

Airbnb Case Study

By :

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Problem Statement:

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.

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

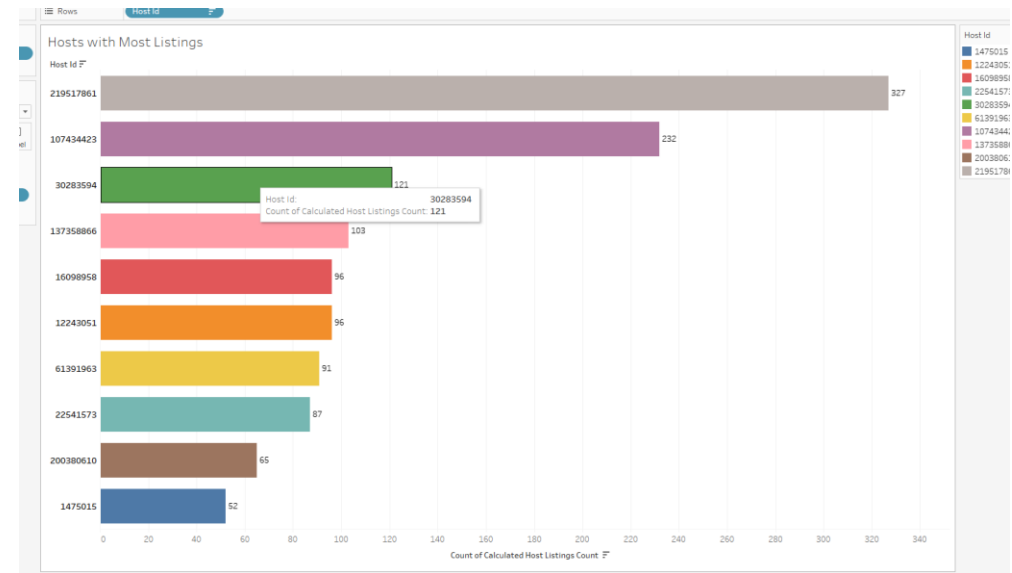
The categorization of customers based on their preferences.

- 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?

Hosts with Most Listings?

Insights:

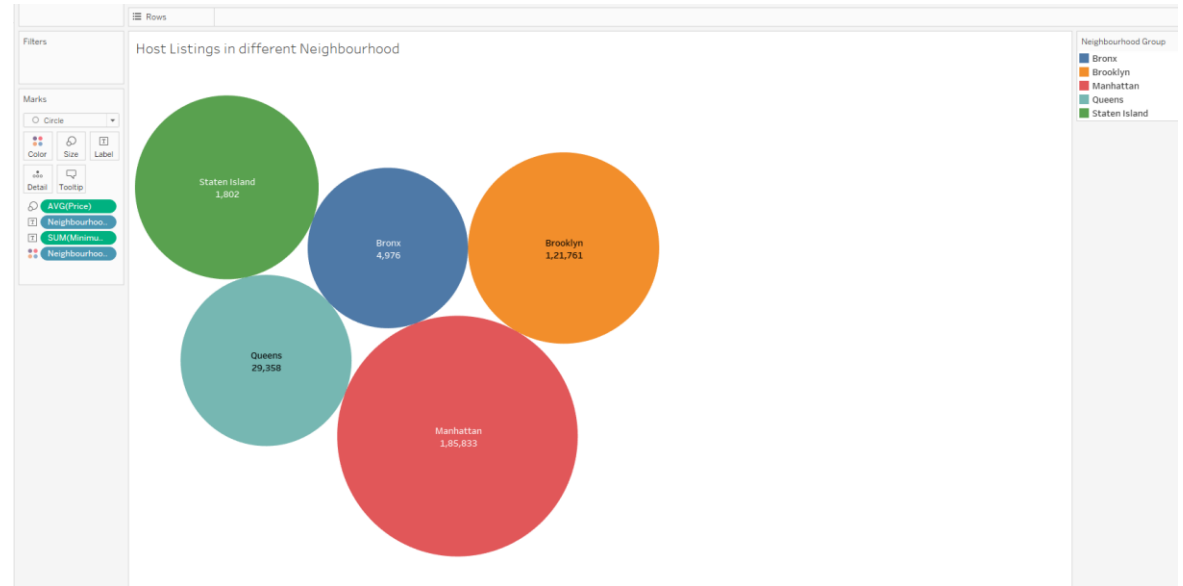
- We can clearly observe from the chart that there are 300+ listings with 219517861 and the lowest is for 1475015.
- 107434423 has 232 listings



Hosts listings in different Neighbourhood Groups?

Insights:

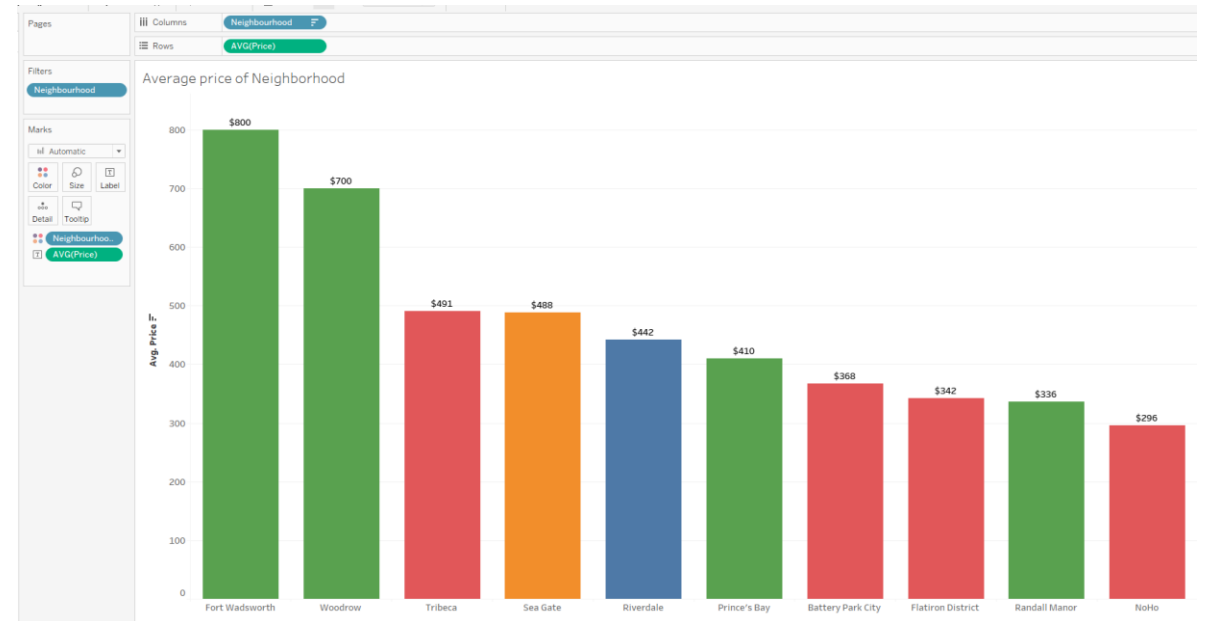
- We have drawn bubble chart in order to conclude the hosts listings in different neighborhoods groups.
- Manhattan has the highest count of host listings around 21661 and Staten island has the least count of host listings.



Average price of Neighbourhood?

Insights:

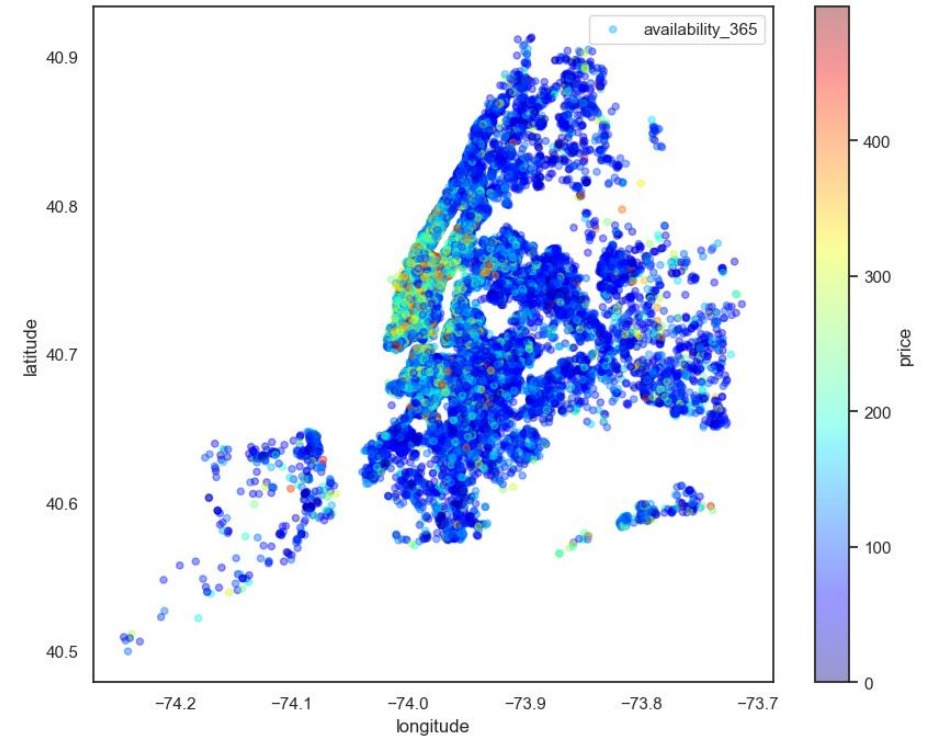
- Top two Neighborhoods Fort Wardsworth and Woodrow falls under Staten Island Neighborhood Group.
- Manhattan has Tribeca, Battery Park City, Flatiron District and NoHo in the top 10.
- Brooklyn, Bronx has neighborhood Sea Gate and Riverdale respectively.



Scatter plot of Availability

Insights:

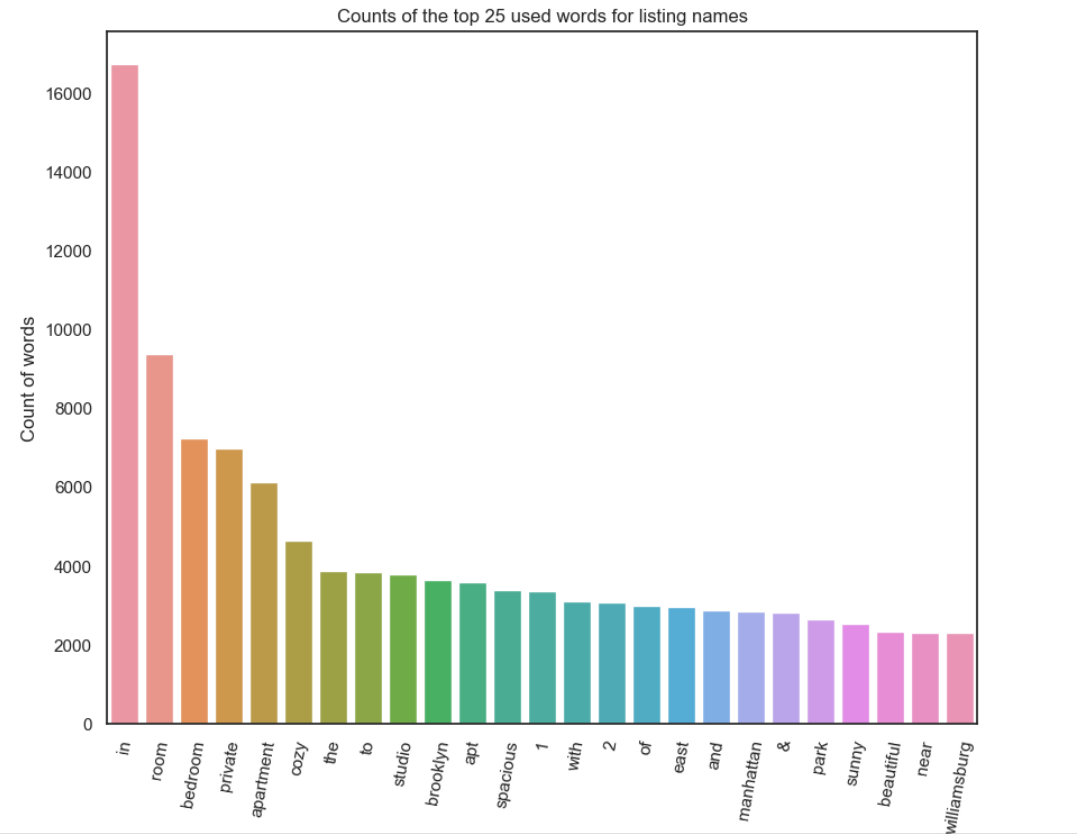
- Scatter plot depicts the latitude and longitude of availability of rooms



Top 25 words used in the listing Name

Insights:

- As per the bar chart “In” is used most in the listing Name



Key Insights & Recommendation:

- It appears to be a very rich dataset with a variety of columns that allowed us to do deep data exploration on each significant column presented. First, we have found hosts that take good advantage of the platform and provide the most listings; we found that our top host has 327 listings.
- After that, we proceeded with analyzing neighborhood listing and what areas were more popular than another.
- Lastly, we found the most reviewed listings and analyzed some additional attributes. Overall, we discovered a very good number of interesting relationships between features and explained each step of the process.