Analysis of Airbnb, NYC Listings

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AGENDA

- Objective
- Background
- > Key Findings
- > Recommendations
- > Appendix:
 - Data Attributes
 - Data Methodology
 - Data Assumptions

OBJECTIVE

- > Improve Airbnb business after restrictions are lifted.
- Provide Insights based on different attributes to improve customer experience.
- Understanding Customer preferences and improve it to generate more revenue.

BACKGROUND

- Airbnb is an online platform using which people can rent their unused accommodations.
- During the Covid time, Airbnb incurred a huge loss in revenue.
- ➤ After lifting the restrictions, people now have started travelling again and Airbnb is aiming to bring up the business again and be ready to provide services to customers.

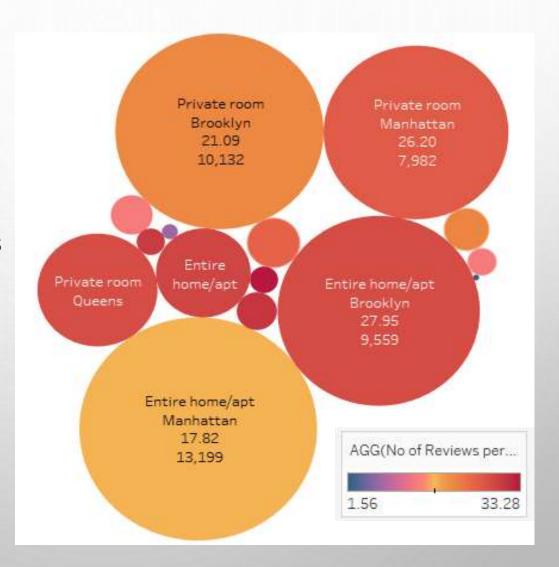
NEIGHBOURHOOD WISE BUSINESS

- Private Rooms Are The Most Popular Throughout New York
 >25 Reviews Per Listing
- ➤ Entire Home/Apt In

 Manhattan Has Reviews

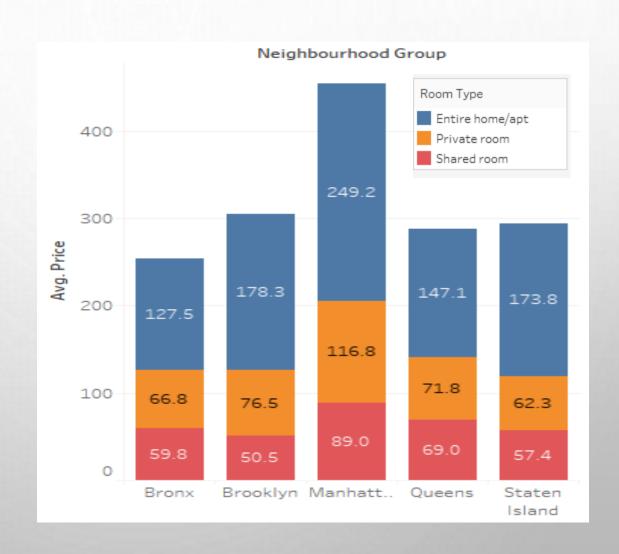
 Per Listing 35%Less Than

 The Average Of 27.7
- Except Manhattan, All Areas Performed Poorly In Shared Rooms With An Average Of 7.3 Reviews Per Listing



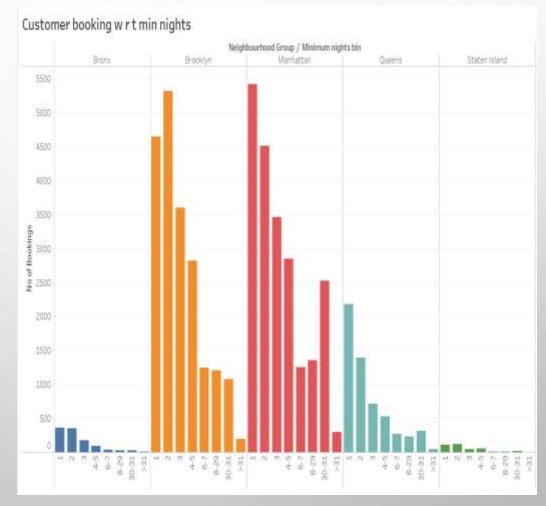
PRICES IN NEIGHBOURHOOD GROUPS

- Prices of Entire
 home/apartment is more
 than Private room and
 Shared room
- ➤ 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: StatenIslands
 - Shared room: Brooklyn



CUSTOMER BOOKINGS WITH RESPECT TO MINIMUM NIGHTS

- The listings with Minimum nights 1-5 have the most number of bookings. We can see a prominent spike in 30 days, this would be because customers would rent out on a monthly basis.
- After 30 days, we can also see small spikes, this can also be explained by the monthly rent taking trend.
- Manhattan &Queens have higher number of 30 day bookings compared to the others. The reason could be either tourists booking long stays or mid-level employees who opt for budget bookings due company visits



RECOMMENDATIONS

- We can offer free pick up and drop facility from airport.
- ➤ We can provide membership discounts at Airbnb and encourage more people to apply for those unpopular properties.
- We must target Staten Island, Queens, Bronx for acquisition of more properties.
- Occasional minimum stays of 30 nights/15nights could be introduced during festive seasons to attract more customers.
- Should increase the properties which costs less than 200\$.

APPENDIX: DATA ATTRIBUTES

- ➤ We have used AB_NYC_2019.csv data to perform analysis.
- Here is a snapshot of the data dictionary:
- 1. Host Listing Information like Host_id, Host_name, Neighbourhood, Latitude and Longitude.
- 2. Customer Preference Information like Number_of_reviews and Reviews_per_month.

APPENDIX: DATA METHODOLOGY

- Observed the given dataset and performed analysis.
- Performed Visualizations in one of the visualization tool Tableau and observed the insights.

Find detailed methodology document below:

Methodology Document.pdf

APPENDIX: DATA ASSUMPTIONS

- ➤ Observed missing values in two columns last_review and reviews_per_month because there are no reviews given by customers for that particular listing.
- ➤ Used Reviews per Listing as the popularity measure to gain information on customer preferences
- Null values assumed to have no material impact on analysis

