Airbnb Trends & Insights in NYC:
Uncovering Patterns and Opportunities for Success in Post COVID Period

For Head of Acquisitions and Operations & Head of User Experience

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Agenda

- Objective
- Background
- Key Findings
- Recommendations
- Appendix:
    - Data Sources
    - Data Methodology
    - Data Assumptions

Objective

- Enhance our business revival strategies for the post-COVID era.
- Deliver strategic recommendations for growth and improved customer satisfaction based on key findings.
- Provide valuable insights for informed decision-making on new acquisitions and operational enhancements

Background

- The COVID-19 pandemic affected Airbnb business due to travel restrictions, resulting in substantial income loss.
- The pandemic significantly impacted Airbnb's revenue, emphasizing the importance of adapting strategies to regain profitability and ensure long-term success.
- As travel restrictions are gradually being lifted, there is an opportunity to strategize and recover from the losses incurred during the pandemic

Most Costly Neighbourhood Group & Room Types

Average Price for room types in neighbourhood group

Average price in the neighbourhoods – room type: All

- **Coastal Neighbourhoods**: Waterfront / coastal neighbourhoods have a higher concentration of Airbnb listings, offering attractive locations for visitors.
- **Manhattan**: Most expensive neighbourhood group (_$179 avg. price_), indicating high demand and popularity among tourists.
- **Room Types**: Manhattan's waterfront areas have the priciest Entire home/apt listings (_$224 avg._), while shared rooms are more affordable.

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Capitalizing on Popularity and Affordability

Host price range preferences

Host price range preferences across neighbourhood groups

- **Price Range Preferences**: Hosts mainly favour lower price ranges, with the majority *(24k)* opting for the *(0-100)$ range*, indicating affordability as a key consideration.
- **Popularity**: Manhattan stands out as the dominant neighbourhood group across price ranges, demonstrating its popularity and appeal among hosts.
- **Strategic Insights**: Target Manhattan's diverse price segments, while also considering opportunities in Brooklyn's lower price range to attract budget-conscious travellers.

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Minimum Stay Analysis: Room Types and Neighbourhood Insights

- **Extended stays in Manhattan**: Avg. minimum stay for entire home/apt in Manhattan is 9.4 nights, indicating a preference for longer stays in the vibrant city.
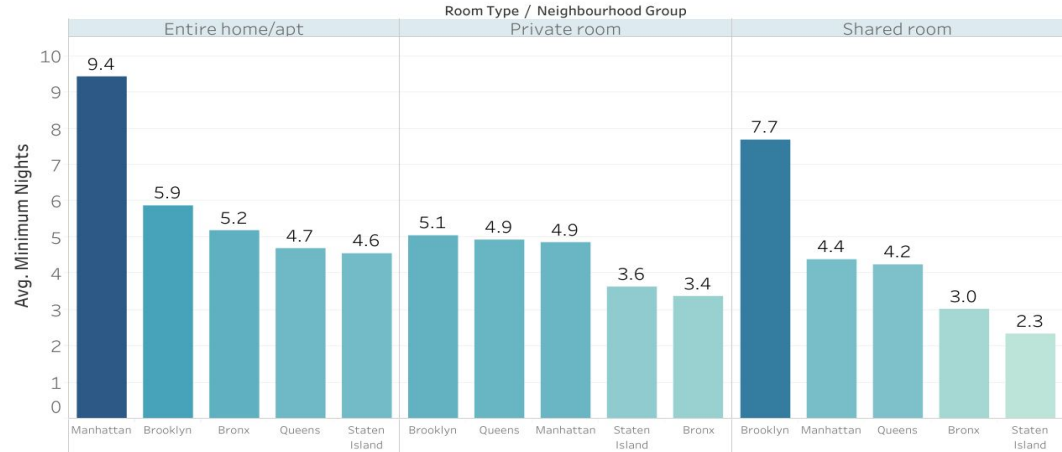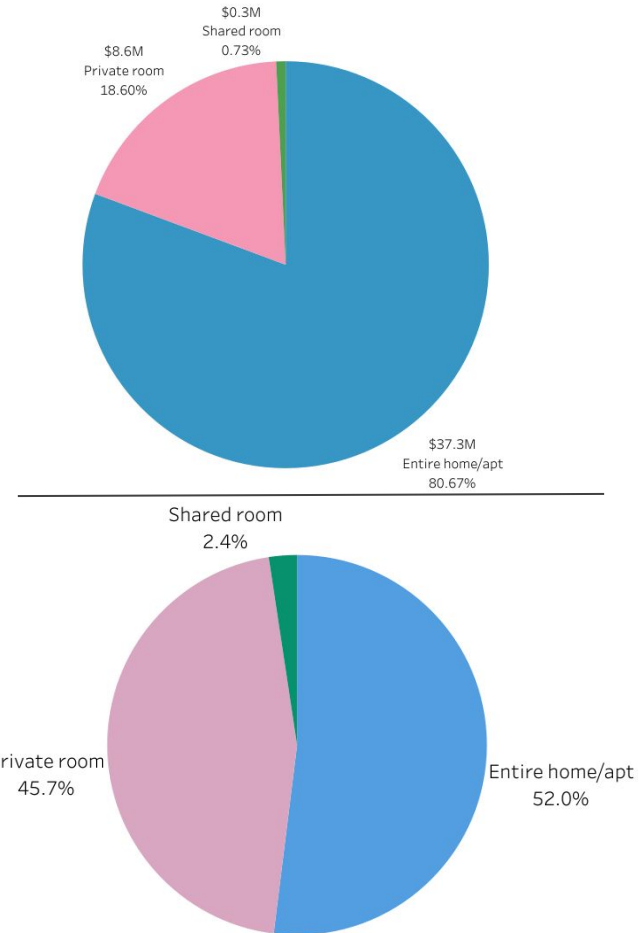

Average minimum nights by room types in neighbourhood group

- **Room type differences in Manhattan**: Private rooms have a shorter minimum stay (4.9 nights) than shared rooms (4.4 nights), offering varied options for different traveller preferences.
- **Flexibility in the Bronx**: Shorter stays in the Bronx, with private rooms averaging 3.4 nights and shared rooms offering a flexible minimum stay of 3.0 nights. These options provide an ideal choice for quick getaways or budget-friendly trips in the Bronx.

Type of Rooms preferred & Total Revenue

- **Focus on Entire Home/Apt**: Prioritize expanding offerings in this category *(52% preference)* to meet demand for private and secluded stays.
- Around *80% of total revenue ($37.3M)* is generated from Entire home/apt. So focus should be done on this room type to recover losses.
- **Leverage Private Room Options**: Attract guests with personalized and intimate stays *(45.7% preference)*. Highlight unique aspects of each private room, such as cozy ambiance and homely atmosphere.
- **Explore Shared Room Potential**: Optimize shared rooms *(2.4% preference)* for budget-conscious or social-oriented travellers. Create safe and comfortable environments, emphasizing cleanliness and privacy partitions.
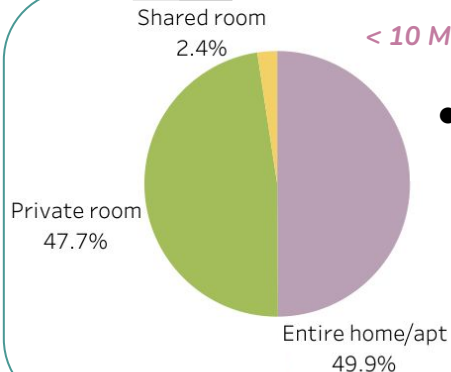

$0.3M
Shared room
0.73%

$8.6M
Private room
18.60%

$37.3M
Entire home/apt
80.67%

Shared room
2.4%

Private room
45.7%

Entire home/apt
52.0%

Types of Room preferred

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Ideal Stay Duration by Property Type

Shared room 2.4%
Private room 47.7%
Entire home/apt 49.9%

< 10 Min. nights

- 97.6% of listings in Entire Home/Apt and private rooms for less than 10 minimum nights stay.

Shared room 2.1%
Private room 28.3%
Entire home/apt 69.6%
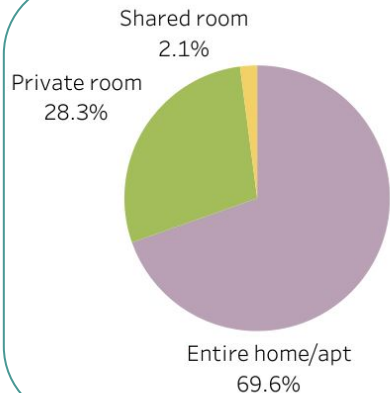
20 – 30 Min. nights

- Monthly Stay Potential: Listings for 20-30 min. night stays shows potential for monthly bookings in Home/Apt (69%), indicating the opportunity to tap into this demand.

Room Type / Minimum Nights Grp

Ideal Stay Duration by Property Type

Room Type
- Entire home/apt
- Private room
- Shared room
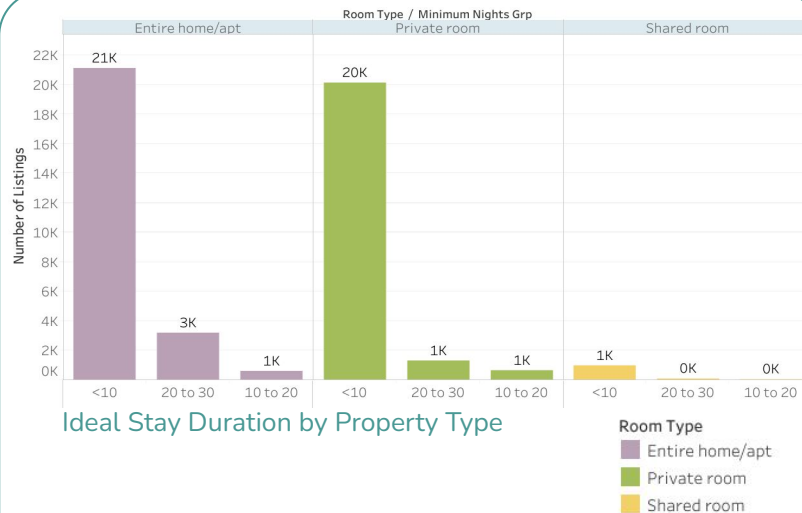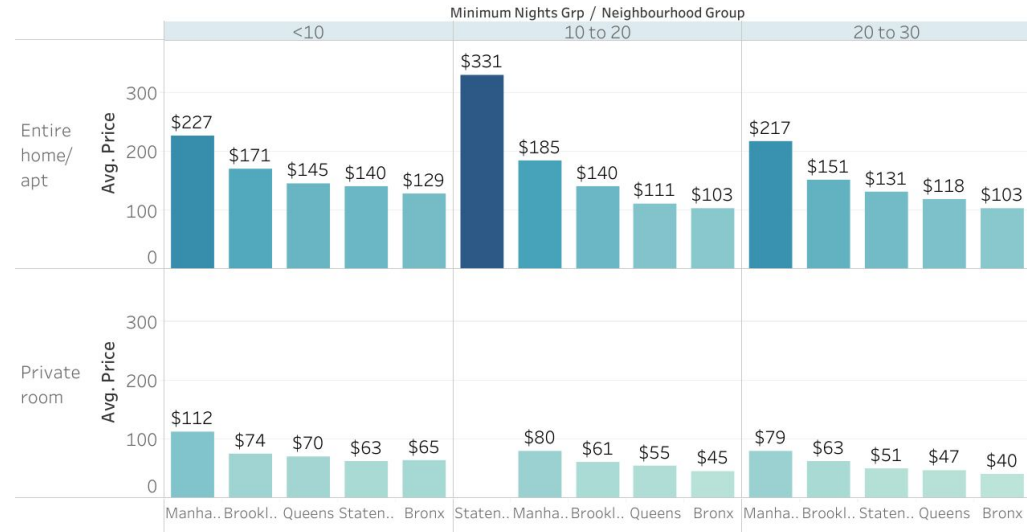
- Shorter Stays in Demand: Majority of bookings (41K) prefer stays of less than 10 days, highlighting the need to optimize offerings for shorter durations in Entire Home/Apt and private rooms.

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Optimizing Property Selection: Balancing Quality and Affordability in the Bronx and Manhattan
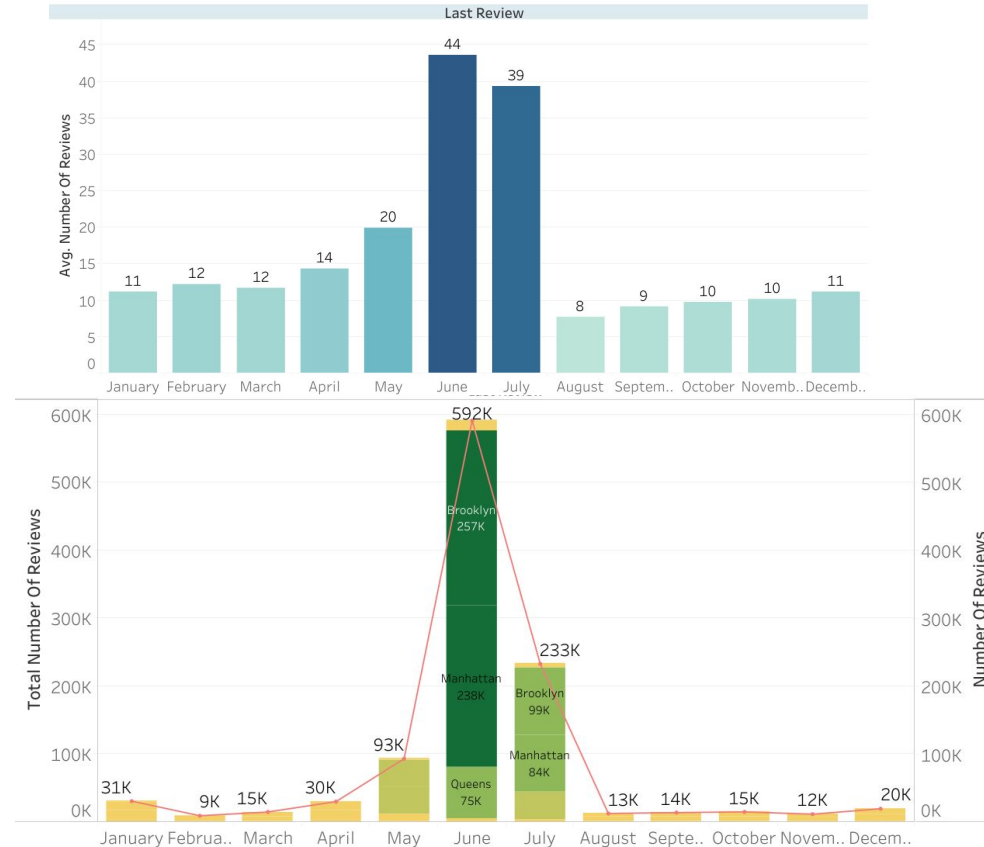
- **Premium Properties in the Bronx**: Appeal to budget-conscious travellers by targeting quality premium properties with affordable rates in the Bronx, for less than 10 nights stay range.

- **Manhattan's Reasonable Approach**: Attract customers in Manhattan seeking affordable options without compromising on quality by focusing on non-premium properties, providing added value to create a satisfying stay, focusing on less than 10 nights stay.

Minimum Nights Grp / Neighbourhood Group

	<10	10 to 20	20 to 30
Entire home/apt	$227, $171, $145, $140, $129	$331, $185, $140, $111, $103	$217, $151, $131, $118, $103
Private room	$112, $74, $70, $63, $65	$80, $61, $55, $45	$79, $63, $51, $47, $40

- Manhattan stands out as the priciest location among all areas, while the Bronx offers the most budget-friendly options

Optimizing Guest Experiences and Operational Performance during Peak Months

- Make peak months (June, July) unforgettable for guests by providing exceptional experiences. Take advantage of the increased demand and turn it into positive reviews.

- Stay ahead of the game by adapting operations based on seasonal review patterns. This ensures allocating resources effectively and deliver outstanding service during busy periods.

- June received around *0.5 Million Reviews*, followed by July which received *0.2 Million reviews*.

Last Review

Avg. Number Of Reviews by month:
January 11, February 12, March 12, April 14, May 20, June 44, July 39, August 8, September 9, October 10, November 10, December 11

Total Number Of Reviews by month:
January 31K, February 9K, March 15K, April 30K, May 93K, June 592K (Brooklyn 257K, Manhattan 238K, Queens 75K), July 233K (Brooklyn 99K, Manhattan 84K), August 13K, September 14K, October 15K, November 12K, December 20K

Top 5 Hosts Reviews & Price Insights in Manhattan, Brooklyn, and Queens

- **Manhattan**: High reviews and higher prices for *Michael (5.4k)* and *David(3.9k)* indicate guests' willingness to pay more for popular accommodations.

- **Brooklyn**: Despite the most reviews, Michael (4.5k) offers value with lower avg. price ($116), driving positive guest experiences.

- **Queens**: Fewer reviews, varied prices; guests prioritize affordability while appreciating David's offerings.
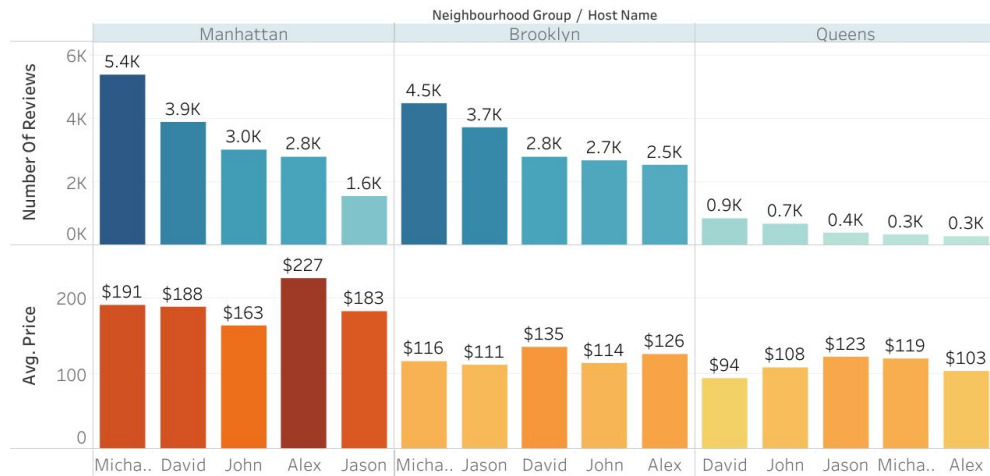
Top 5 Hosts Reviews & Price Insights in Manhattan, Brooklyn, & Queens

Recommendations

For the Head of Acquisitions and Operations, NYC:

- Acquire properties strategically in high-demand areas like Manhattan and Brooklyn, focusing on waterfront/coastal neighbourhoods.
- Diversify property offerings by acquiring more entire home / apartment listings and expanding the portfolio of private rooms.
- Negotiate favourable prices with hosts while considering the preferences of budget-conscious travellers.
- Enhance operational efficiency by allocating additional resources during peak months (June & July) and delivering exceptional guest experiences.

Recommendations

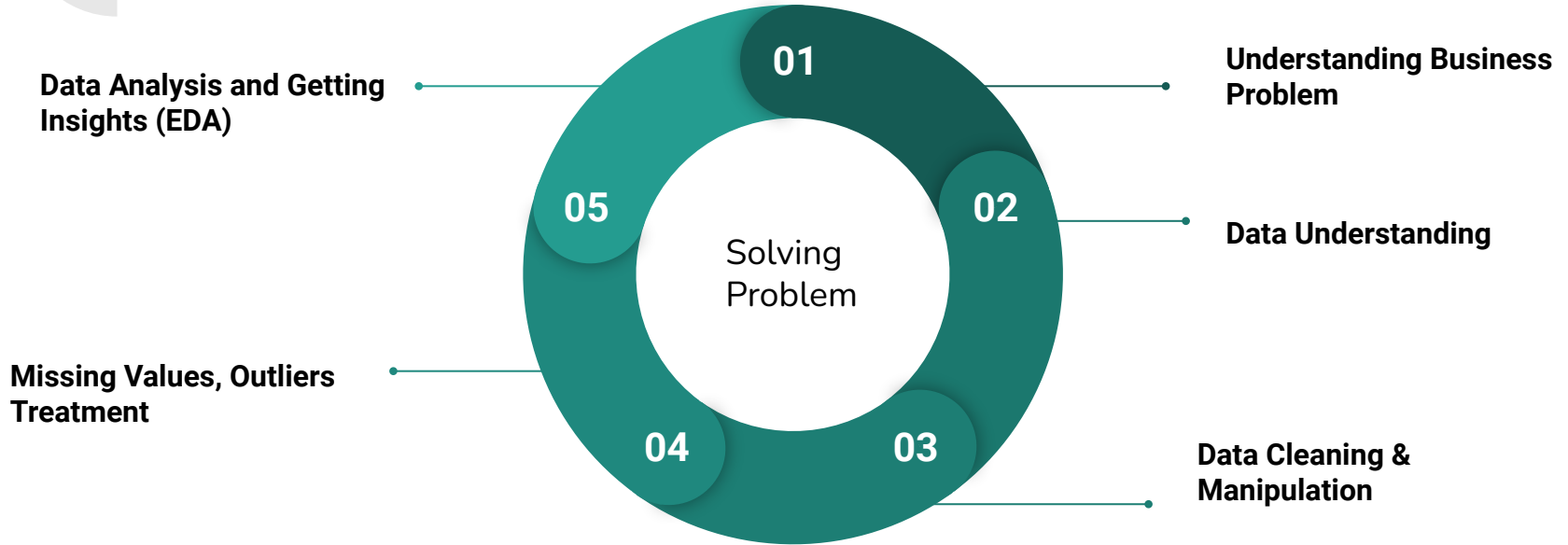For the Head of User Experience, NYC:

- Optimize property listing in order to highlight popular areas like Manhattan while considering affordability in neighbourhoods like the Bronx.
- Personalize property recommendations based on customer preferences, emphasizing features like waterfront locations and exclusive amenities.
- Improve visibility for less popular properties through curated lists, promotions, and enhanced descriptions to attract a wider range of customers.
- Segment customers based on their preferences, such as budget-conscious travellers, those seeking private stays, or those looking for shorter stays.
- Identify target neighbourhoods based on their popularity, affordability, and unique offerings to enhance the user experience.

Appendix – Data Source

- The New York Airbnb Dataset provides detailed information on listings, hosts, locations, pricing, and more,
- User-Friendly Structure: With a clear and self-explanatory column structure, the dataset is designed for ease of use.
- We carefully reviewed the dataset description, gaining valuable insights into each column's meaning and context.

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

Appendix – Data Methodology

Data Analysis and Getting Insights (EDA)

Understanding Business Problem

01

02

Data Understanding

05

Solving Problem

Missing Values, Outliers Treatment

04

03

Data Cleaning & Manipulation

See in Methodology Document for details…..

Appendix – Data Assumptions

- Data Consistency: It is assumed that the dataset maintains consistency in the format and structure of the data across all records.
- Data Accuracy: It is assumed that the provided dataset is accurate and reliable, based on the assumption that Airbnb maintains accurate records of their listings in NYC.
- Data Privacy and Anonymity: It is assumed that appropriate measures have been taken to protect the privacy of hosts and guests in the dataset. Personal information has been removed to maintain data confidentiality.

THANK YOU

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