**Strategic Analysis of Airbnb's Pre-COVID Success and Post-Pandemic Plans**

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# Objective

- Improve our strategy to minimize the economic and commercial effects of covid-19.

- Use data analytics to identify trends, understand customer behavior, and make data-driven decisions to adapt the strategy as the situation evolves.

- Recommendation for further acquisition and enhancement of customer experience.

# Background

- As a result of travel restrictions imposed during the Covid-19 pandemic, Airbnb experienced a substantial decline in income.

- With the gradual easing of restrictions and increased travel activity, Airbnb is proactively gearing up for this shift.

- To ensure thorough preparedness, an analysis has been conducted on a dataset encompassing diverse Airbnb listings in New York city.

# What is interesting in the dataset?

- Airbnb has vast presence in Manhattan, Brooklyn and Queens.

- Hosts providing rentals in New York city favours more on Entire home/Apartments and Private rooms compared to shared rooms.

- The room types 'Entire home/apartment' and 'Private room' account more than 97% of listed properties. Less 3% value shred by shared rooms.

2.37%
Shared room

45.66%
Private room

51.97%
Entire home/apt
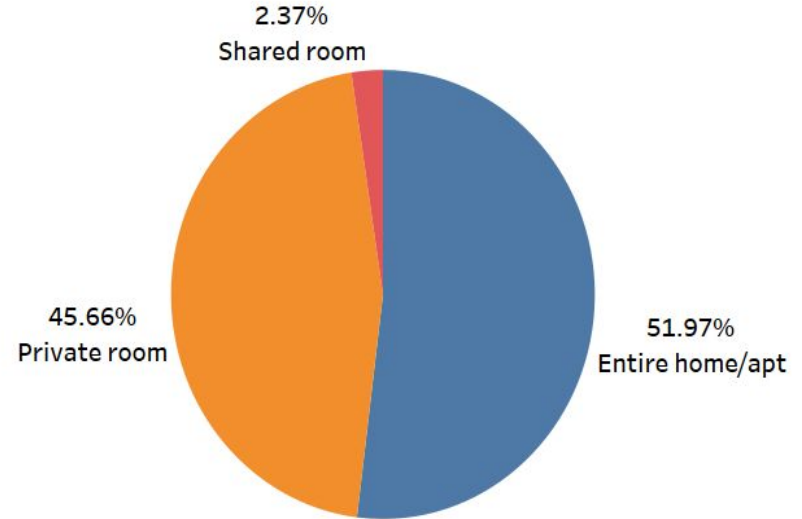
# Room type distribution each neighbourhood.

- The most costly room type across all cities will be Entire home/apartments followed by Private rooms.

- Manhattan being the costliest among all the areas.

- Brooklyn and Staten island shares almost equal properties across all the categories.



average price for different room types and neighbourhood group
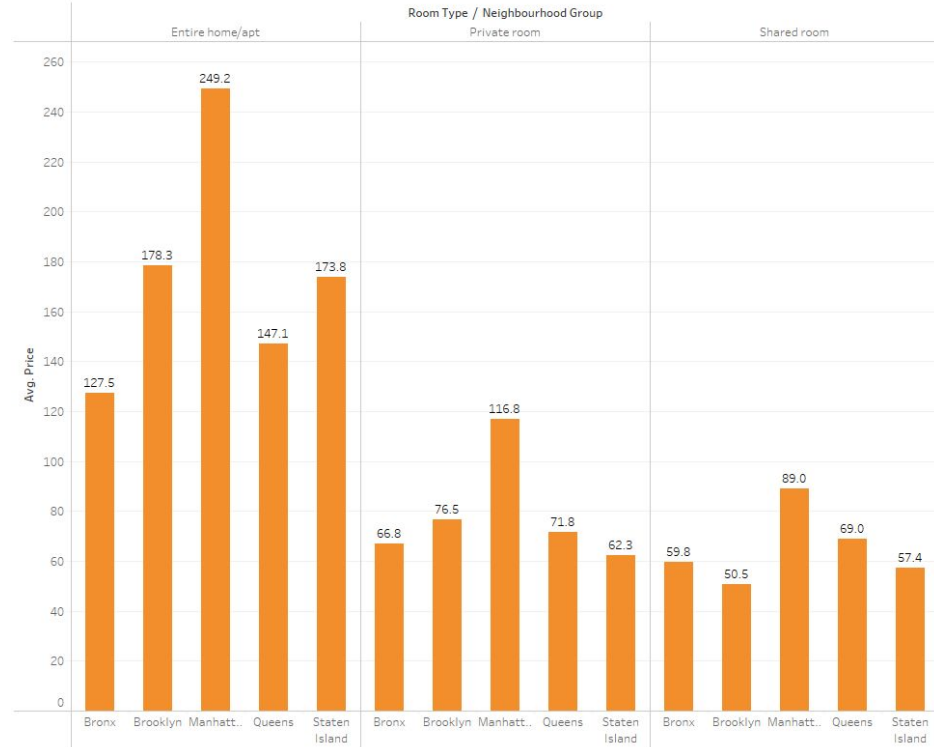
# Most valued customers

- Customer "Sonder(NYC)" from Manhattan lists most properties in Airbnb around 327 no.s followed by ""Blueground" around 230 no.s and "kara" around 121 no.s.

- Customer "Kazuya" lists at least 6 properties among all the areas.

- Bronx has very less number of listing compare to other cities.



Top 10 host listing
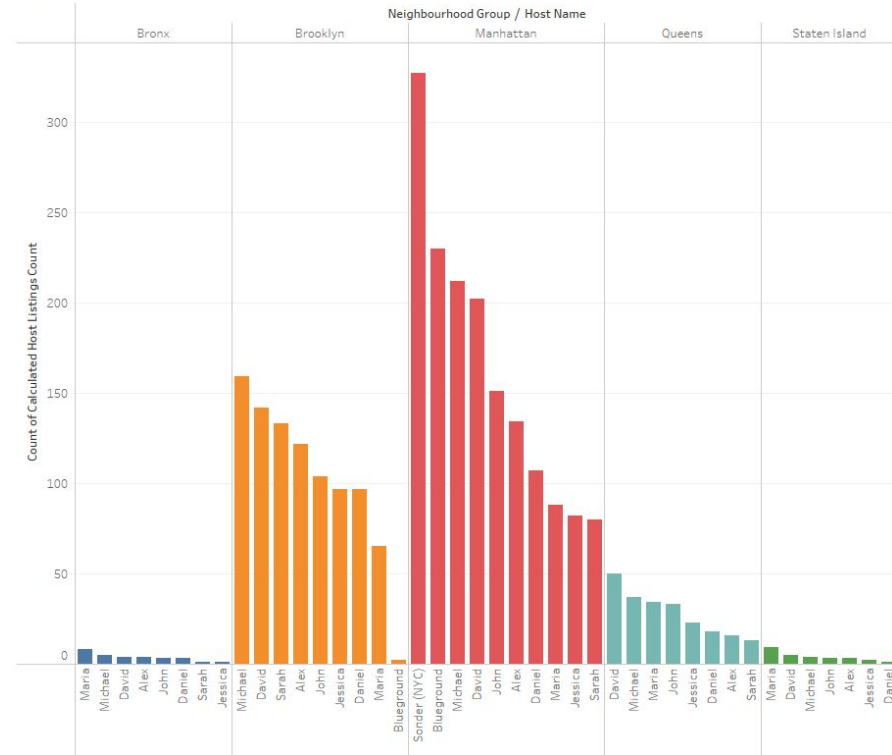
# Premium priced properties and neighbourhood

- Manhattan stands out as the sole neighborhood with premium-priced properties command higher values in the real estate market due to various factors such as location, amenities, and overall quality.

- These neighborhoods often attract buyers or renters seeking a more luxurious living experience, featuring exclusive amenities, proximity to desirable attractions, or a generally elevated standard of living.

prices of property for different room types in different neighbourhood groups
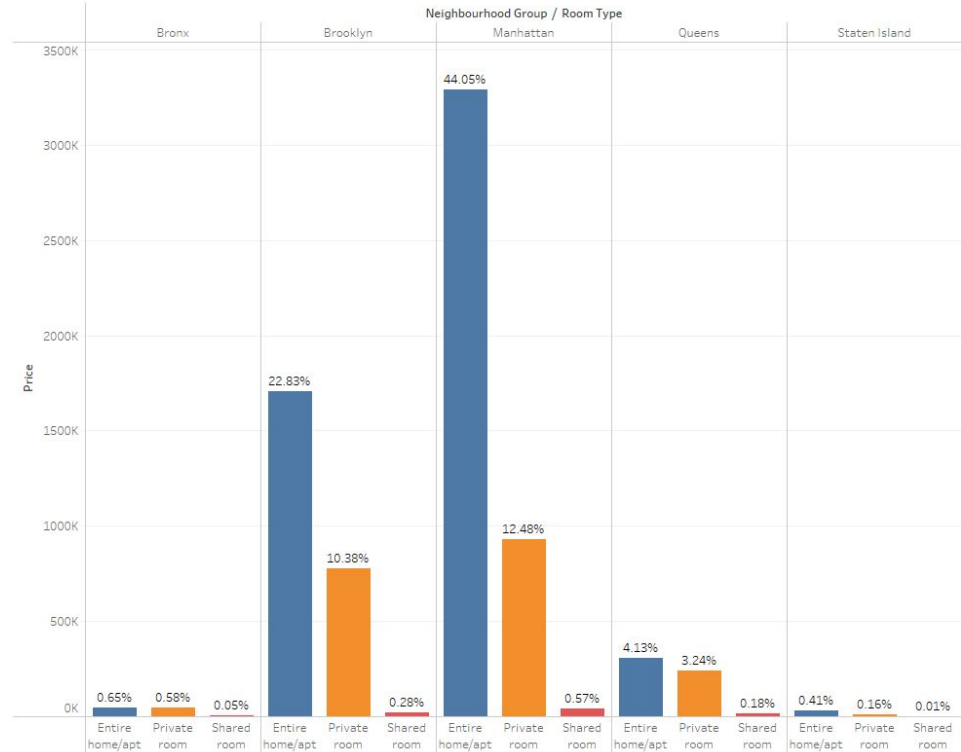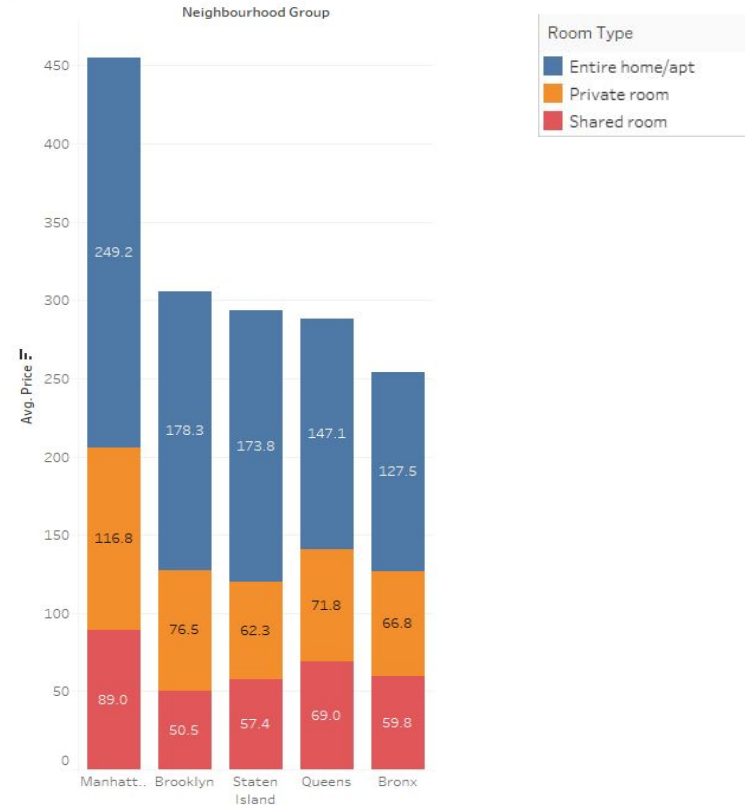
# Average Price of properties and room type

- Manhattan is the only neighbourhood category where the average price of the Entire home/apartment properties is more than $200.

- Brooklyn and Staten island have average prices of $124 and $114, which are less and more affordable to Manhattan.

- Queens and the Bronx have the lowest prices compared to other areas in New York.

average price for different room types in different neighbourhoods

**Neighbourhood Group**

Room Type
- Entire home/apt
- Private room
- Shared room

Avg. Price

| | Manhatt.. | Brooklyn | Staten Island | Queens | Bronx |
|---|---|---|---|---|---|
| Entire home/apt | 249.2 | 178.3 | 173.8 | 147.1 | 127.5 |
| Private room | 116.8 | 76.5 | 62.3 | 71.8 | 66.8 |
| Shared room | 89.0 | 50.5 | 57.4 | 69.0 | 59.8 |

# Analyzing customer preferences for night stays

- 12.7k customers prefers to stay for a day on their visit closely followed by 11.6 k Customers who stays for 2 night.

- Customers show a preference for staying between 3 to 7 nights also .

- Customer preferences for stays also show an increase, particularly for durations extending up to 30 days.



minimum night per stay

Minimum Nights

| Minimum Nights: | 1 |
| Avg. Price: | 142.0 |
| Count of Minimum Nights: | 12,720 |

Bar values:
- 1: 142.0 / 12,720
- 2: 146.3 / 11,696
- 3: 160.3 / 7,999
- 4: 161.2 / 3,303
- 5: 157.3 / 3,034
- 6: 170.4 / 752
- 7: 141.2 / 2,058
- 8: 119.5 / 130
- 10: 133.9 / 483
- 12: 116.3 / 91
- 14: 123.6 / 562
- 15: 103.8 / 279
- 20: 115.9 / 223
- 21: 103.3 / 135
- 28: 187.3 / 203
- 29: 185.4 / 340
- 30: 182.6 / 3,760
- 31: 188.9 / 201
- 60: 207.5 / 106
- 90: 204.7 / 104

Count of Minimum Nights (y-axis)
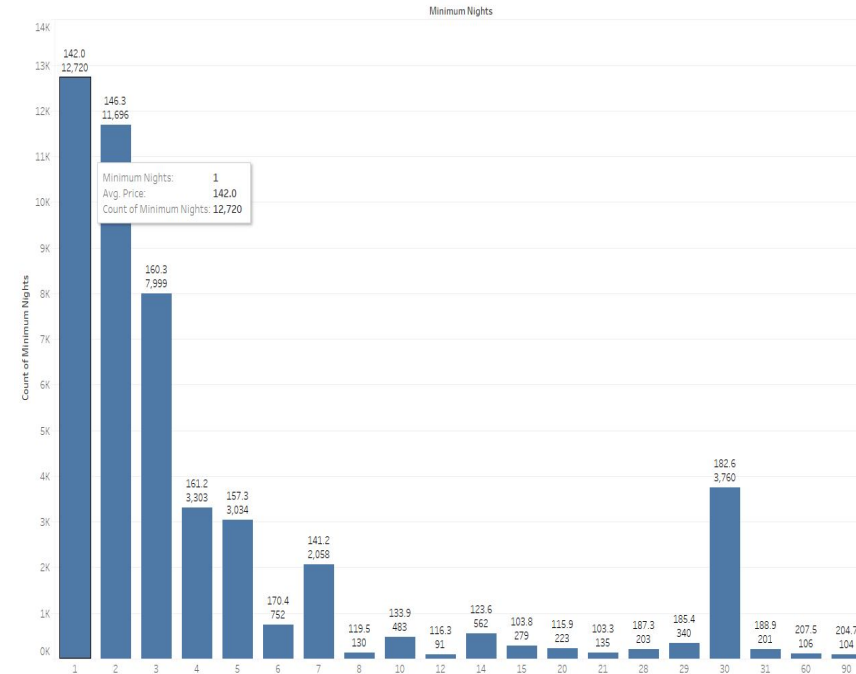
# Recommendations

- The company should prioritize and concentrate its efforts on promoting entire homes/apartments to attract a larger customer base.

- The company should consider forming partnerships with local brands to provide enticing offers for extended stays at their properties, encouraging customers to choose longer durations.

- Increased promotional offers should be directed towards customers in Manhattan to enhance engagement and attract more bookings in the area.

# Appendix- Data Sources

- The New York Airbnb dataset includes information on various Airbnb listings, including their hosts, locations, pricing and other characteristics.

- We reviewed of data set and description to gain insight of data.

| 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 |

Dataset Description

# Appendix– Data Methodology

A thorough analysis of the Airbnb Data was conducted. This process includes,

Cleaning the data set for missing values and outliers  treatment.

Using exploratory data analysis to identify customer preferences based on :

    Locality/ Neighbourhood

    price

    No. of Reviews

    Minimum nights stay

    Room Type

    Host ID/Name

# Appendix–Data Assumptions

- In this case study, it is posited that Airbnb successfully attained the envisaged revenue and profit levels prior to the onset of the COVID-19 pandemic, and the available data corroborates this assertion.

- The company's current focus is not on expanding to additional cities around New York City, indicating a strategic decision to consolidate efforts within the existing market.

- As global COVID-19 limitations begin to ease, the business is poised to develop plans taking into account the anticipated surge in travel. This suggests a proactive approach to adapting strategies in response to evolving market conditions and aligning with the expected resurgence in the travel industry.

# Thank You...