

DATA INSIGHTS OF AIRBNB IN NYC



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.

People have now started travelling again and Airbnb is aiming to bring up the business again and ready to provide services to customers.

For the past few months, Airbnb has seen a major decline in revenue.

Now that the restrictions have started lifting and people have started to travel more, Airbnb wants to make sure that it is fully prepared for this change.

So, analysis has been done on a dataset consisting of various Airbnb listings in New York.

AIRBNB DATA DESCRIPTION

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

DATA ASSUMPTIONS - VARIABLES

Categorical Variables:

- room_type
- neighbourhood_group
- neighbourhood

Continuous Variables(Numerical):

- Price
- minimum_nights
- number_of_reviews
- reviews_per_month
- calculated_host_listings_count
- availability_365
- Continuous Variables could be binned in to groups too

Location Variables:

- latitude
- longitude

Time Variable:

- last_review

Variable Categories

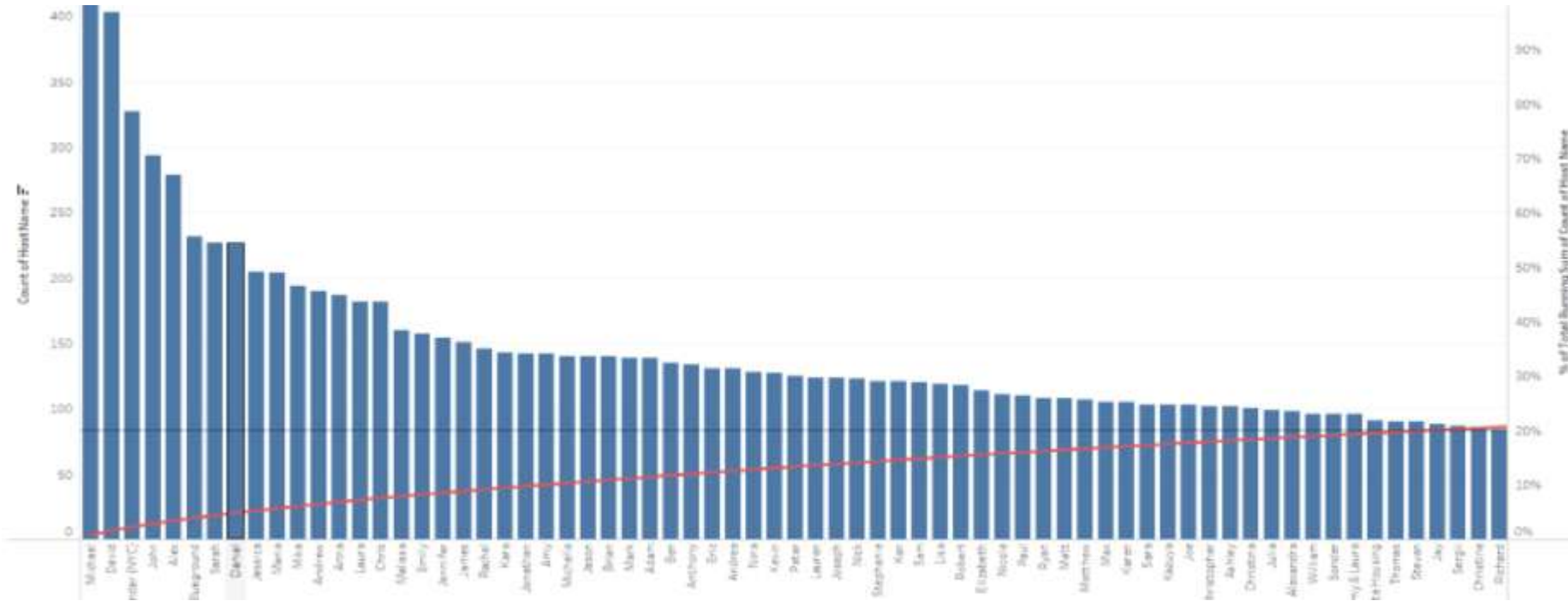


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The different leaders at Airbnb want to understand some important insights based on various attributes in the dataset so as to increase the revenue. Our responsibility is to provide valuable insights to aid in decision making.

PROBLEM STATEMENT

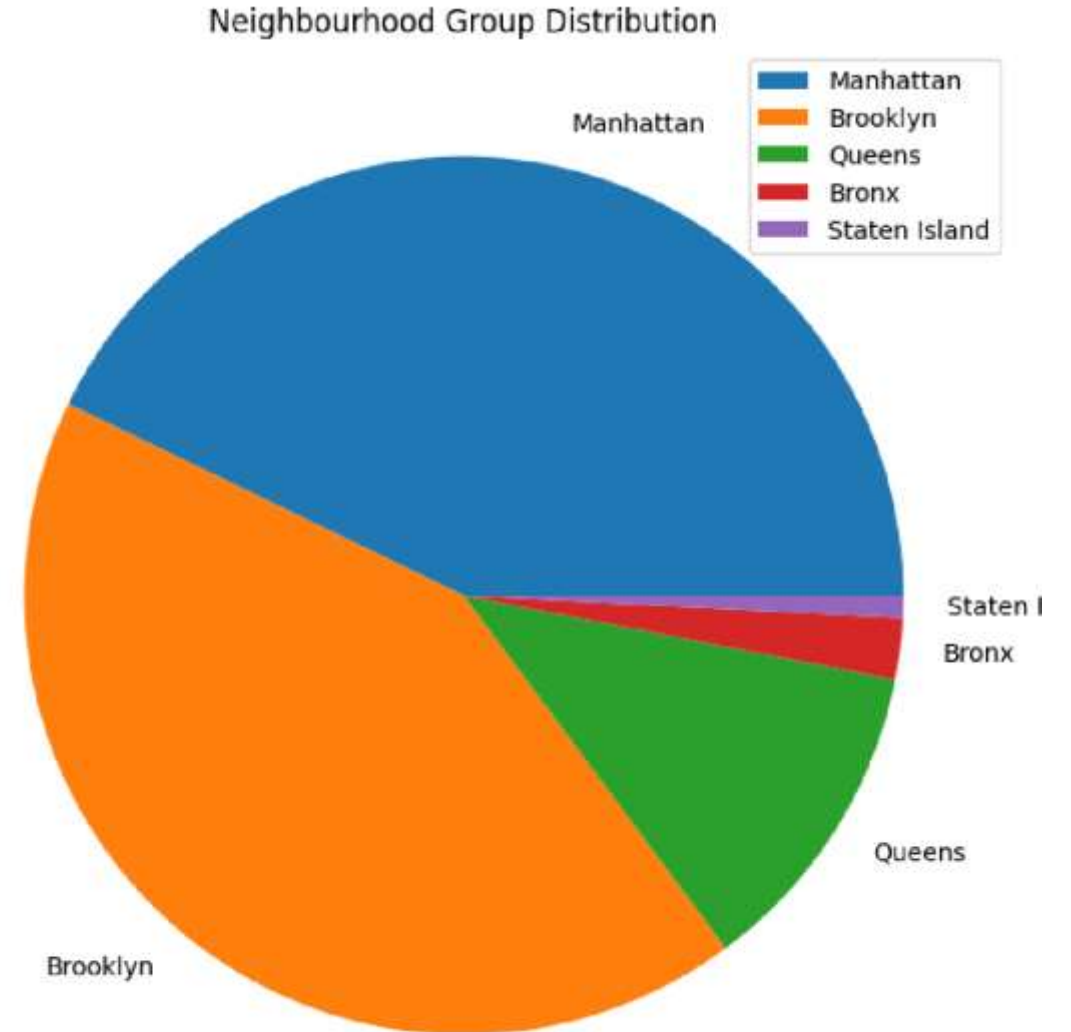


EVERY HOST MATTER

The top 60 hosts only make up 20% of the total host count.

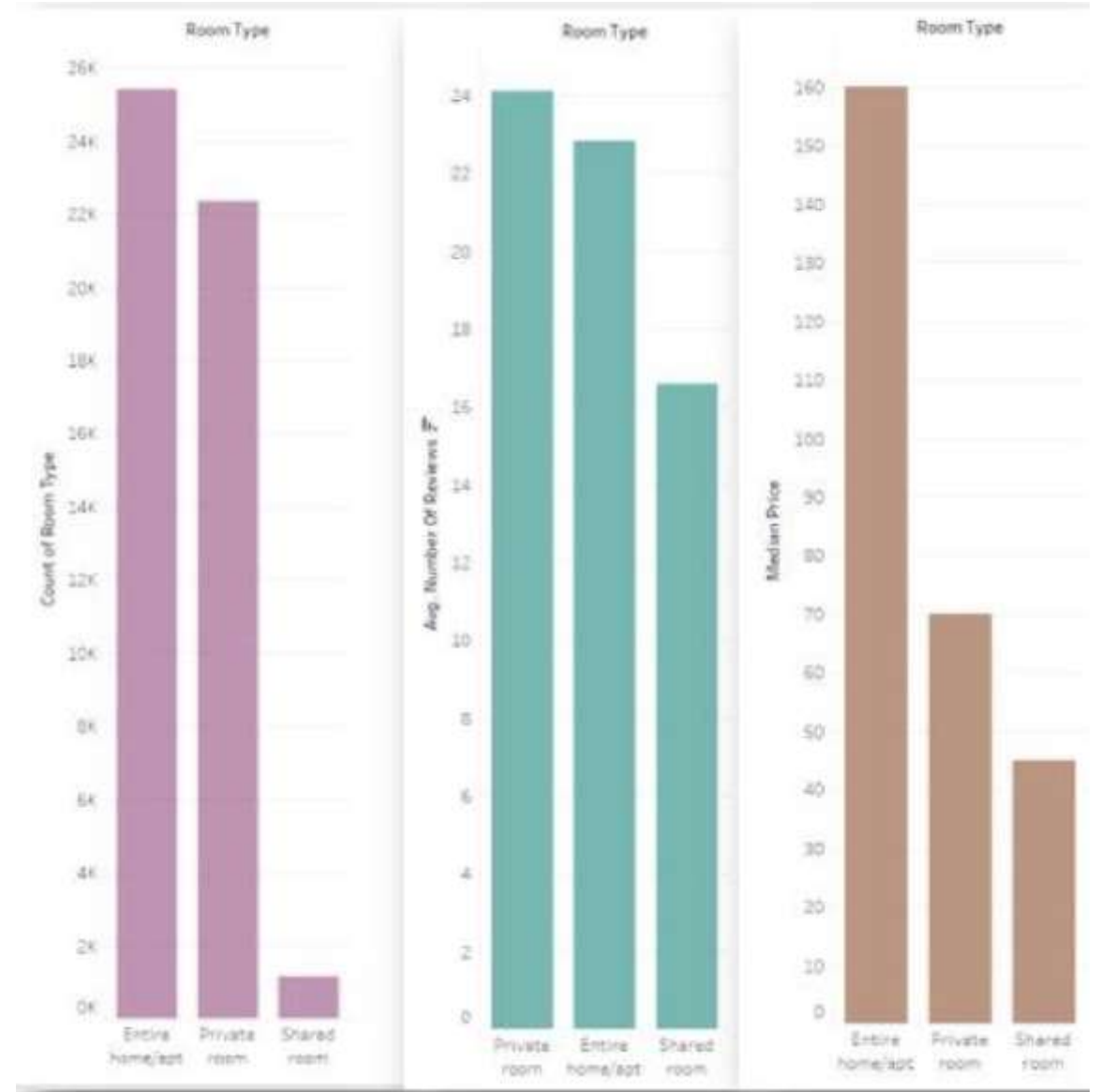
MOST CONTRIBUTING NEIGHBOURS

What are the neighborhoods needed to target?
81% of the listing are Manhattan and Brooklyn neighborhood group



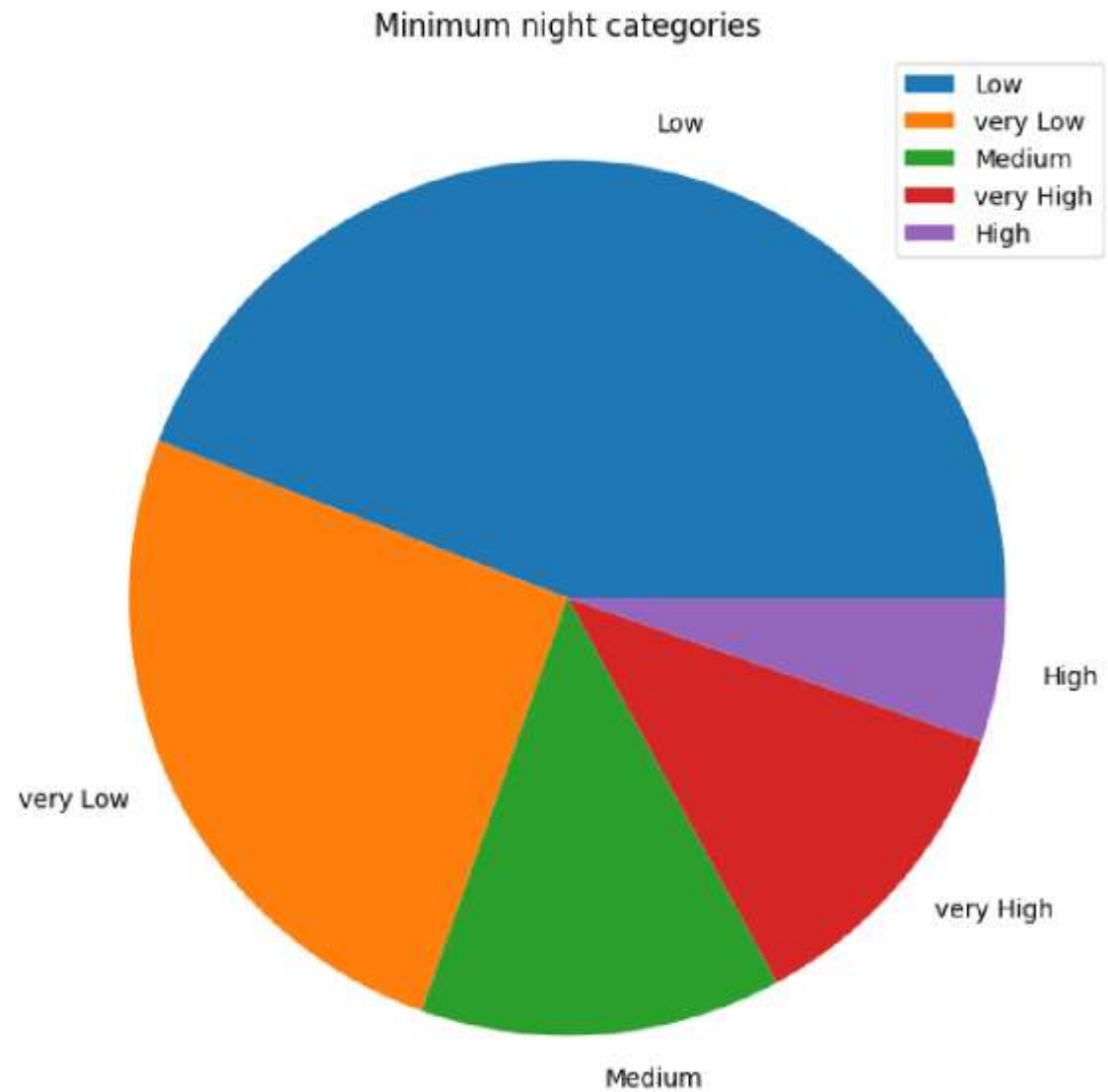
THE PROBLEMS OF SHARED ROOMS

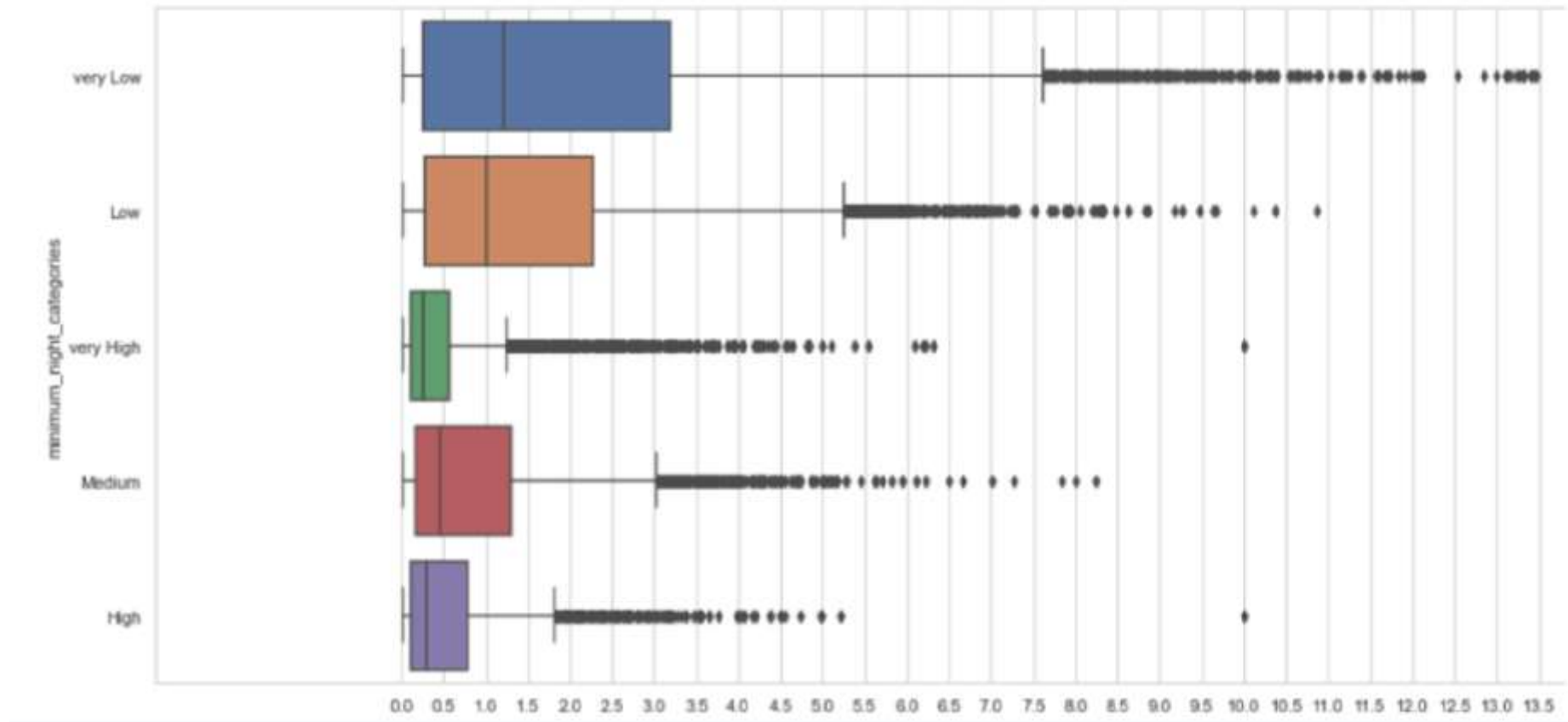
Median rates for shared rooms are significantly lower. They are less likely to be reviewed. Shared rooms only accounts for 2% of the total types of rooms.



MINIMUM NIGHT CATEGORIES

Low Category in minimum nights feature contribute 40%.





EFFECT OF MINIMUM NIGHT CATEGORIES

Customers are more likely to leave reviews for lower number of minimum nights

DATA METHODOLOGY

Conducted a thorough analysis of New York Airbnb's Dataset.

Cleaned the data set using python.

Derived the necessary features.

Used group aggregation , pivot table and other statistical methods.

Created charts and visualization using Tableau.

CONCLUSION AND RECOMMENDATIONS



Shared rooms need to be inspected upon.



More than 80% of the listings are Manhattan and Brooklyn neighbourhood group .



Minimum nights threshold should be on the lower side to make properties more customer-oriented.



The cumulative contribution of all hosts is better than a few hosts doing well.



THANK YOU