

Airbnb NY Case Study

Impact of Customer Preferences on Home Rentals

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Agenda

1. Objective
2. Background
3. Key Findings
4. Recommendations
5. Appendix:
 - a. Data Attributes
 - b. Data Methodology
 - c. Data Assumptions

Objective:

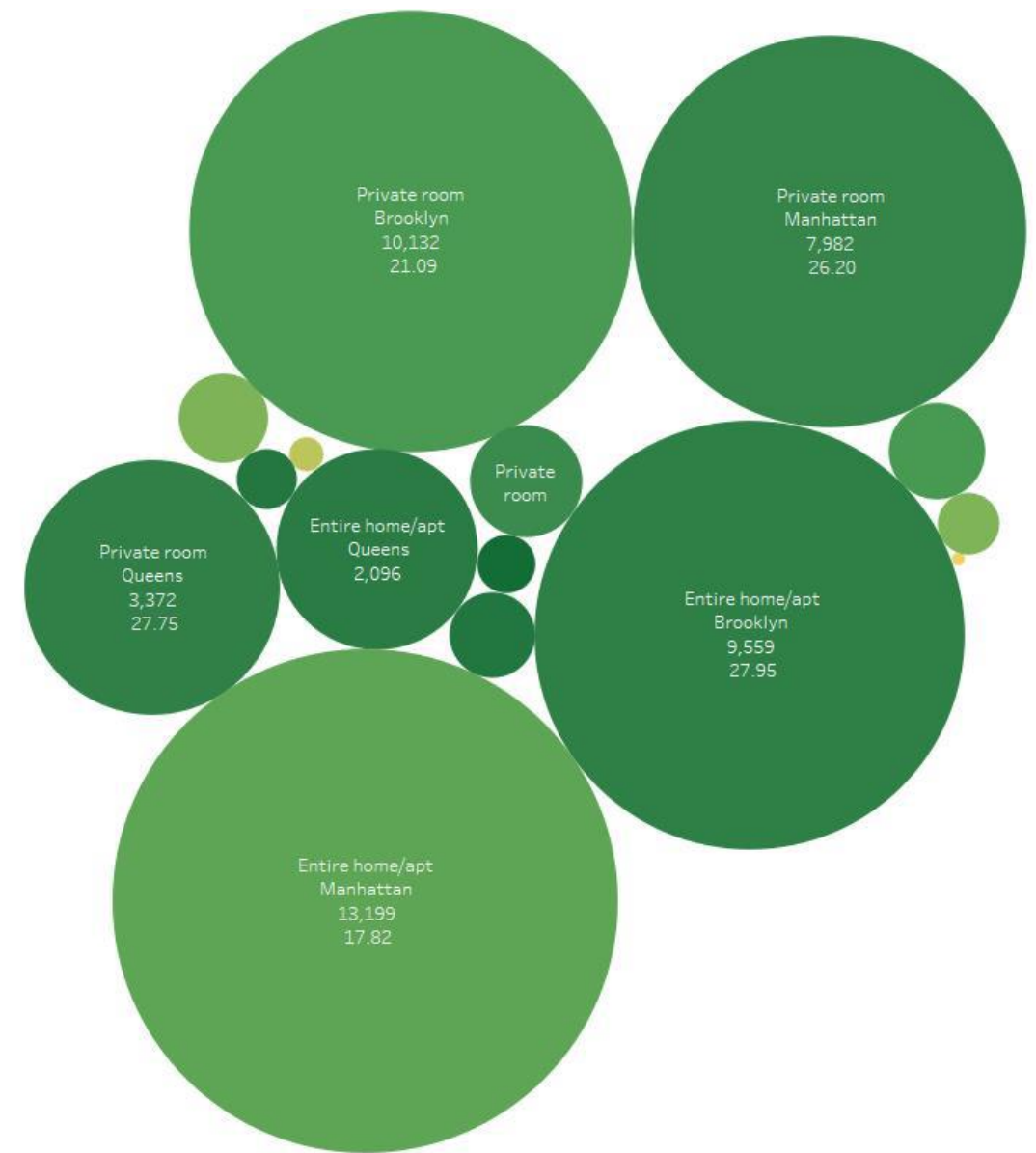
1. Improve our shared understanding about the market conditions
2. Improve shared understanding about our customers
3. Provide recommendation to various departments to be prepared for the changes post pandemic

Background:

1. Major decline in revenues due to pandemic in the last few months
2. Restriction are lifting
3. People are travelling more

Neighbourhood Wise Business Distribution

1. Private rooms are the most popular throughout New York >25 reviews per listing
2. Entire home/apt in Manhattan has reviews per listing 35% less than the average of 27.7
3. Except Manhattan, all areas performed poorly in shared rooms with an average of 7.3 reviews per listing

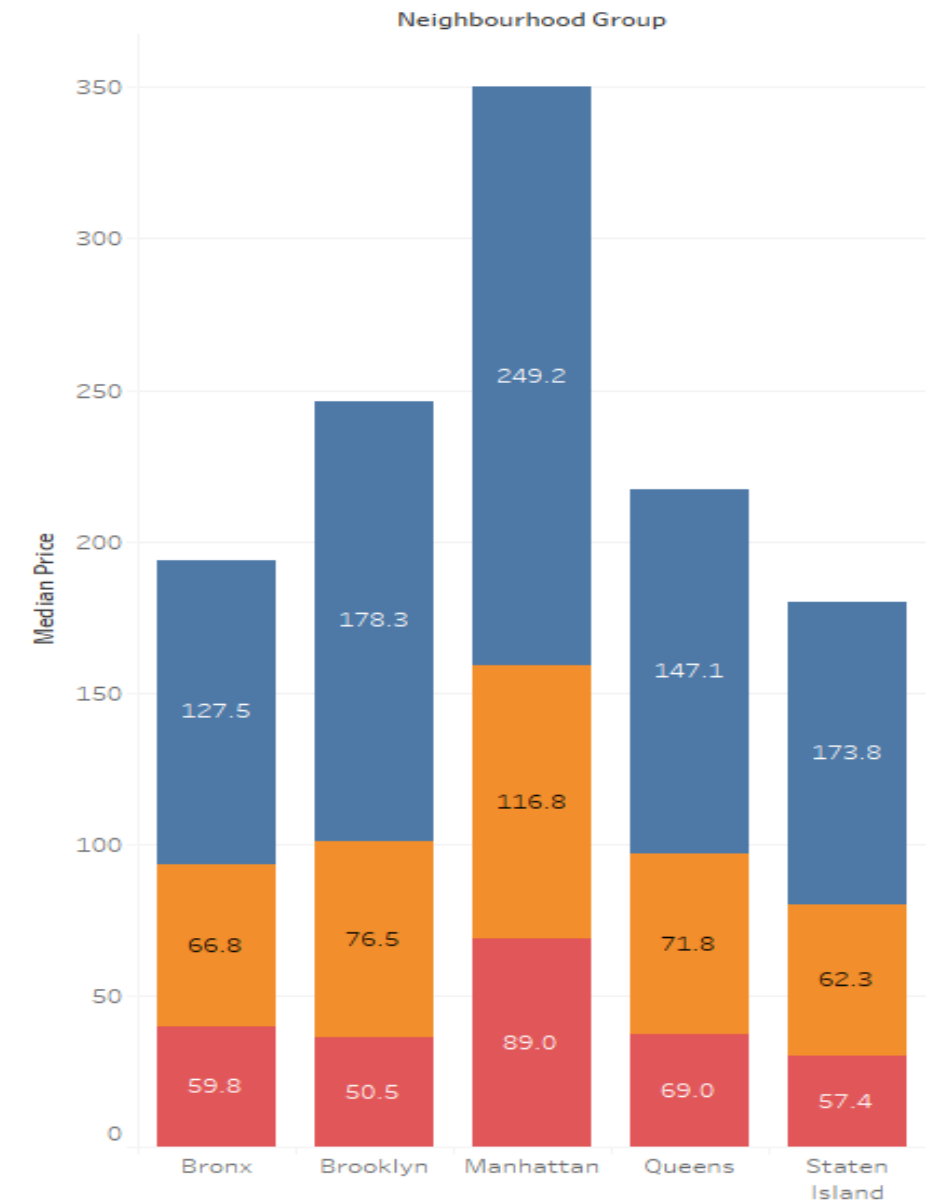


Room Type, Neighbourhood Group, count of Calculated Host Listings Count and No. of Reviews per Listing. Color shows No. of Reviews per Listing. Size shows count of Calculated Host Listings Count. The marks are labeled by Room Type, Neighbourhood Group, count of Calculated Host Listings Count and No. of Reviews per Listing.



Pricing in Preferred Locations

- Entire home/apartments price is ~100% more than private rooms except Brooklyn and Staten Island with ~150%
- Private room's price is ~10% more than shared rooms except Brooklyn and Manhattan with ~40%
- Manhattan is costliest overall and the cheapest are:
 - Entire apt: Bronx
 - Private room: Staten Islands
 - Shared room: Brooklyn



Median of Price for each Neighbourhood Group. Color shows details about Room Type. The marks are labeled by average of Price.

Room Type

- Entire home/apt
- Private room
- Shared room

Recommendations

- 1. Acquire private rooms and entire apartments, especially in Staten Islands since it is popular
- 2. 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%
- 3. 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

Snapshot of the data:

- Host listing information like host name, neighbourhood, latitude and longitude.
- Customer preference information like number of reviews and number of reviews per month

Appendix: Data Methodology

- Used Tableau to visualize correctly to get insights
- Since outliers existed in price field, used median of price instead of mean for analysis purposes
- Please refer methodology document for details ([Methodology Document.pdf](#))

Appendix: Data Assumptions

- Used Reviews per Listing as the popularity measure to gain information on customer preferences
- Number of reviews assumed to be a base measure to find customer preferences
- Null values assumed to have no material impact on analysis

Thank You