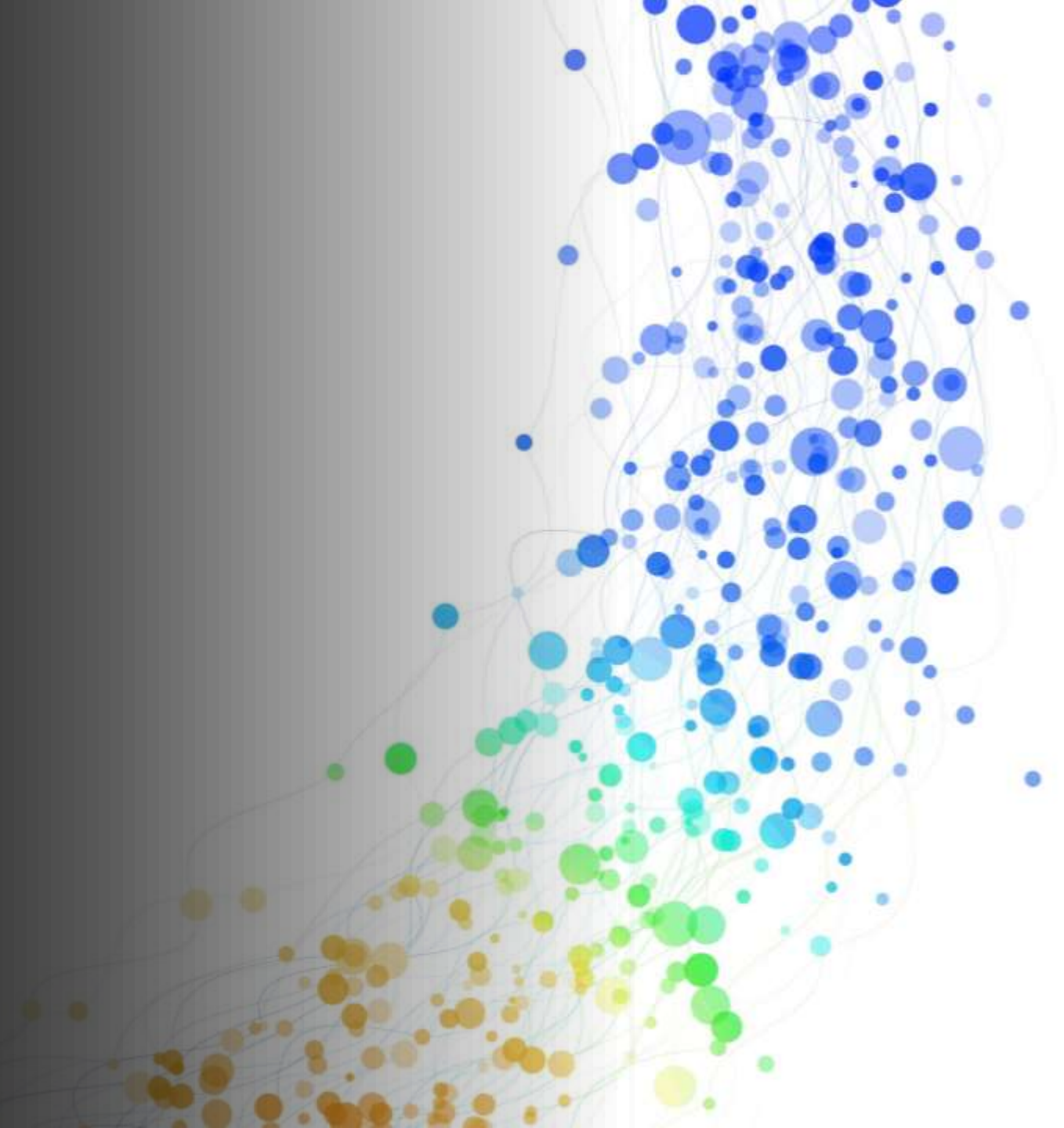




Improving Airbnb NYC Business after Covid

By,
Gaurav Kumar
Srilathaa Vasu



Agenda

- Objective
- Background
- Visualization and Inference
- Recommendations
- Appendix
 - ✓ Data Sources
 - ✓ Data Methodology
 - ✓ Data Assumptions



Objective

- Improve our strategy to minimize the economic and commercial effects of Covid-19 on Airbnb, New York City.
- Understand client preferences and trends in user experience for Airbnb in New York City.
- Understand the pricing relation to various parameters
- Provide Recommendations to improve quality of new acquisitions and customer experience.





Background

For the past few months, Airbnb has seen a major decline 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.

So, analysis has been done on a dataset consisting of various Airbnb listings in New York.

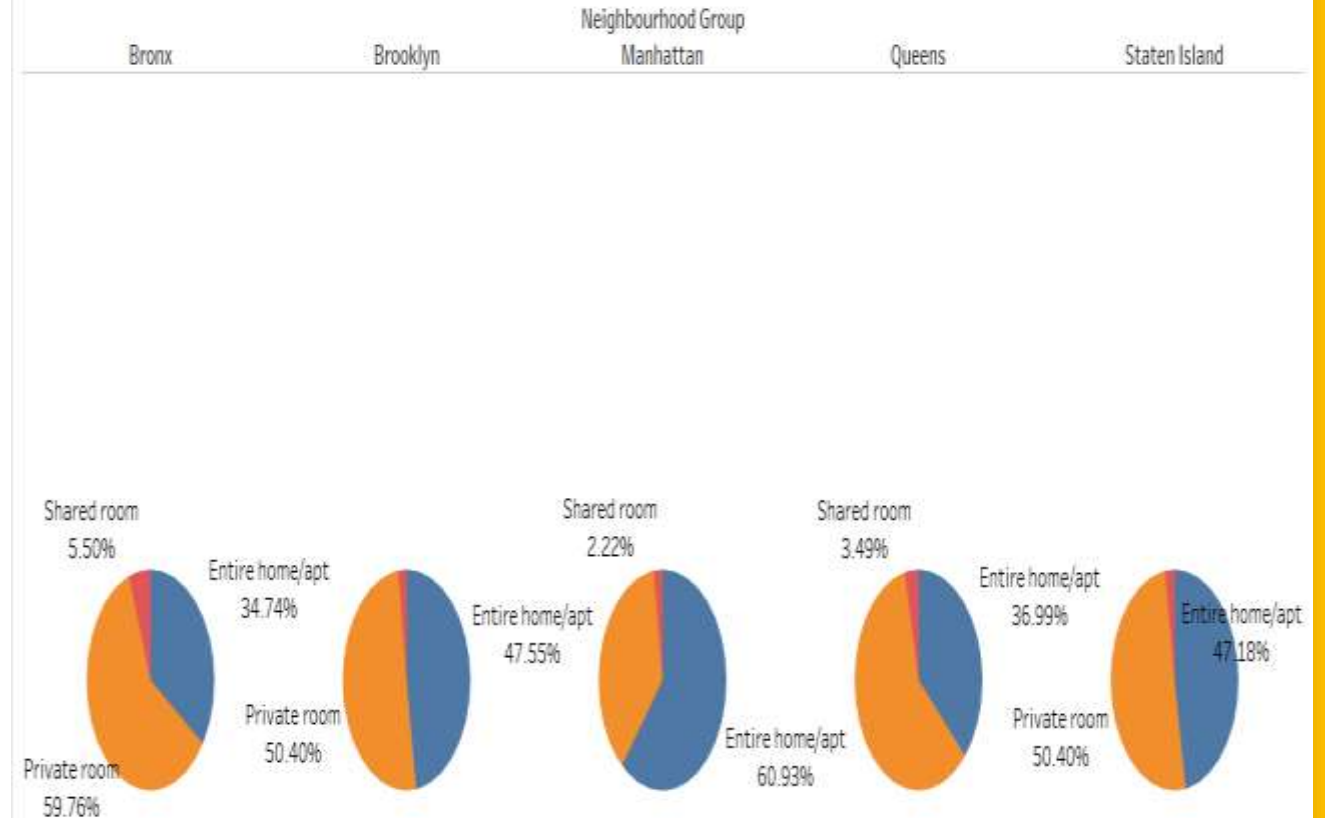


Visualization and Inference

Room type w.r.t Neighbourhood group

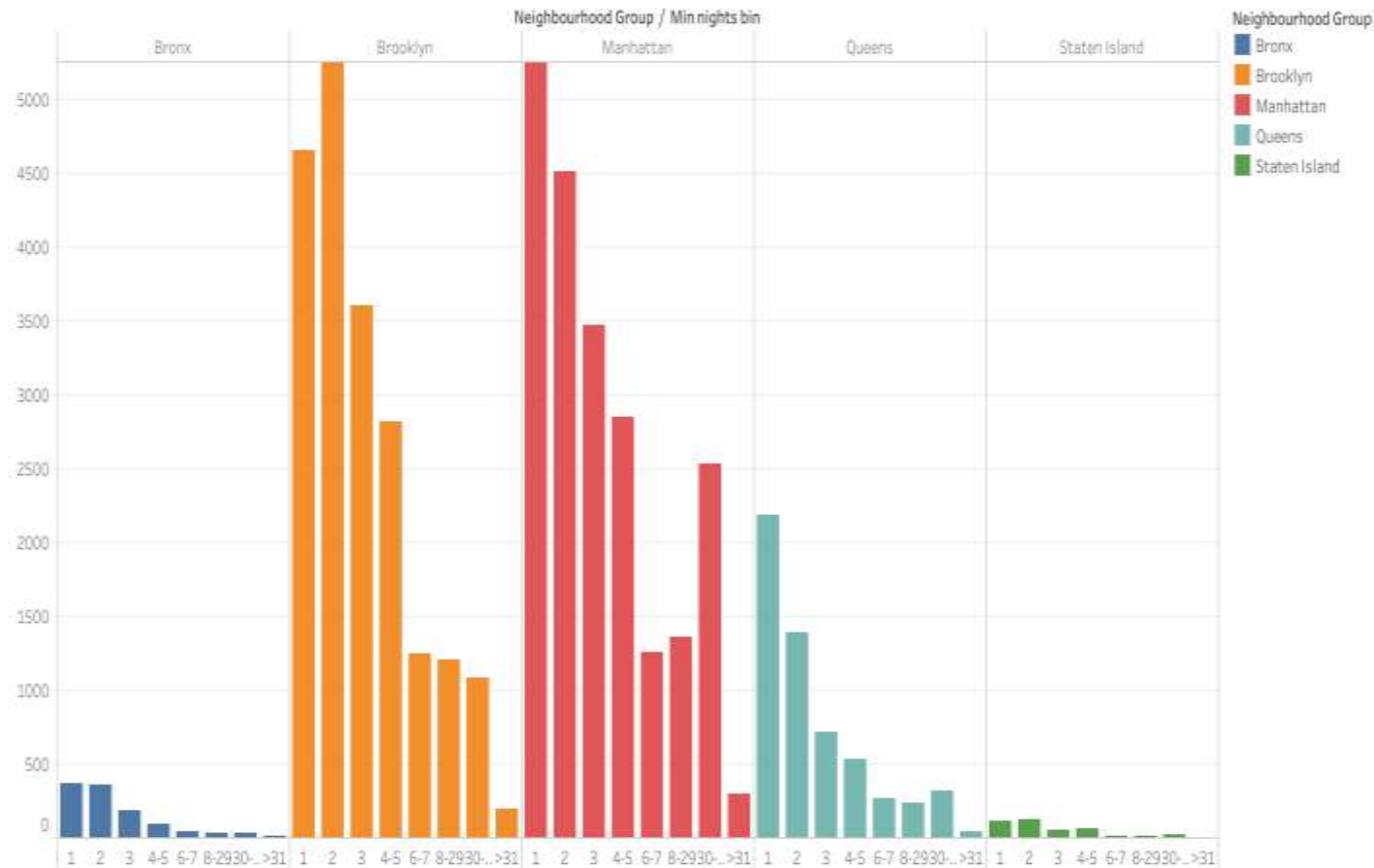
- Manhattan has highest number of home/apt properties, i.e. 60.93% of total listed properties.
- Manhattan and Brooklyn are top neighbourhood groups and mostly people prefer to book the entire home or private room.
- Maximum number of private rooms are available in Bronx i.e. around 59.76% of total listed properties.
- Very less number of shared rooms are available in each Neighbourhood group.

Room Type wrt Neighbourhood group



Customer Bookings w.r.t Minimum Nights

Customer Bookings Wrt Minimum Nights



- The listings with Minimum nights 1-5 have the highest number of bookings. We can see a prominent spike in 30 days, this would be because customers would rent out on a monthly basis. Customers also prefer to stay for 3-7 nights.
- After 30 days, we can also see small spikes, this can also be explained by the monthly rent taking trend.
- Manhattan & Brooklyn have higher number of 30 day bookings compared to the others. The reason could be either tourists are booking for long stays or mid-level employees who opted for budget bookings due to company visits.

Understanding Price variation w.r.t Room Type & Neighbourhood

- The 'Entire home/apt' room type in Manhattan is the most expensive at \$250, much higher than the overall average.
- The 'Private rooms' of Manhattan & Brooklyn has the highest average
- The 'Shared Room' type is the cheapest in Brooklyn.

Price Variation wrt Room Type & Neighbourhood Group

Room Type	Neighbourhood Group				
	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

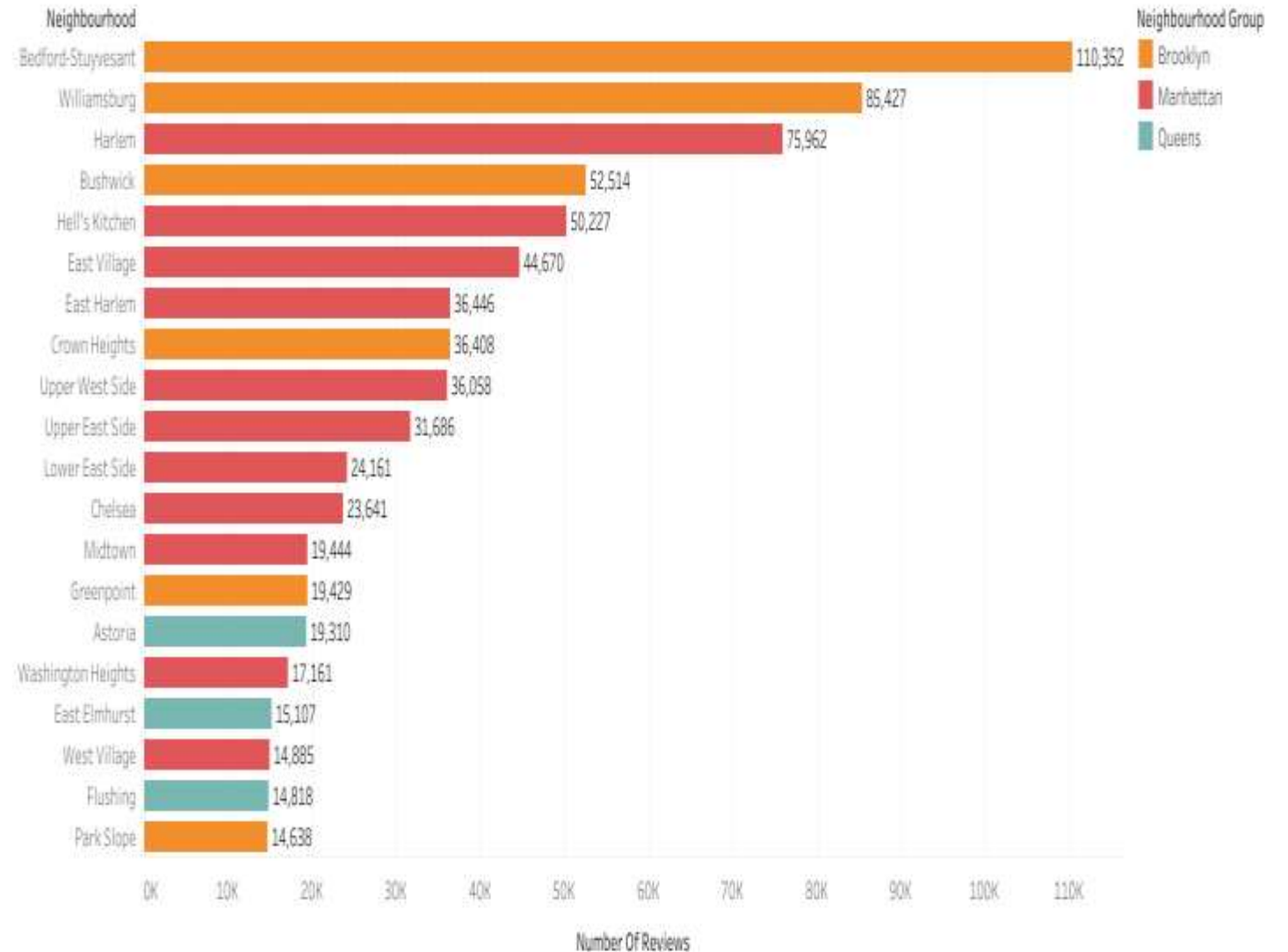
Avg. Price

50.5 249.2

Popular Neighbourhood

- Bedford-Stuyvesant from Brooklyn is the most popular with 1,10,352 reviews in total followed by Williamsburg.
- Harlem from Manhattan has got the highest number of reviews followed by Hell's kitchen.
- The higher number of customer reviews imply higher satisfaction in these localities.

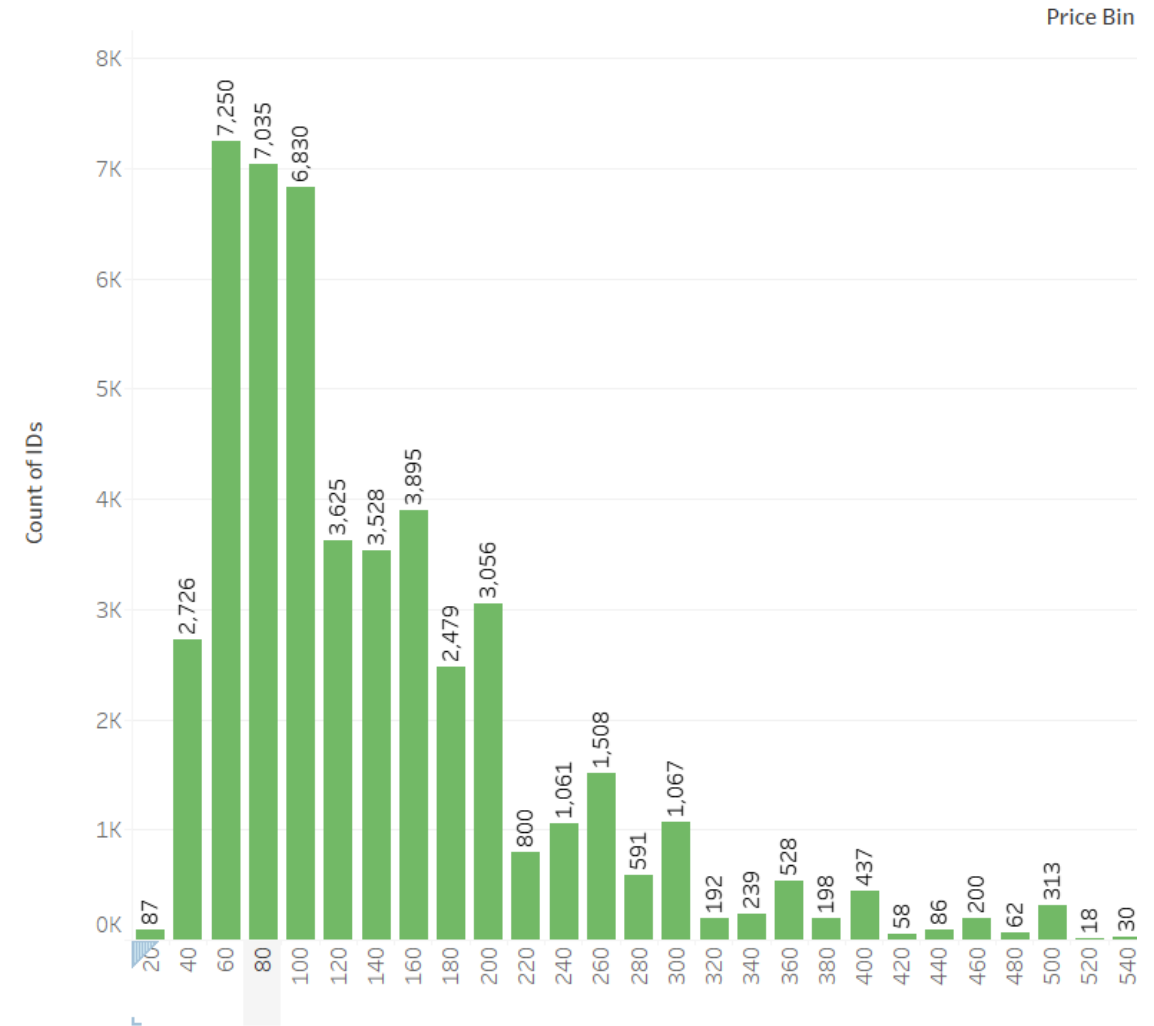
Popular Neighbourhoods



Price range preferred by Customers

- We have taken pricing preference based on volume of bookings done in a price range.
- From the graph we can observe that the most preferred price range by most customers lies between \$60 to \$160.
- The New acquisitions and expansion can be done in this price range.

Price range preferred by customers





Recommendations

- We can do the promotion of shared rooms with targeted discounts to increase bookings.
- We see a good potential in the 30-day rental window. Manhattan & Brooklyn have higher number of 30 day bookings compared to the others, these areas can be further targeted.
- New acquisitions and expansion can be done in the price range of \$40 - \$160.
- New acquisitions can be explored to acquire 'Private rooms' in Manhattan and Brooklyn and 'Entire Homes' in Bronx and Queens as they fall in the favorable price range (\$40-\$160).

Appendix - Data Sources

- The New York Airbnb Dataset includes information on various Airbnb listings, including their hosts, locations, pricing, and other characteristics. The dataset's columns are self-explanatory.
- We reviewed the dataset description on the right to gain a better understanding of what each column represents.

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
related_host_listings_count	amount of listing per host
availability_365	number of days when listing is available
Dataset Description	

Appendix - Data Methodology

- A thorough analysis of the Airbnb Data was conducted. This process included
 - i. Cleaning the data set for missing values and outliers.
 - ii. Using exploratory data analysis to identify customer preferences based on :
 - ✓ Locality/ Neighbourhood
 - ✓ price
 - ✓ No. of Reviews
 - ✓ Minimum nights stay
 - ✓ Room Type
 - ✓ Host ID/Name
 - iii. Deriving visualization using the Tableau tool to understand key inferences from the analysis.
-



Appendix - Data Assumptions

- We assumed the data prior to the COVID – 19 period was achieving the desired revenue.
 - We assumed the company does not want to expand yet to new territories in NYC.
 - The company's strategies are decided considering the travel will increase in the post COVID period.
-



Thank you