

Airbnb NYC Analysis

Nikshita Shetty & Hammad Siddiqui



Objective

☐ To understand the market condition post Covid-19.

Optimizing the process of order of property listing in order to get every property the optimal amount of traction.

Improvising the process of host acquisitions and operations by digging deeper into features such as pricing, geographical availability and hosts popularity.



- Brooklyn & Manhattan have 85% of the total NYC listings.
- Queens owns around 12% of the total listings.
- O The rest 3% is shared by Bronx & Staten Island.



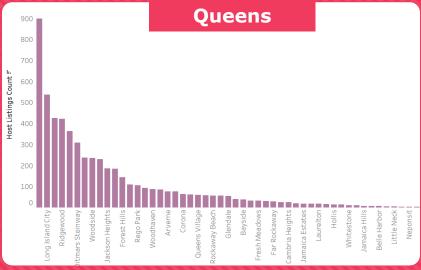












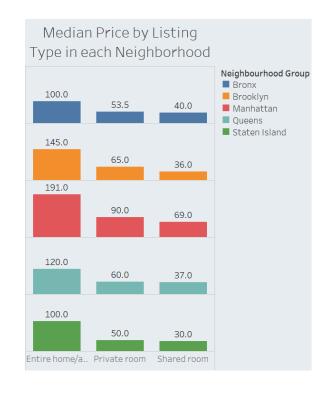
Majority of the listings are from:

- O In Brooklyn, 32% of the listings are in Bedford-Stuyvesant & Williamsburg.
- O Harlem has 12% of the listings, becoming the neighborhood with maximum listings within Manhattan.
- Astoria holds 16% of the total listings in Queens.

Pricing range differs vastly within the NYC metropolitan areas, starting from the most expensive rent prices per night in Manhattan to the cheapest per night in Bronx as:

- O Manhattan being the prime area in NYC, many organizations have their offices there. Also, many tourist locations are found within the district. It has the highest prices for listings with Entire Apt. Entire Apt. listings are comparatively cheaper in the rest of the neighborhoods.
- Places like Staten Island are only 30 minutes away from Manhattan, hence for many tourists they prefer coming back to their stay in Manhattan rather than staying on the island.
- O Not many visitors visit Bronx as compared to the other districts, as Bronx has limited attractions & also South-East Bronx is considered to be an unsafe zone, hence many visitors tend to avoid visiting Bronx.

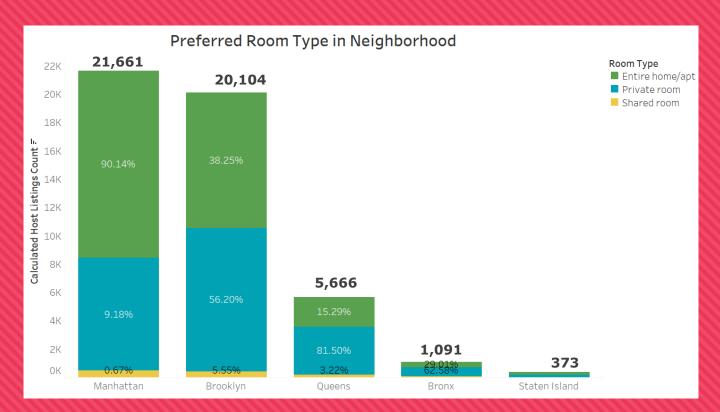




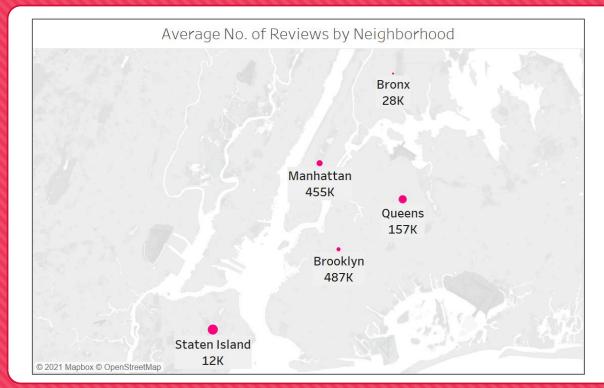


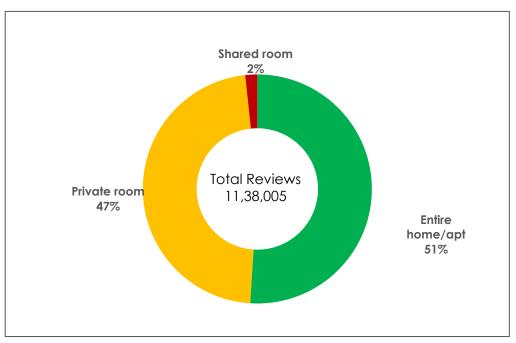


Pricing by Room Type						
Price (bin)	Entire home	Private room	Shared room			
0-999	25,166	22,275	1,156			
1000-1999	153	31	4			
2000-2999	47	10				
3000-3999	14	4				
4000-4999	8	1				
5000-5999	7	1				
6000-6999	6	1				
7000-7999	2	1				
8000-8999	2					
9000-9999	2	1				
10000+	2	1				



- The majority of listings offer a rental price of less than \$1000.
- O The most prevailing listings are Private Rooms and Entire Apartments. Shared rooms may not be appealing to most visitors.
- O Brooklyn & Manhattan are the most prevailing neighborhoods as they are the most visited neighborhoods in NYC which makes them popular areas for rented apartments.





Exploring the Neighborhood: Customer Perspective

- The most reviewed neighborhoods are Manhattan followed by Brooklyn which also states that most customers prefer staying in these neighborhoods.
- Based on the room types 51% of the reviews are given to Entire Apartments followed by 47% to Private Rooms of the total reviewed listings. Shared rooms have been very rarely reviewed which also says not majority of the travelers prefer renting out shared rooms.
- Listings offering Shared room currently, if start offering the same as Private rooms can help gain more traction to those properties.

Pricing Range vs Customer Reviews

- More than 90% of the customer reviews are given to listings below 1000\$ which makes it the most preferred pricing range by the customers.
- Shared rooms can be offered to the guests as private rooms in order to get these listings gain some traction.



Price Range preference by Customer Reviews					
		Room Type			
Price (bin)	Entire home/apt	Private room	Shared room		
0-999	578,451	538,267	19,250		
1000-1999	1,525	24	6		
2000-2999	359	29			
3000-3999	20	0			
4000-4999	5	0			
5000-5999	17	10			
6000-6999	17	0			
7000-7999	0	8			
8000-8999	3				



Minimum Nights preferred based on Customer Reviews

- We see a large distribution mainly leaning towards 1 to 3 nights minimum stay for all types of listings which also means if the no. of nights is kept to the minimum i.e., 1 night, higher are the chances of the listing gaining traction.
- O Also, a spike is seen on 30 nights for Entire Apartments & Private Rooms, which means for a longer duration stay customers prefer renting these accommodation types over shared rooms.
- Maximum reviews on shared rooms are on 1 2 nights only, which means customers prefer booking shared rooms for not a longer duration stay, hence keeping the shared rooms minimum nights to 1 will help attract more bookings.





Top Hosts Based on No. of Reviews

- The Hosts having listings near to the airports & Subways are highly preferred by the customers due to travel convenience.
- O Also, hosts who have their listings in the heart of the city and are near to major landmarks are also highly preferred by the customers.
- Additional benefits given along with the bookings such as "NO Additional Cleaning Fee" & "Laundry Services" also gain customer traction to the listings.



Recommendations

- Investing in listings in the preferred areas such as near to the airports, a walking distance from Times Square or Central Park will help attract more bookings.
- Listings having lesser reviews, can attract bookings by keeping a price **lower** than \$1000 and additional benefits such as "No Cleaning Fee" or "Laundry inclusive" with the bookings. Also, gaining customer trust with offering sanitized rooms post Covid will help gain more traction to the listings.
- Shared rooms have been the least preferred by customers. We can gain more traction by providing additional benefits as mentioned above or by converting them into Private rooms, as private rooms are highly preferred.



Appendix: Methodology

- Step1 (Story Boarding):
 - a) Went through the data to get familiarized with it and noted down important fields.
 - b) Made a mind map of the various slides of the presentation.
 - c) Based on the above mind map, created a rough template on a blank paper to visualize the slides.
- Step2 (Process followed):
 - a) Wherever the price was appearing to be 0, we removed those rows as those were insignificant in number.
 - b) We conducted a thorough analysis of the AirBnb dataset & Identified trends and retrieved insights to understand the next best steps to be taken post Covid-19 by AirBnb to improve the business.
- Step3 (Final Presentation)
 - a) Made the presentation adhering to best practices: Whiteboarding, Rule of 3 and pyramid principle.
- ☐ The detailed methodology document is attached with the submission.