

Insights from Airbnb Analysis from Pre-COVID Period

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AGENDA

- Objective
- Background
- Key Findings
- Recommendations
- Appendix:
 - Data sources
 - Data methodology
 - Data model assumptions

OBJECTIVE

- Improve our strategies to revive the business in the post-COVID period.
- Understand key insights from Airbnb NYC business in pre-COVID period.
- Estimate customer preferences for the post-COVID period travel.

BACKGROUND

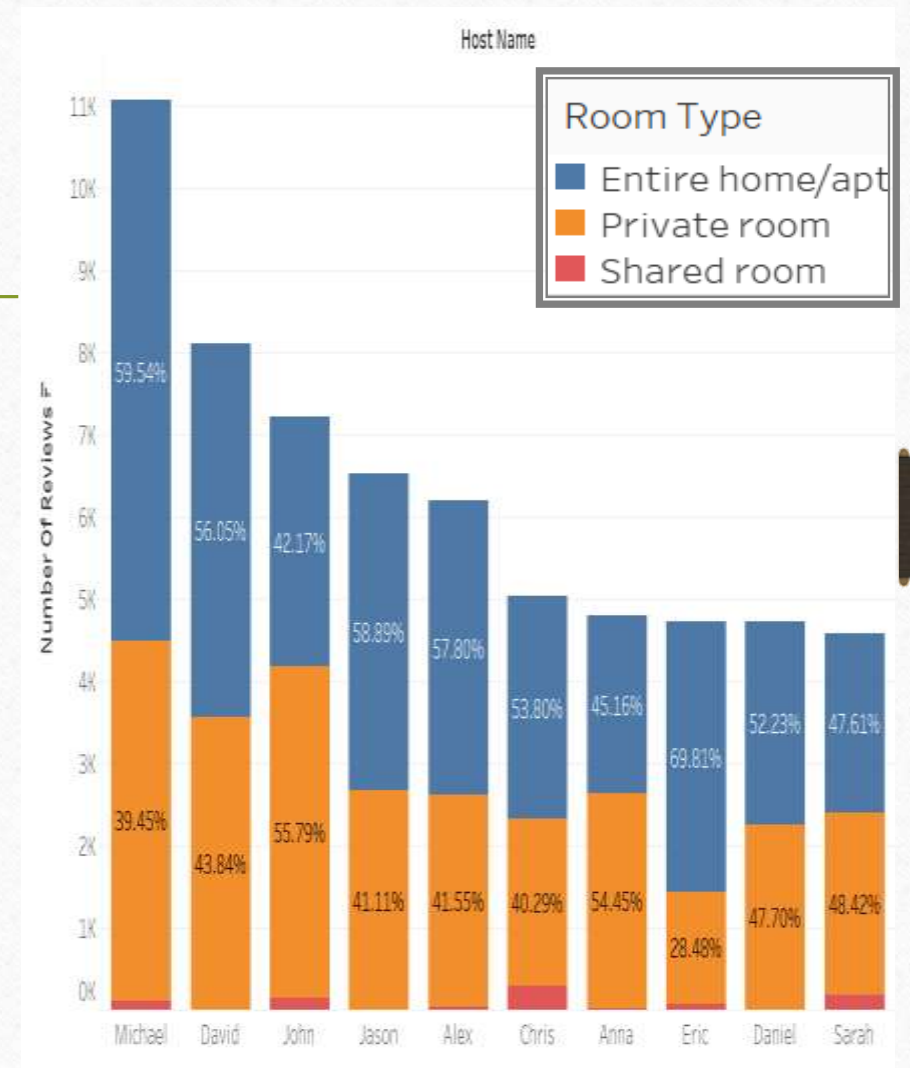
- The COVID-19 pandemic affected Airbnb business due to travel restrictions.
- The revenue took the **largest hit** in NYC in the **Q2 of 2020**.
- Now that the travel restrictions are lifted, the business should be operated to recover the loss.

Objective of the Analysis of the Airbnb NYC Data

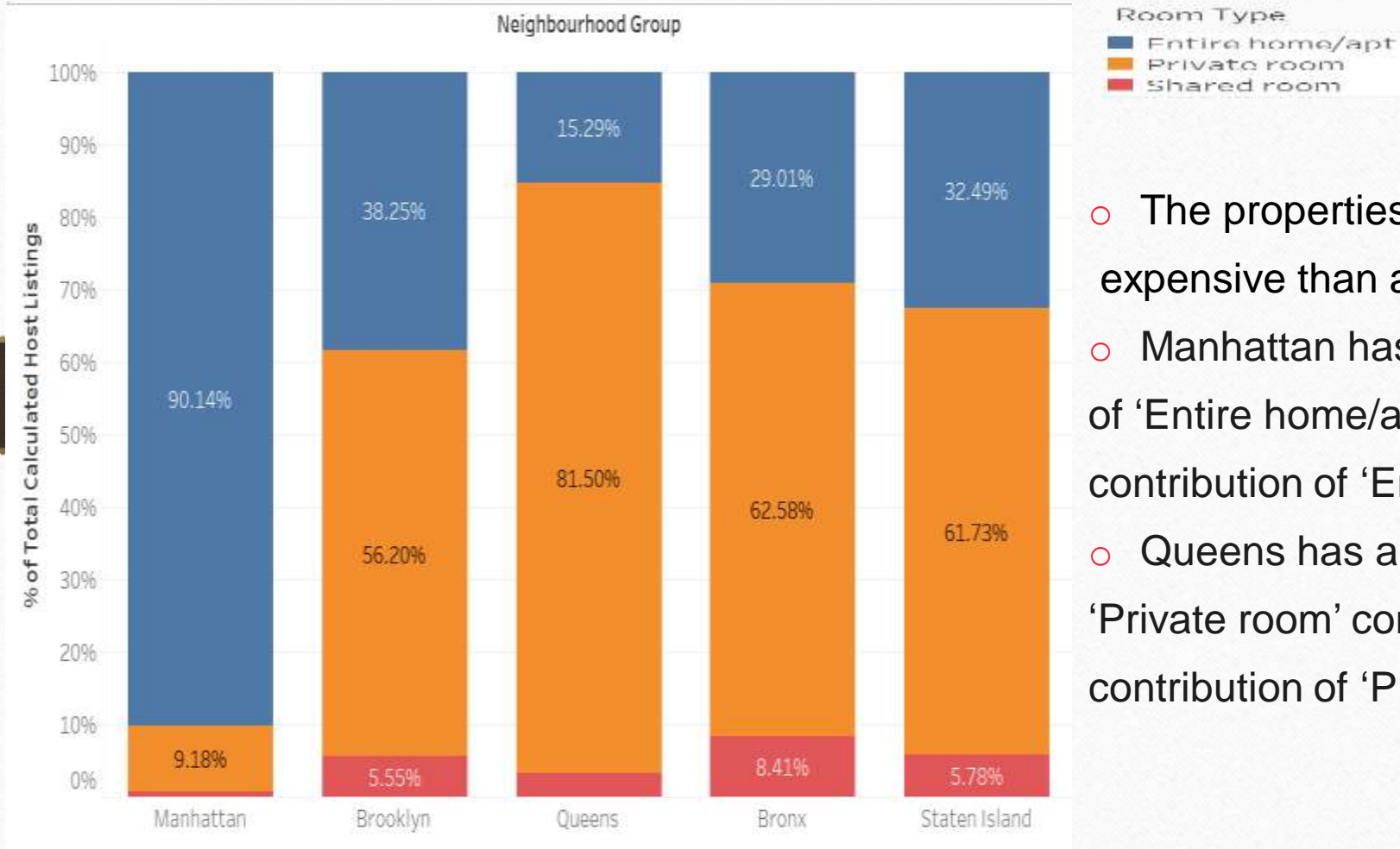
- Customer preferences and ratings with average price of different hosts of Airbnb in were analyzed.
- The data was analyzed to derive key insights from the Pre-COVID period.
- The insights will be used to take decisions for the NYC Airbnb business for travel in post-COVID period.

Top 10 Hosts by Reviews

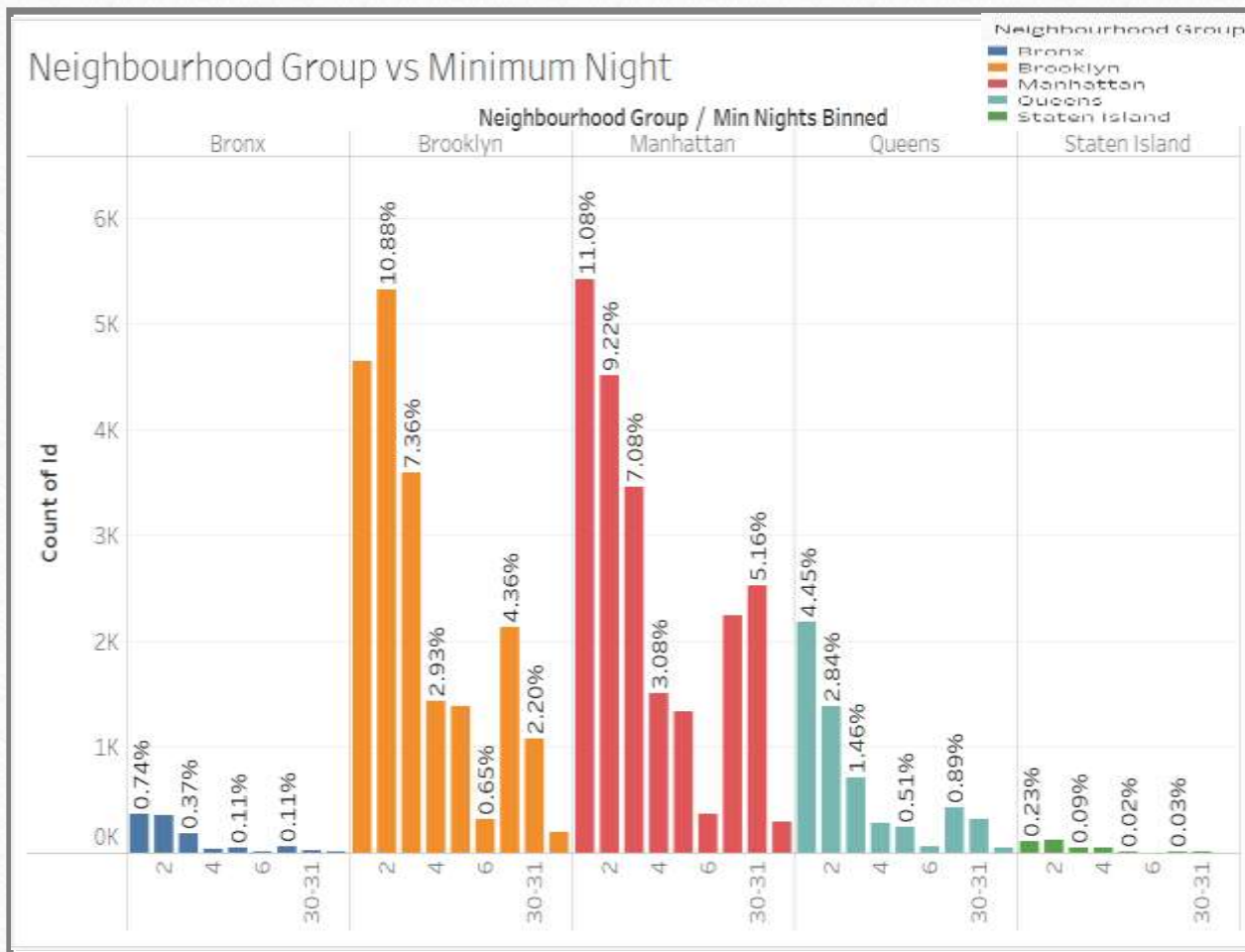
- Shared rooms accounts the least number of reviews of the total listed properties
- More than 50% of the hosts prefer renting out the entire home/apartment
- Private room & Entire home/apartment seems to be popular(more than 90% reviews)



Customer Preferences of Properties in NYC Areas



- The properties in Manhattan are the most expensive than any other area.
- Manhattan has the highest contribution of 'Entire home/apt' compared to the overall contribution of 'Entire home/apt'.
- Queens has a higher contribution of 'Private room' compared to the overall contribution of 'Private room'.



Preferences of Neighbourhood Group w.r.t Minimum Nights

- 20% of the bookings are made either in Manhattan or Brooklyn.
- As Manhattan & Brooklyn are expensive areas, majority of the people prefer staying below 3 nights
- Staten Island is still a developing place while Bronx is the poorest borough, only 10% of the people prefer renting out.


RECOMMENDATIONS

- Airbnb can list its hosts in 2 categories: Super Hosts & Regular Hosts
- Hosts with more than 80% reviews & providing minimum 10 stays in a year can be considered as Super Hosts
- Rest can be considered as Regular Hosts

APPENDIX - DATA SOURCES

- Here is a snapshot of our data dictionary.
 - Host details such as Id, name, host name & host id
 - Property Listings information such as latitude, longitude, price, room type.
- The team used the following data sources:
 - Data provided by Upgrad Team
 - Airbnb listings data from NYC
 - Survey conducted in 2019

APPENDIX - DATA METHODOLOGY

- ❖ We conducted a thorough analysis of the Airbnb dataset. The process included
 - Cleaning the dataset by treating the missing values. Refer  Methodology Document 1
 - Creating new calculated fields 'Min Nights Binned' & 'No. of Reviews Per Listing' in Tableau.
 - 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.