Presentation 2

Insights into Property Performance and Customer behavior Airbnb Case Study

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Agenda

- Objective

- Background

- Key Findings

- Recommendations

- Appendix
  - Data Understanding
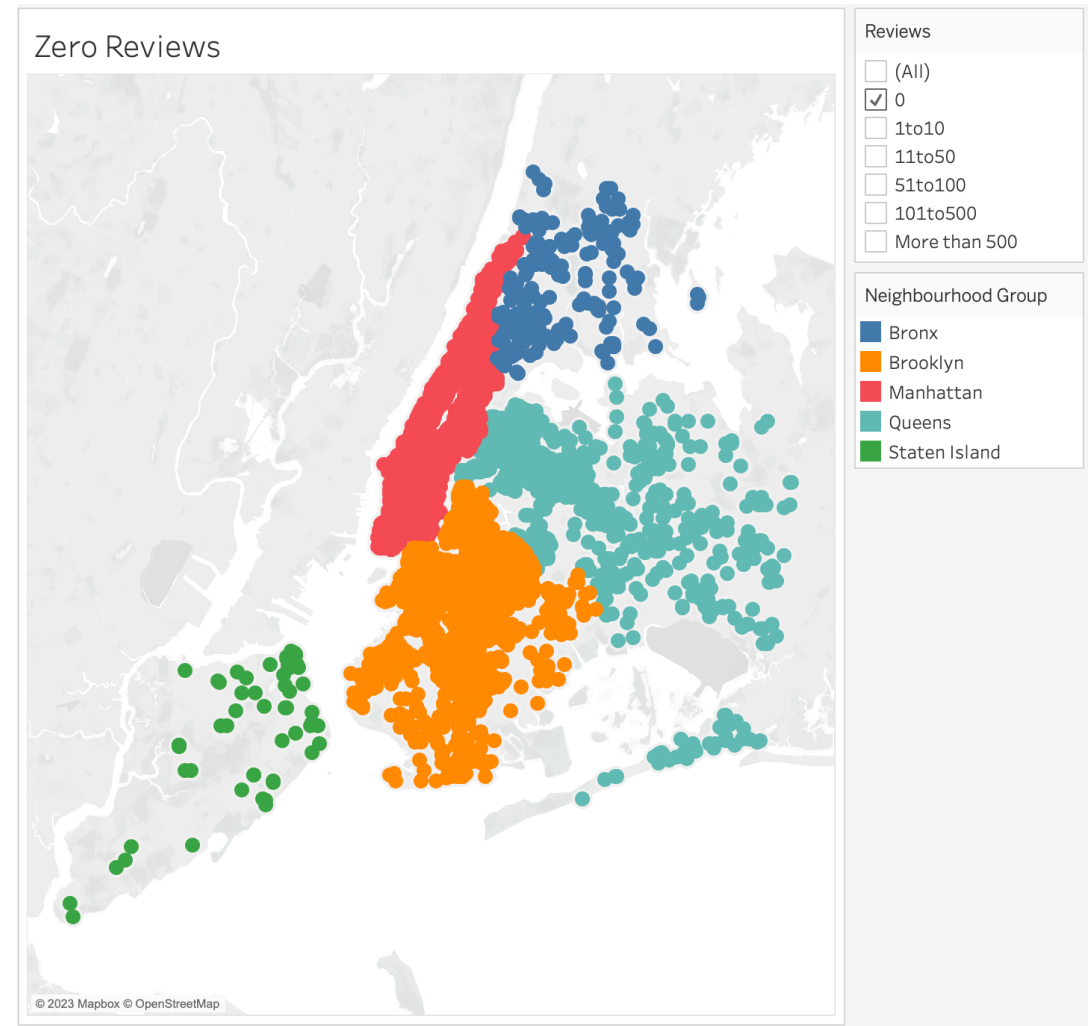 - Data Methodology
  - Data assumptions

Objective

- Understand the performance of Properties based on various attributes.

- Understand Customer behavior and preferences for better Property Location and Segmentation

- Provide recommendations based on the insights to improve the performance of Properties and acquisition of new Properties

Background

- 2019 was a very good year. If growth follows trend the growth Post-Covid can be even better.

- More than 20% of the properties have shown 0 Reviews. Nearly 60% have Less than 10 Reviews.

- Property Distribution is asymmetric. 85% of the properties Concentrated in Manhattan and Brooklyn. They also have the highest concentration of Low performing properties.

Zero Reviews

Reviews
- (All)
- ☑ 0
- 1to10
- 11to50
- 51to100
- 101to500
- More than 500

Neighbourhood Group
- Bronx
- Brooklyn
- Manhattan
- Queens
- Staten Island

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Maximum 7% of Hosts Get More than 100 Reviews

- Manhattan and Brooklyn have the highest number of hosts who have Multiple Listings.

- High Minimum Number of Days negatively affect the reviews.

- Availability all year round also positively affects the reviews.

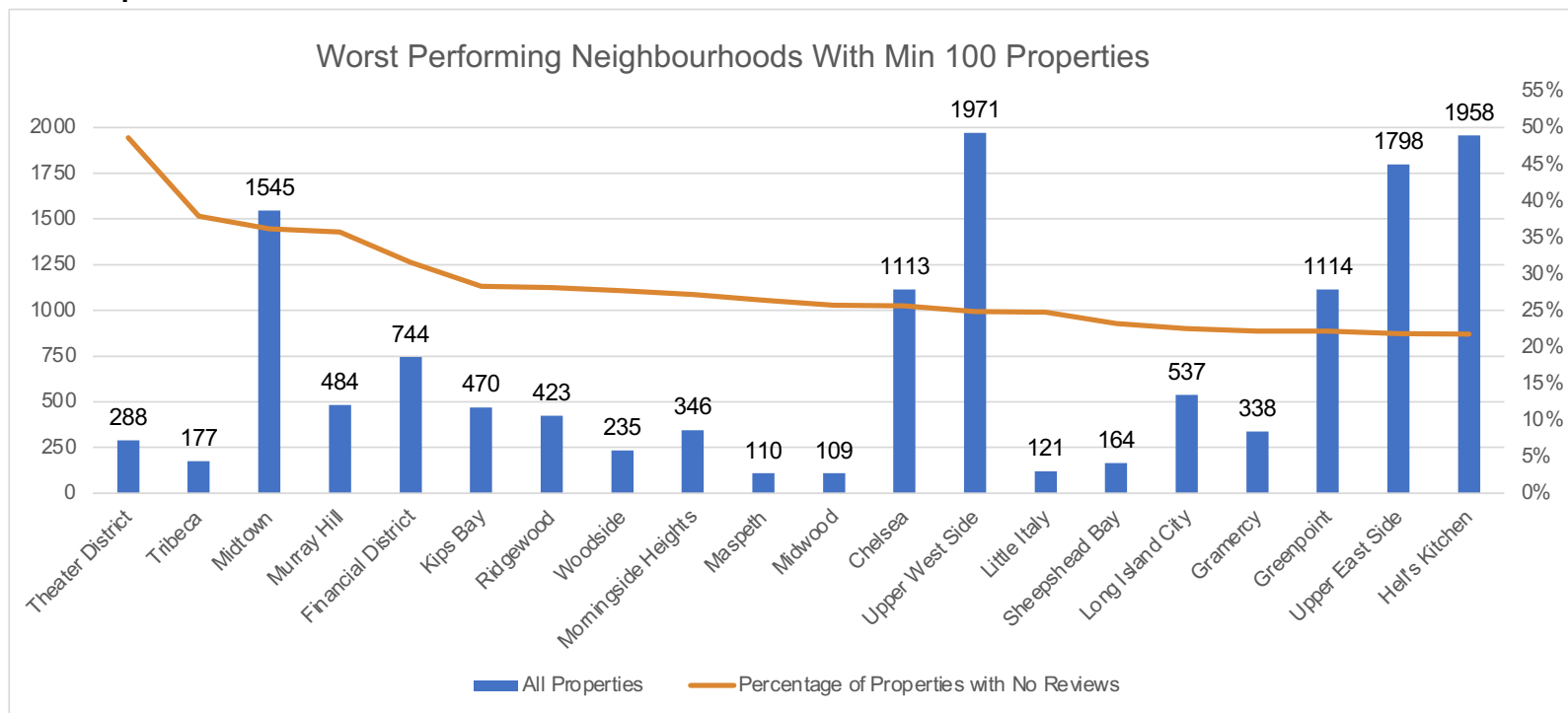Percentage of Good Performing Hosts Neighbourhood wise
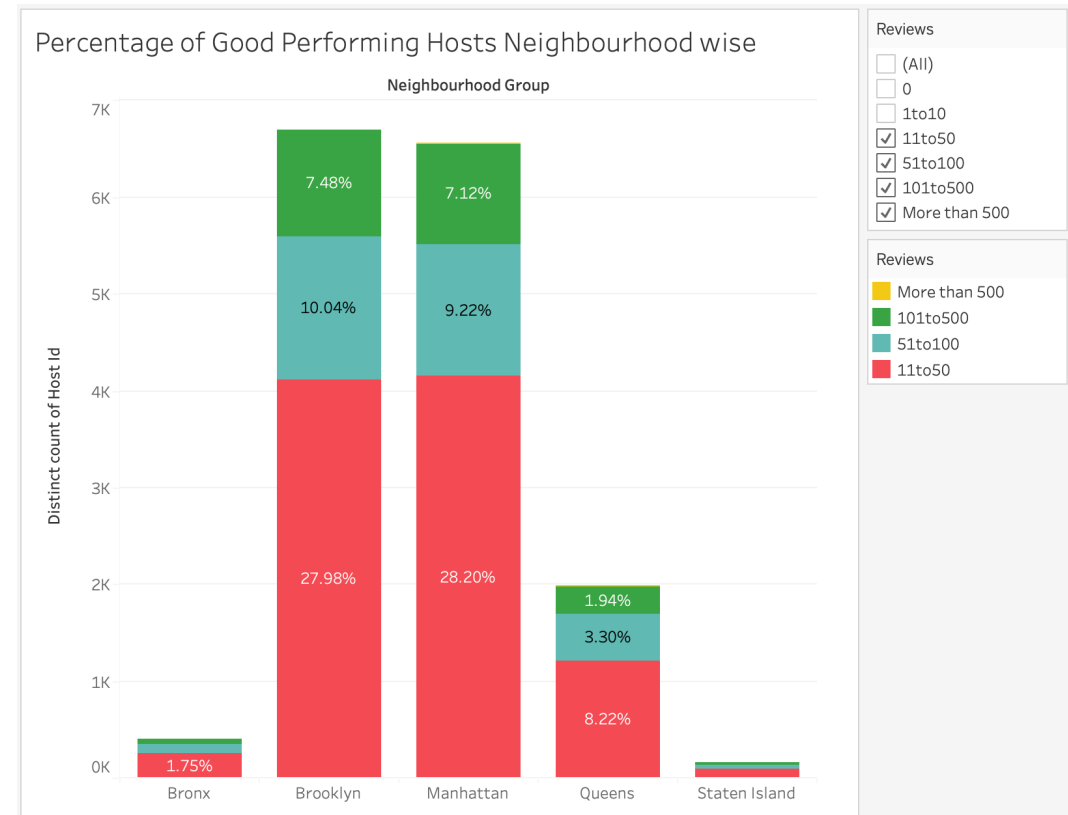
Change Room type segmentation

- Manhattan has nearly 60% Entire Homes Listed with only 1.15 Median Value of Reviews Per Month.

- Private and Shared have higher Median Reviews Per Month but Lower Number of Properties.

- Bronx and Queens requires more Entire Home/Apt and Staten Island Requires More Shared

Manhattan Percentage of Room Type with Median Price and Median Reviews Per Month for 2019
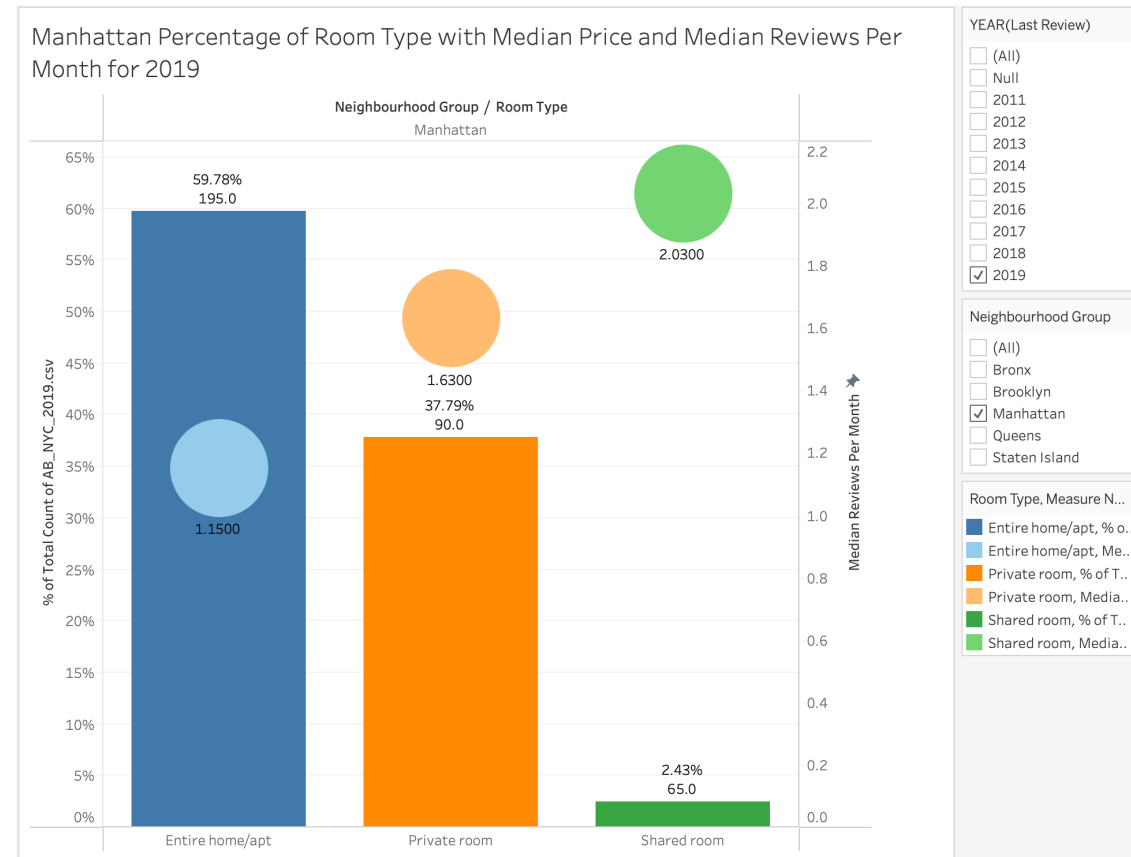
Neighborhoods with upto 49% Properties with 0 Reviews

- Neighborhoods like Theater District, Tribeca, Midtown, Murray Hill have Upwards of 35% Properties which have never been reviewed.

Worst Performing Neighbourhoods With Min 100 Properties

Legend: All Properties (blue bars), Percentage of Properties with No Reviews (orange line)

2019 Performance also presents Opportunities

- 5 Neighborhoods in Queens

- 2 Neighborhoods in Staten Island

- 5 Neighborhoods in Bronx

- 2 Neighborhoods in Manhattan

ALL SHOW OPPORTUNITIES WITH LESS NUMBER OF PROPERTIES AND HIGH MEDIAN REVIEWS PER MONTH.

2019 Most Popular Neighbourhoods (Min 25 Properties and 2 Reviews per Month)
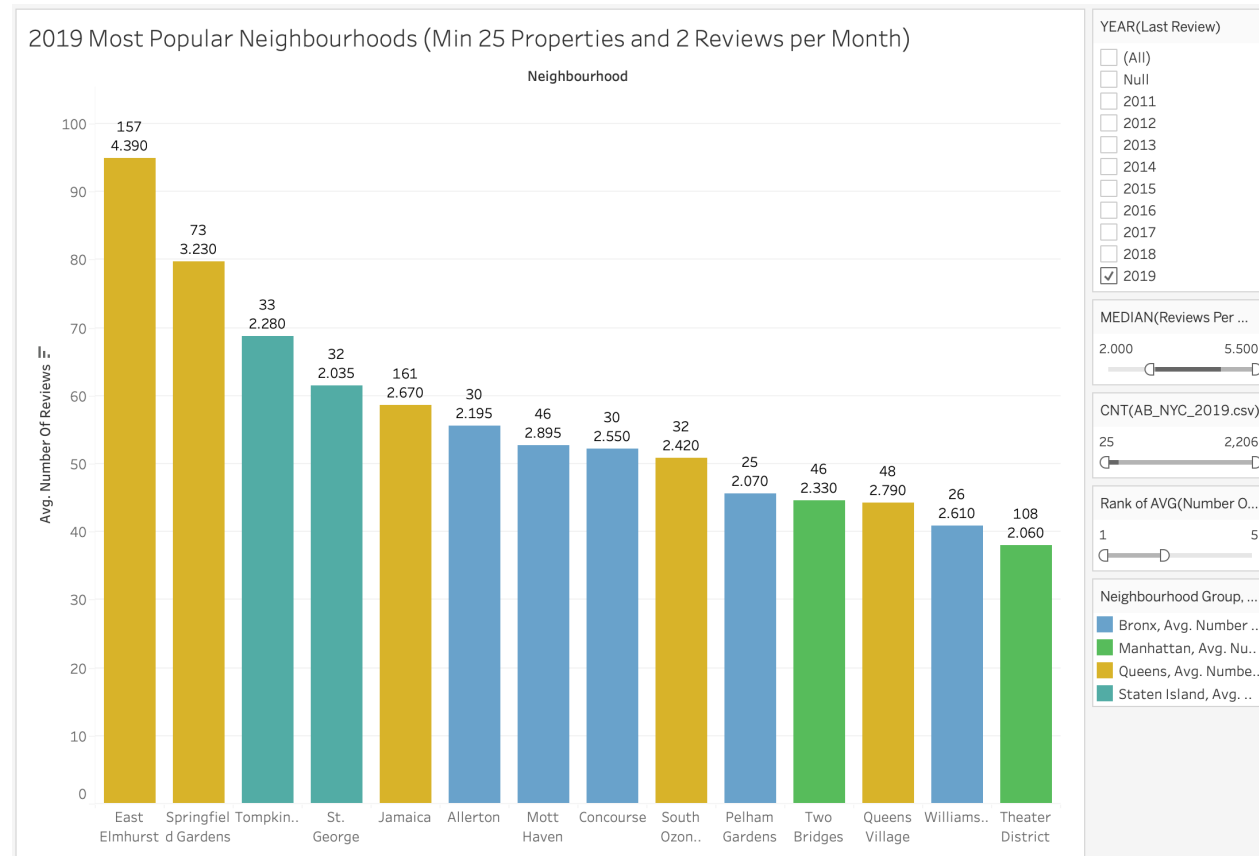
Price Range of Upto USD 250 Per Night Most Comfortable.

- Entire Home/Apt perform best below USD 50/Night.

- Private Room perform best in USD 50-250/Night Range.

- Shared Rooms Perform Best in USD 50-100 Range and not below USD 50.

- **Even Manhattan with the Highest Median Pricing follows similar trend.**

Average Number of Reviews With Price Band and Room Type

	Price Range				
Room Type	50 to 100	100 to 250	250 to 500	Greater than 500	Less than 50
Entire home/apt	44.59	40.03	30.95	23.63	48.76
Private room	44.26	46.05	21.22	15.16	35.68
Shared room	30.52	21.67	21.00	12.00	27.75

Recommendation

- 2019 Growth Suggests that we may expect very good Post Covid Growth. It is expected to have double positive impact as we were seeing very good year on year growth and with the removal of Covid Restrictions should also give a surge.

- Re-Segmentation of Room Types form Entire House to Private Room can help get non-performing Properties improve. Competitive pricing will also help as data suggest upto USD 250/Night is a sweet spot.

- Distribution of Properties is heavily skewed towards Manhattan and Brooklyn with nearly 85% Properties concentrated there which may be affecting the performance of Properties. This also leaves several neighborhoods under serviced which can generate more demand.

Appendix – Data Understanding

- Dataset Comprises of Nearly 49,000 Entries and Property ID is Unique.

- There are only 39,000 Hosts, so one host has multiple properties.

- There are 5 Neighborhood Groups and 221 Neighbourhoods.

- There are 3 Room Types and Reviews are dated from 2011 to 2019.

- Prices with Value Zero have been dropped from analysis. As a Property having a price Zero cannot be considered in analysis.

Appendix - Data Methodology

- Analysis done keeping in mind that a neighborhood with high concentration of properties is not a good candidate for new properties.

- Places where the property concentration is low and Median Monthly Reviews are high are supposed to be good areas for growth.

- Areas with very few properties may have good reviews or frequency because of the individual property, so kept cut off as 25 properties.

- For Re-segmentation of Room types considered the neighborhood group and the percentage of different property types with their Median Review Per Month. High Percentage of Room type with lower frequency suggests High Supply to Demand Ratio.

- Kept analysis of neighborhoods and groups to 2019 to capture more recent trends and because 2019 was the best performing year.

Appendix – Data Assumptions

- No Last Review Means Property where no one has ever stayed.

- Total Number of Reviews taken as a Measure of Popularity.

- Reviews Per Month taken as a Measure of Frequency.

- Prices Upto USD 10,000/Night Considered as Correct data.

- Zero Price Dropped as irrelevant data.

- Availability of 0 in a Year Considered as Null Data.