

# Airbnb Data Story Telling Case Study

---

MANASA PVKL



# Objective

---

- Airbnb, Inc. is an American San Francisco-based company operating an online marketplace for short- and long-term homestays and experiences.
- The company acts as a broker and charges a commission from each booking.
- To find insights to grow the business in a profitable manner

# Background

---

- Airbnb wants to increase sales Post Covid since the restrictions has been removed and travels have been increased
- A dataset consisting of various Airbnb listings in New York have been given for the analysis of data to find insights and easy visualizations
- Data set with 48,897 rows and 16 columns were taken for analysis

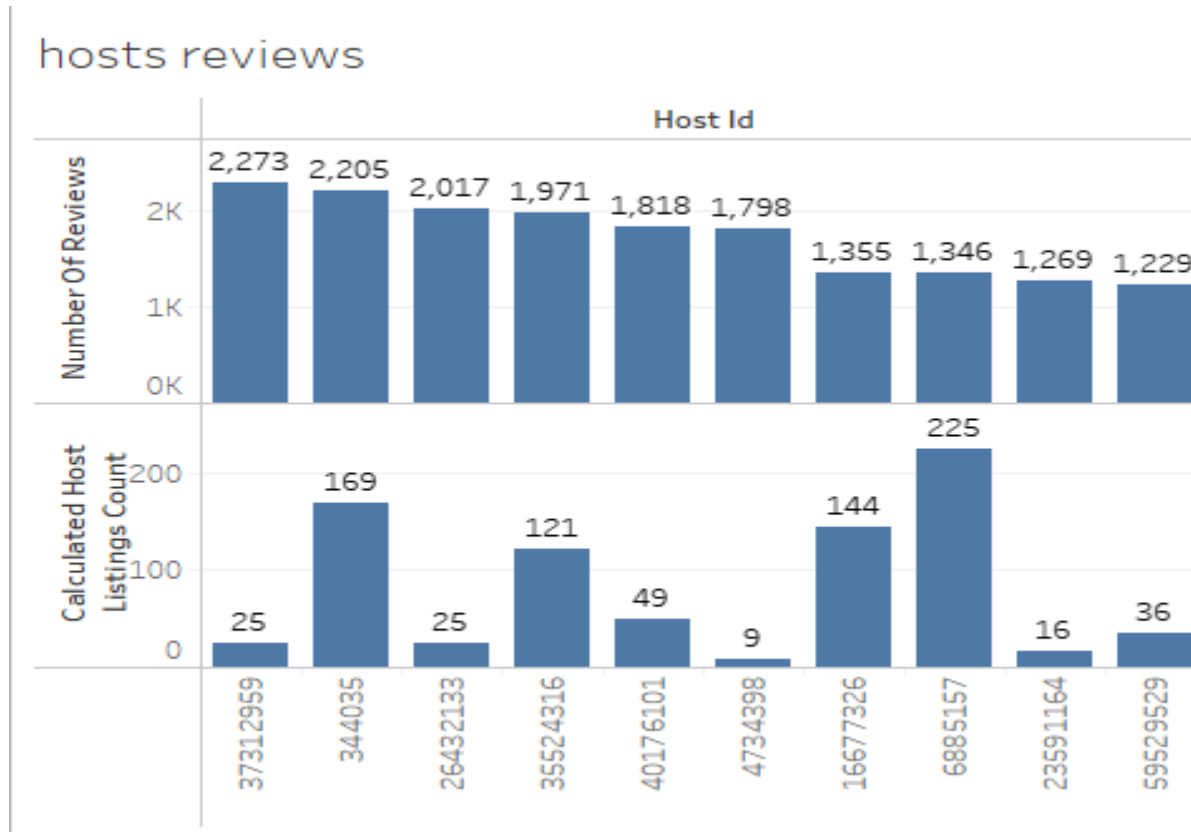
# Data Preparation

---

- Data set is checked for Null values ,Outliers and Duplicates
- Variables with Null values are treated by optimally filling them or dropping them if not necessary
- Data types of the variables have been checked
- Outliers have been treated in Price column for a clear view of results
- Unnecessary columns – Id,Date Column with max Null values have been dropped to optimize the data set for faster analysis
- The reduced data set is further exported to Tableau for further Analysis and Visualizations of the data

# Data Visualizations

Top 10 Hosts (host id's) who have higher customer reviews and their respective count of listings

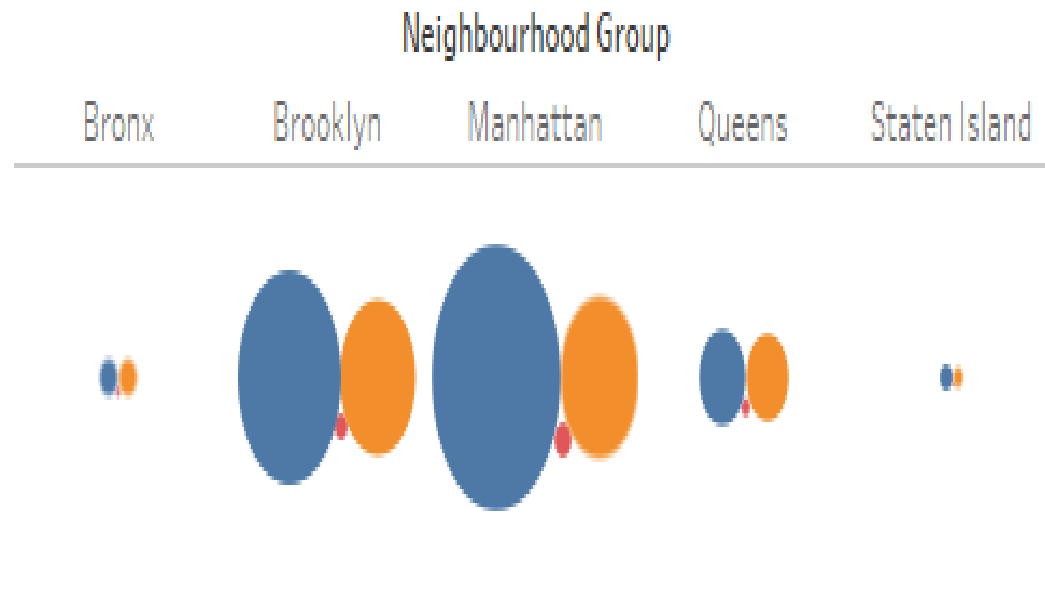


Top Performing Hosts and

Few Hosts though they have less no of listings have more no of reviews which states they provide very good service at their property

# Price of Room Type in each Neighborhood Group:

Price of room type



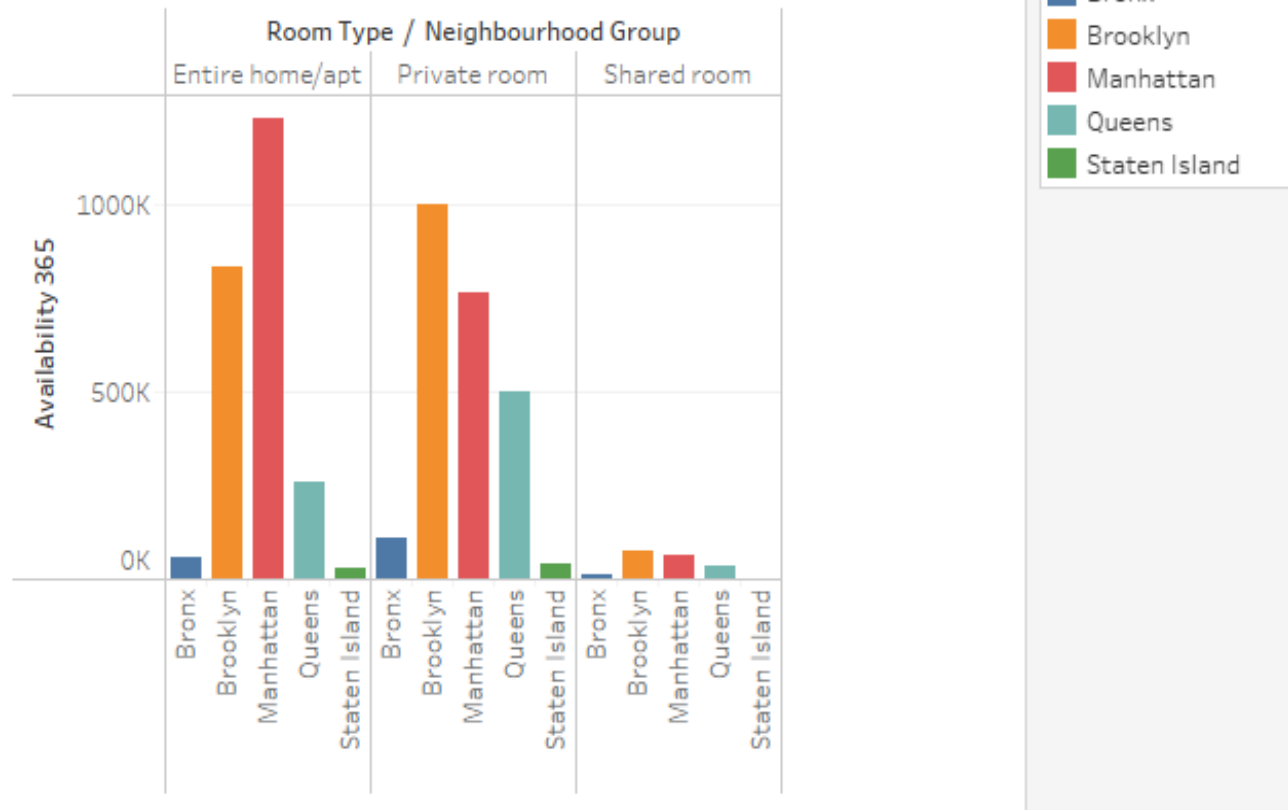
Room Type

- Entire home/apt
- Private room
- Shared room

- Prices are higher in Manhattan and Brooklyn for Entire home/apt followed by Private room

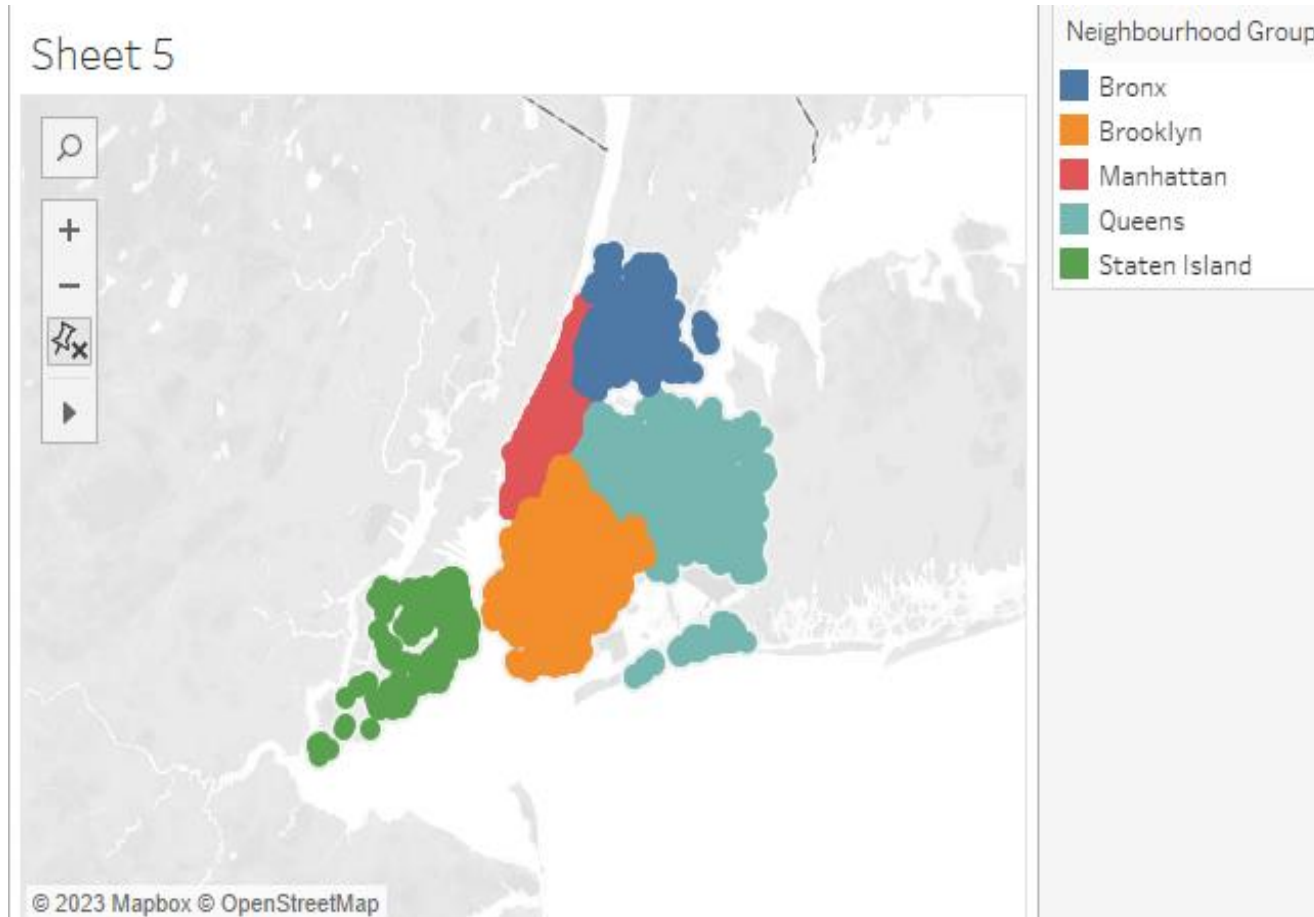
# Availability of Rooms based on Neighborhood Group and Room type:

availability based on neighbourhood and room type



Manhattan and Brooklyn has more no of Rooms availability for booking with max share in Entire Home/apt next comes the Private Room

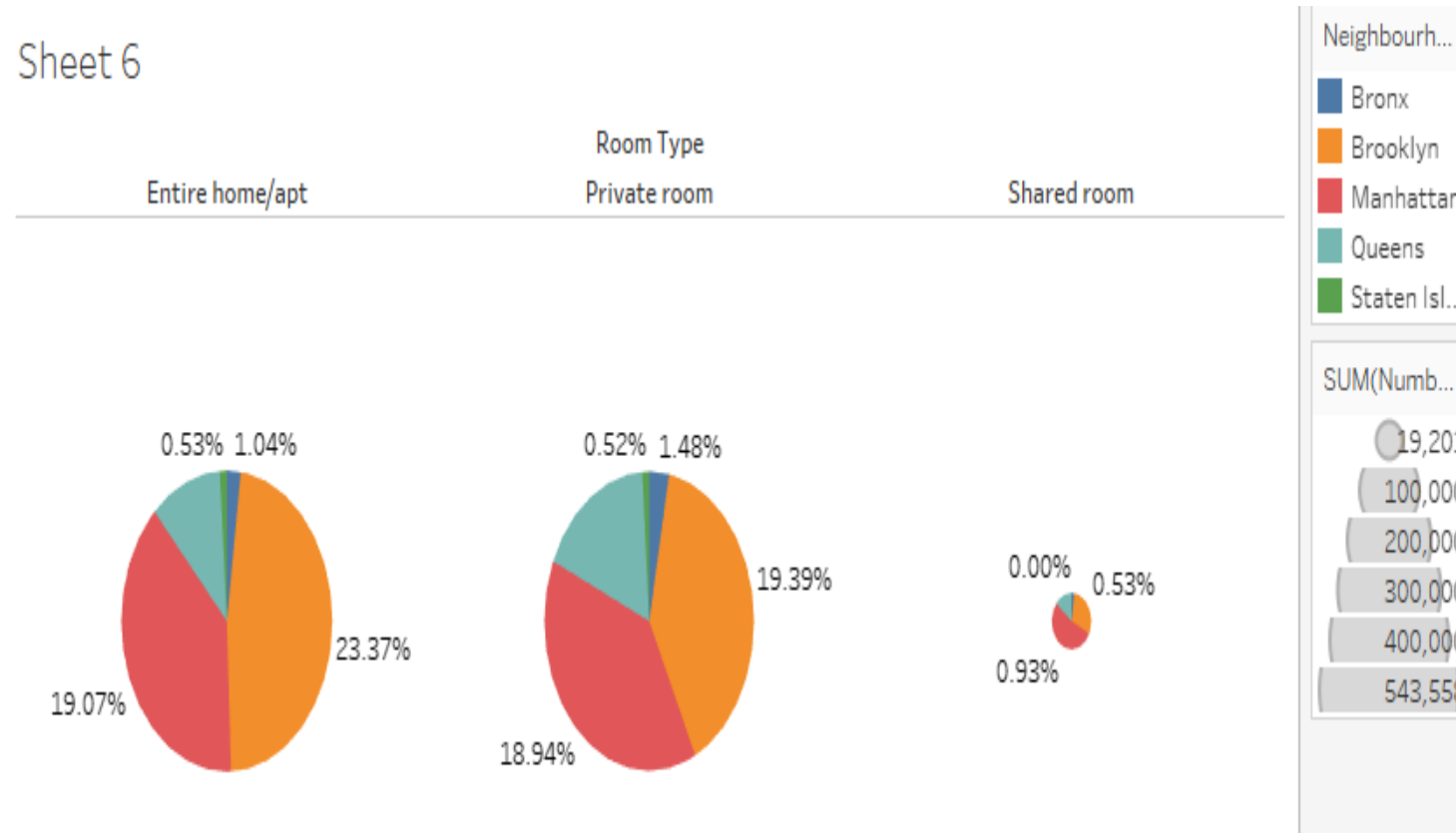
# Distribution of Rooms based on the Neighborhood Group:





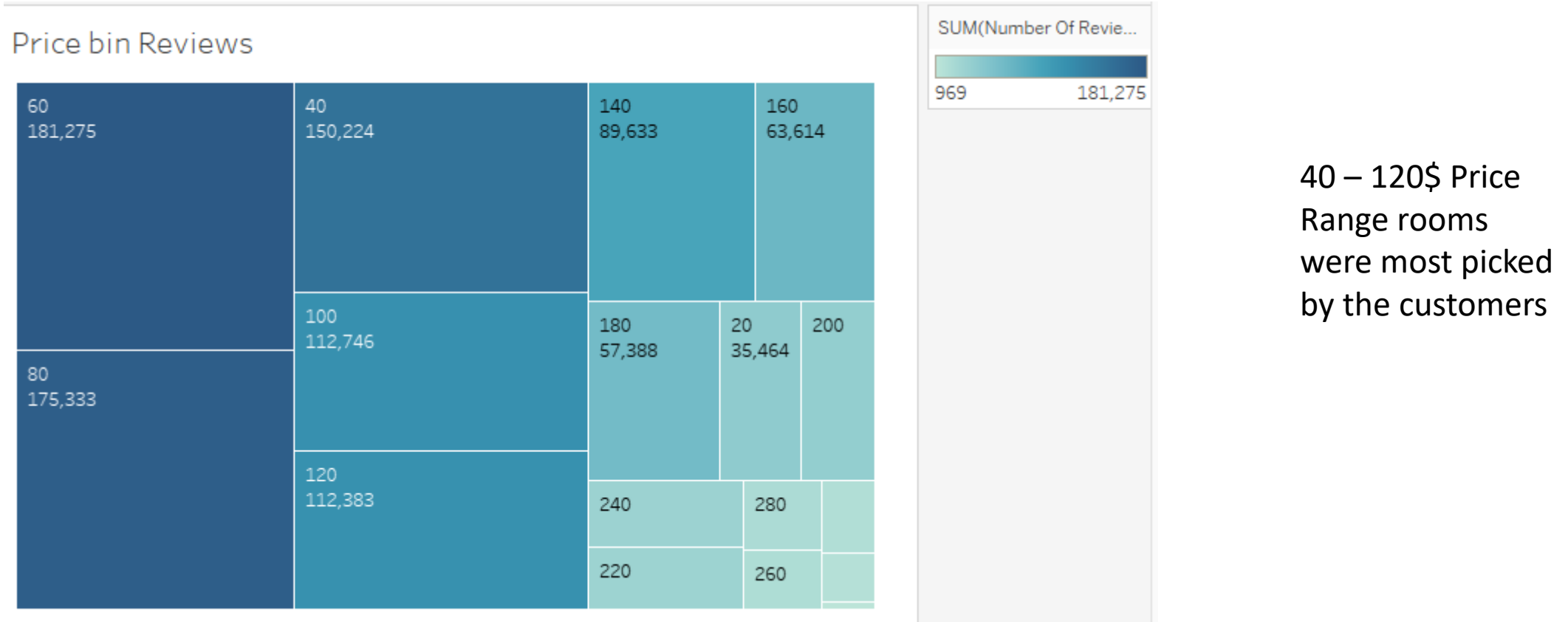
# Percentage of Reviews on Each Room Type & Neighborhood Group :

Sheet 6

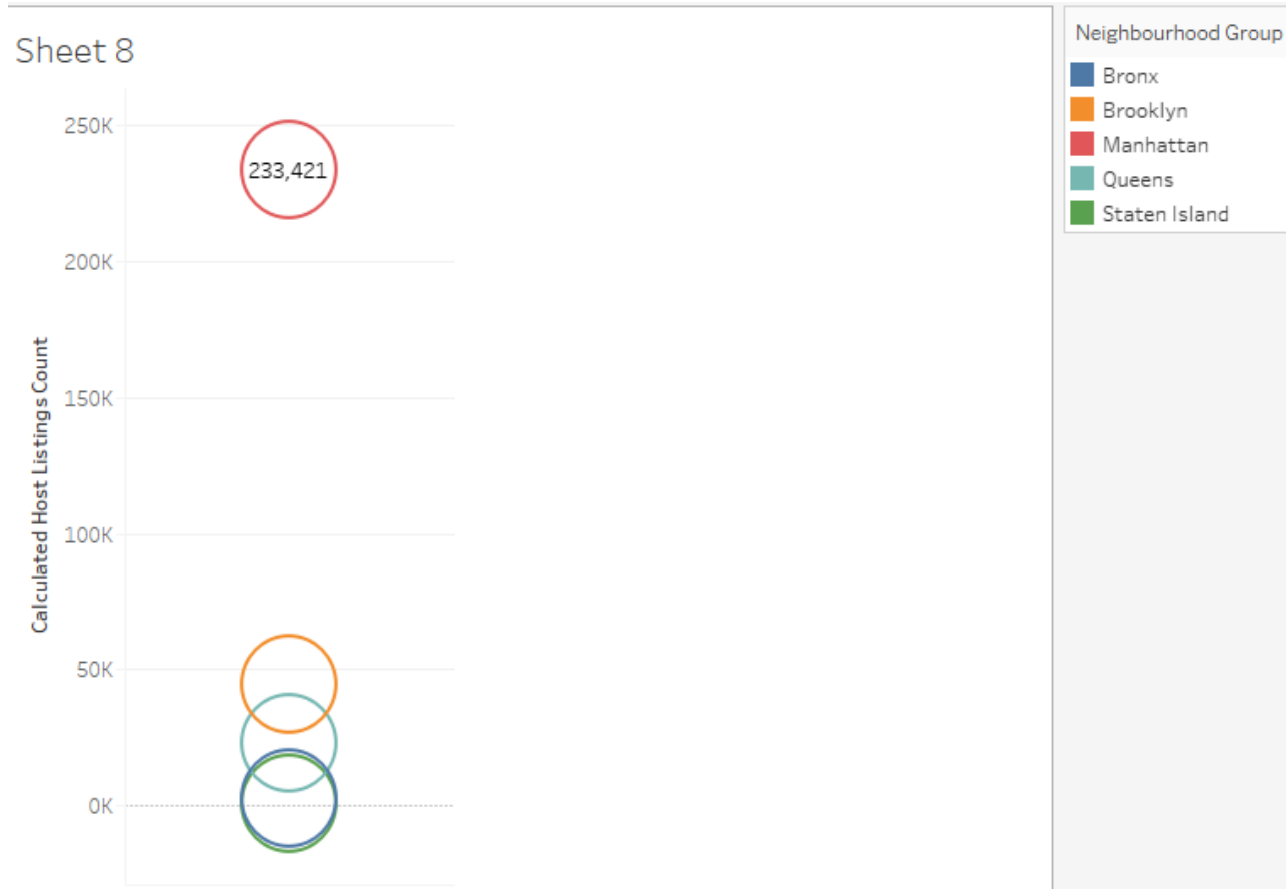


- Entire Home/apt was most attracted by Customers
- Manhattan was best Neighborhood Group among them

# Most Interested Price Range of the Customers based on Reviews:

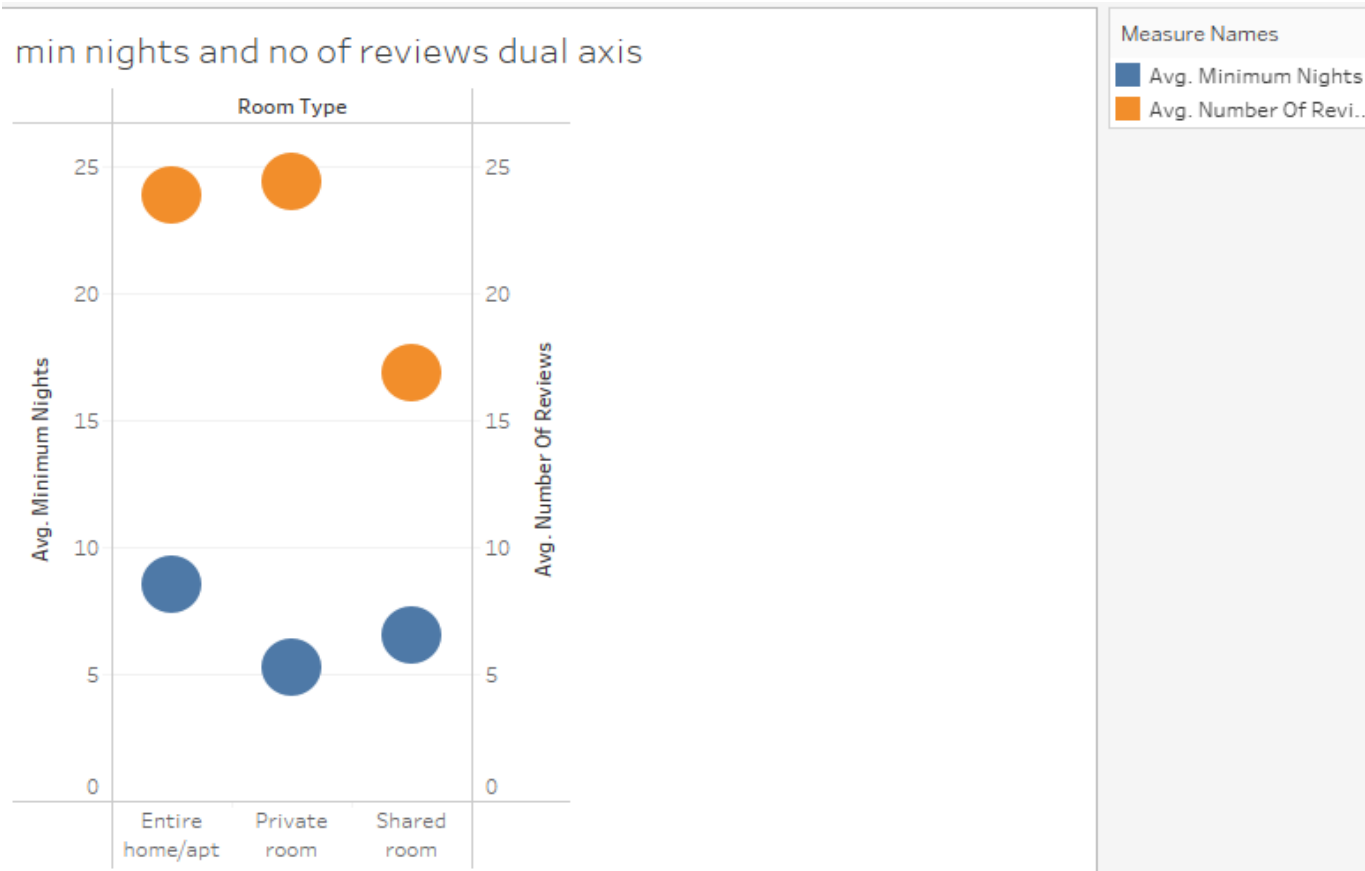


# Max No of Listings:



Manhattan has the maximum no of Listings Compared to other neighborhood groups

# Minimum Nights and Average No of Reviews for a room type:



- Entire home/apt the avg min nights lie at 8-10 with the Avg no of reviews lies at 23-25
- Private Room the avg min nights lie at 5 with avg no of reviews at 25
- Shared room the avg min nights lie at 7-8 with avg no of reviews at 16-17

# Recommendations

---

- Hosts who have less no of listings with more no of reviews shows they provide very good service at their property
- Prices are higher in Manhattan and Brooklyn
- Entire home/apt followed by Private room have higher prices
- Manhattan and Brooklyn has more no of Rooms availability with max share in Entire Home/apt next comes the Private Room
- Entire Home/apt was most attracted by Customers, Manhattan was best Neighborhood Group among them
- 40 – 120\$ Price Range rooms were most picked by the customers
- Manhattan has the maximum no of Listings Compared to other neighborhood groups
- Entire home/apt avg min nights lie at 8-10
- Private Room avg min nights lie at 5
- Shared room avg min nights lie at 7-8

# Appendix:

- Data Sources:
- Data Methodology file has been attached with further more details and info of Data Set
- The Price ranges which are very high are assumed to be Outliers and are treated accordingly
- More No of Customer Reviews is assumed to have more customer liking

Column	Description
id	listing ID
name	name of the listing
host_id	host ID
host_name	name of the host
neighbourhood_group	location
neighbourhood	area
latitude	latitude coordinates
longitude	longitude coordinates
room_type	listing space type
price	
minimum_nights	amount of nights minimum
number_of_reviews	number of reviews
last_review	latest review
reviews_per_month	number of reviews per month
calculated_host_listings_count	amount of listing per host
availability_365	number of days when listing is available for booking