AIRBNB Case Study IIIT-B

BY SHAWN, YOGESH AND SHRADDHA

INTRODUCTION

▶ Suppose that you are working as a data analyst at Airbnb. 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

OBJECTIVE

- The different leaders at Airbnb want to understand some important insights based on various attributes in the dataset so as to increase the revenue

- 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.

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

PROBLEM STATEMENT

▶ Which type of hosts to acquire more and where?

▶ The categorization of customers based on their preferences.

▶ What are the neighborhoods they need to target?

▶ What is the pricing ranges preferred by customers?

▶ The various kinds of properties that exist w.r.t. customer preferences.

▶ Adjustments in the existing properties to make it more customer-oriented.

▶ What are the most popular localities and properties in New York currently?

▶ How to get unpopular properties more traction? and so on..

DATA CLEANING AND PREPARATION

▶ For this case study, we have used Jupiter Notebook for initial analysis of the data and Tableau for further analysis and visualization

▶ The dataset was checked for duplicate rows, and none were found.

▶ Null values were found in the columns name, host-name, last review, and review-per-month.

▶ The column "name" was dropped because the number of missing values was small and dropping it would not have a significant impact on the analysis. Other irrelevant columns like "last review" and "ID" were also dropped.

▶ The formatting of the dataset was checked.

▶ Outliers were identified and reviewed.

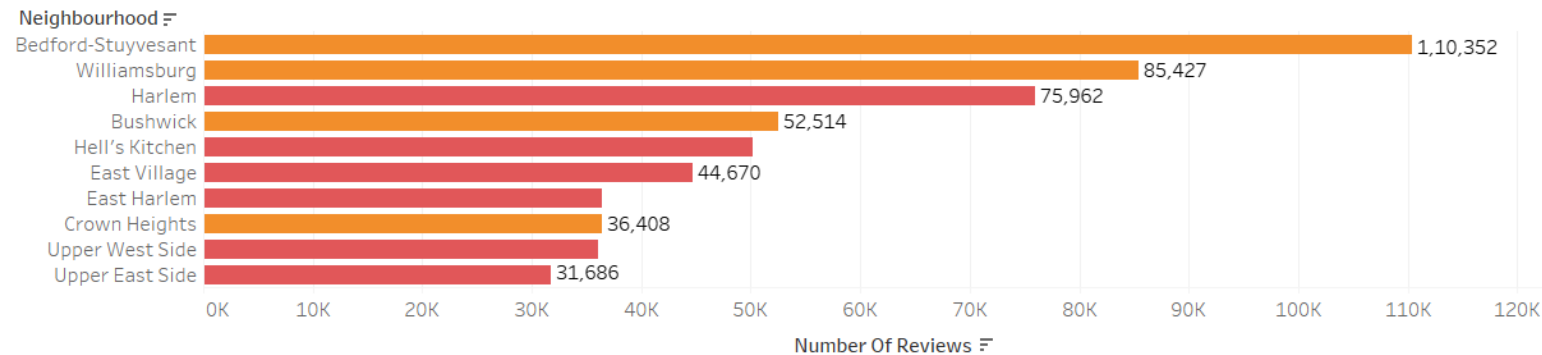# LIST OF TOP 10 HOSTS

Top 10 Host
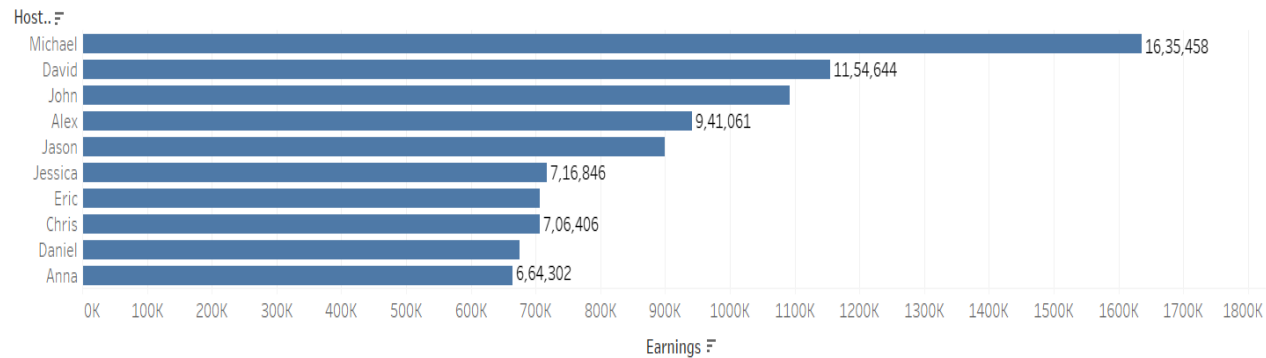
The graphs depicts the top 10 host who are earning more.

Michael is the top earner who is earning more and he belongs to Manhattan

TARGETED NEIGHBOURHOODS

Top 10 Neighbourhoods

Neighbourhood Group	
■ Brooklyn	
■ Manhattan	

Bedford-Stuyvesant 1,10,352
Williamsburg 85,427
Harlem 75,962
Bushwick 52,514
Hell's Kitchen
East Village 44,670
East Harlem
Crown Heights 36,408
Upper West Side
Upper East Side 31,686

Number Of Reviews

These Neighborhoods are the most targeted by customers. It could be mostly visited as they are near a tourist spot or the facilities are best in this locality.

Average Price Prefer by People

Room Type Pricing preferred by customers
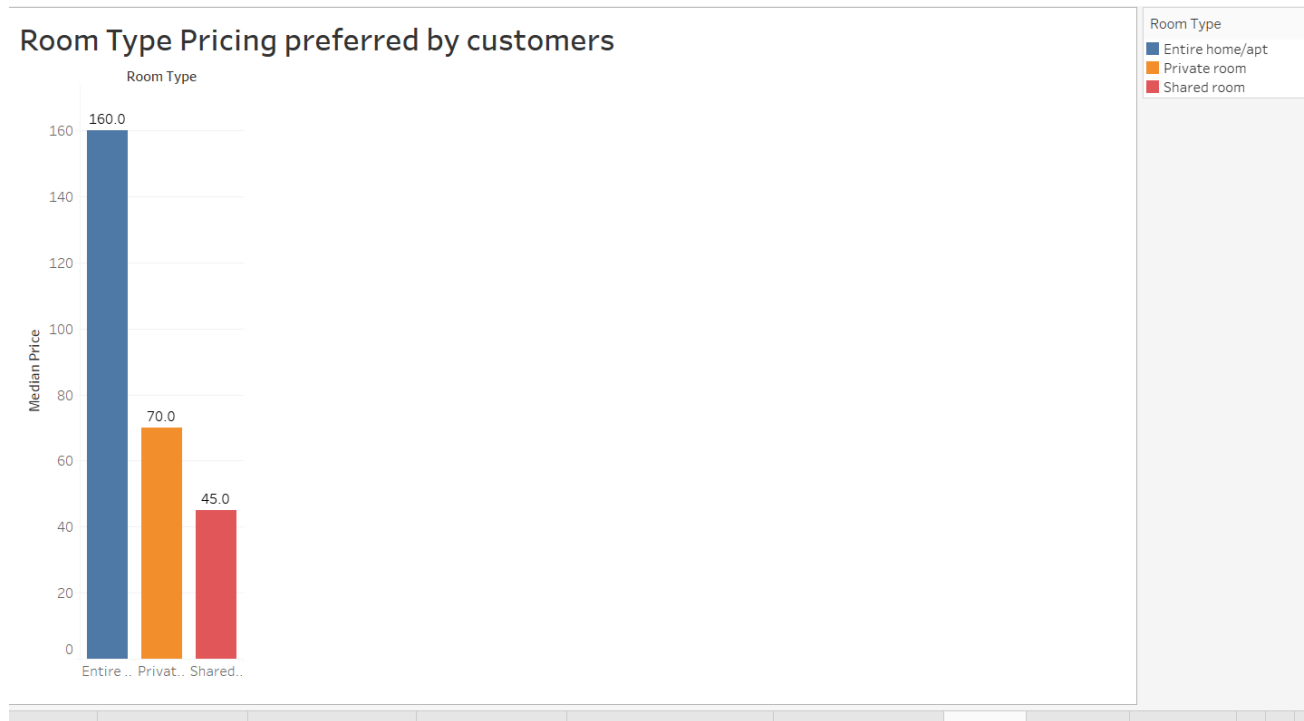
On the basis of room type the average price preferred by customer for Entire Room is 160.

- For Private Room is 70

- Shared Room is 45

TYPES OF PROPERTIES PREFERRED BY CUSTOMERS

• There are three types of rooms – Entire Home/Apartment, Private Room & Shared Room

• Overall customers appear to prefer Entire Home (51%) & Private Room (47.31%) in comparison to the shared room (1.69%).

• Airbnb can focus on promoting shared rooms with discount offers to increase booking of a shared room with discounts


Types of properties w.r.t Customer Preferences

Room Type
Entire home/apt
Private room
Shared room

1.69%
Shared room

47.31%
Private room

51.00%
Entire home/apt
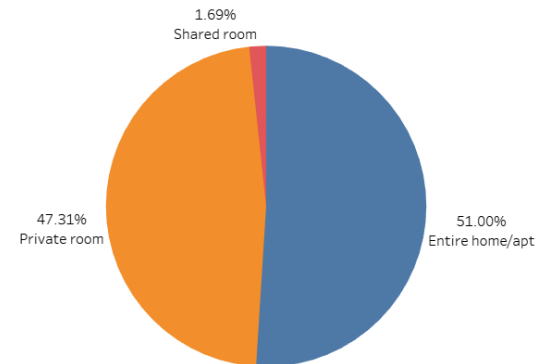
# MOST POPULAR LOCALITIES AND PROPERTIES IN NEW YORK

According to this map more the darker side represents the most popular localities and the lighter side represents the least popular.

We can conclude that Manhattan, Brooklyn & Queens are much popular than Bronx and Staten Island
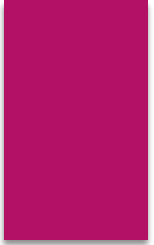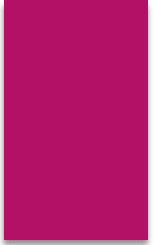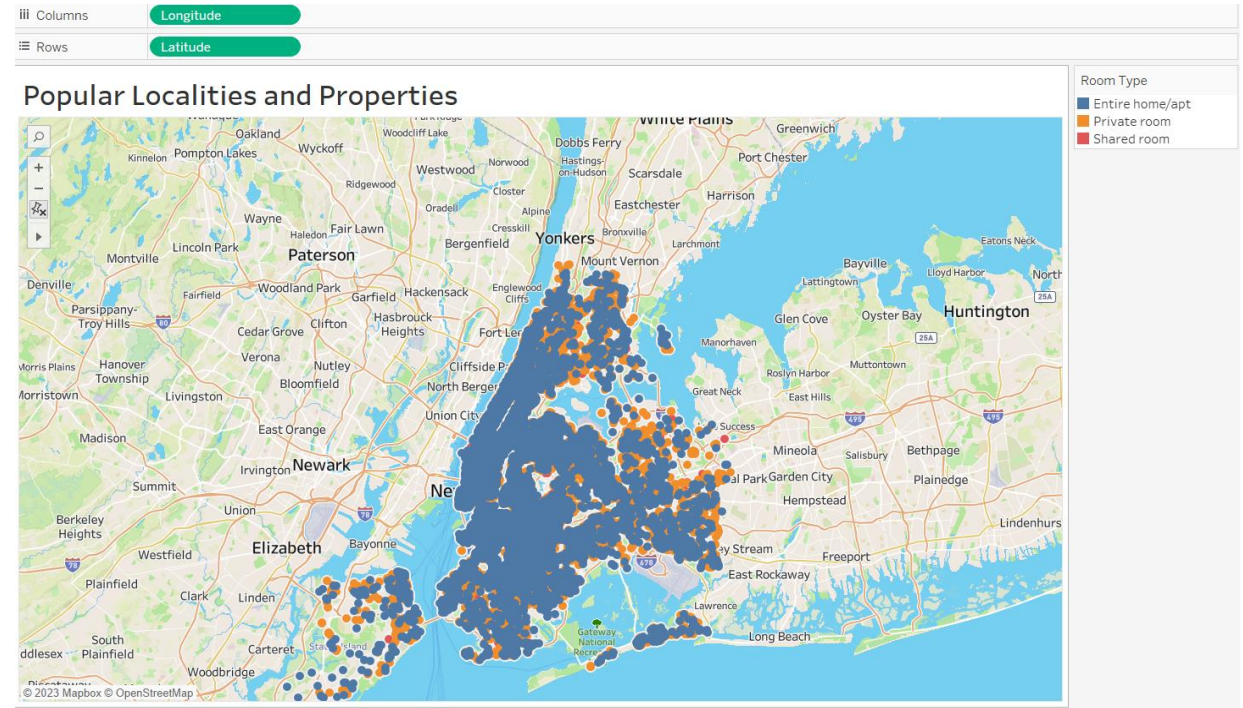
BOTTOM 10 PROPERTIES

• Top 10 unpopular locations where people do not opt for stay.

• Because the location of all unpopular localities is at the corner of the city where people do not wish to visit or there may not be any tourist attraction point.

List of Bottom 10/Unpopular Properties
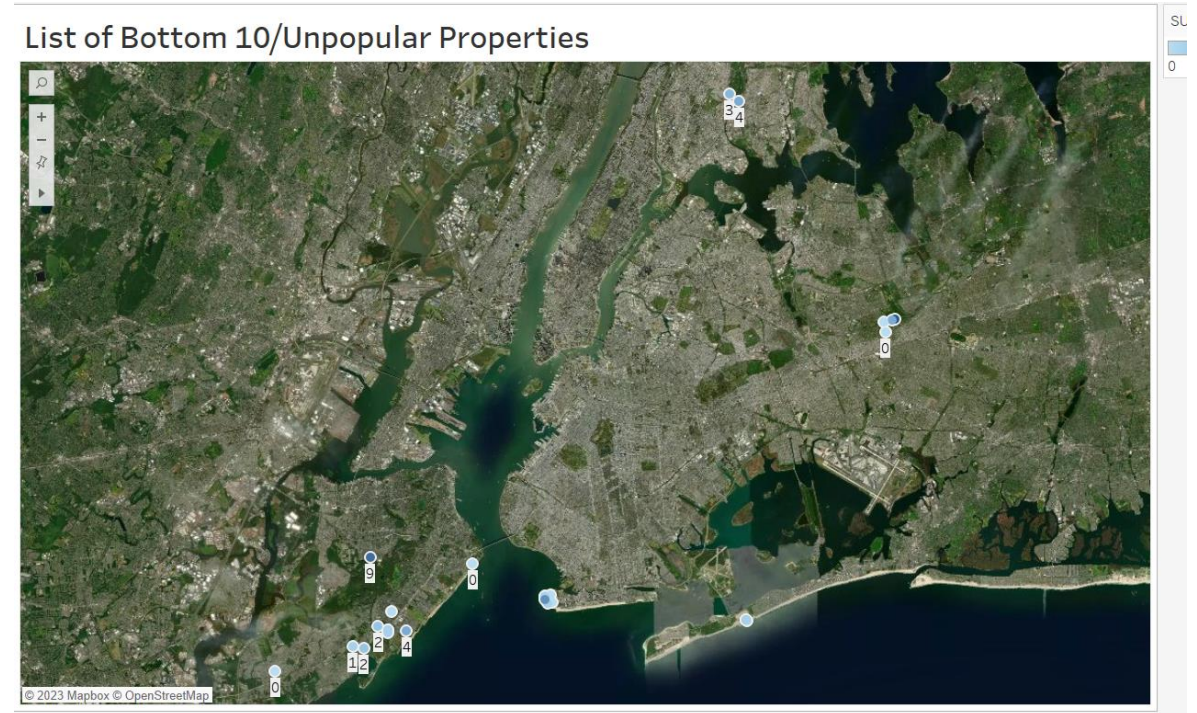
RECOMMENDATIONS

▶ Airbnb can increase bookings by promoting shared rooms with targeted discounts. They can also acquire new properties, such as private rooms in Manhattan and Brooklyn, and entire homes in Bronx and Queens. These areas have a higher number of bookings, and weekly or bi-weekly rentals can also be acquired to help customers who are stranded in New York City for quarantine purposes.

▶ The prices of private rooms in Manhattan and Brooklyn, and entire homes in Bronx and Queens are also favorable. Brooklyn has an average price of $113, which is lower than Manhattan's average price. Therefore, Airbnb can consider expanding to Brooklyn.

- Overall, increasing acquisitions and new properties in coastal regions, as well as promoting shared rooms with discounts, can help Airbnb increase customer bookings.

- Here are some specific examples of how Airbnb can promote shared rooms with targeted discounts:

- They can offer discounts for bookings made during the offseason.

- They can offer discounts for bookings made by groups of travelers.

- They can offer discounts for bookings made by members of the military or other organizations.

- They can partner with businesses or organizations to offer discounts to their employees or members.

By promoting shared rooms with targeted discounts, Airbnb can attract more travelers and increase bookings.

- All cities except Manhattan and Brooklyn need to change their marketing strategy to increase bookings.

- Most customers are willing to spend between $40 and $160 on accommodation. Therefore, these cities should try new marketing tactics to attract customers, such as offering discounts and promotions.

- Unpopular cities need to change their strategy to increase revenue. This could involve creating tourism attractions, improving infrastructure, or starting recreation and sports clubs.

- They could also try to increase the purchasing power of their customers by offering financial assistance or other incentives.

- More coastal acquisitions and new construction could also lead to increased bookings from customers