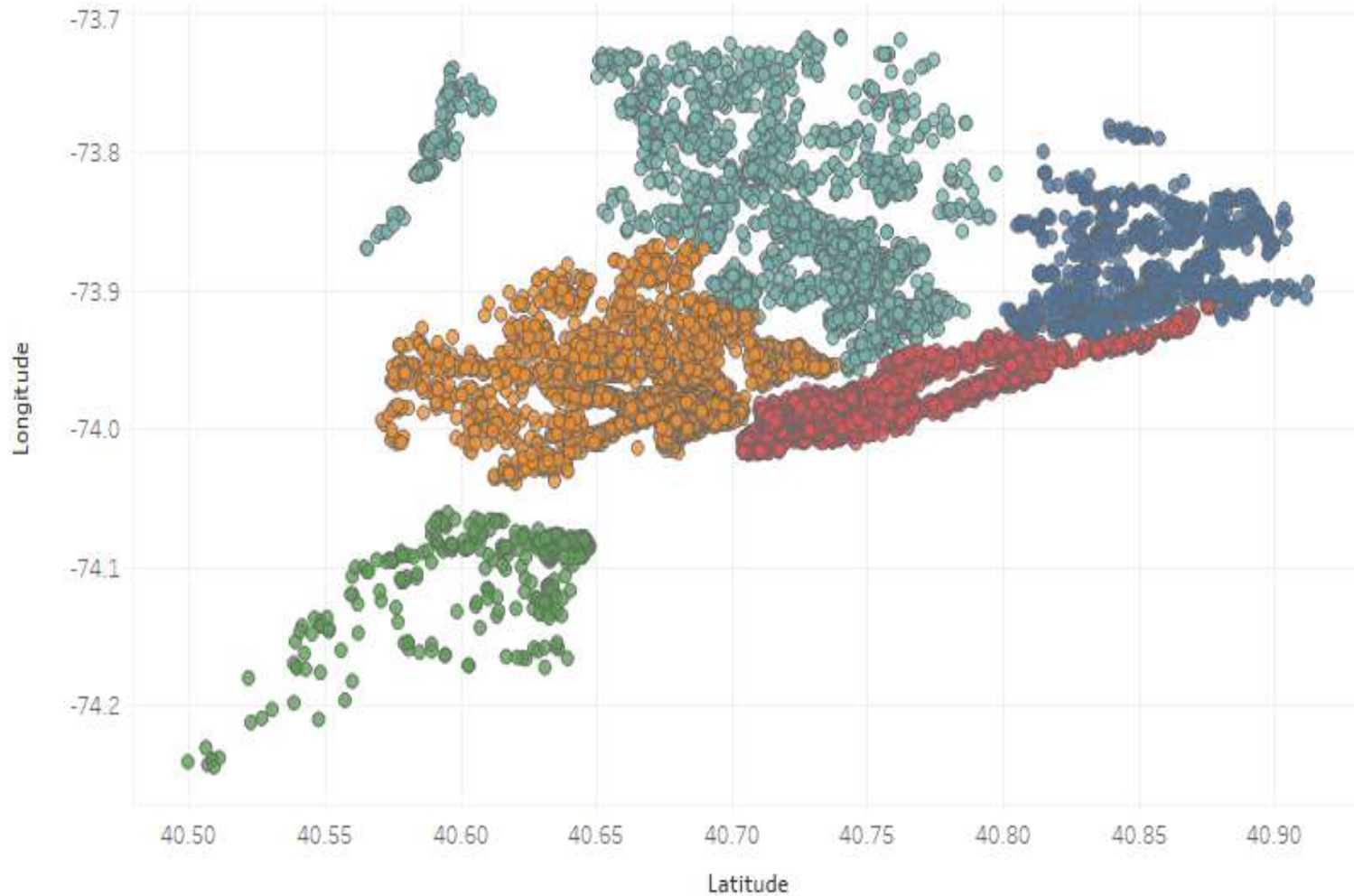
Price Range Analysis
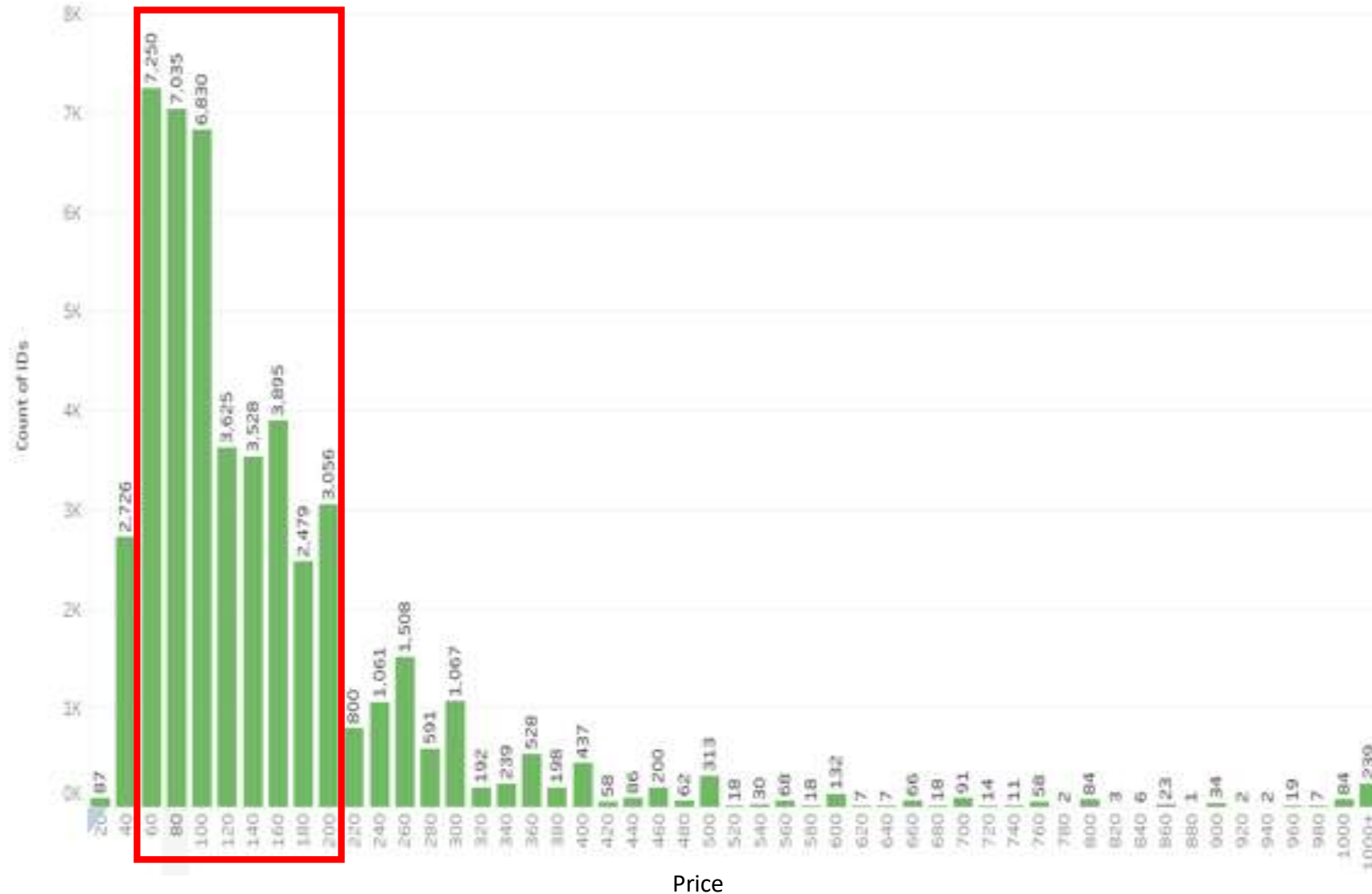
As we can see that, price range between $40 - $200 is preferred by the majority of the customers as the majority volume of the bookings is done within this price range.

Price Variation w.r.t. Geography

- As we can see that, Airbnb has a good business in Brooklyn & Queens.

- There are maximum listings in Brooklyn due to high population density.

- Staten Island has the least number of listings, this might be due to low population density.

Price Variation

Price Variation

Neighbourhood Group

Room Type	Bronx	Brooklyn	Manhattan	Queens	Staten Island
Entire home/apt	127.5	178.3	249.2	147.1	173.8
Private room	66.8	76.5	116.8	71.8	62.3
Shared room	59.8	50.5	89.0	69.0	57.4

- The Entire home/apartment room type in Manhattan is the most expensive i.e. $249, which is higher than the overall average.

- Private rooms in Manhattan has the highest average price.

- Shared Room type is the cheapest i.e. $50.5 in Brooklyn as well as across overall neighborhood groups.

Bookings w.r.t. Minimum Nights
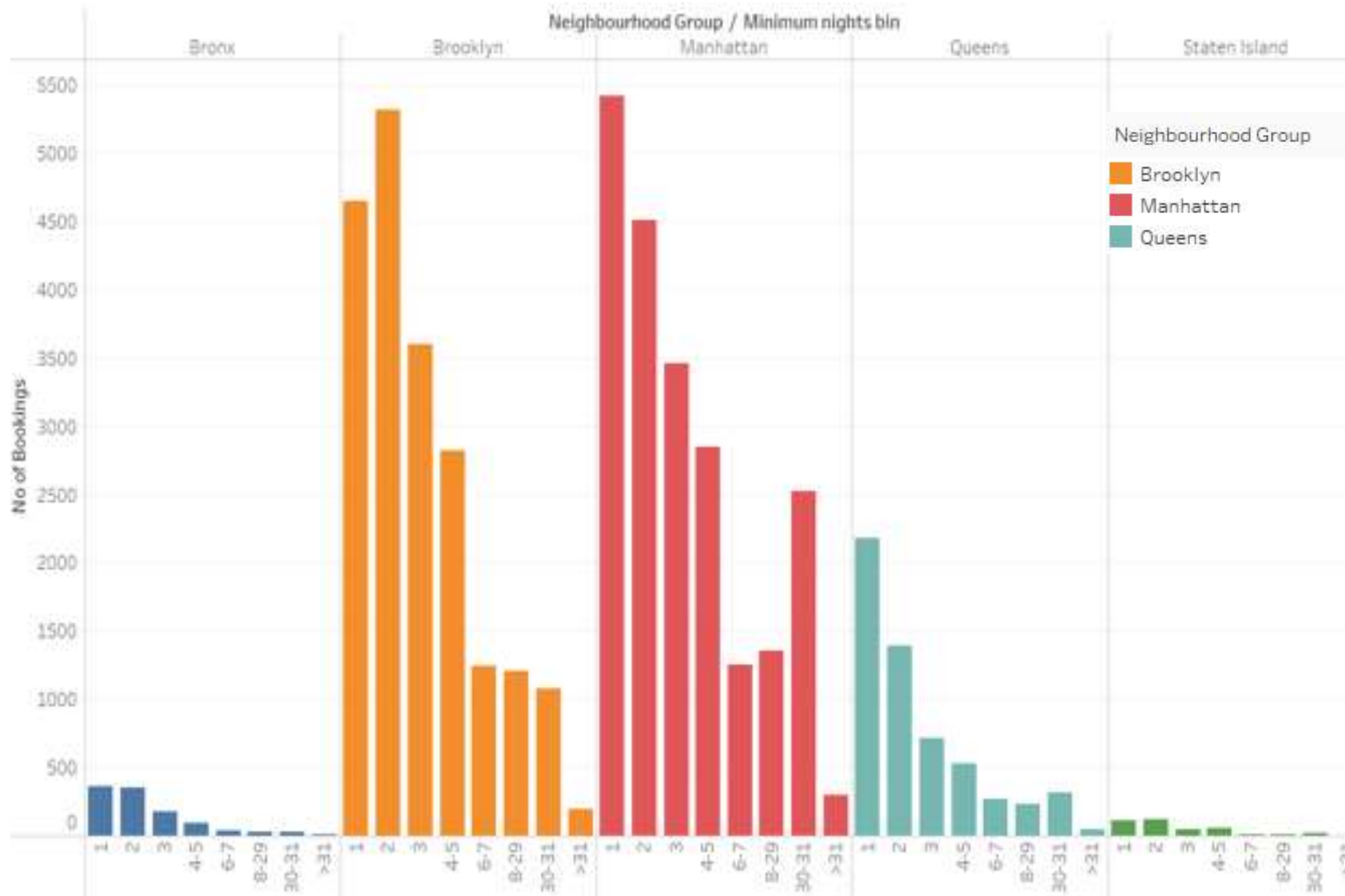
- The listings with Minimum nights 1-5 have the highest number of bookings.

- 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.

Neighbourhood Popularity
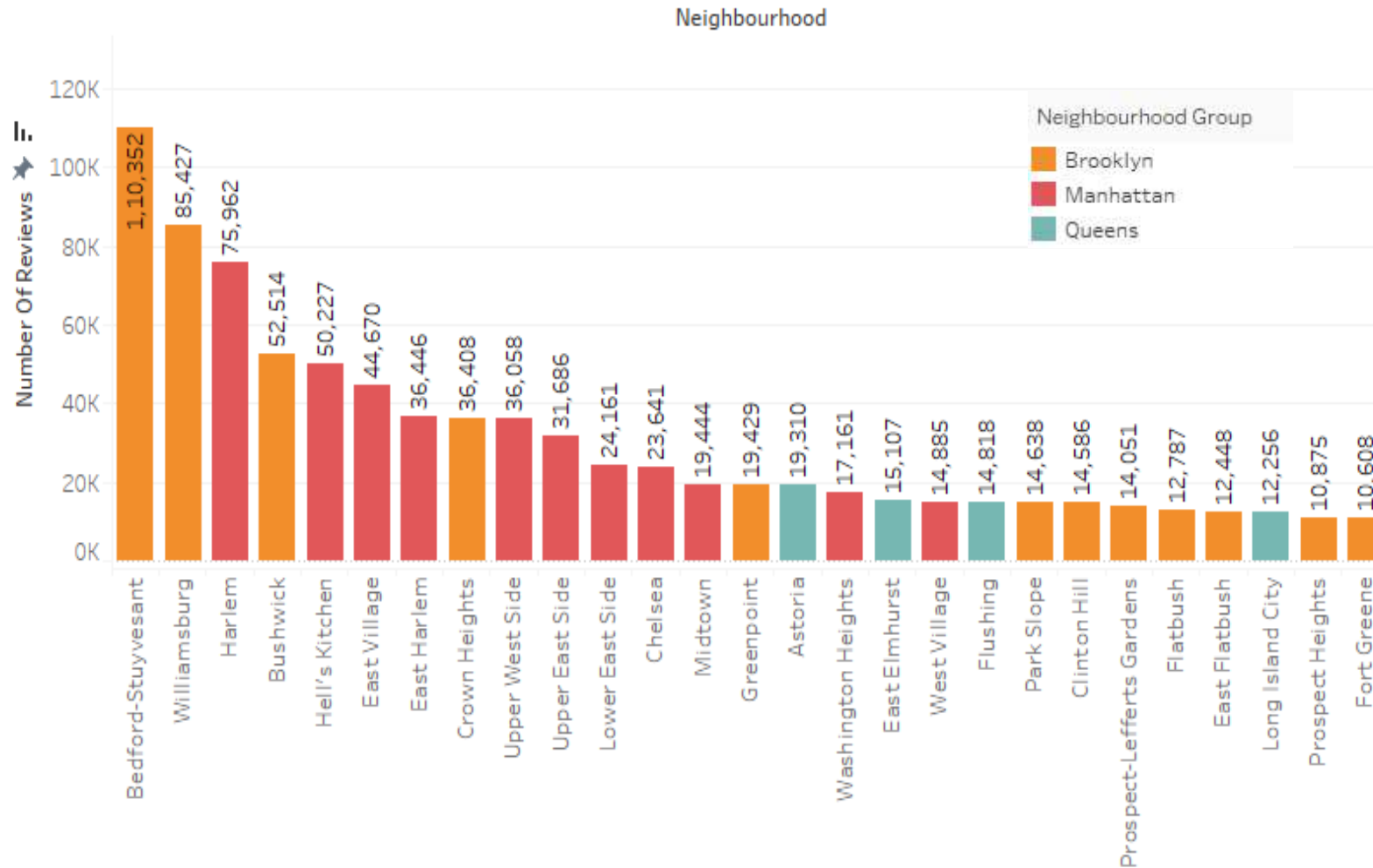
- As we can see that, **Bedford-Stuyvesant** from **Brooklyn** is the most popular Neighbourhood among all other neighborhood groups with 1,10,352 No. of reviews.

- **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.