

# **PPT-2**

# **Insights from the Airbnb, NYC**

# **Analysis**

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# Objective

- ▶ Improve business strategies and estimate customer preferences to revive the business and generate more revenue in the post-COVID period.
- ▶ Get a better understanding of critical pre-COVID period insights with respect to various parameters.
- ▶ Understand customer preference and customer experience in Airbnb listings.

# Background

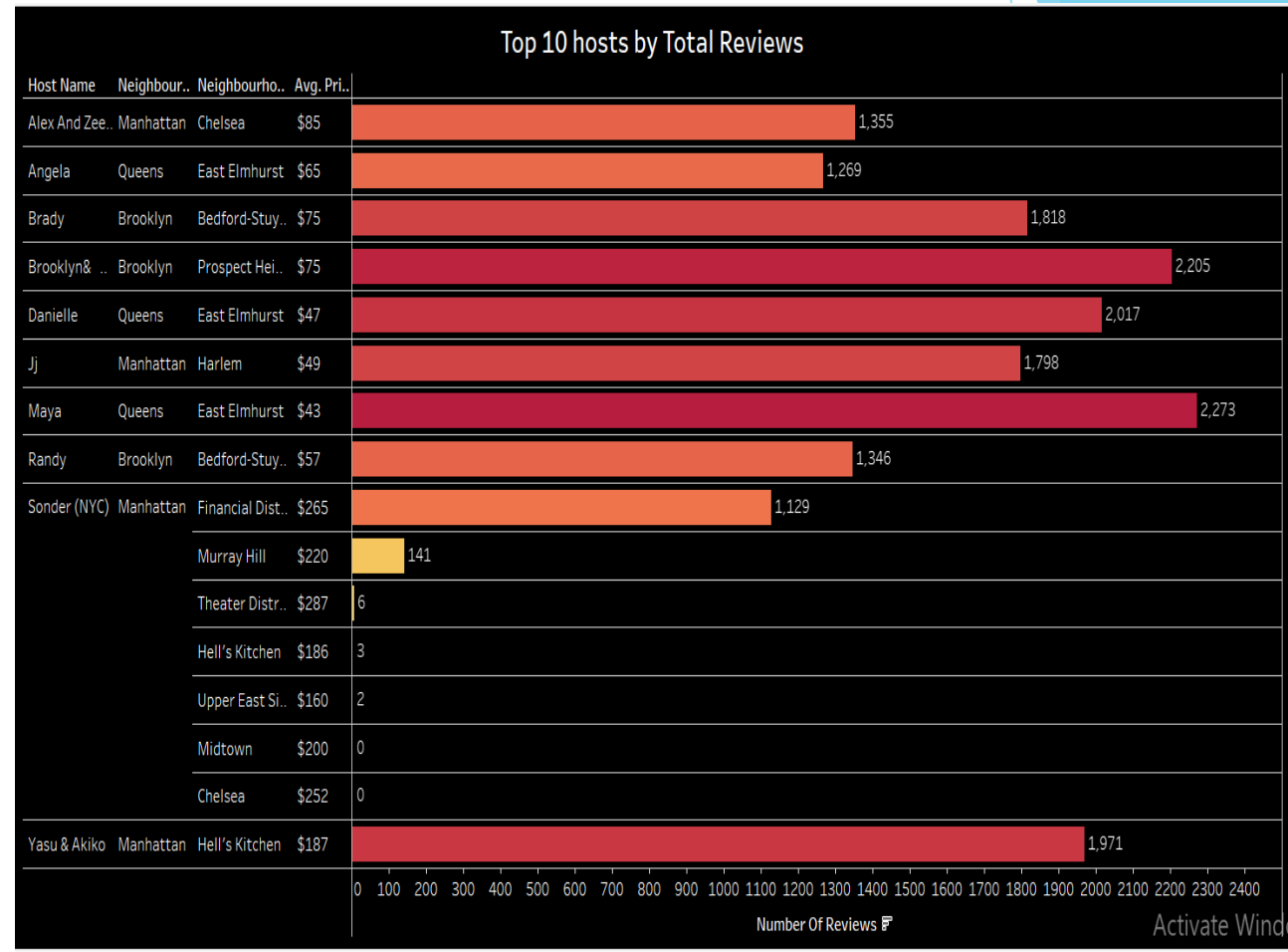
- ▶ For the past few months, Airbnb has seen a major decline in revenue as a result of COVID-19.
- ▶ Now that the restrictions have started lifting and people have started to travel more, Airbnb wants to make sure that it is fully prepared for this change and want to make a bigger revenue in the upcoming days.
- ▶ So, analysis has been done on a dataset consisting of various Airbnb listings in New York.

# Data Preparation

- ▶ We perform the Data Preparation & Data Cleaning process on Jupyter Notebook.
- ▶ Cleaned the data to remove any missing values and duplicates.
- ▶ Replace the missing values with mode.

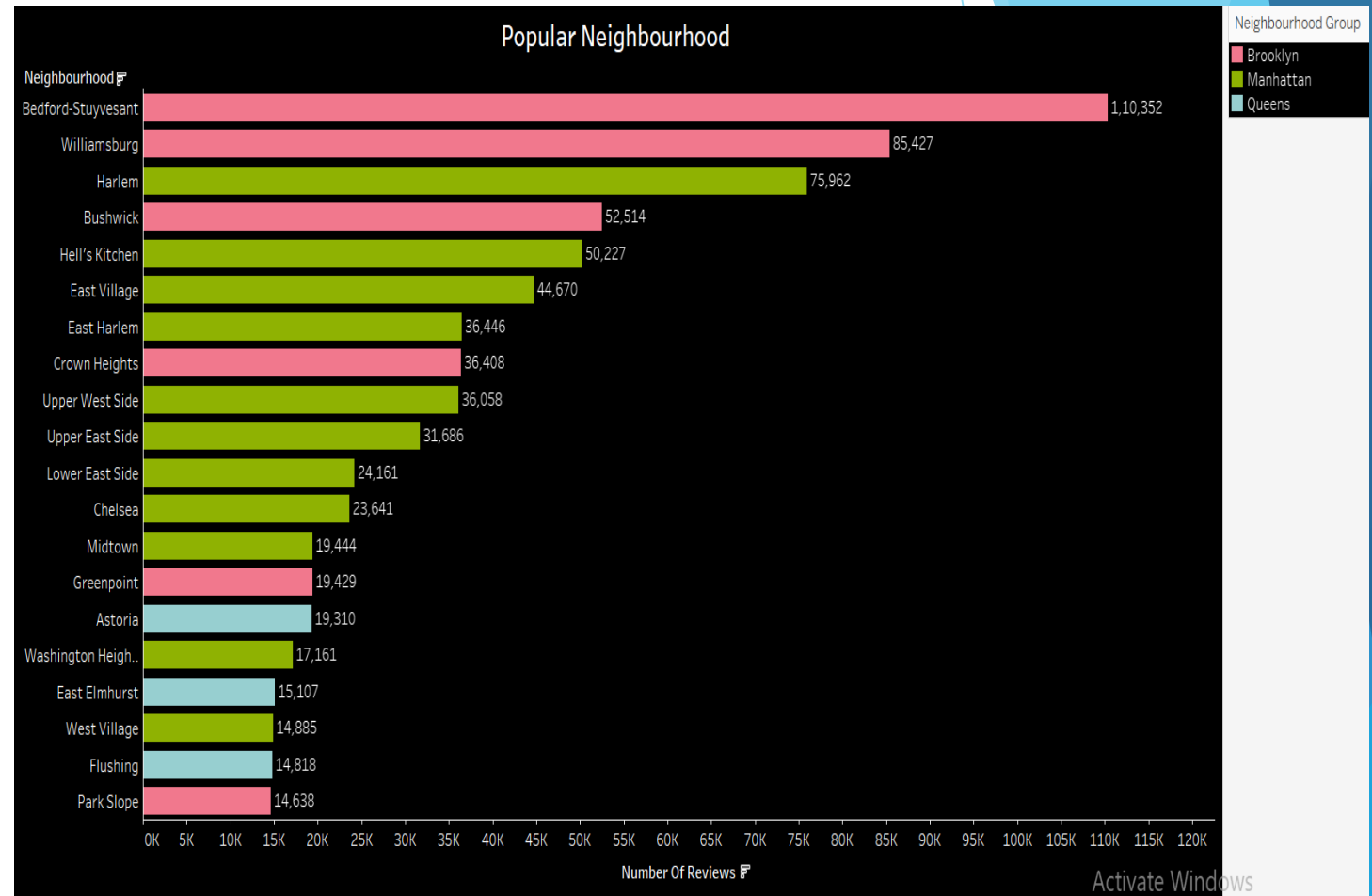
## Top 10 Hosts by Total Reviews

- Host Maya from Neighbourhood group Queens is on the top with highest number of total reviews i.e. 2273.
- Host Brooklyn & Breakfast from neighbourhood group Brooklyn is on the second top position with total reviews 2205.
- Then there are other hosts like Danielle, Yasu & Akiko, Brady, Jj and Alex And Zeena that fall under top 10 hosts.



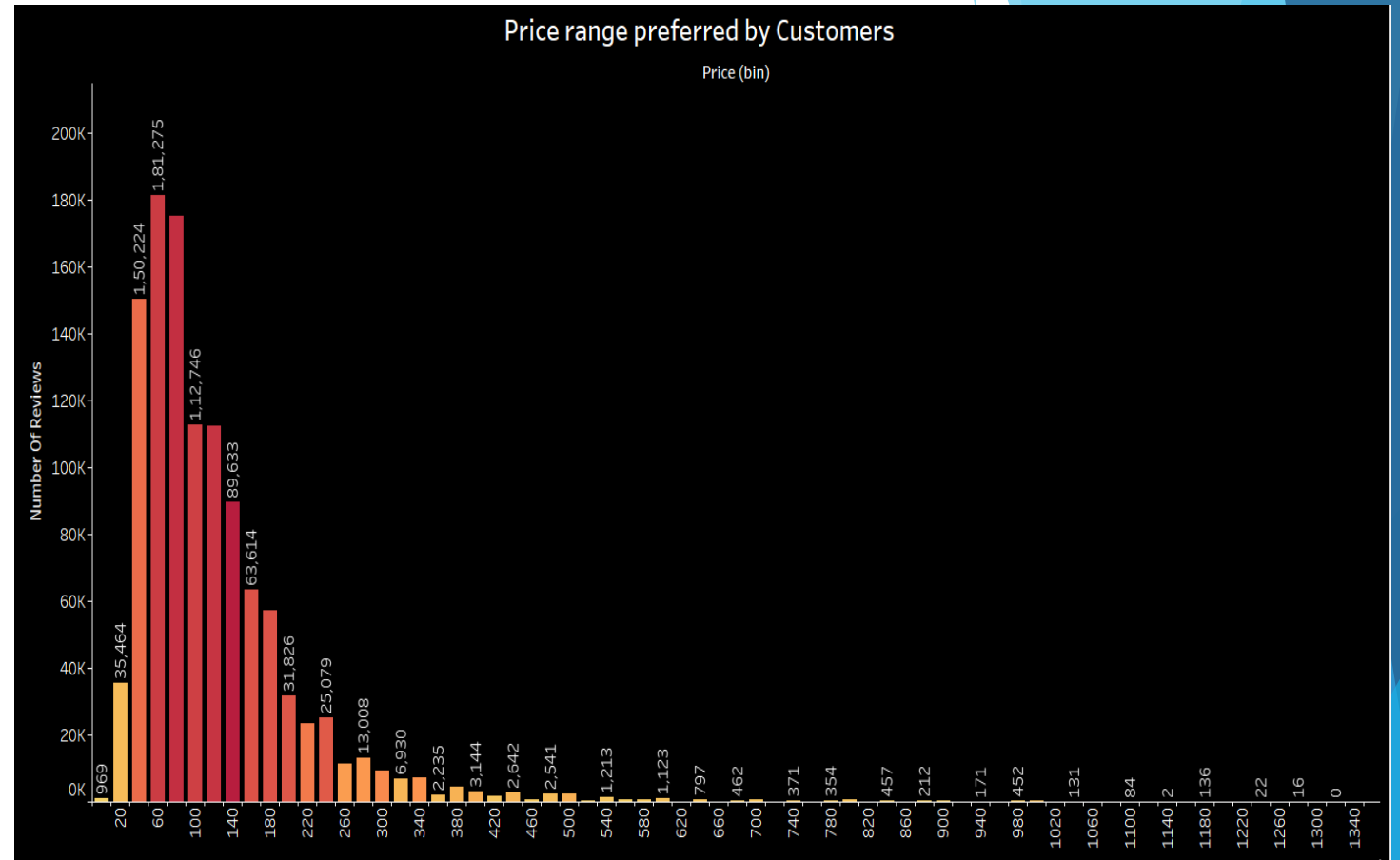
## Popular Neighborhoods

- Here we can see Bedford-Stuyvesant from Brooklyn is the most popular with 1,10,352 no of reviews in total followed by Williamsburg.
- Harlem from Manhattan got the highest no of reviews followed by Hell's kitchen.
- Astoria from Queens got the highest no. of reviews followed by East Elmhurst.
- A greater quantity of customer reviews is often associated with elevated satisfaction levels in these specific locations.



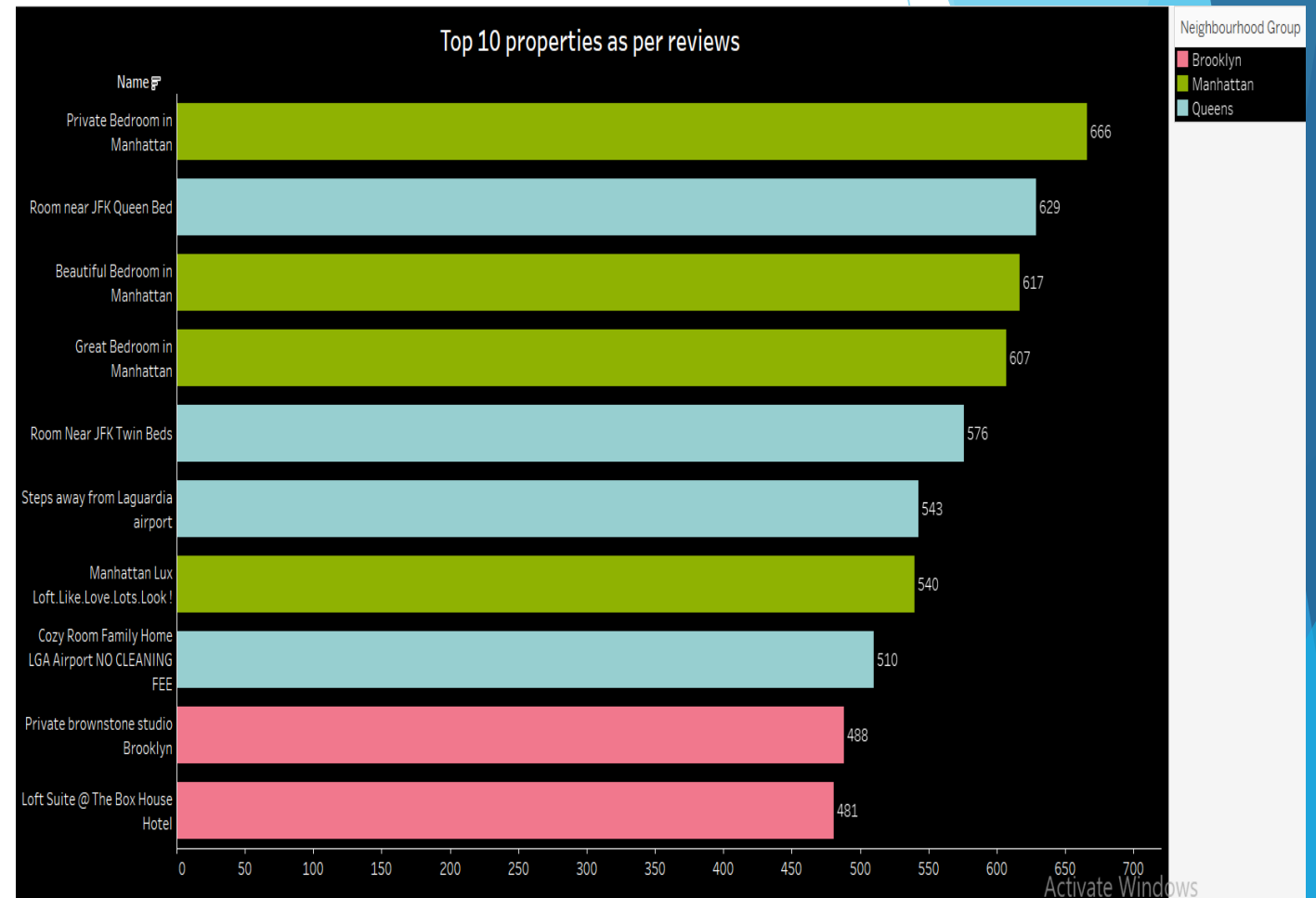
## Popular Price Range Preferred by Customers

- Here we have taken price preference based on the parameters number of reviews.
- From the plot we can see the price range \$40-\$160 got the most reviews by customers. So, \$40-\$160 is the most preferred price range by customers.



## Popular properties as per reviews

- Neighbourhood groups Manhattan, Brooklyn and Queens have the most popular properties.
- Private Bedroom in Manhattan is the most popular properties with the highest no. of reviews 666.
- Room near JFK Queen Bed from Queens is the second most popular properties with no. of reviews 629.
- Other than those Beautiful Bedroom in Manhattan, Great Bedroom in Manhattan and Room near JFK Twin Beds from Queens are fall under top 10 properties.





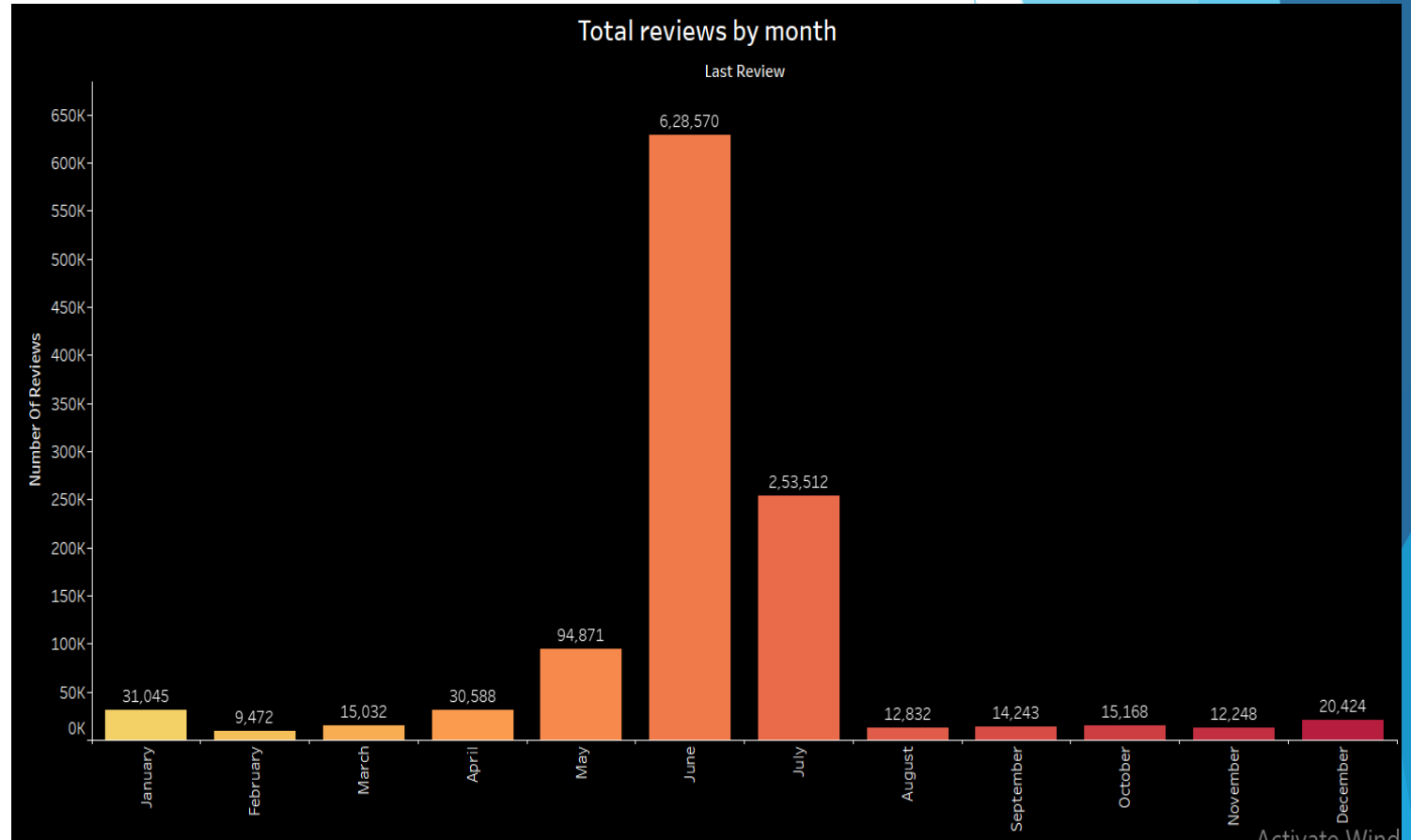
## Variation of price respect to neighbourhood group & room type

- In each Neighbourhood groups there are three types of rooms Entire home/apt, Private room and Shared room.
- The 'Entire home/apt' in Manhattan is the most expensive nearly \$250, which is much higher than the preferred price range by customers.
- Private rooms in all the neighbourhood group and Entire home/apt of Bronx and Queens are fall under the most preferred price range(\$40-\$160).
- Shared rooms of Brooklyn is cheapest than the other.

Price variation in neighbourhood group r. t. room type					
Room Type	Bronx	Brooklyn	Neighbourhood Group Manhattan	Queens	Staten Island
Entire home/apt	\$ 127.51	\$ 178.33	\$ 249.24	\$ 147.05	\$ 173.85
Private room	\$ 66.79	\$ 76.50	\$ 116.78	\$ 71.76	\$ 62.29
Shared room	\$ 59.80	\$ 50.53	\$ 88.98	\$ 69.02	\$ 57.44

## Total reviews by month

- Here we have taken the total no. of reviews by month .
- Month June and July received most no. of reviews by customers.
- So, as the number of reviews are high on June and July, we can say that most number of people are travelling in the middle of the year.
- In the starting and in the end of a year a very small no. of people are travelling.



# Conclusion & Recommendation

- Acquire Entire home/apt and Private rooms since they are more popular room type having more number of reviews per listing.
- New acquisitions and expansion can be done in the price range \$40-\$160 as it is the popular price range based on the customer reviews.
- Airbnb can concentrate on promoting shared room with targeted discounts to increase bookings.
- These insights will be helpful for Head of Acquisitions & Operations and Head of User Experience to make strong decisions that will help in improving the business revenue.

# APPENDIX

- Here we used Tableau to make an analysis and draw various insights from the data.
- The detailed methodology document are attached below
  - I. [Airbnb case study Methodology.pdf](#)