



Presentation 1

Insights into Customer and Host behavior Airbnb Case Study

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Agenda

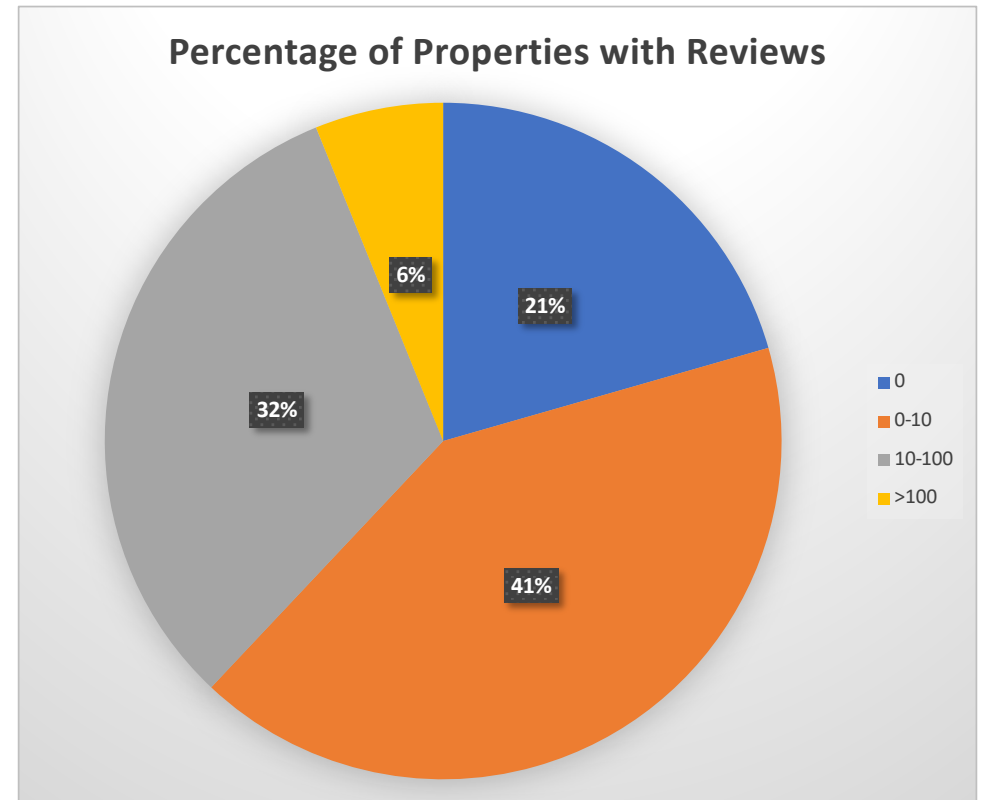
- Objective
- Background
- Key Findings
- Recommendations
- Appendix
 - Data Understanding
 - Data Methodology
 - Data assumptions

Objective

- Understand Host and Property Performance based on various attributes.
- Understand Customer behavior and preferences for better Property selection
- Provide recommendations based on the insights to be better prepared for future Post Covid increase in Customer Activity

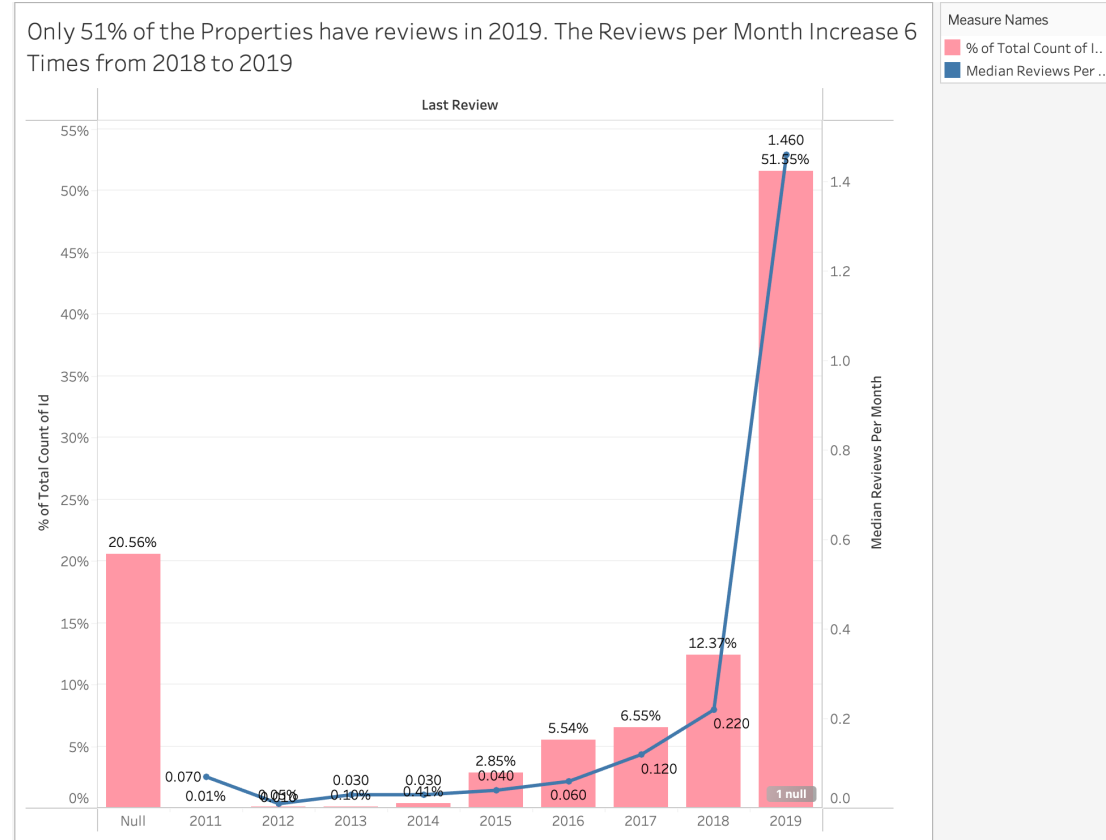
Background

- Customer activity saw more than 400% growth in 2019 over 2018. Previous years saw 200% growth at most.
- 20% of the Properties have not seen any Customers (0 Reviews). Just over 60% have seen 10 Reviews or Less.
- 98% of the Properties have a Price below USD 500/Night.



2019 was the best Year

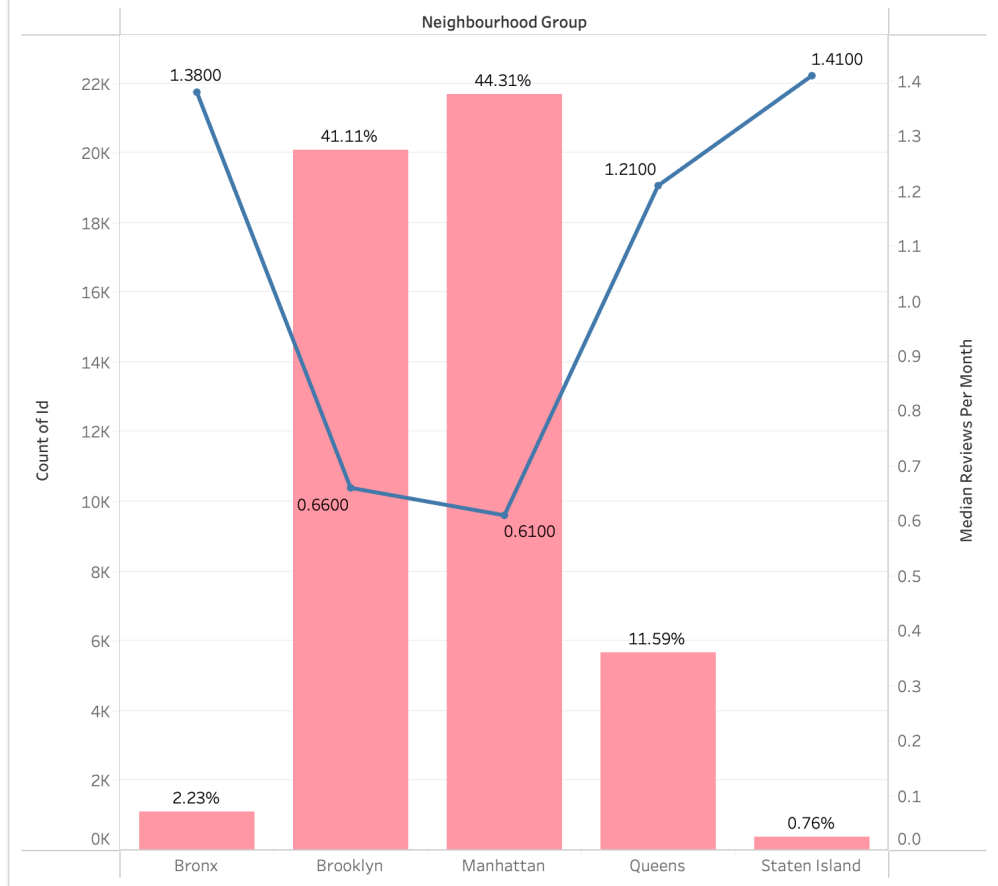
- Manhattan and Brooklyn account for 85% of all properties.
- Manhattan is the costliest with the median price per night nearly 66% higher than Brooklyn which is the second costliest.
- Manhattan is big on Entire Home/Apt (52% of All Available) and Brooklyn is big on Private Room (45% of All Available)



Scope of Growth in Bronx, Queens and Staten Islands

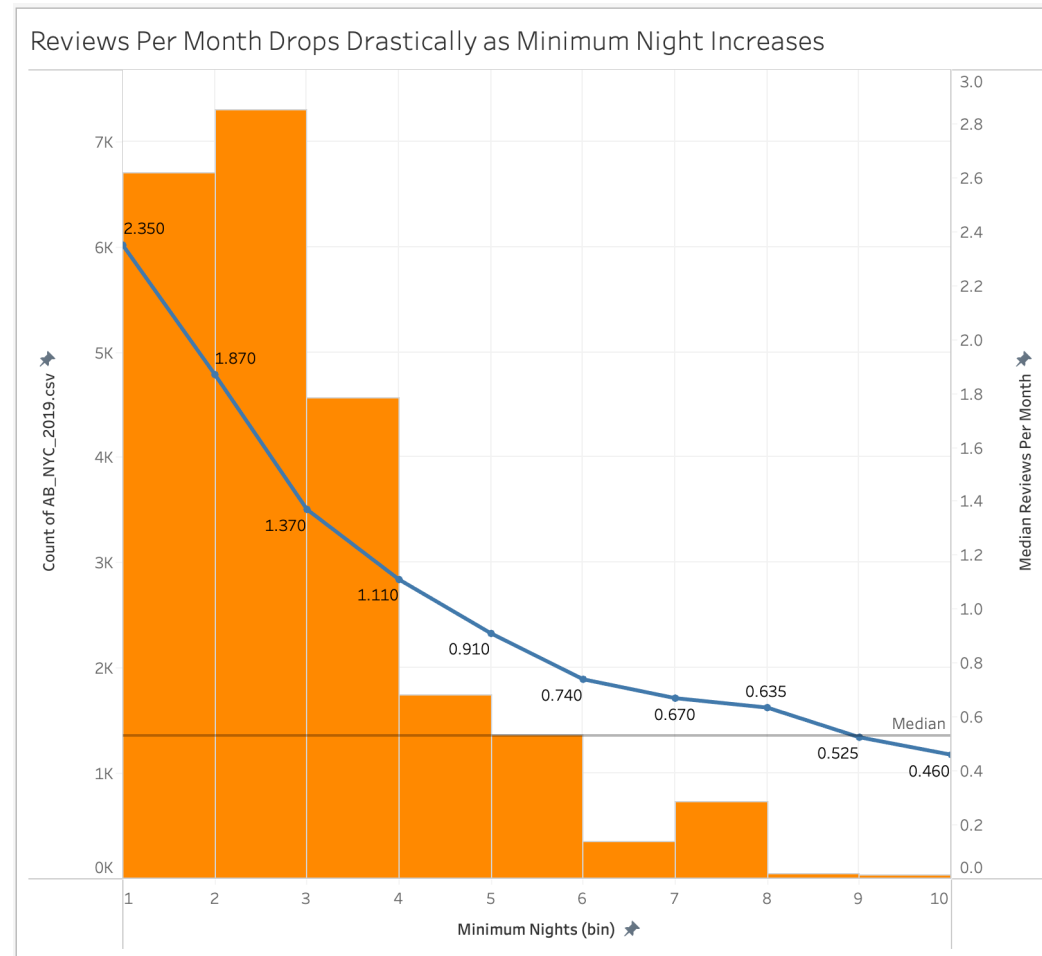
- Manhattan and Brooklyn have lower Median of Reviews Per Month but Highest no of Properties.
- From 2019 Trends highest Median Reviews:
 - Bronx, Queens – Entire Home/Apt
 - Staten Island - Shared

Brooklyn & Manhattan have the Highest No of Properties but Lowest Median of Reviews Per Month



High Number of Minimum Nights & Availability Drastically Effect Property Performance

- Median of Reviews Per Month for Property decreases by 70 Percent for Properties as Minimum Nights Increase from 1 to 7 Days.
- Properties with All Year Availability have less than 3% Properties which have less than 10 Reviews.



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

Room Type	Price Range				
	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

Recommendations

- Expanding in Bronx, Queens and Staten Islands. They have less number of properties but perform at par if not better than Manhattan and Brooklyn.
- More In-depth analysis into the properties which have not seen a single review or less than 10 reviews. More than 20% of the properties have zero reviews.
- Customers are sensitive to Price per night and Minimum nights to be booked. The trend stays true even in neighborhood groups with higher median price of properties.

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

- All Property ID's Unique. Dropped 0 Values in Price.
- Then looked for Price distribution which suggested 98% of Prices below 500. So bucketed Pricing so that above 500 comes as one bucket.
- All Properties with Zero Reviews have no Last date of review so considered them as properties which are unpopular.
- Bucketed Total Reviews and Availability for easier analysis.

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.