

Capstone Project

Airbnb Bookings Analysis

By-Lovejeet Singh

Points For Discussion

- Airbnb?
- Data Summary
- Total Hosts Listings
- Visitors
- Maximum Price Per Night
- Lowest Price Per Night
- Top 10 Busiest Hosts
- Traffic Areas
- Why Manhattan?
- Conclusion

Airbnb?



Airbnb is an online marketplace or a platform that connects people who want to rent out their Homes, Apartment and Private room with people, Who looking for accommodations in that locale. New York City is the most densely populated city in the United States, and one of the most popular tourism and business places globally.

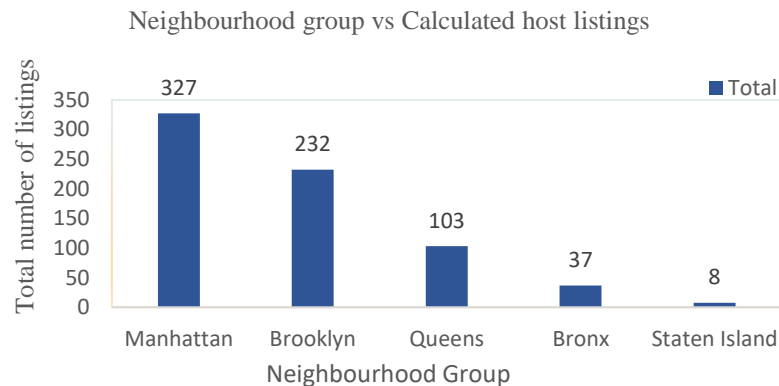
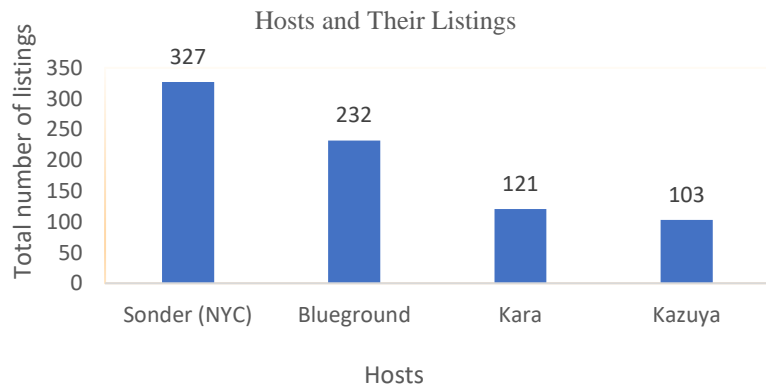
Data Summary

- `Airbnb_df` : It contains all the information such as id, name, host id, host name, neighbourhood group, neighbourhood, latitude, longitude, room type, price, minimum nights, number of reviews, last reviews, reviews per month, calculated host listings count and availability 365.
- Total number of rows and columns are 48895 and 16 respectively.
- We will not going to use the columns name such as “latitude” and “longitude” in our analysis. Because it only contains the geographical coordinates of Airbnb which we already have in form of column name “Neighbourhood_group”.

Top Hosts Listings

- The Manhattan neighbourhood group has maximum number of listings, Which is 327 exact by the host name Sonder(NYC).

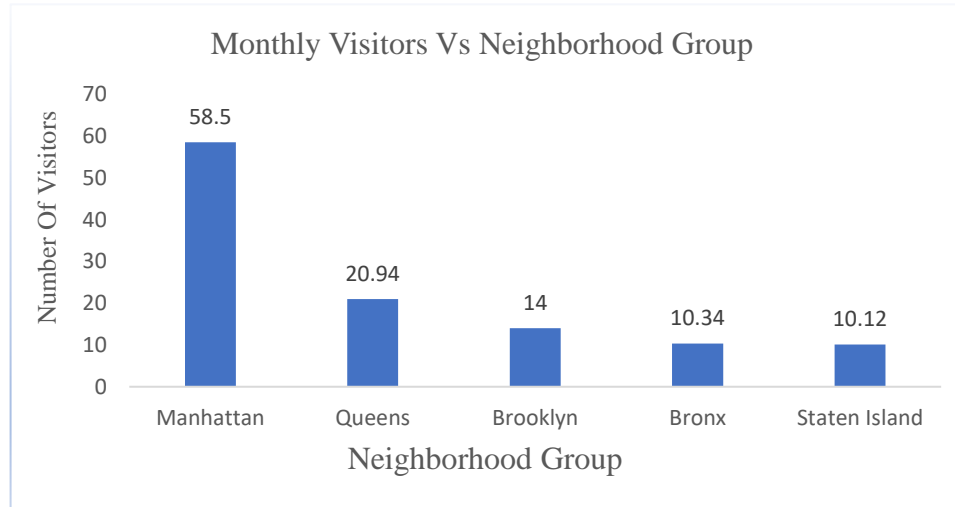
neighbourhood_group		calculated_host_listings_count
host_name		
Sonder (NYC)	Manhattan	327
Blueground	Manhattan	232
Blueground	Brooklyn	232
Kara	Manhattan	121
Kazuya	Queens	103



Visitors

Visitors on monthly basis

- Manhattan neighbourhood group has more number of visitors per month.
- Queens has the second highest number of visitors.



Reason

We got last review date of Manhattan neighbourhood which is 7th of July 2019.

The reasons behind why we get Manhattan on top in July month.

- Fourth of July is the independence day of America. On this day there is a federal holiday across the entire America.

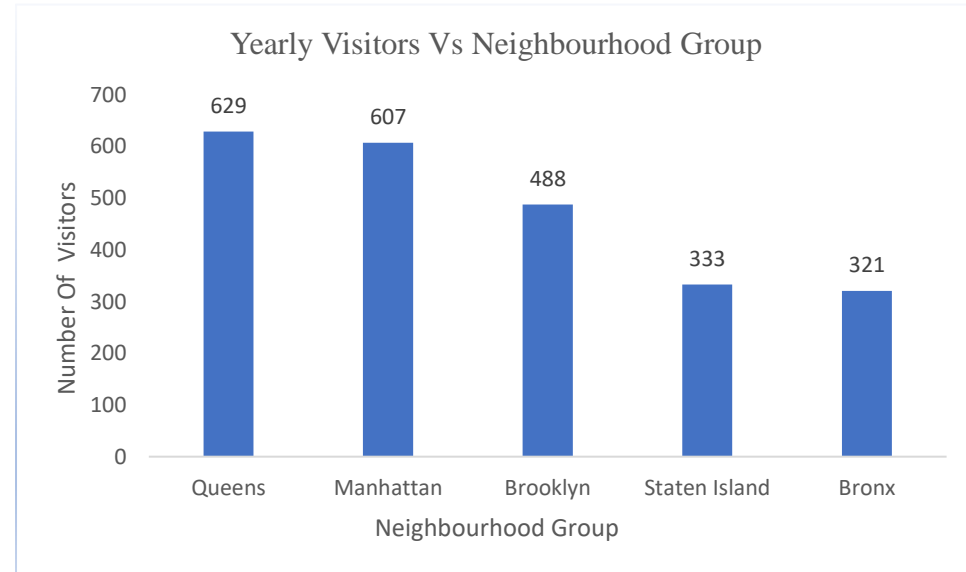
neighbourhood_group	last_review	reviews_per_month
Manhattan	2019-07-07	58.50
Queens	2019-07-08	20.94
Queens	2019-07-06	19.75
Queens	2019-07-05	15.78
Queens	2019-06-26	15.23

Visitors on yearly basis

- Things are changed when we saw yearly Visitors.
- Queens neighbourhood group has got little bit more number of visitors, which is 629.
- Manhattan got the second highest number of visitors

Following might be the reason behind this result :-

- Queens is famous for studies, social science and mental health research and highlighted by the 2015 Nobel Prize in Physics. So might be student was came here for admission/Intake purpose throughout the year.

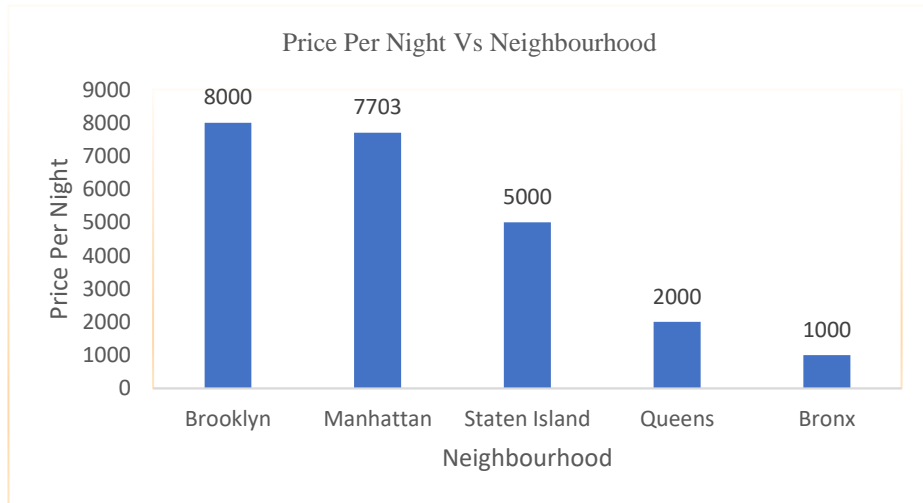


Maximum Price Per Night

we can see that Brooklyn and Manhattan neighborhood groups has high price tagged Airbnb which costs more than 5000\$ per night.

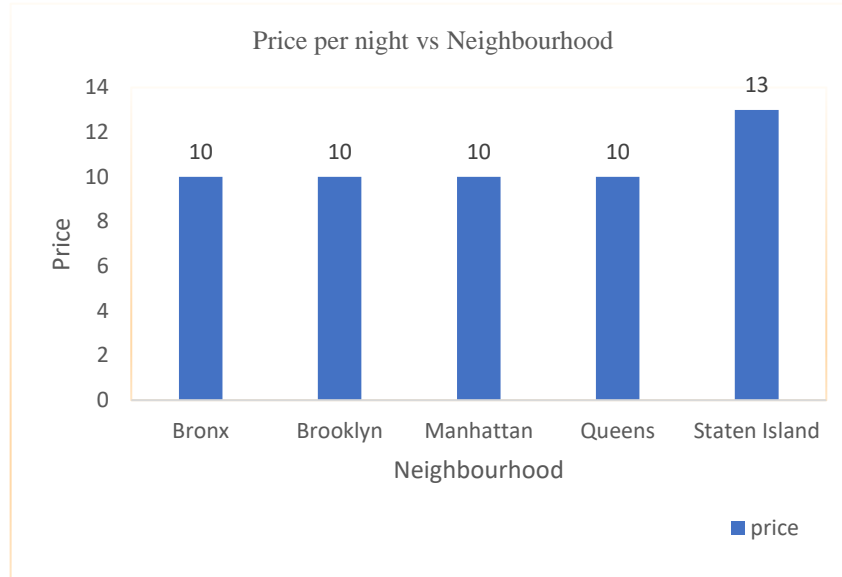
Reason

Brooklyn and Manhattan are metropolitan cities. These cities are heavily dense populated. These neighborhood comes under Porsche area. Most of the trade happens there.



Minimum price Per Night

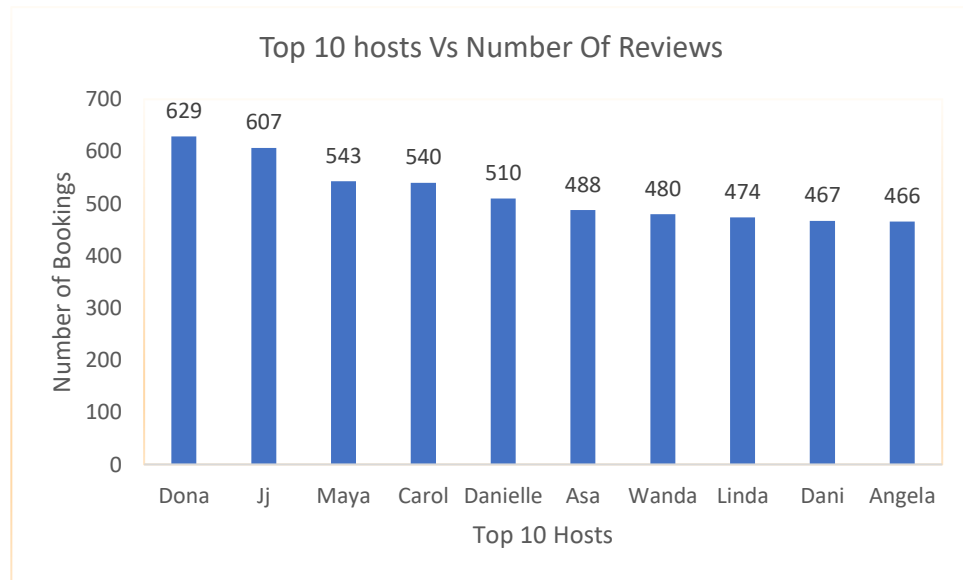
- Bronx, Brooklyn, Manhattan and Queens has lowest price tag Airbnb.
- But Staten Island offering Airbnb at 13 \$ which is the lowest in this neighbourhood



Top 10 Busiest Hosts

Following are the top 10 Busiest Hosts in 2019 :-

- Dona
- Jj
- Maya
- Carol
- Danielle
- Asa
- Wanda
- Linda
- Dani
- Angela



Reason why these are the top 10 host

In the below dataset we can see that 8 out of 10 hosts has similar room type which is “Private Room”.

room_type	
Private room	8
Entire home/apt	2

Rest of 2 has “Entire home/Apartment” as room type.

So, the key for to be the busiest host is..

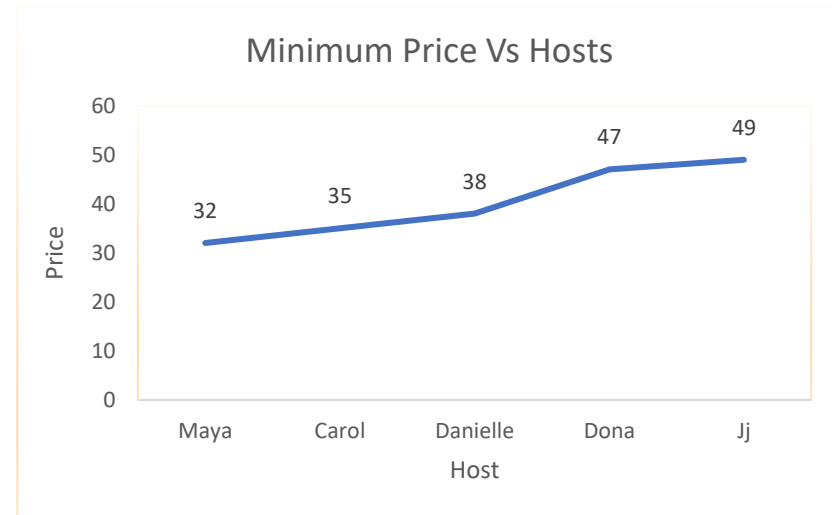
Airbnb whose room type is private room would be the busiest host

Price Per Night Offer By Top Hosts

Following are the Top 5 hosts whose Airbnb price are minimum as compared to others.

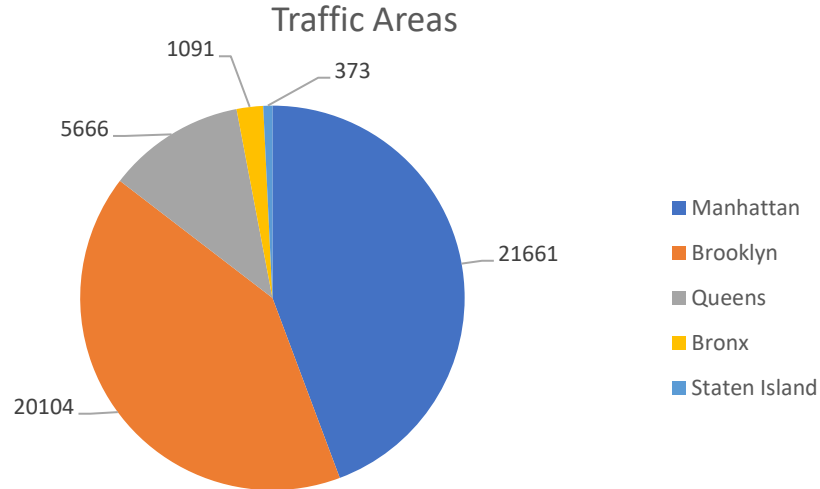
- Maya
- Carol
- Danielle
- Dona
- Jj

	host_name	price	room_type	neighbourhood_group	minimum_nights
0	Maya	32	Private room	Queens	1
1	Carol	35	Private room	Brooklyn	1
2	Danielle	38	Shared room	Queens	1
7	Dona	47	Private room	Queens	1
11	Jj	49	Private room	Manhattan	1



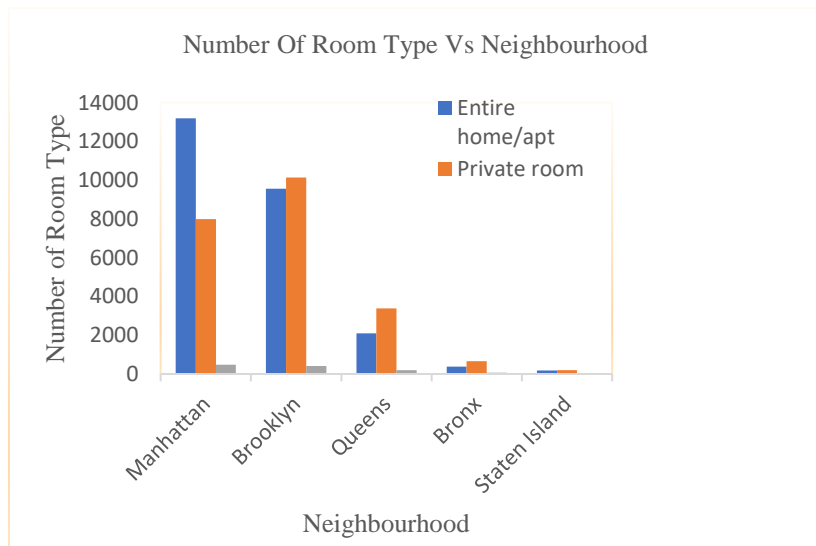
Traffic Areas

Manhattan neighbourhood has The most traffic as compared to other neighbourhoods



Why Manhattan

- Why Manhattan has more traffic as compared to others. Because Manhattan is a metropolitan area and has more number of historical places. The number of Airbnb is also high there. In which Entire home/Apartment are the highest number of room type listing.



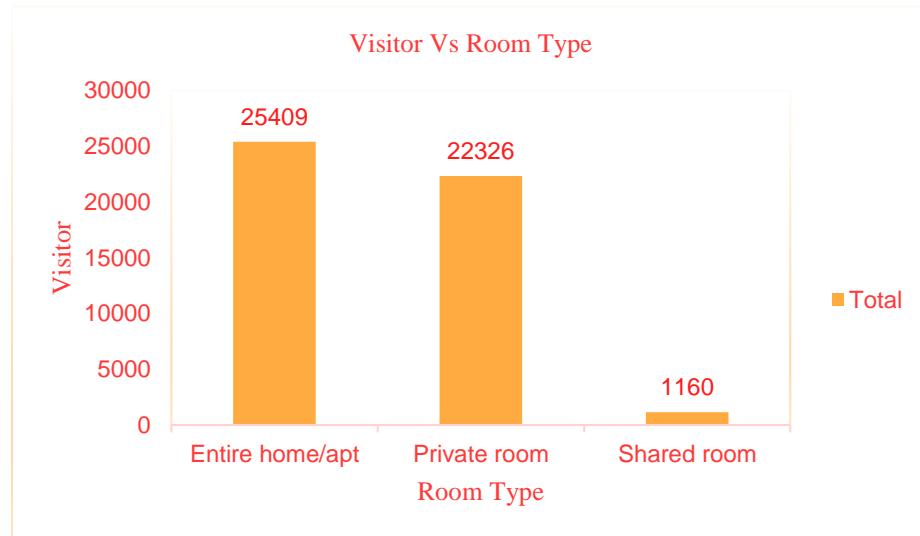
Count of Minimum Nights Neighbourhood	Room Type			Grand Total
	Entire home/apt	Private room	Shared room	
Manhattan	13199	7982	480	21661
Brooklyn	9559	10132	413	20104
Queens	2096	3372	198	5666
Bronx	379	652	60	1091
Staten Island	176	188	9	373
Grand Total	25409	22326	1160	48895

What kind of room type people prefer more in traffic areas ?

- Peoples prefer more to stay in Entire Home/Apartment as room type.

Reason

- Visitors would love to travel with their family. That's why they book Entire home/Apartment as room type.



Conclusion

1. Manhattan neighborhood has most listed Airbnb as compared to others.
2. Queens and Manhattan has most number of Visitors which means people visited more here.
3. Brooklyn and Manhattan has Airbnb whose prices are more than 5000\$ per night.
4. Bronx neighborhood has their maximum price Airbnb which costs 1000\$ per night.
5. The top 10 hosts has listed their Airbnb which has room type as private.
6. The major traffic areas are where room type as entire home/apartment and private room.
7. Peoples doesn't like to stay in Airbnb which has room type as shared room.
8. The demand of Airbnb is too high in Manhattan and Queens neighborhoods.
9. In Staten Island the demand of Airbnb is too low as compared to others neighborhoods.
10. In Staten Island the lowest price tagged Airbnb 13\$ is little bit higher that other neighborhoods and maximum price Airbnb for single night is 5000.
11. In the Staten island neighborhood the pricing of the Airbnb is quite high. Therefor people doesn't book Airbnb there.
12. It would be better to record the reviews on scale of 0 to 5. It will help to identify the hosts, whose services are better.

Thank You