

# **AIRBNB CASE STUDY**

By-

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# AGENDA

- Objective
- Background
- Key Findings
- Recommendations
- Appendix



# OBJECTIVE

- Improve shared understanding about the market conditions.
- Improve shared understanding about customers
- Find categorization of customers based on their preferences
- Understand about the most popular localities and properties in New York currently
- Provide recommendations to stakeholders and relevant departments for future conditions.

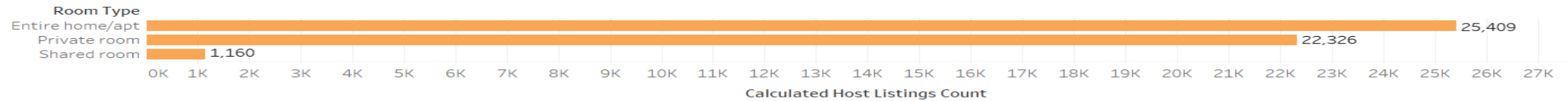
# BACKGROUND

- Major decline in revenues due to pandemic, in the last few months
- Restriction are been lifting
- People have started travelling more
- Airbnb wants to make sure that it is fully prepared for this change.

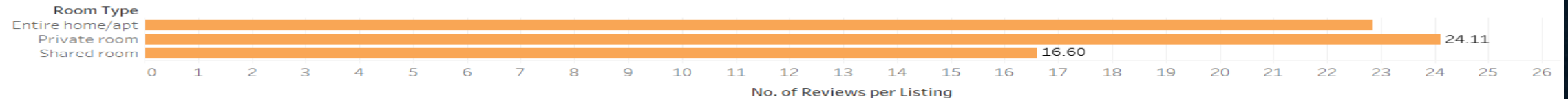


# HOUSE LISTING & REVIEWS

Number of Host Listings Per House Type



No. of Reviews Per Listing



- The above visuals show the total listings per house type and total reviews per house type, where we can derive the private rooms have both inline.
- The statistics makes it clear that Listings in Bronx, Queens & Staten Island doesn't impact the popularity; which is opposite to Manhattan.
- Brooklyn is the moderate place, and it required more data to calculate the forecast.

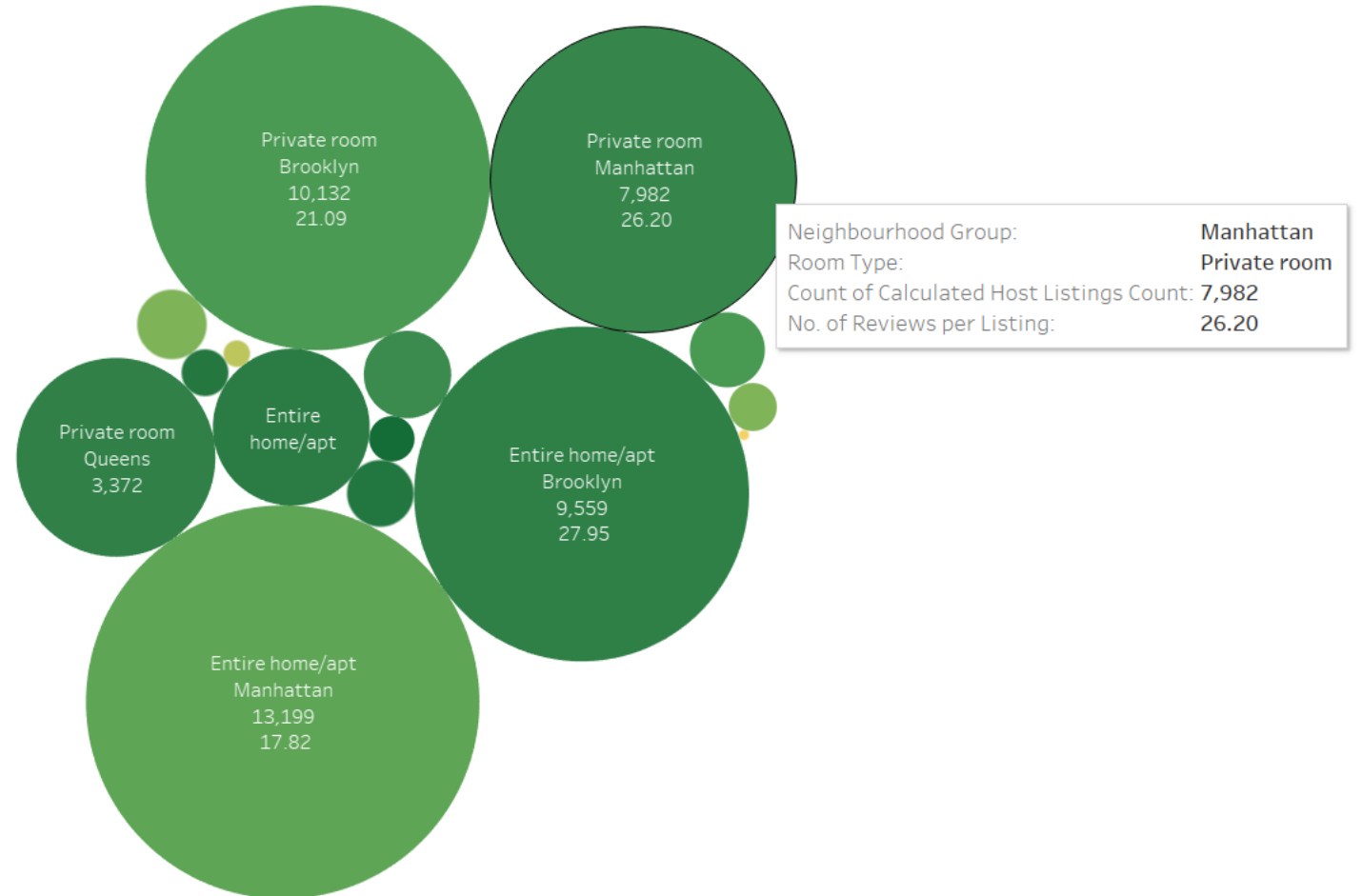
Neighbourhood Groups statistics



# LISTING ON DIFFERENT PARAMETERS

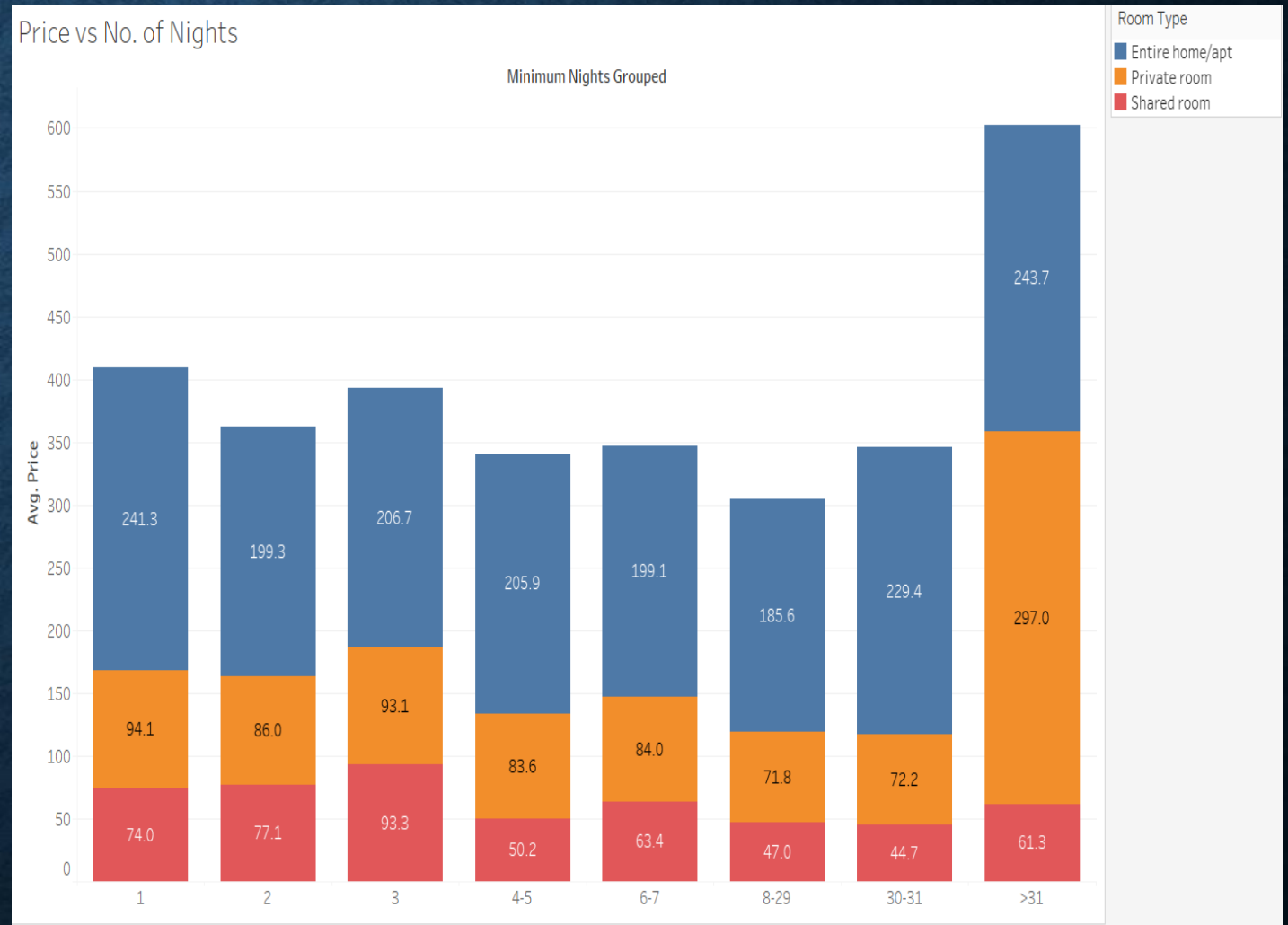
- Private rooms are the most popular with >25k reviews
- Entire home/Apt in Manhattan has 35% less reviews per listing, than the average of 27.7
- The reviews for shared rooms are very poor with an average of 7.3. (except Manhattan)

Neighbourhood Group statistics 2



# PRICE ON TOTAL STAY

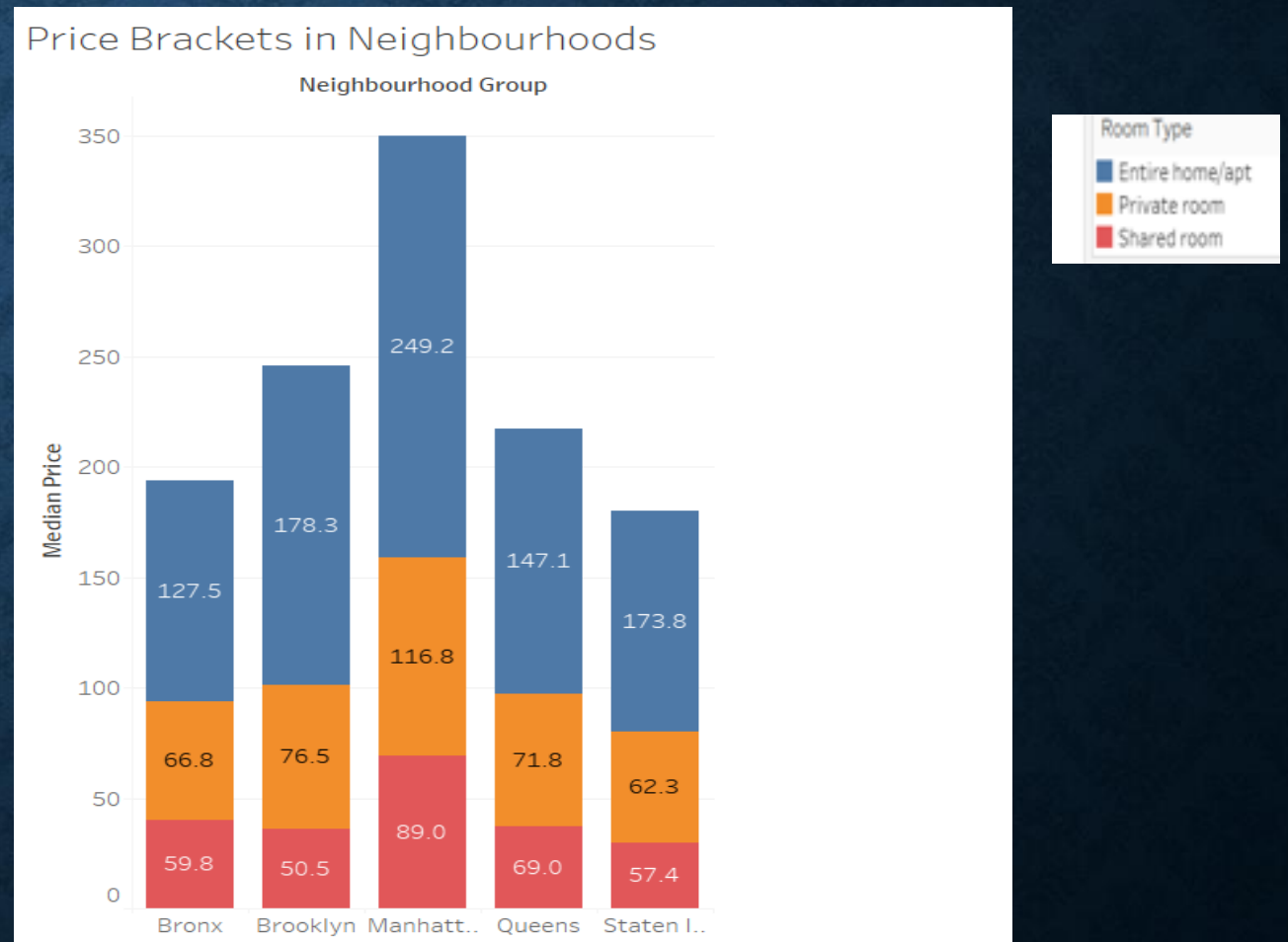
- Longest stay in a single AirBnB has most costly-duration attribute as private room, whereas all other stay duration has whole apt/house as the most costly duration.
- The whole apt pricing is nearly consistent to all duration, and the shared room has most variable cost.
- Regularization of price of private rooms, and whole apts, has made them popular, as shown in prior graphs; which should be implemented to shared rooms also.





# PRICING IN PREFERRED LOCATIONS

- Entire Home/Apt price is approx. 100% more than private rooms except Brooklyn and Staten Island with approx. 150%
- Private room's price is nearly 10% more than Standard rooms except Brooklyn and Manhattan with nearly 40%
- Manhattan is costliest overall and the economical or budget friendly are:
  - Entire Apt: Bronx
  - Private Room: Staten Island
  - Shared Room : Brroklyn

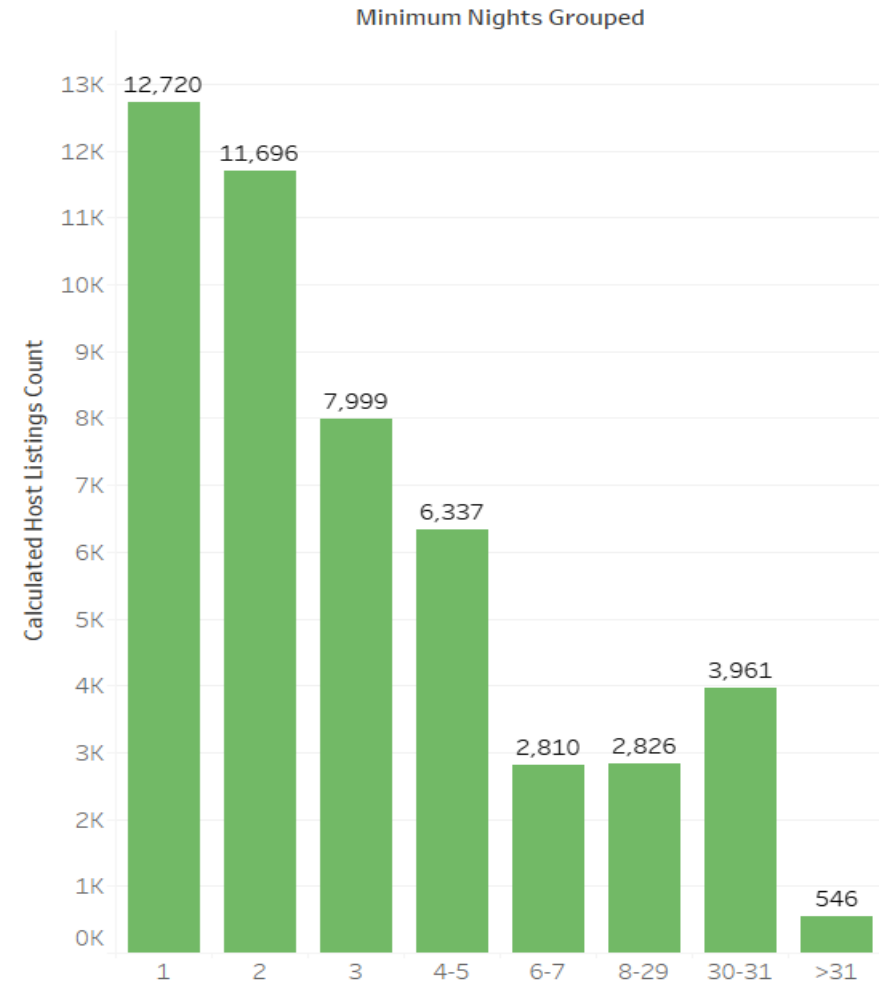




# LISTINGS AVAILABILITY ON DURATION

- Most AirBnBs are listed for 1 night, or alternatively, 1 night stay is highly available on all AirBnBs. Opposite to long stay >31 days.
- The customer stay pattern is for small holiday below 3 days; and is >100% for all other holiday's combined.
- We can combine this data with reviews to check the popularity and scope for improvement.

Listing count over total nights



# RECOMMENDATIONS

- AirBnB should improve the acquisition of private rooms and entire apts. Most popular places like Staten Island, should be prioritized.
- Price changes are required, for exa: Increase the price of private rooms in Queens (around 10%), or decrease the amount of apartments in Manhattan (around 15%).
- Order of listings in popular areas should be maintained by ascending order of nights, or descending order of price, or vice versa.
- AirBnBs need to focus on price for other duration of stays, resulting the duration increase from 2 to 3 days, or maybe 4 days if planned properly.



# APPENDIX

- Data Attributes
  - Host Listing information as host name, neighbourhood etc.
  - Customer preference information as total no. of reviews, monthly no of reviews etc.
- Data Methodology
  - Visualization via Tableau
  - Usage of Median of price due to presence of outliers
  - Detailed methodology document: [Methodology Document](#)
- Data Assumptions:
  - Used Reviews per listing to measure popularity
  - Used no. of reviews to see customer preferences
  - Null values are assumed to be outlier.

**THANK YOU**