INSIGHTS AND INFERENCES FROM CUSTOMER PREFERENCES ON AIRBNB REVENUE

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AGENDA

- Objective of this case study
- Background information
- Key Findings
- Recommendations
- Appendix:
  - Data Source
  - Some other Insights
  - Data Methodology
  - Data model assumptions

OBJECTIVE

❖ Improve our strategies to revive the business in the post – Covid Period.

❖ Understand customer preferences and user experience trends from Airbnd NYC business

❖ Provide early recommendations for market traction and improving customer experience by adjusting existing properties to make it more customer oriented.

BACKGROUND

❖The Covid -19 pandemic affective Airbnd business due to travel restrictions.

❖The revenue took the largest hit in NYC in Q2 and Q3 in 2019.

❖Now that the travel restrictions are lifted, the business should be operated to recover the loss.


Trend of reviews
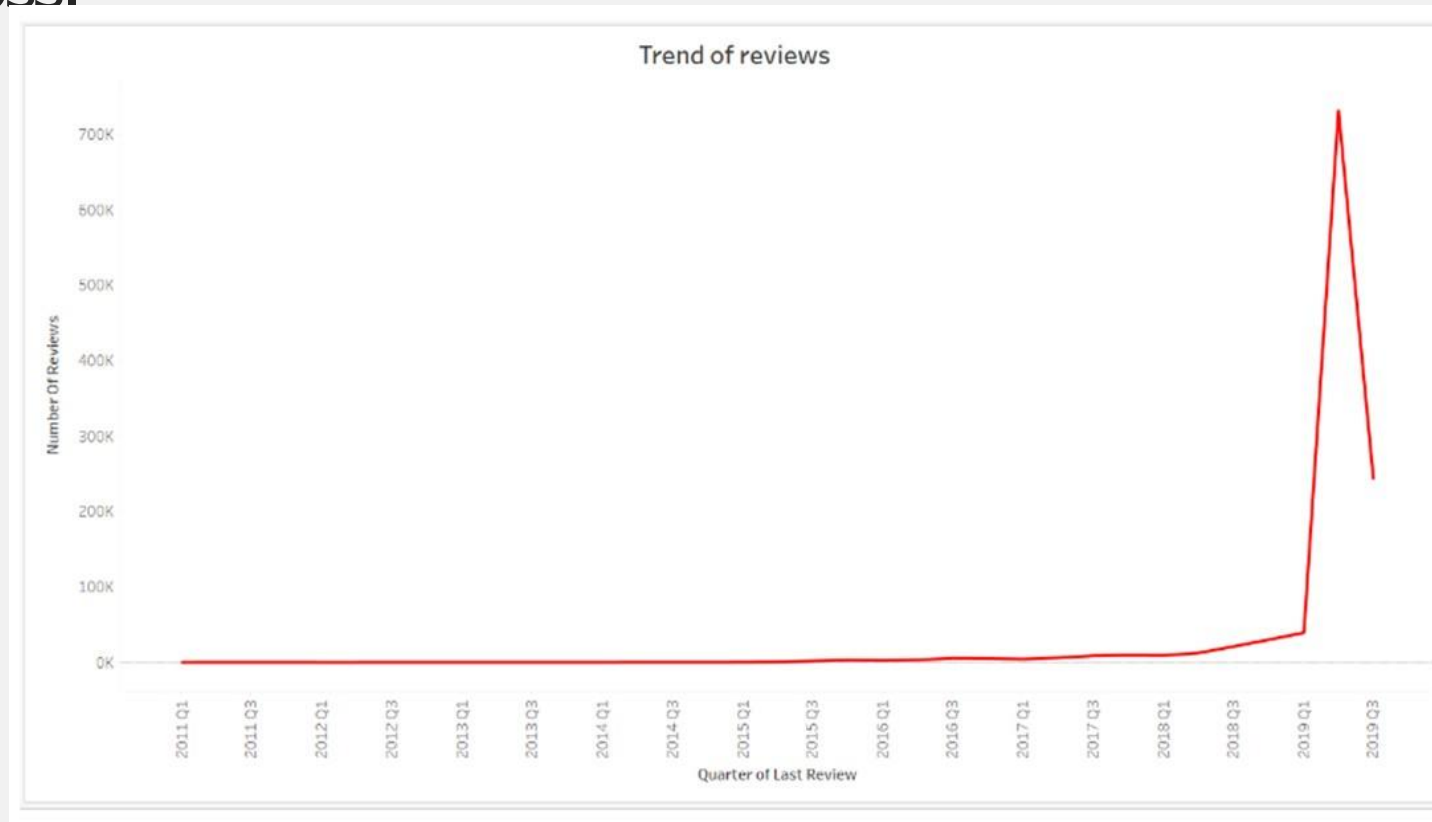
CUSTOMER PREFERENCES FOR 'ENTIRE HOME/APT' AND 'PRIVATE ROOM' REMAIN HIGH POST - COVID

- '**Entire home/apt' and Private room** account for a major portion of the listed properties (97.63%) in NYC in pre –Covid time and this may remain prevail in the post Covid time as well.

- Only 2.37% of the room type belong to 'Shared room' category.

- Customer would prefer to isolate themselves , hence **'Shared rooms can be converted to ''Private room'** to increase football and revenue.
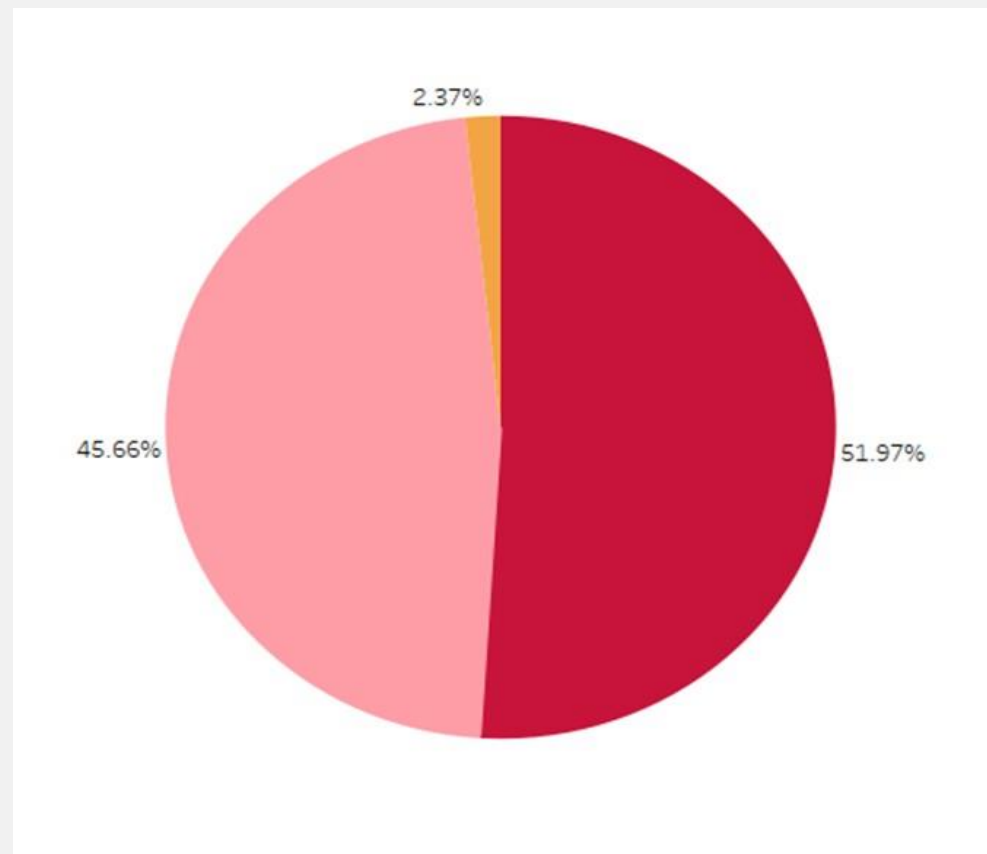
TARGET HOSTS OFFERING THE LEAST MINIMUM NIGHTS OF STAY

- Properties offering the least minimum number of nights to stay have the highest number of reviews.

- As the minimum number of nights to stay increases , the minimum expense to stay at the property increases and bookings to these properties will decline due to exorbitant prices.

- Premium properties are not visited much , hence their acquisition should not be prioritized in the current circumstances. Acquire properties which are budget friendly.
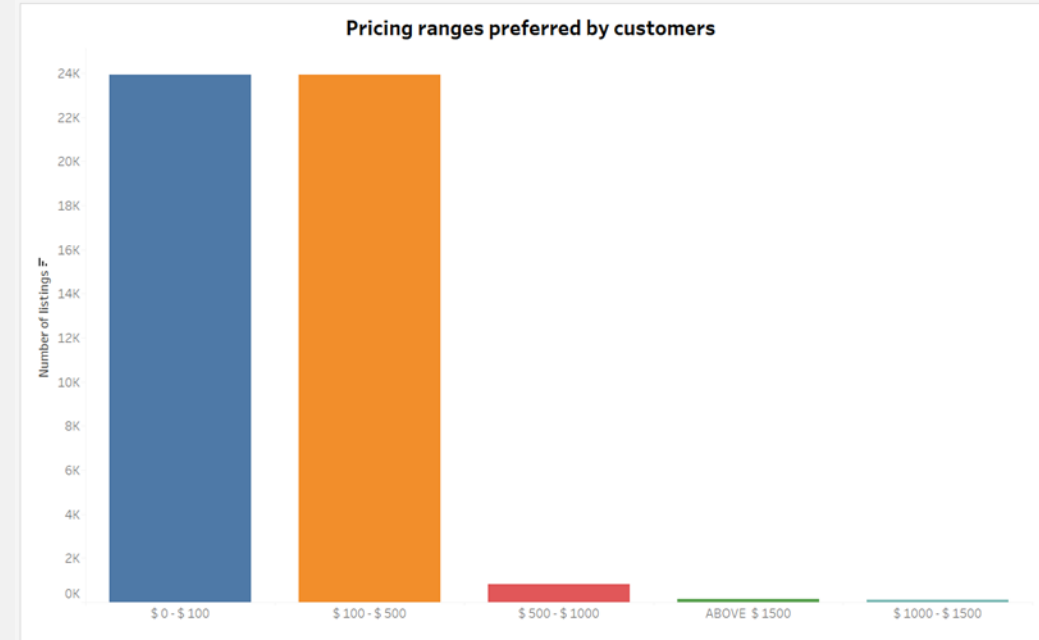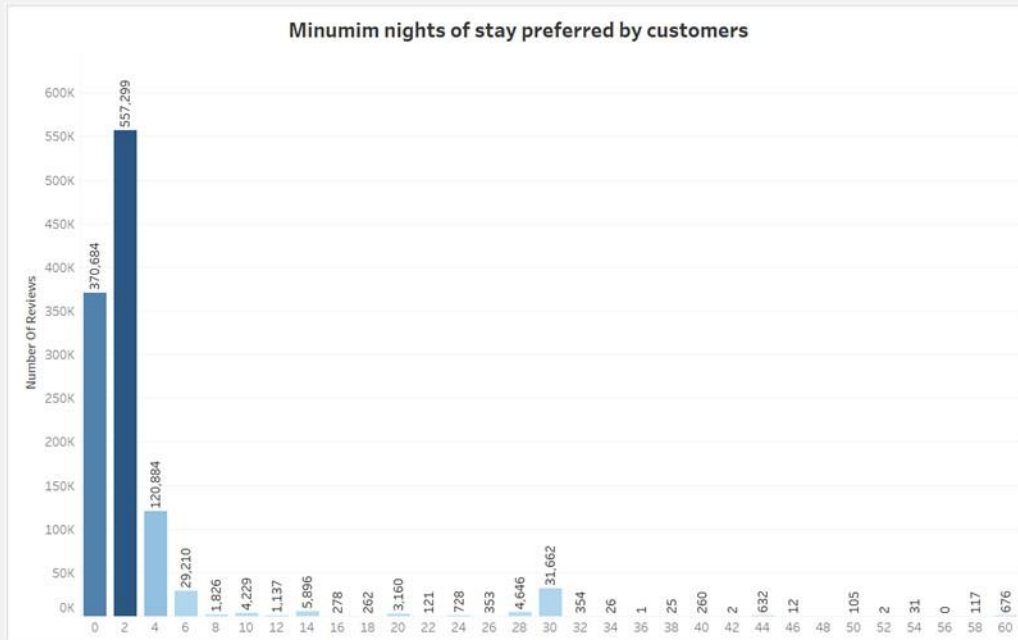
PROPERTIES WITH LEAST MINIMUM NIGHTS TO STAY OFFER MAXIMUM BOOKINGS

- Customer prefer **1-10 days** of minimum nights per stay based on the number of reviews. There is spike for 30 , 60 and 90 days during pre – Covid time.

- Properties with higher number of minimum nights of stay and higher price have low reviews during pre – Covid time. Due to ongoing pandemic , customers may prefer to book properties for **30 , 60 or 90 days to avoid frequent travelling.**

- It has been observed that majority of bookings are done for apartments, where the minimum no of days is the least.

Assumptions: With Covid -19 , it is reasonable to assume that people will book properties for longer period of time (15 or 30 or 60 or 90 days of stay)

ACQUIRING PREMIUM PROPERTIES IN BRONX & NON-PREMIUM PROPERTIES IN MANHATTAN

- Premium properties in Bronx and Queens must be targeted as they cost an upwards of $2500.

- Non premium properties in Manhattan and Brooklyn must be targeted. Premium properties are exorbitant and may not attract a lot of bookings. Cheaper listing are usually preferred in these localities.
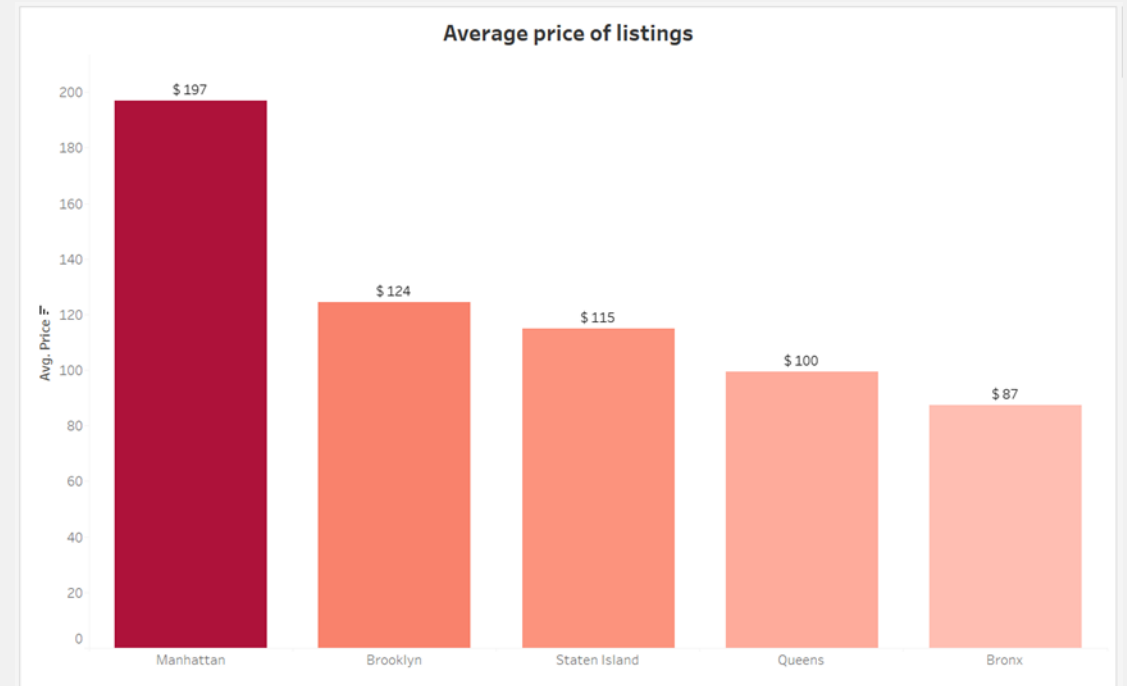
APPENDIX: DATA SOURCES

Column	Description
id	listing ID
name	name of the listing
host_id	host ID
host_name	name of the host
neighbourhood_group	location
neighbourhood	area
latitude	latitude coordinates
longitude	longitude coordinates
room_type	listing space type
price	
minimum_nights	amount of nights minimum
number_of_reviews	number of reviews
last_review	latest review
reviews_per_month	number of reviews per month
calculated_host_listings_count	amount of listing per host
availability_365	number of days when listing is available for booking

```
Categorical Variables:
    - room_type
    - neighbourhood_group
    - neighbourhood

Continous Variables(Numerical):
    - Price
    - minimum_nights
    - number_of_reviews
    - reviews_per_month
    - calculated_host_listings_count
    - availability_365
- Continous Variables could be binned in to groups too

Location Varibles:
    - latitude
    - longitude

Time Varibale:
    - last_review
```

Variable Categories

APPENDIX – OTHER INSIGHTS

- Manhattan and Brooklyn bookings prefer Entire Home / Apartment and Private rooms.
- Bronx and Queens bookings prefer Private rooms over Entire Home / Apartment.
- Multiple hosts have more than 10 listings at different neighbourhoods.
- Manhattan and Brooklyn are most popular neighbourhoods with regard to total number of listings. The two neighbourhoods account for 82.7% of the listings in NYC.
- Average price of listing per neighbourhood is $197 for Manhattan which is much higher than the other neighbourhoods.
- Williamsburg , Bedford – Stuyvesant and Harlem are popular localities in NYC.

APPENDIX – DATA METHODOLOGY

Methodology Document

Performed analysis on Airbnd dataset using Python and Tableau.

- Missing values in few columns were treated and simple statistical analysis of data was performed.
- Visuals were derived to understand customer preferences based on
  - Room type
  - Area preference
  - Price
  - Number of reviews
  - Minimum nights to stay

APPENDIX – DATA ASSUMPTIONS

- We assumed the data prior to Covid – 19 period was achieving the desired revenue.

- We assumed unpopular properties are the ones that have not been reviewed even once.

- We assumed that the company does not want to expand yet to new territories in NYC.

- The company's strategies are decided considering the travel will increased on the post Covid Period .

THANK YOU!