

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

For Data Managers & Lead Data Analysts

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Agenda

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



Objective

- Enhance understanding of COVID impact on the Airbnb market, providing key insights for decision-making.
- Provide in-depth analysis to Lead Data Analyst and Data Analysis Managers on the COVID impact in the Airbnb market.
- Address challenges and gaps in research and data preparation to improve understanding and future analyses.

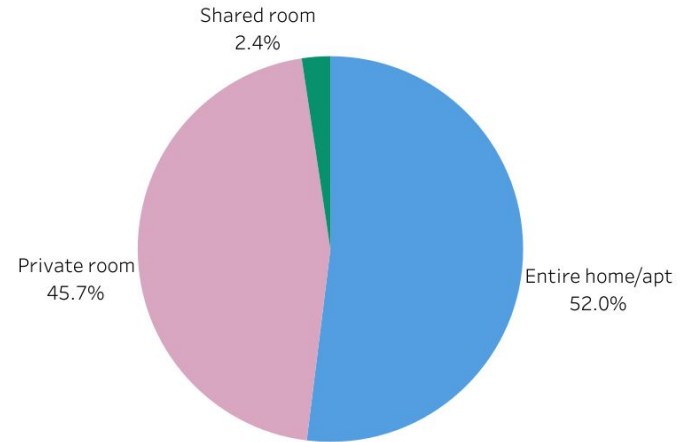


Background

- 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.

Type of Rooms preferred

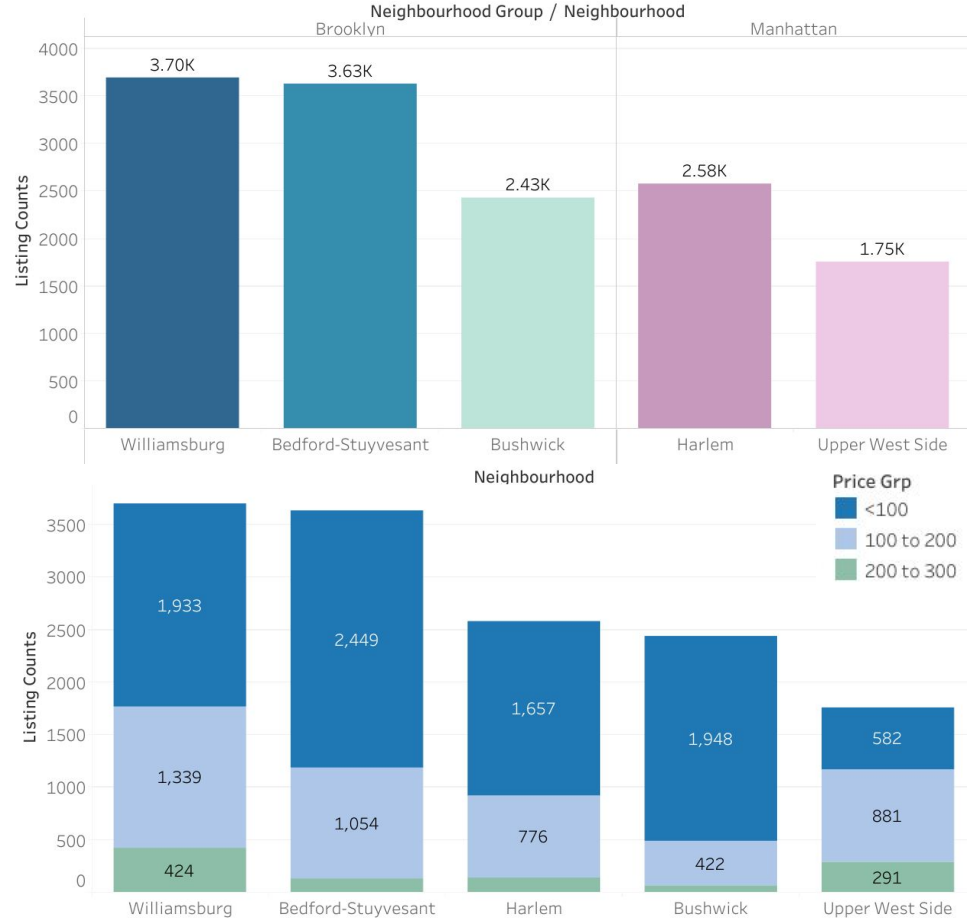
- **Focus on Entire Home/Apt:** Prioritize expanding offerings in this category (*52% preference*) to meet demand for private and secluded stays. Emphasize features like privacy, comfort, and exclusive amenities.
- **Leverage Private Room Options:** Attract guests with personalized and intimate stays (*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.



Types of Room preferred

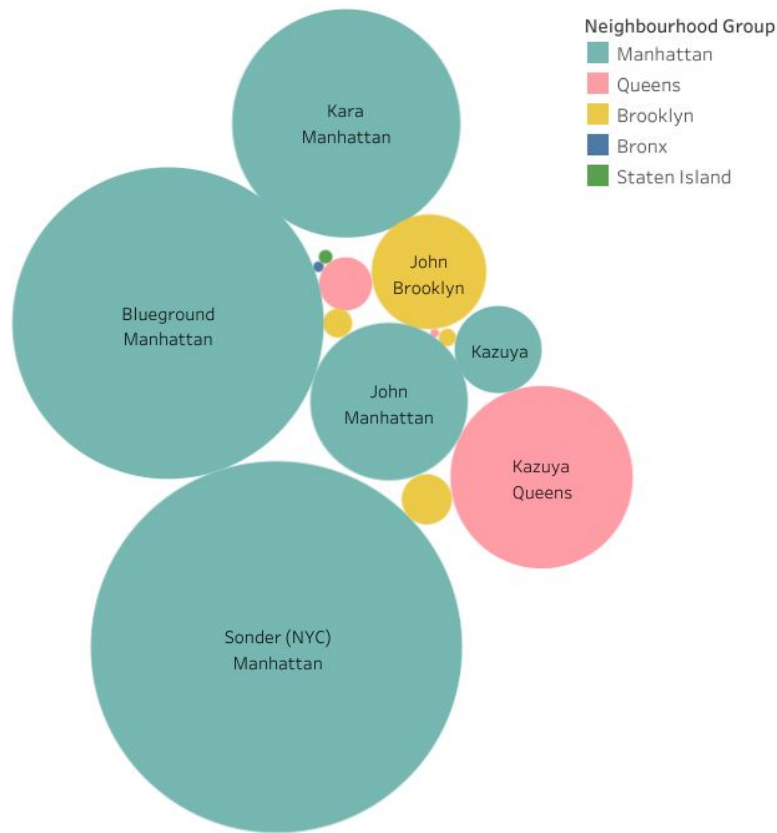
Top 5 Neighbourhoods with highest Listings & Price range preferences

- Williamsburg (3.7k), Bedford-Stuyvesant (3.63k) and has the most number of listings in their neighbourhood
- Brooklyn dominates with 3 neighbourhoods, while Manhattan has 2 in the top 5 based on listing counts.
- High number of properties preferring affordable price range (0-\$100) indicates a focus on budget-conscious travellers



Top 5 Host Name listings in Neighbourhood Group

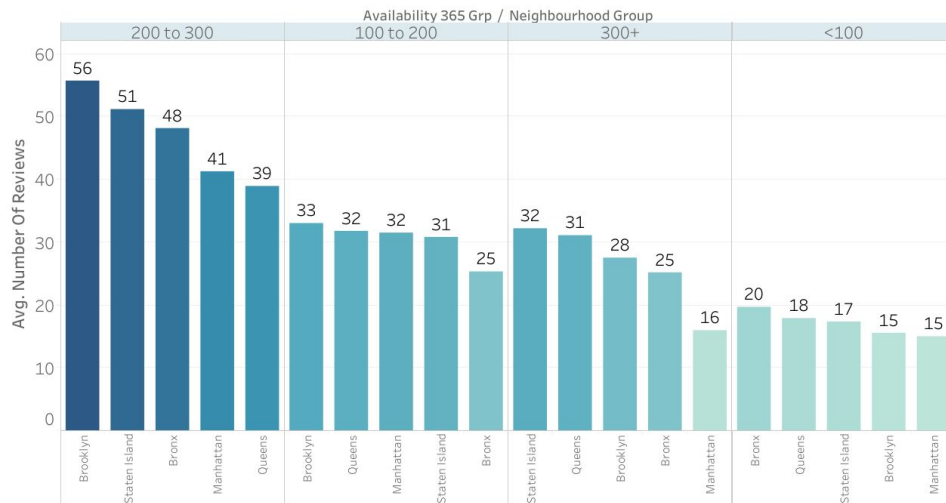
- **Sonder (NYC)** has the highest market presence in **Manhattan** with 3597 listings.
- **Blueground** and **Sonder (NYC)** popularity and extensive offerings make them key players in the market.
- **Queens** neighbourhood is dominated by **Kazuya** with 869 listings.



Top 5 Host Name listings in Neighbourhood Group

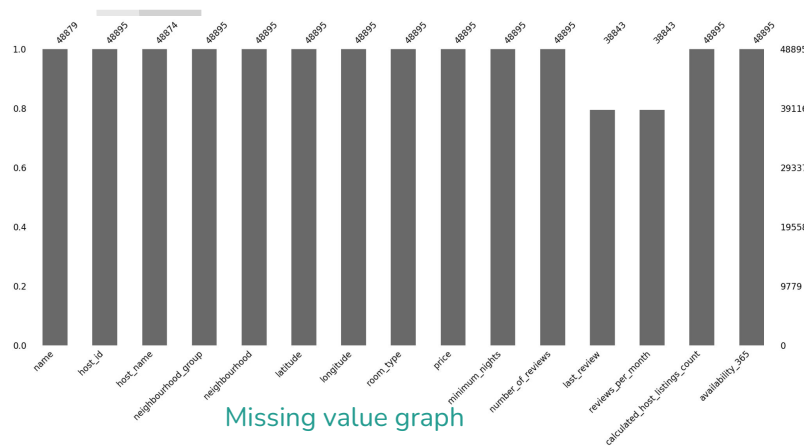


- Average number of reviews are high in neighbourhood groups when the property is available for 200 to 300 days,
- Shorter property availability (less than 100 days) in neighbourhood groups leads to lower average reviews.



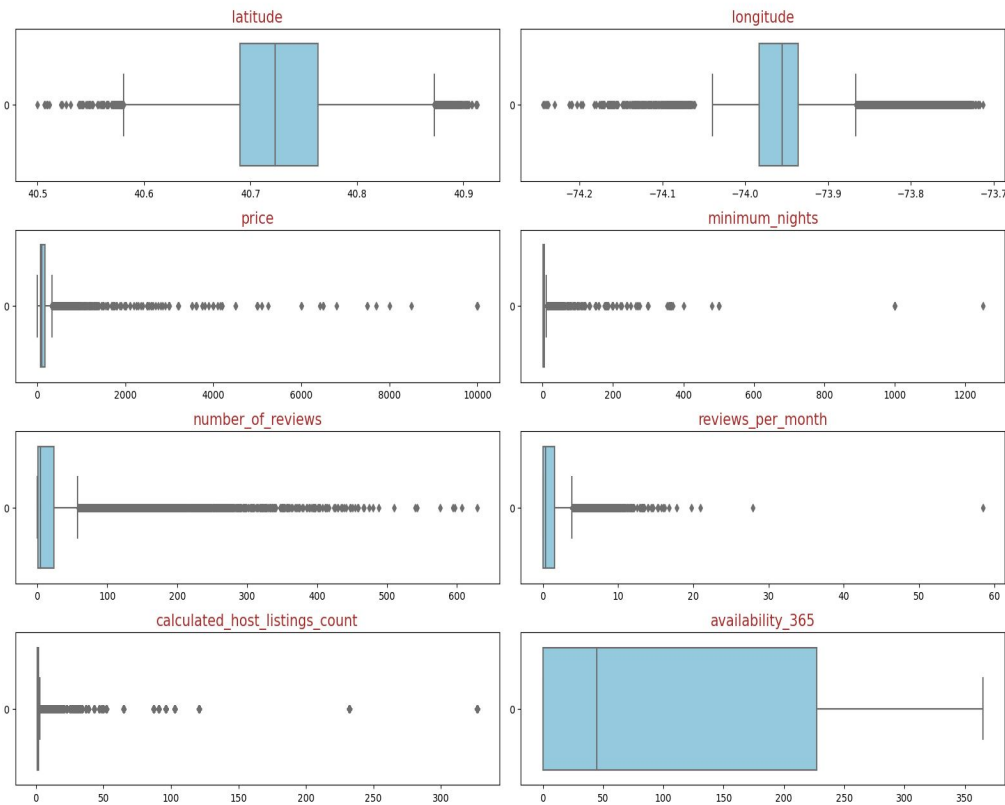
Avg. number of reviews across different Availability Group in neighbourhood Group

Data Quality Check



- There are some outliers in the dataset for numerical columns, as seen in boxplot.
- There are 2 columns which contains 20% of missing values.
- Data managers should prioritize resolving outliers and missing values in the dataset to enhance data quality.

Checking Outliers using Boxplot





Recommendations

For Data Managers & Lead Data Analysts, NYC:

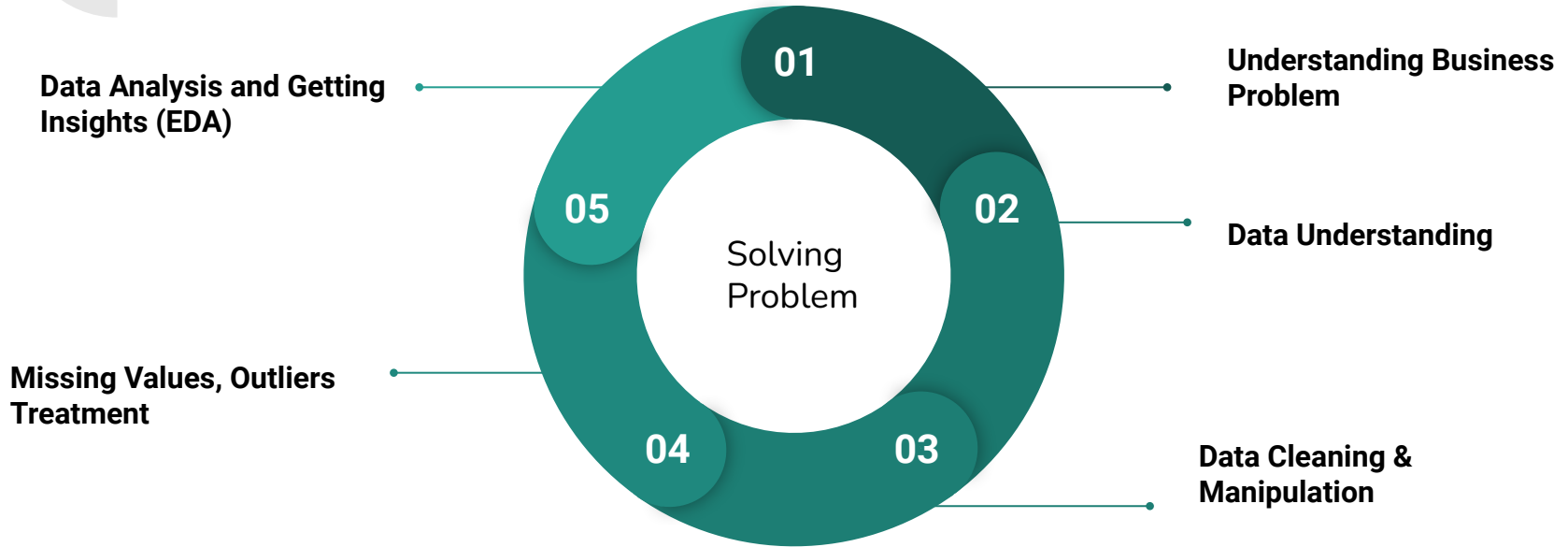
- Improve data collection: Gather additional details about amenities, features, and reviews for deeper insights.
- Segment customers: Identify different traveller categories and personalize marketing and recommendations.
- Leverage advanced analytics: Employ machine learning to predict preferences, demand, and optimize pricing.

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



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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