

DECODING NYC AIRBNB: UNVEILING HIDDEN INSIGHTS

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AGENDA

Objective

Data life cycle

Analysis methods

Recommendations

appendix:

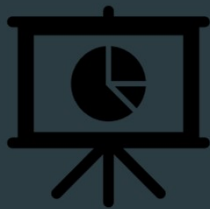
- *Data sources*
- *Data methodology*
- *Data model assumptions*

OBJECTIVE



To Provide insight into the current market situation

Enhance our understanding of property and host acquisitions, operations, and customer preferences.



Provide early recommendations to our marketing and operations teams

BACKGROUND

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.

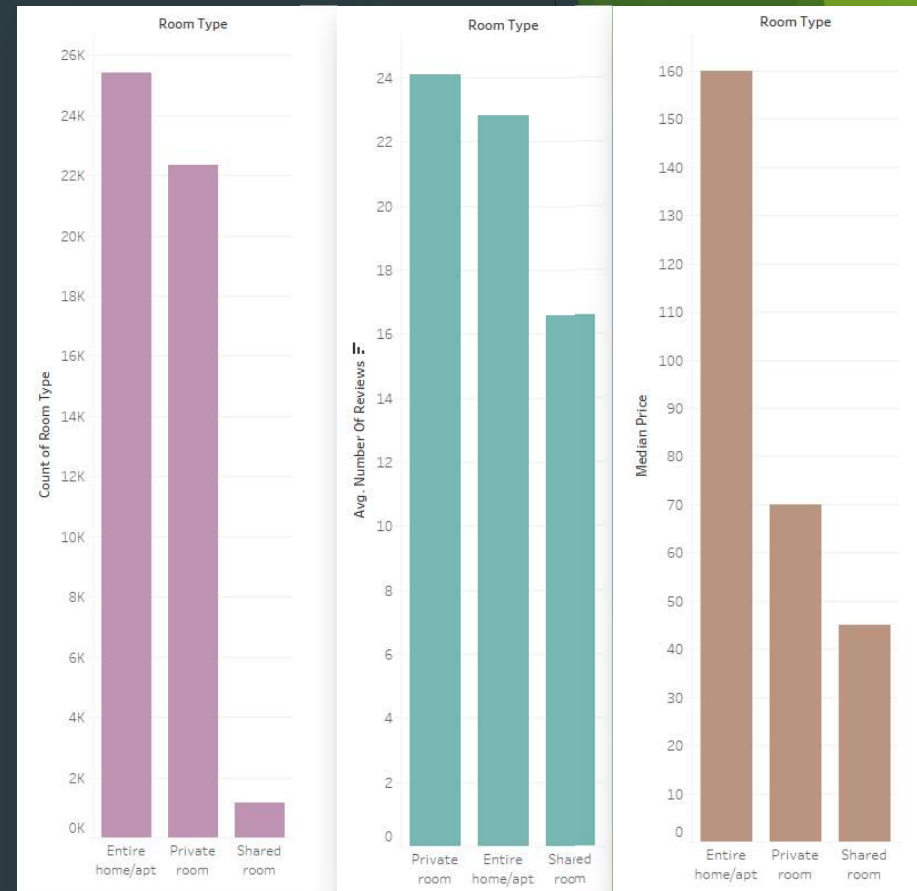
Airbnb wants to make sure that it is fully prepared for this change.

THE PROBLEMS WITH SHARED-ROOMS

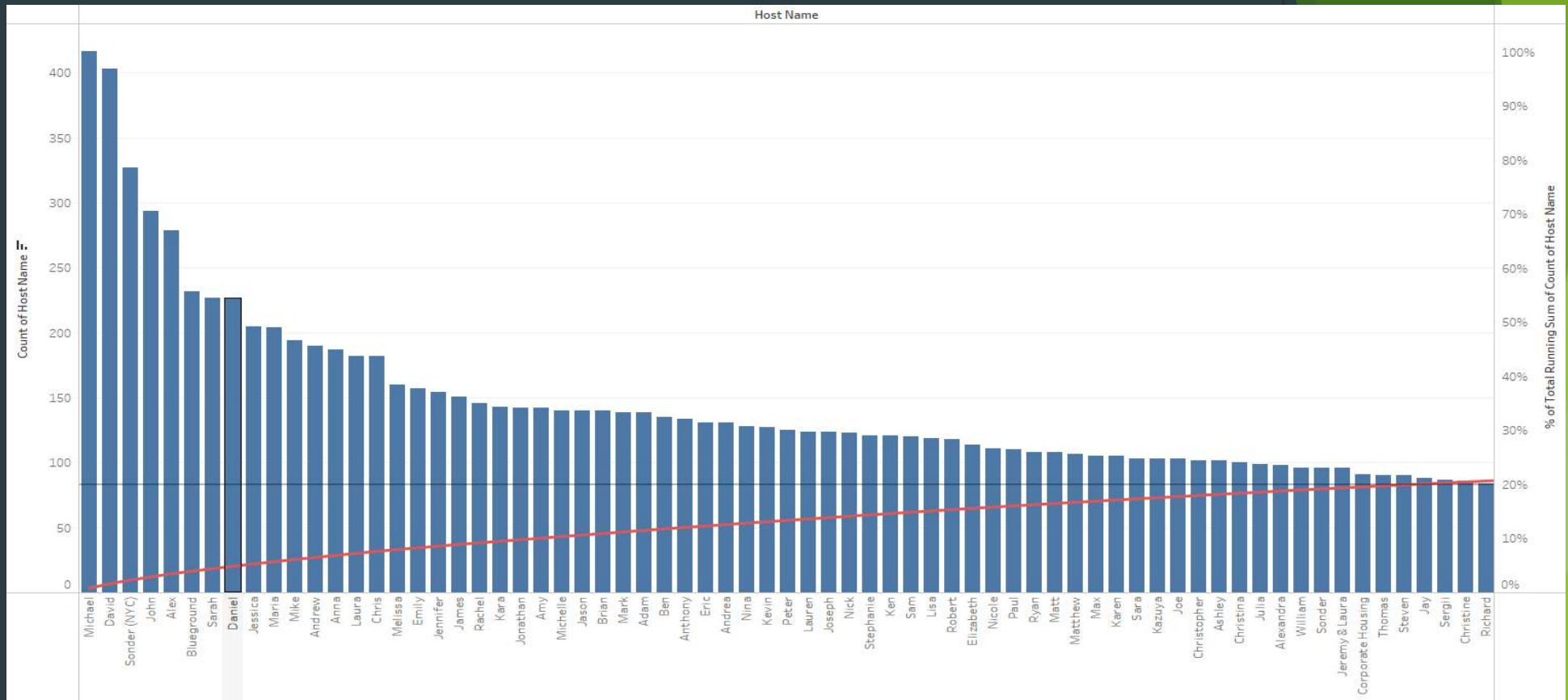
Shared rooms only account for 2 % of the total types of rooms.

They are less likely to be reviewed.

Median rates for shared rooms are significantly lower.

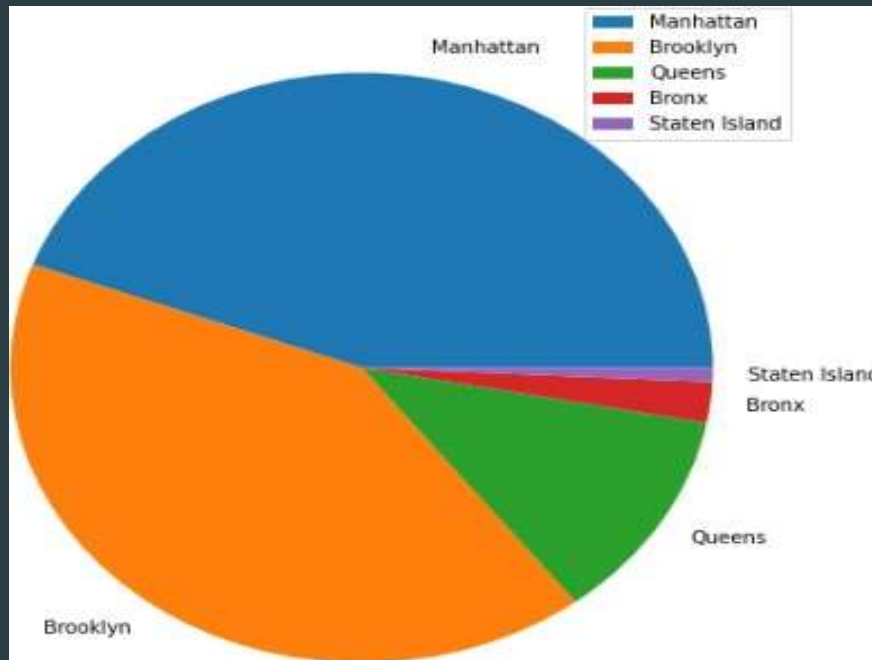


EVERY HOST MATTER



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

MOST CONTRIBUTING NEIGHBORHOODS



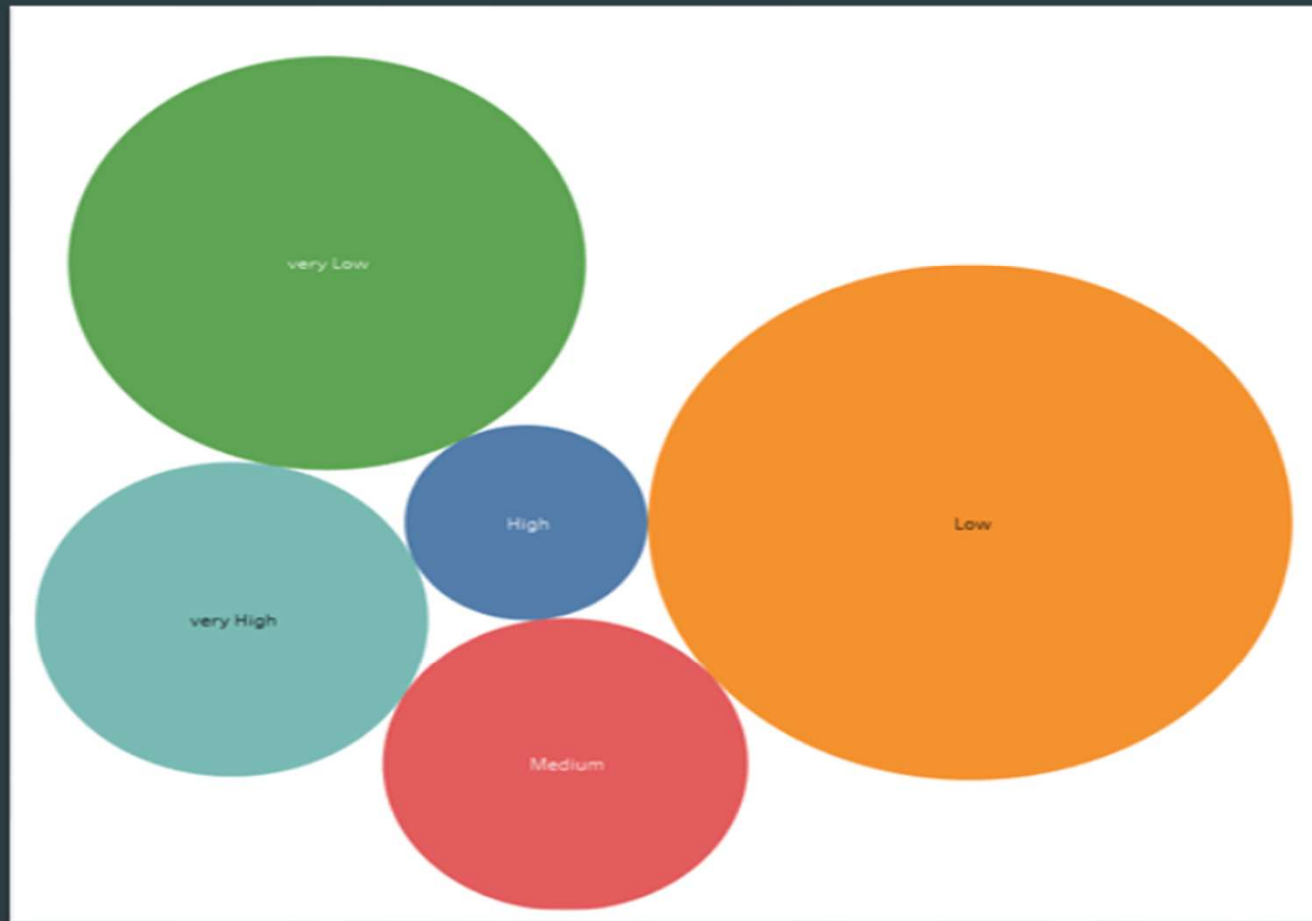
Neighborhood group percentages

Manhattan	44.301053
Brooklyn	41.116679
Queens	11.588097
Bronx	2.231312
Staten Island	0.762859

81 % of the listing are Manhattan and Brooklyn neighborhood group

Staten Island has the lowest contribution.

MINIMUM NIGHT CATEGORIES

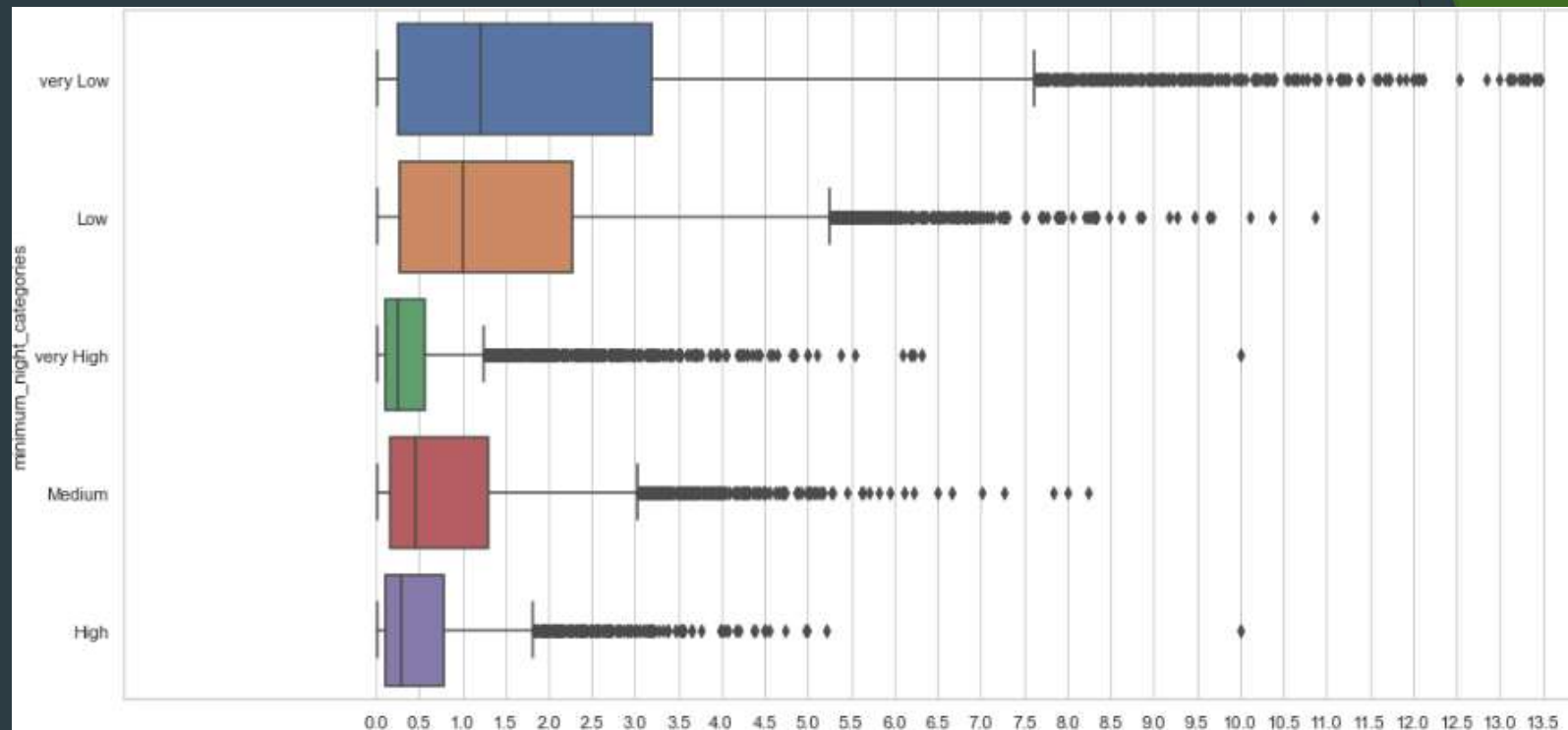


Minimum night category percentages

Low	40.280192
very Low	26.014930
very High	14.997444
Medium	12.960425
High	5.747009

Low category in minimum night feature contributes 40 %

EFFECT OF MINIMUM NIGHT ON REVIEWS



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

CONCLUSION & RECOMMENDATIONS



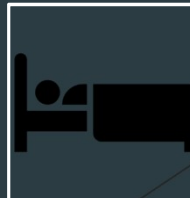
Shared rooms need to be inspected upon.

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



More than 80 % of the listing are Manhattan and Brooklyn neighborhood Group.

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



APPENDIX - DATA SOURCES

The columns in the dataset are self-explanatory. You can refer to the diagram given below to get a better idea of what each column signifies.

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

Conducted a thorough analysis of NewYork Airbnbs Dataset.

Cleaned the data set using python.

Derived the necessary features.

Used group aggregation, pivot table and other statistical methods.

Created charts and visualizations using Tableau.

APPENDIX - DATA ASSUMPTIONS

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

The background is a dark blue-grey color. On the right side, there are several overlapping, semi-transparent green geometric shapes, including triangles and polygons, creating a layered effect. In the center-left area, there is a cluster of green circles of various sizes. Some circles have a thin white outline, while others are solid green. The text "Thank you" is written in a white, sans-serif font, centered horizontally and slightly below the middle of the image.

Thank you