airbnb

Data Storytelling Case Study Presentation – II
Acquisitions, Operations, and User Experience

By

Mr. Justin Dias

Mr. Mandar Dhumal

Cohort - DS-37

Agenda

➢ Objective

➢ Background

➢ Key findings

➢ Recommendations

➢ Appendix:

- Data sources
- Data methodology
- Data assumptions

Justin Dias
Mandar Dhumal

Objective

- Acquisition of the best properties in Newyork

- Optimal price negotiation, and negotiating the services

- Optimising the order of property listings in certain neighbourhoods and cities
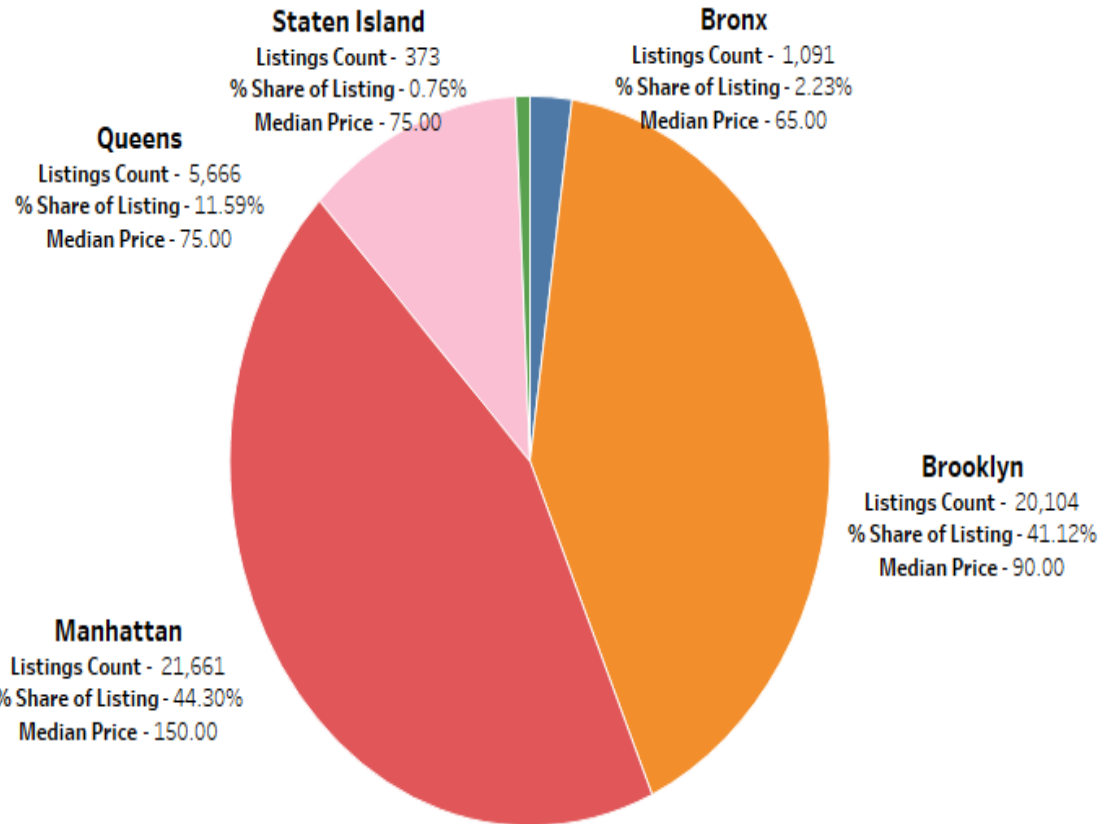
Background

- For the past few months, Airbnb has seen a major decline in revenue. due to Covid pandemic

- Recently most of countries have lifted Covid restrictions and people have started to travel more

- Airbnb wants to make sure that it is fully prepared for this change.

# Manhattan and Brooklyn have major share of Listings

Neighbourhood Groupwise Listing Count vs Median Price

Staten Island
Listings Count - 373
% Share of Listing - 0.76%
Median Price - 75.00

Bronx
Listings Count - 1,091
% Share of Listing - 2.23%
Median Price - 65.00

Queens
Listings Count - 5,666
% Share of Listing - 11.59%
Median Price - 75.00

Brooklyn
Listings Count - 20,104
% Share of Listing - 41.12%
Median Price - 90.00

Manhattan
Listings Count - 21,661
% Share of Listing - 44.30%
Median Price - 150.00

- Almost 85 % of the listings are from Manhattan and Brooklyn

- Even the Median Price of the listings is on the higher side of these two boroughs of Newyork

- The high median price of Manhattan Borough may be because of its proximity to Mainland

Entire Home/Apt and Private Room are more preferred

- The Location is a major attribute in having more number of listings and a higher median price

- Hence, Manhattan borough has a higher median price level and more number of listings for every room type with respect to other boroughs

- Except Brooklyn, Entire Home/Apt are highly priced than other room types

Neighbourhood Group vs Count of Room Type

Neighbour Group vs Median Price as per Room Type

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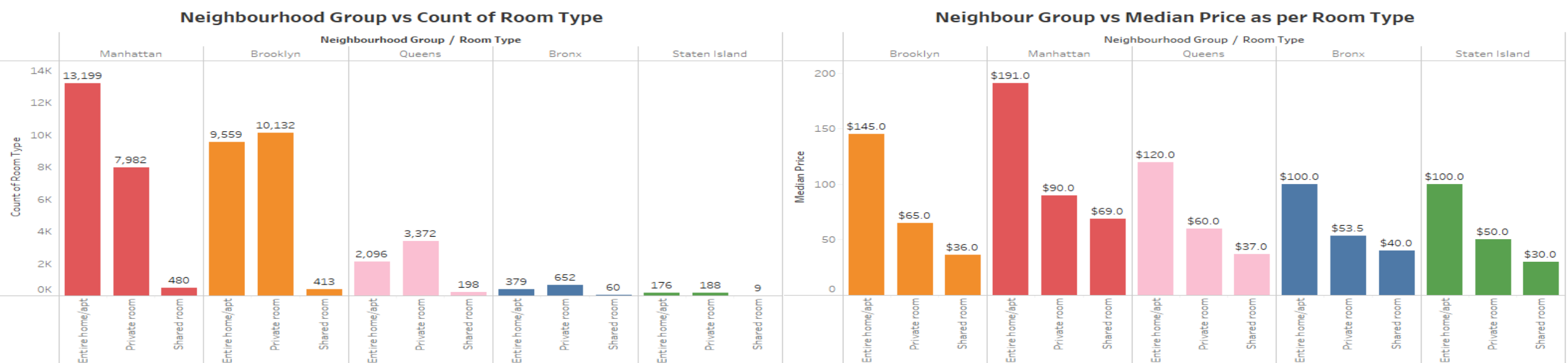
Recommendations

- Concentrate on increasing the listings in Staten Island and the Bronx where the listings are less

- Acquire more properties in Manhattan and Brooklyn as median prices are high in these boroughs

- Market the entire home/apt to customers as that can generate more revenue

Appendix – Data Sources

- We were provided with a New York Airbnbs Dataset
    - The data dictionary consists

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

Appendix – Data Methodology

- We have done an in-depth analysis of the data sets. The process included:
  - Cleaning the data by removing the null values of some columns with median values

  - Outliers were not dealt with as that did not affect our analysis (as during visualizations we have taken median where outliers were found)

  - The cleaning was conducted in Python and the visualisations were done in Tableau

Appendix – Assumptions

- There were certain gaps in the data due to data unavailability hence, we assumed:
  - That number of reviews shows the preference of the customers

  - Not all customers send reviews

  - Sum of Price is assumed to the revenue generated for the getting valuable insights

Justin Dias
Mandar Dhumal

Thank You