Analysis Of Airbnb Rental Data Presentation - II

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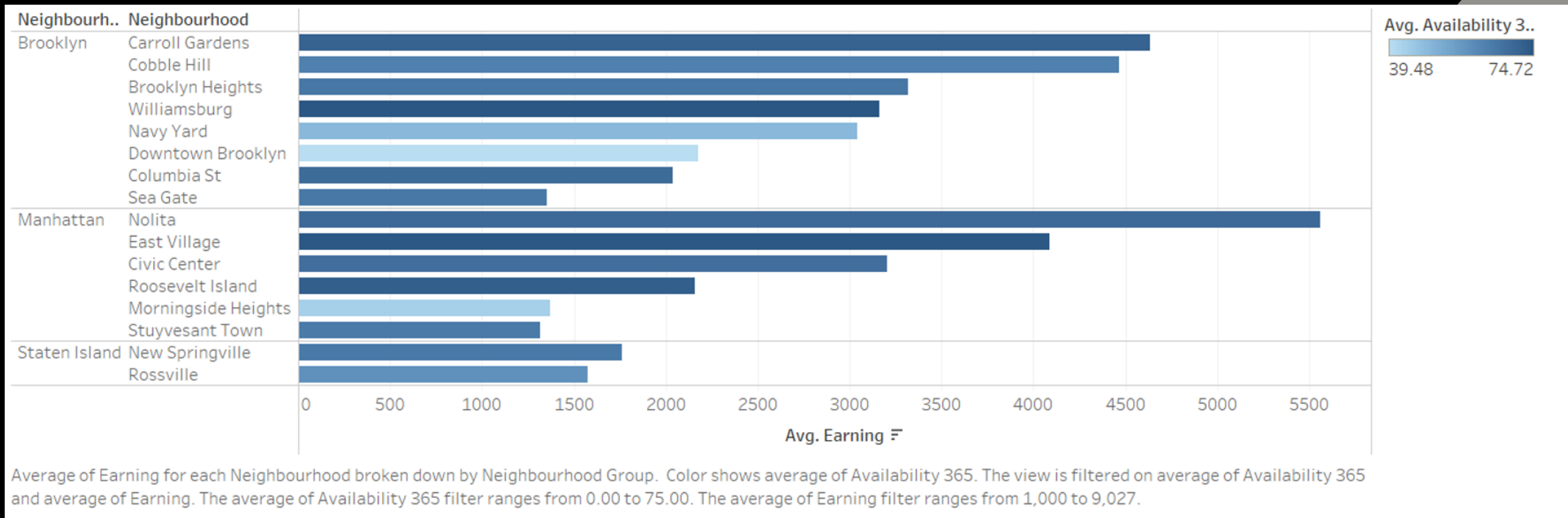# Index:

Objective

- This presentation is aimed at the Head of Acquisitions and Operations, NYC & Head of User Experience, NYC.

- The purpose is to provide insights into Airbnb listings across New York City.

- We want to provide information and suggestions based on various attributes in the dataset to increase the revenue for Airbnb.

Background Information

- 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.

- We have been provided with a dataset that contains information about different Airbnb listings along with their hosts, locations, prices and other attributes.

- This presentation is focused on the points that will be relevant to the Head of Acquisitions and Operations, NYC & Head of User Experience, NYC.

Average of Earning for each Neighbourhood broken down by Neighbourhood Group. Color shows average of Availability 365. The view is filtered on average of Availability 365 and average of Earning. The average of Availability 365 filter ranges from 0.00 to 75.00. The average of Earning filter ranges from 1,000 to 9,027.
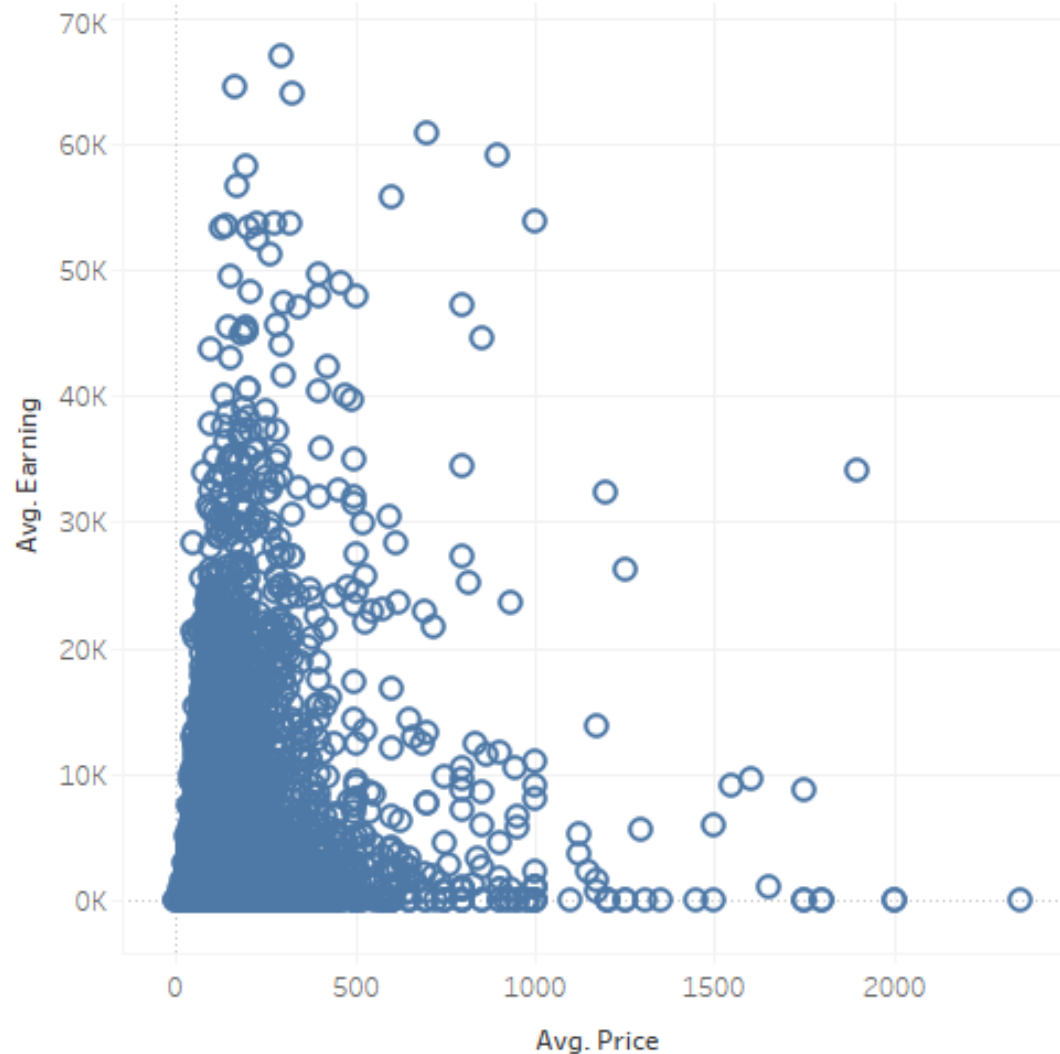
There are many neighborhoods which have an availability of less than 75 days in a year.

We have filtered these groups to find the ones with average earnings of >$1000.

There are 17 such neighbourhoods which have low availability and high average earnings.

Average Earning at Low price range

Average of Price vs. average of Earning. Details are shown for Host Name. The view is filtered on average of Earning and average of Price. The average of Earning filter ranges from 0 to 67,666. The average of Price filter ranges from 0 to 2,385.

The majority of earnings for Airbnb hosts come from properties in the low-price range.

There are very few properties in the high price range

For the high-priced properties, the profits are mostly on the lower end of the scale

There are some low and medium-priced properties which deliver high profit for the owners

Min Night Vs Host Listing

Minimum Nights (group)

Avg. Earning
883 — 4,001
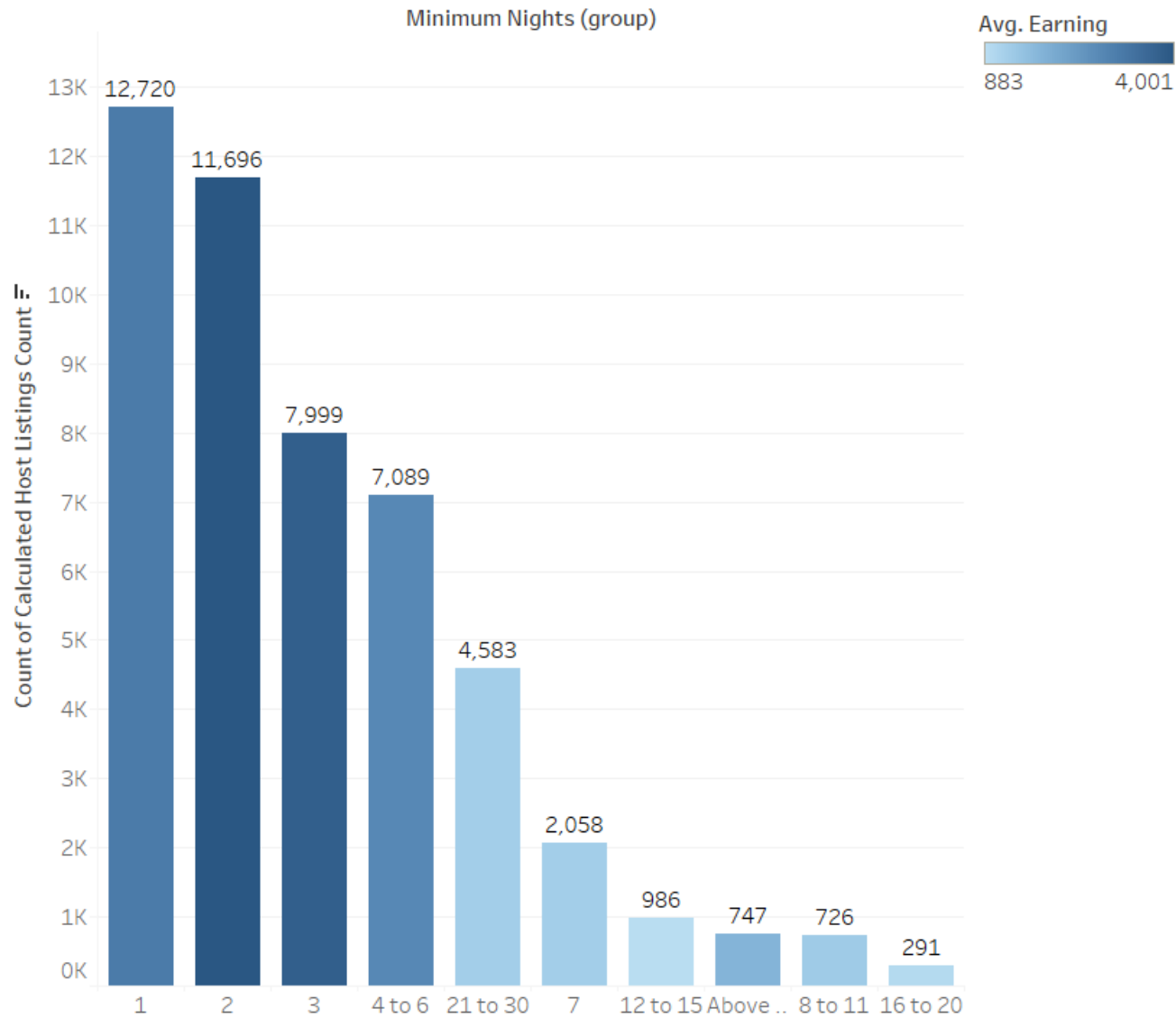
Count of Calculated Host Listings Count for each Minimum Nights (group). Color shows average of Earning. The marks are labeled by count of Calculated Host Listings Count.

From the chart given we can infer that most of the listings are given out for 1 – 2 days.

For anything more than 7 days the listings and the earnings drop considerably

The highest profitability is for listings of 2 and 3 days

Avg Price vs Neighbouthood Group
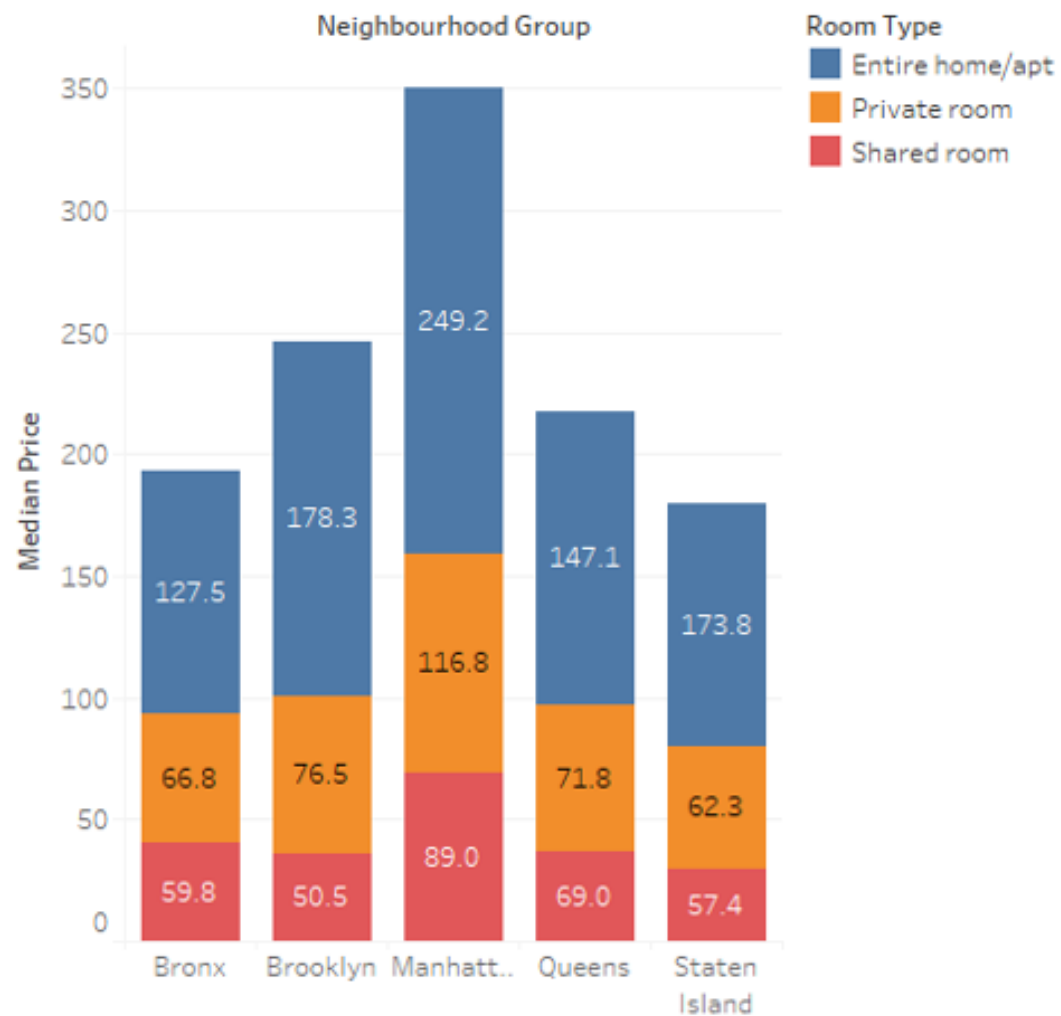
The average price in the for listings is highest for the Manhattan area.

The 'entire home/apt' segment has the highest median price across all neighborhood groups

The 'shared room' segment has the lowest median price across all neighborhood groups

Recommendations

- The company should try and find more properties in the neighborhoods which have less than 75 days availability and average earnings of >$1000.

- Airbnb can acquire some more medium-price(between $1,000 & $2,000) properties and create more momentum in that segment

- Airbnb can also create a luxury segment with high-priced (above $2000) properties. Since NYC has the second highest number of millionaires in the world (https://www.worldatlas.com/articles/cities-boasting-the-most-millionaires-around-the-globe.html) there will be good demand for the same once the segment is popularized

Recommendations (continued)

- Airbnb can focus on the three-day listings as the average earnings are high in this segment. The company can create long weekend listings for 3 days to create demand.

- The company can try to acquire more listings in the Manhattan and Brooklyn area since the most high-priced listings come from those two neighborhood groups

- The company can also try to add more listings in the shared room segment and create a 'budget travel/hostel' category to attract travelers looking for a reasonably priced room.

Appendix – Data Assumptions

- We assumed that the company is going to strategize for the post covid period which will have greater amounts of travel and bookings. This will require more acquisitions and spends by the company

- We assumed that the company is not looking to expand into other geographies and is confining itself to the NYC region

Appendix – Data Methodology

We have analyzed the Airbnb data in the following manner :

- Remove missing values and outliers in Python

- Performed exploratory data analysis in Tableau to understand the information given in the data and derive insights

Thank You