



Reviving Airbnb NYC business in Post-COVID situation

Agenda

- Objective
- Background
- Key findings
- Recommendations
- Appendix:
 - Data sources
 - Data methodology



Objective

- Improve our strategies to attract more customers in Post-COVID situation
- Improve our understanding of the business model in Pre-COVID situation
- Provided suggestion to improve services as per customer preferences

Data preparation and cleaning

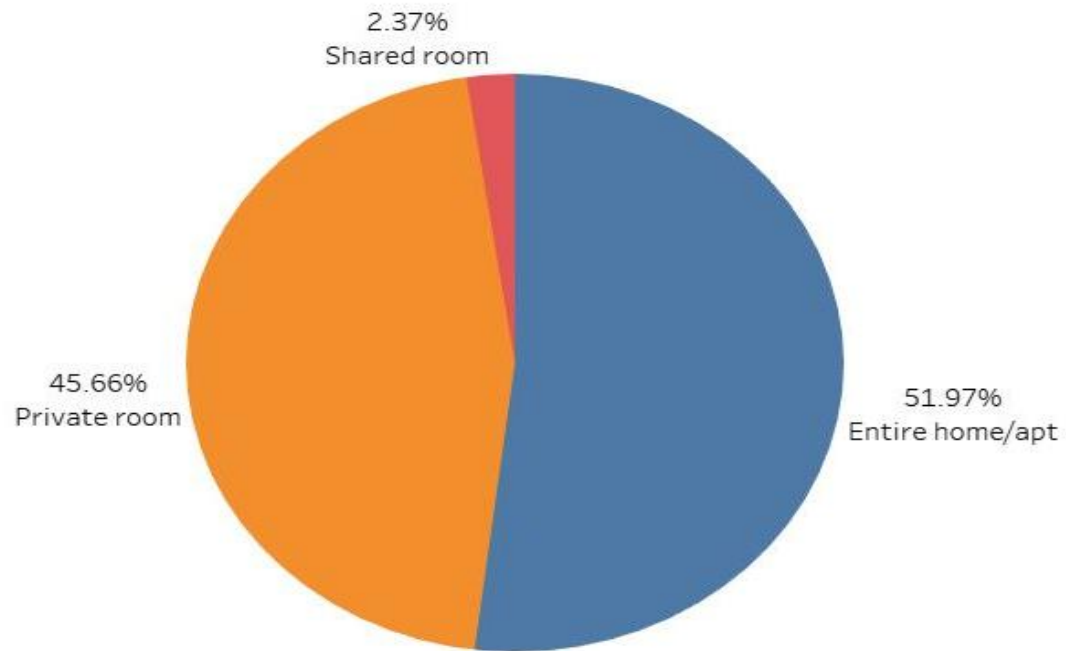
- Data was cleaned for missing values and outliers
- Visualized relation between different parameters using EDA
- Used plotly and tableau to visualize key relationships and develop insights.



Background

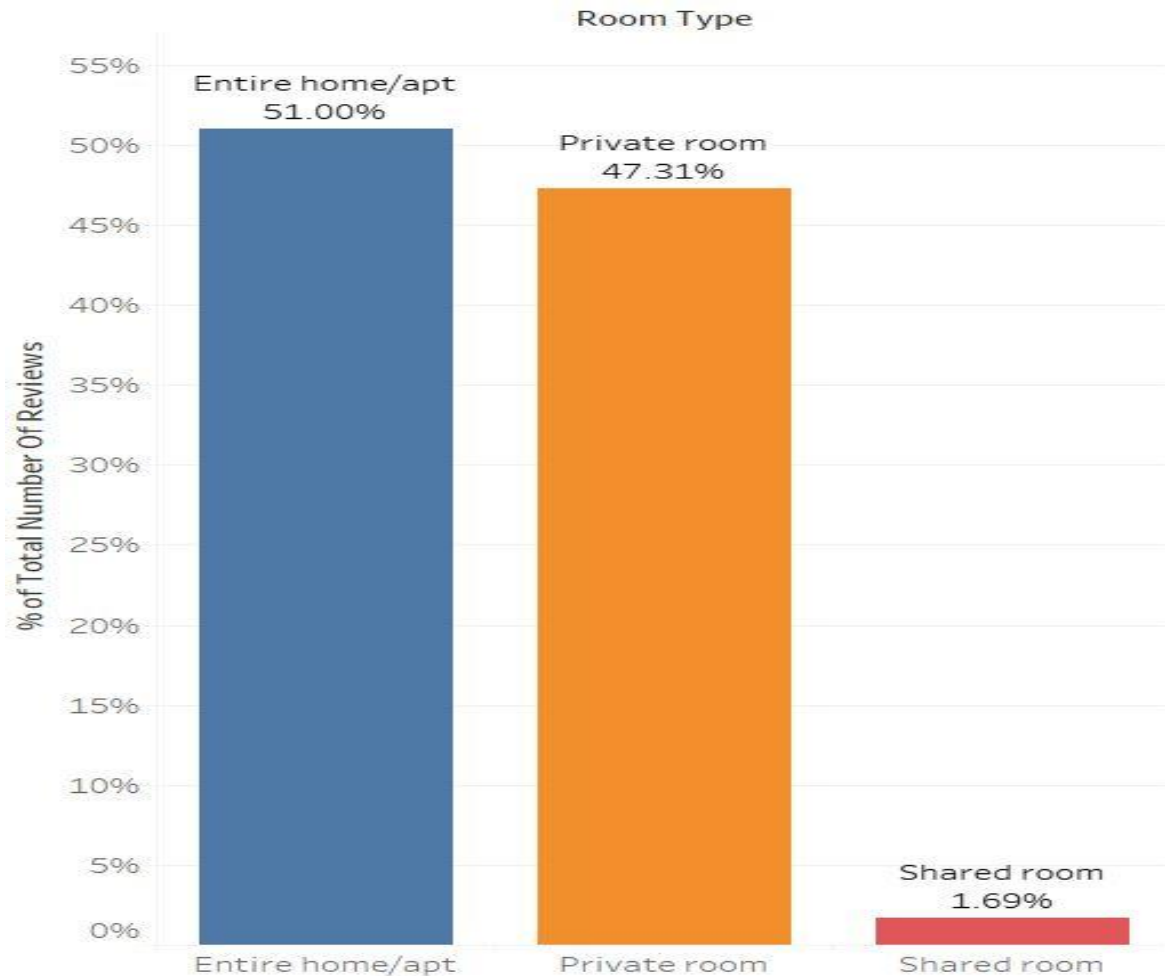
- Due to COVID-19 global pandemic all governments imposed travel restrictions which affects Airbnb business severely.
- The revenue took the largest hit in NYC in 2020
- Now that most of the travel restrictions are lifted Airbnb should run effectively to recover the losses

Type of property preferred by customer



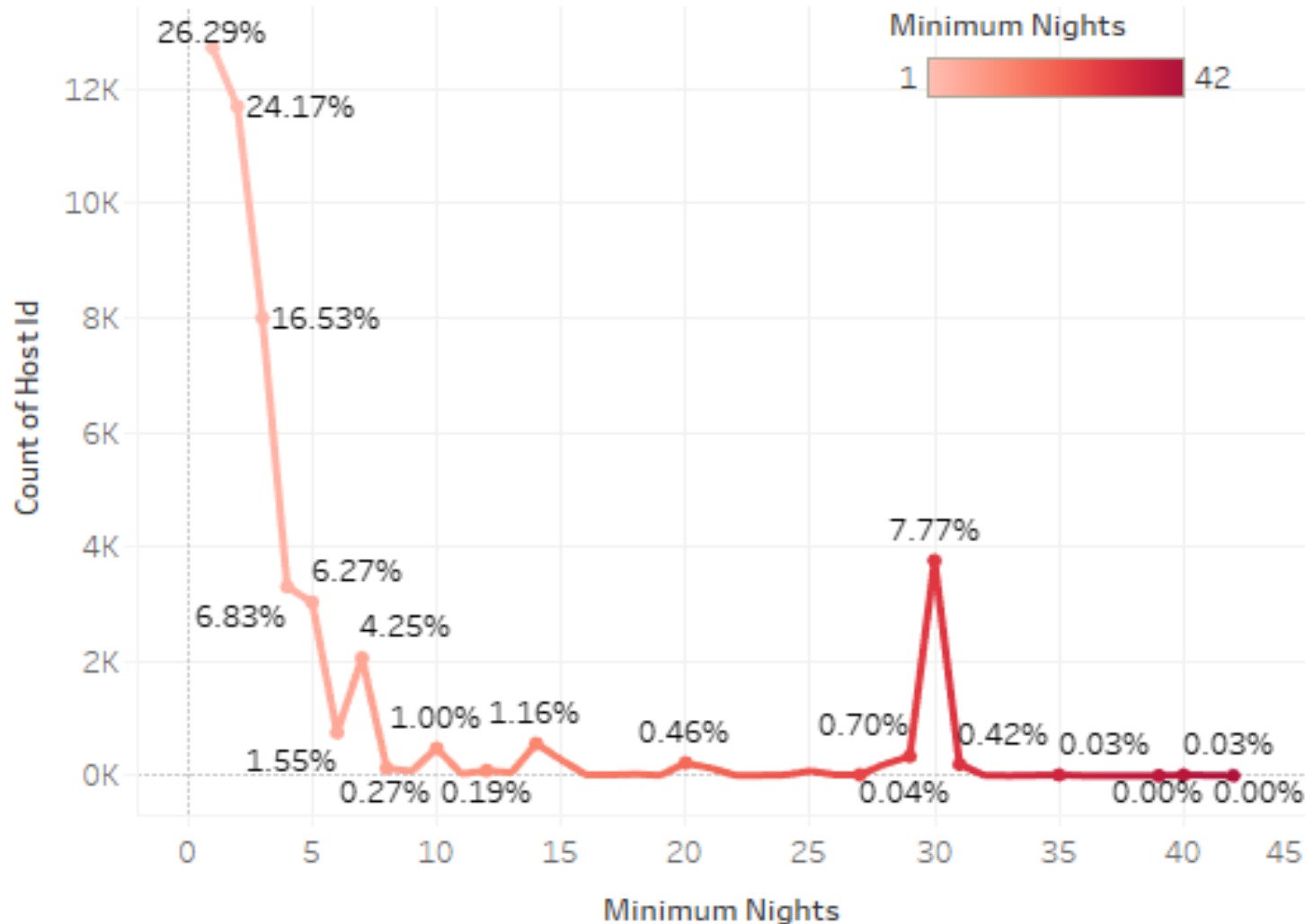
- The room type Entire home/apt is most preferred among the customers
- Entire home/apt and private room together makes more than 97% total property listing
- The contribution of shared room is around 2% only.

Popular places and room type



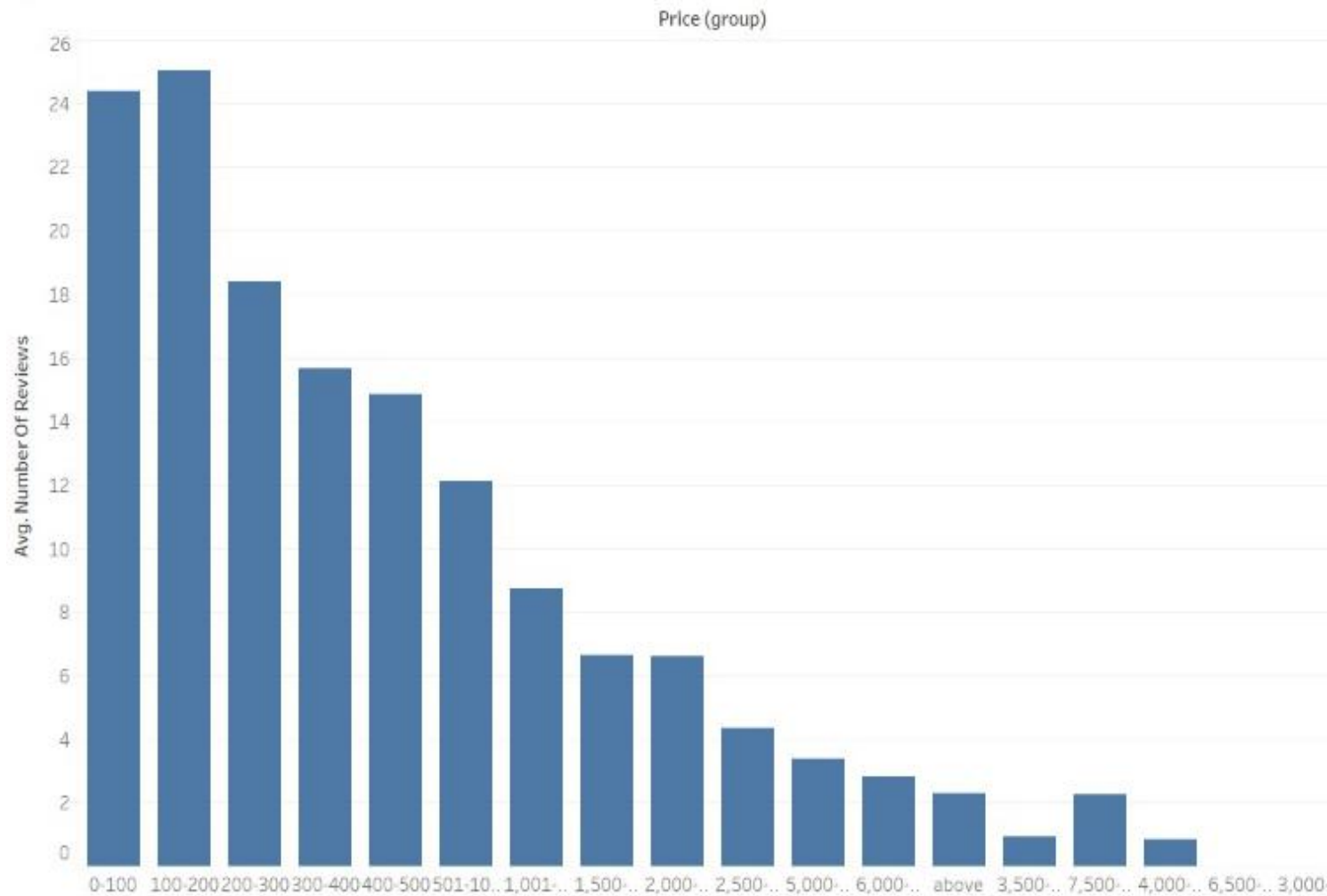
- Manhattan and Brooklyn are the most visited places in NYC
- Customers prefer Entire home/apt in Manhattan whereas in Brooklyn customers prefer shared rooms more.
- Around 50% of people prefer to rent cheap property which is around 0-100 dollars.

Customer Preference for minimum nights of stay



- More than 26% of people rent properties for less than a week and listing cross over 12k.
- Spike again come for 30 minimum nights. More than 7% people rent properties for a month.

Customer Reviews with price range



- Properties with low price range have high number of reviews, and it decreases as price increases.

Recommendation

- Increase number of Entire home/apt in Manhattan and Brooklyn.
- Increase the property listing in the price range 0-200 dollars.
- Properties with minimum night of stay from 0 to 5 and 30 should be increased
- Premium Properties in Bronx should be targeted.
- Non-Premium properties in Manhattan and Brooklyn should be targeted.

Appendix – Data sources

- Here is a snapshot of our data dictionary.
 - Property information such as property ID, name, minimum nights, price, ratings and location
 - Customer information as host ID
- We used the following data sources:
 - Past booking data till 2019



Appendix – Data methodology

- We conducted a thorough analysis of Airbnb NYC dataset. The process included:
 - Cleaning the data set using python
 - Visualize data using EDA
 - Used box plots to remove outliers
 - Used heatmaps to visualize correlation between the variables.