Impact of Customer Preferences on Home Rentals Business of Airbnb

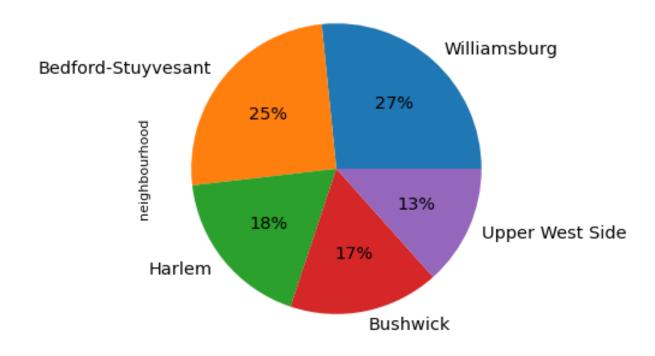


Shrey Toshniwal
Bhupendra Gautam
Ankit Srivastava

Objectives: 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.

- 1. Improve our shared understanding about the market conditions
- 2. Improve shared understanding about our customers
- 3. Provide recommendation to various departments to be prepared for the changes post pandemic

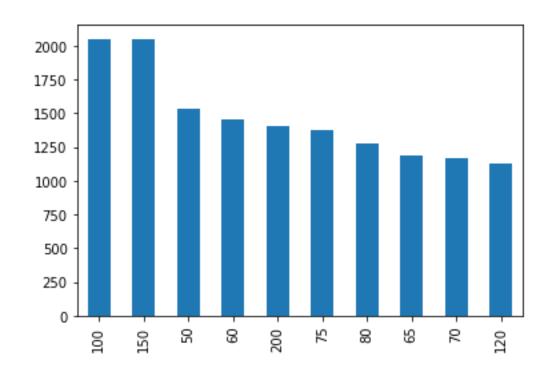




We can see that Williamsburg is the hottest area of transaction followed by Bedford-Stuyvesant.

This pie-chart shows the top 5 areas by percentage in the dataset.

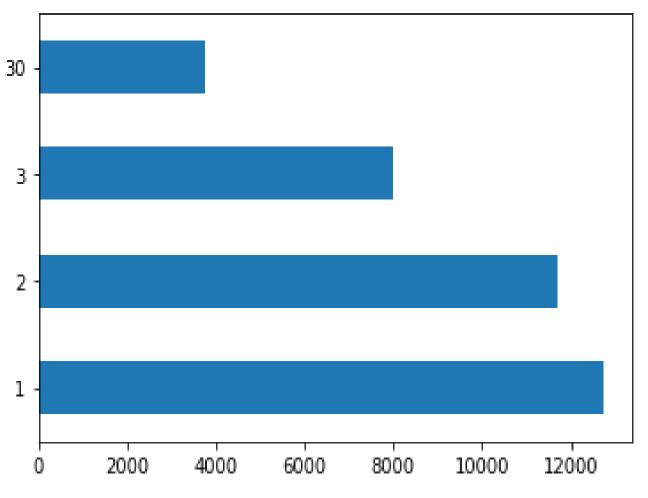




Almost 2k+ Airbnb's has a price of 100 dollars and 150 dollars each respectively.

1.5k Airbnb's have around 50 dollars price.

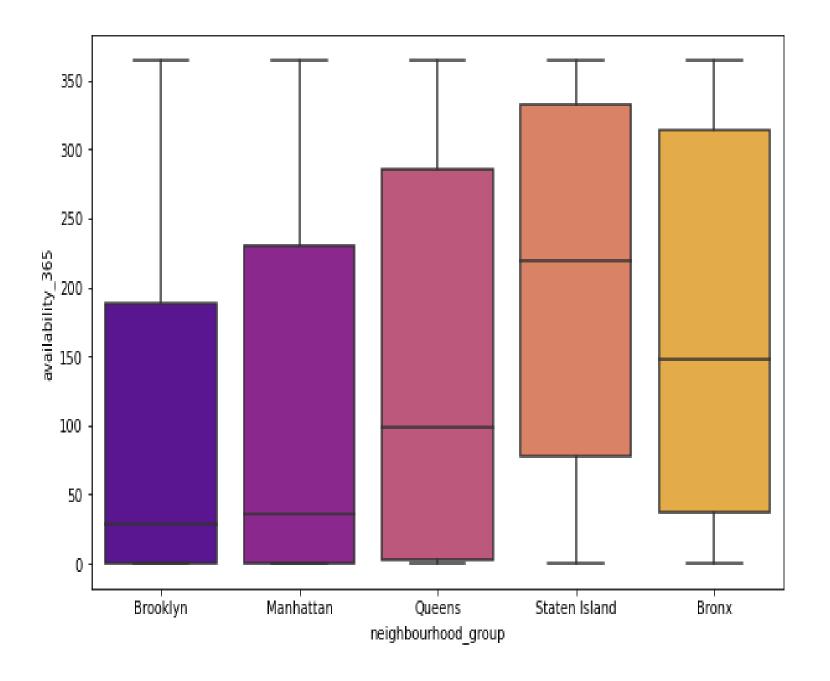




We can observe that most of almost 12k people used 1 night stay in Airbnb.

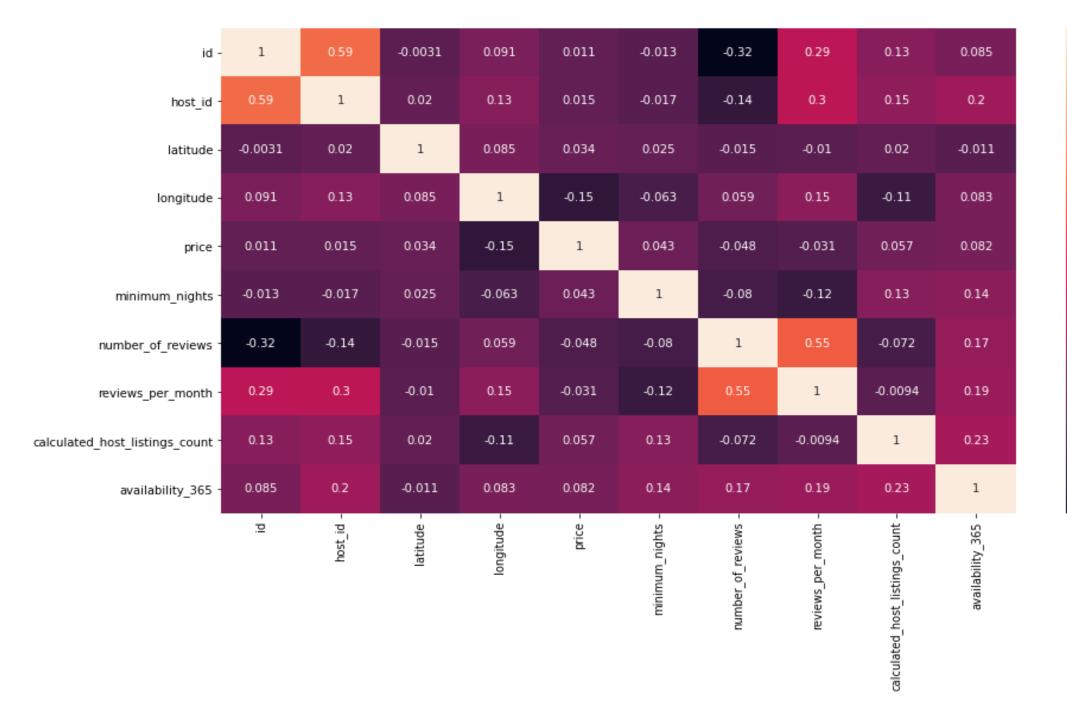
11k people choose 2 night stay while 7k choose 3 night stay. Almost 3.7k stayed up to a month.





Staten Island has the highest average Airbnb availability.



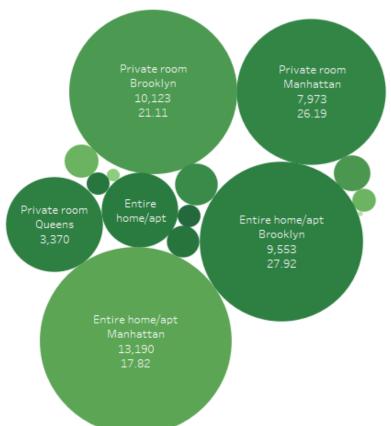






NEIGHBOURHOOD WISE BUSINESS DISTRIBUTION

Neighbourhood Group Bubble Chart

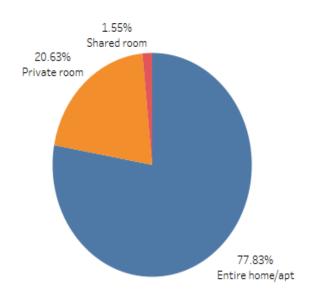


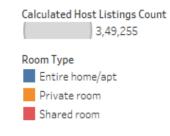
- Private rooms are the most popular throughout
 New York >25 reviews per listing
- Entire home/apt in Manhattan has reviews per listing 35% less than the average of 27.7
- Except Manhattan, all areas performed poorly in shared rooms with an average of 7.3 reviews per listing

Room Type, Neighbourhood Group, count of Calculated Host Listings Countandaverage of Number Of Reviews. Colour shows average of Number Of Reviews. Size shows count of Calculated Host Listings Count. The marks are labelled by Room Type, Neighbourhood Group, count of Calculated Host Listings Countandaverage of Number Of Reviews.

ROOM TYPE PREFERENCE

Room type Preference



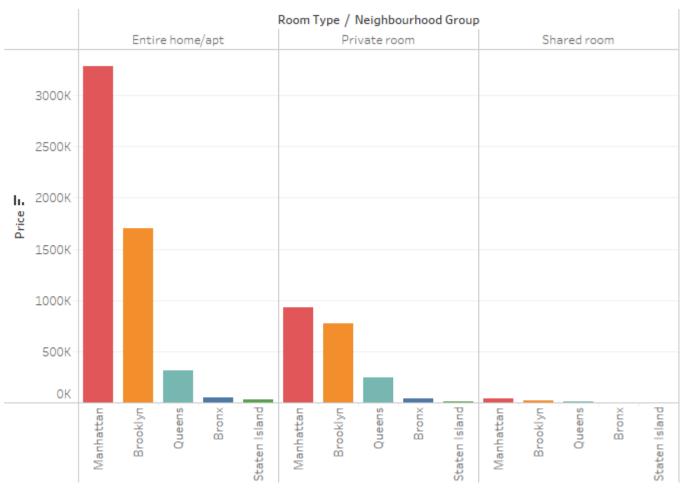


72.07 % of customers prefer an Entire home/apartment for their stay

% of Total Calculated Host Listings CountandRoom Type. Colour shows details about Room Type. Size shows sum of Calculated Host Listings Count. The marks are labelled by % of Total Calculated Host Listings CountandRoom Type.



Room type v/s Neighbourhood



Brooklyn and Manhattan are the top leading neighbourhood groups in the rooms listings and the majority of people like the entire home or private room.

Neighbourhood Group

Bronx

Brooklyn

Manhattan

Queens
Staten Island

Sum of Price for each Neighbourhood Group broken down by Room Type. Colour shows details about Neighbourhood Group.



Price Brackets in Neighbourhoods



Median of Price for each Neighbourhood Group. Colour shows details about Room Type. The marks are labelled by average of Price.

Entire home/apt's price is ~100% more than private rooms except Brooklyn and Staten Island with ~150% Private room's price is ~10% more than shared rooms except Brooklyn and Manhattan with ~40% Manhattan is costliest overall and the cheapest are:

o Entire apt: Bronx

Entire home/apt

Private room Shared room

o Private room: Staten Islands

o Shared room: Brooklyn



Findings & Recommendations:

- Acquire private rooms and entire apartments, especially in Staten Islands since it is popular
- Reducing the prices of entire apartments in Manhattan by at least 15% and increasing the price of private rooms in Queens by at least 10%
- Listings most popular have minimum number of nights requirement from 1-5 days and 30 days which should be showcased the most ordering them by properties which are available for most number of days to least
- We saw that people like to visit the centre of New York from where they can see the beauty of the city.
- The number of listings of shared rooms is limited but their average price is placed less and availability is high.
- A number of reviews and reviews per month are more at less price than the higher price as there is less chance of people going for a high price room.
- Manhattan and Brooklyn are very costly neighnourhood_groups.
- People show interest in the host Blueground and spend more nights here.
- The minimum number of nights to stay reduces with a price increase.
- Focus on prime locations like Manhattan and Brooklyn where people show interest.
- One-to-one interaction with some property owners in Staten Island, Queens, and the Bronx to identify their challenges for being fully functional for a maximum number of days in a year and allow a booking of more than 10 days of minimum night stay.
- Create some sort of interaction between the Top 5 hosts to share their experience with the rest of the community for better improvement and value-generating ideas.



METHODOLOGY

- Used Tableau to visualize data from Airbnb dataset in order to obtain accurate insight
- Used python to clean the data and handle the null values
- Used python to create new column with Bin for better understanding and to analyse the data
- EDA was used for various finding that was presented in the previous slide



Methodology Documnet Airbnb.pdf



THANK YOU

