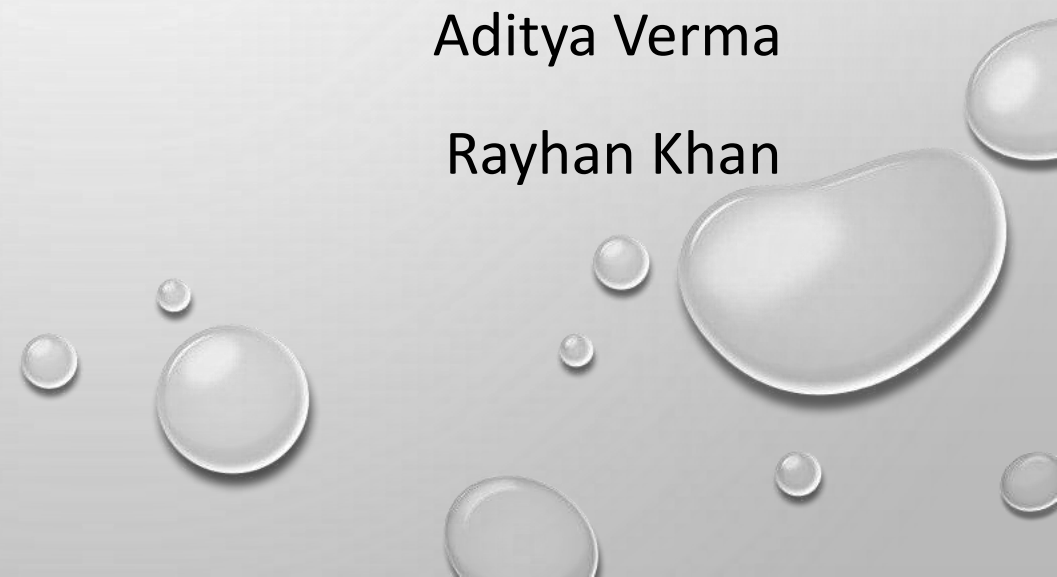# Analysis of Airbnb, NYC Listings

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AGENDA

- ➢ Objective
- ➢ Background
- ➢ Key Findings
- ➢ Recommendations
- ➢ Appendix:
  - ▪ Data Attributes
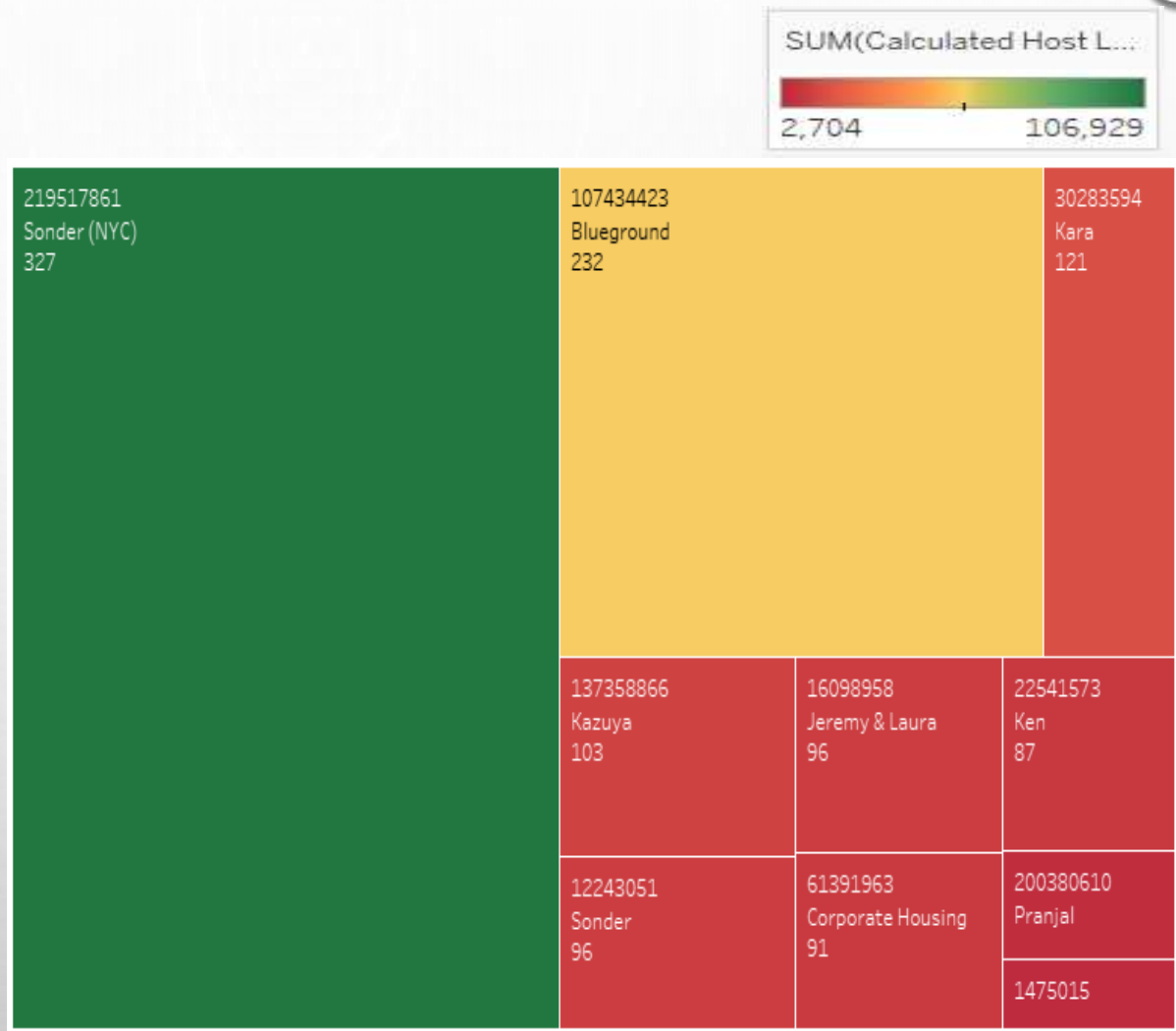 - ▪ Data Methodology
  - ▪ Data Assumptions

OBJECTIVE

➢ Improve Airbnb business after restrictions are lifted.

➢ Provide Insights based on different attributes to improve customer experience.

➢ Understanding Customer preferences and improve it to generate more revenue.

BACKGROUND

➤ Airbnb is an online platform using which people can rent their unused accommodations.
➤ During the Covid time, Airbnb incurred a huge loss in revenue.
➤ After lifting the restrictions, people now have started travelling again and Airbnb is aiming to bring up the business again and be ready to provide services to customers.

TOP 10 HOSTS

➤ Host Sonder (id 219517861), has been booked most number of times i.e. 327.

➤ Host Blue ground is the second popular host.

➤ Then there are other hosts like Kara, Ken, Pranjal, Jeremy and Mike that fall under top 10 hosts.

SUM(Calculated Host L...
2,704   106,929

219517861
Sonder (NYC)
327

107434423
Blueground
232

30283594
Kara
121

137358866
Kazuya
103

16098958
Jeremy & Laura
96

22541573
Ken
87

12243051
Sonder
96

61391963
Corporate Housing
91

200380610
Pranjal

1475015

Preferred Room Types

- There Are Three Types Of Rooms - Entire Home/Apartment, Private Room & Shared Room.

- Overall, Customers Appear To Prefer Private Rooms (45%) Or Entire Homes (52%) In Comparison To Shared Rooms (2.4%).

- Airbnb Can Concentrate On Promoting Shared Rooms With Discounts To Increase Bookings And Also Acquire More Private Listings.


Preferred Room Types

2.37%
Shared room

45.66%
Private room

51.97%
Entire home/apt
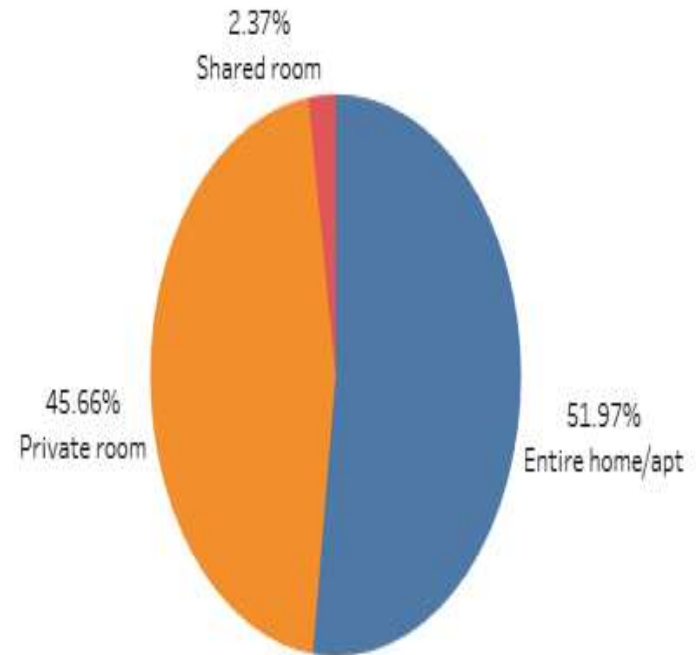
Average Price Of Neighbourhood Groups

➢ The Average Price Of Listed Properties In Manhattan is Around 196.9, Which Is Highest Among All Neighbourhoods.

➢ Average Price For Brooklyn Is Second Highest i.e., 124.4.

➢ Bronx Appears To Be An Affordable Neighbourhood As The Average Price Is Almost Half Than Manhattan's Average Price.

Average Price vs Neighbourhood groups

Staten Island 114.8

Bronx 87.5

Brooklyn 124.4

Queens 99.5
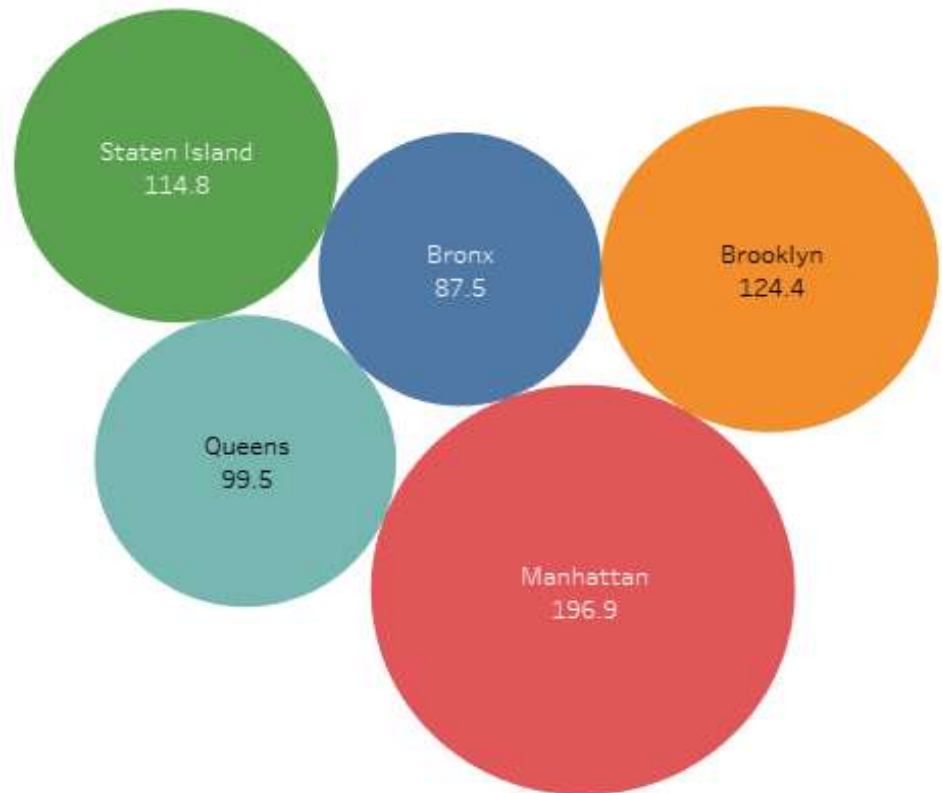
Manhattan 196.9

RECOMMENDATIONS

➢ Acquire private rooms and entire apartments, especially in Staten Islands since it is popular

➢ Reducing the prices of entire apartments in Manhattan by at least 15% and increasing the price of private rooms in Queens by at least 10%

➢ Listings most popular have minimum number of nights requirement from 1-5 days and 30 days which should be showcased the most ordering them by properties which are available for most number of days to least

APPENDIX: DATA ATTRIBUTES

➤ We have used AB_NYC_2019.csv data to perform analysis.

➤ Here is a snapshot of the data dictionary:

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

➢ Observed the number of rows and columns and performed Data Cleaning.

➢ Removed Unnecessary columns and identified the outliers and binned Continuous Columns.

➢ Performed Visualizations in one of the visualization tool Tableau and observed the insights.

Find detailed methodology document below:

Methodology Document.pdf

APPENDIX : DATA ASSUMPTIONS

➢ Observed missing values in two columns last_review and reviews_per_month because there are no reviews given by customers for that particular listing.

➢ Used Reviews per Listing as the popularity measure to gain information on customer preferences

➢ Null values assumed to have no material impact on analysis

THANK YOU