

# Storytelling Case Study: Airbnb, NYC

By :

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## Objective:

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- People can Utilize the web rental service Airbnb to market their vacant properties.
- Airbnb suffered a significant revenue loss during the time.
- Since people have started travelling once more, Airbnb is working to revive the industry and get ready to serve clients.



# Background:

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- The revenue of Airbnb has significantly decreased during the last few months.
- Airbnb wants to make sure that company is completely ready for this transformation now that the limits have started to loosen and people have started to travel more.
- As a result, analysis has been done on a dataset made up of different New York Airbnb listings.

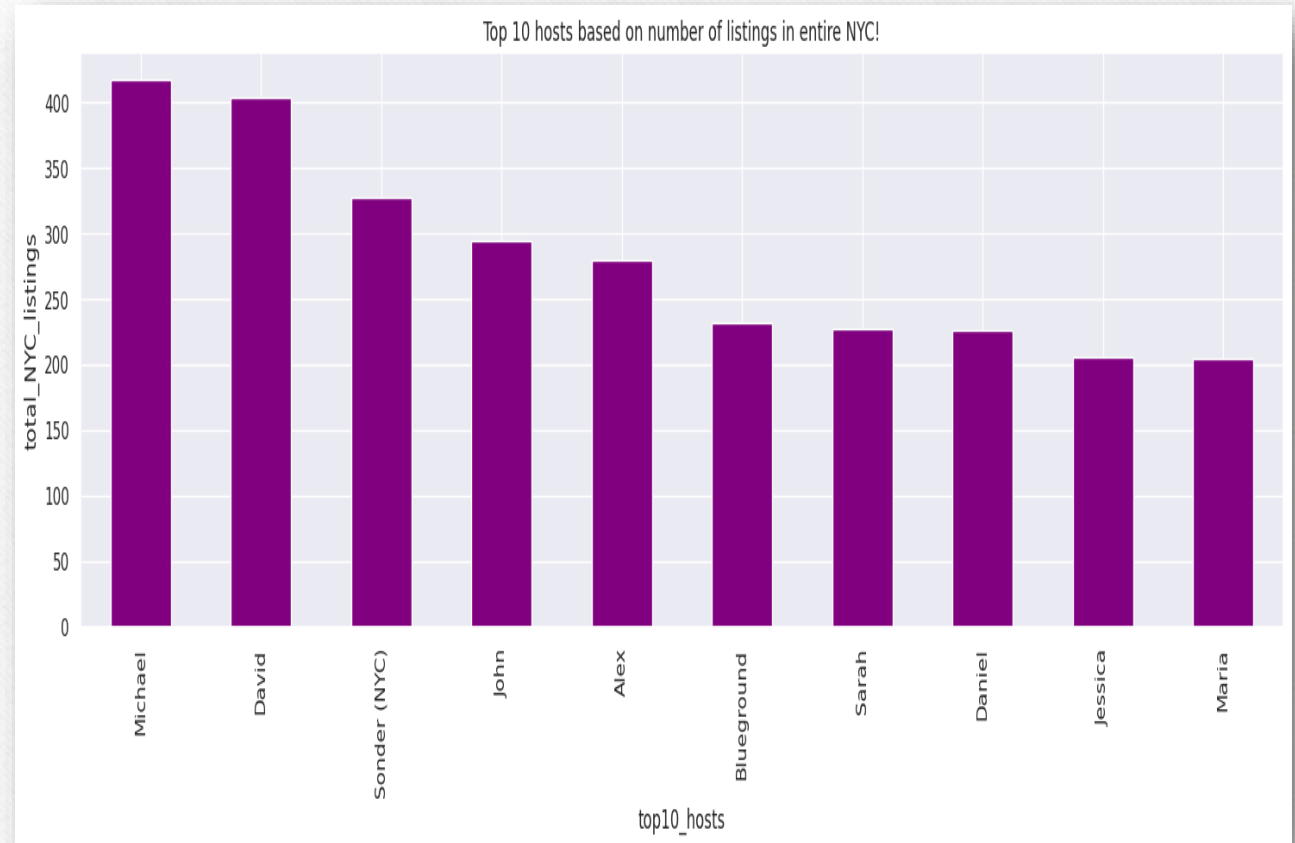
# Data Preparation:

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- Cleaned data to remove any missing values and duplicates.
- Dropped insignificant columns.
- Identified outliers

# Top 10 Host:

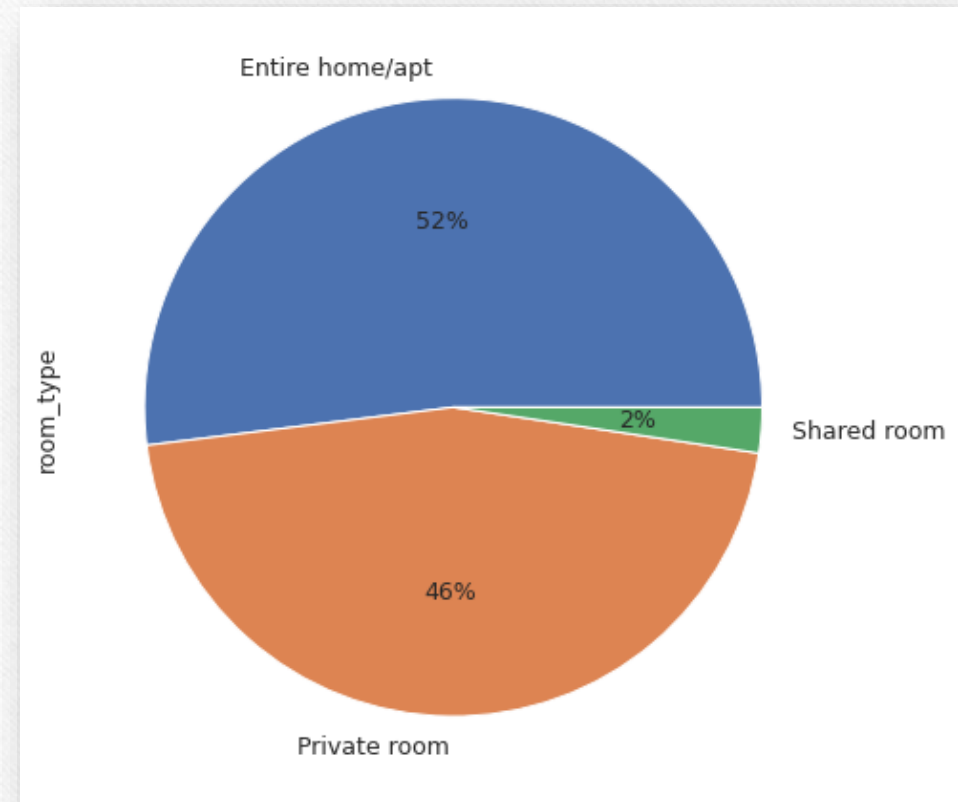
- Host Michael seems to have most number of listings/properties which is more than 400 followed by David and the 10th host is Maria with around 200 listings.



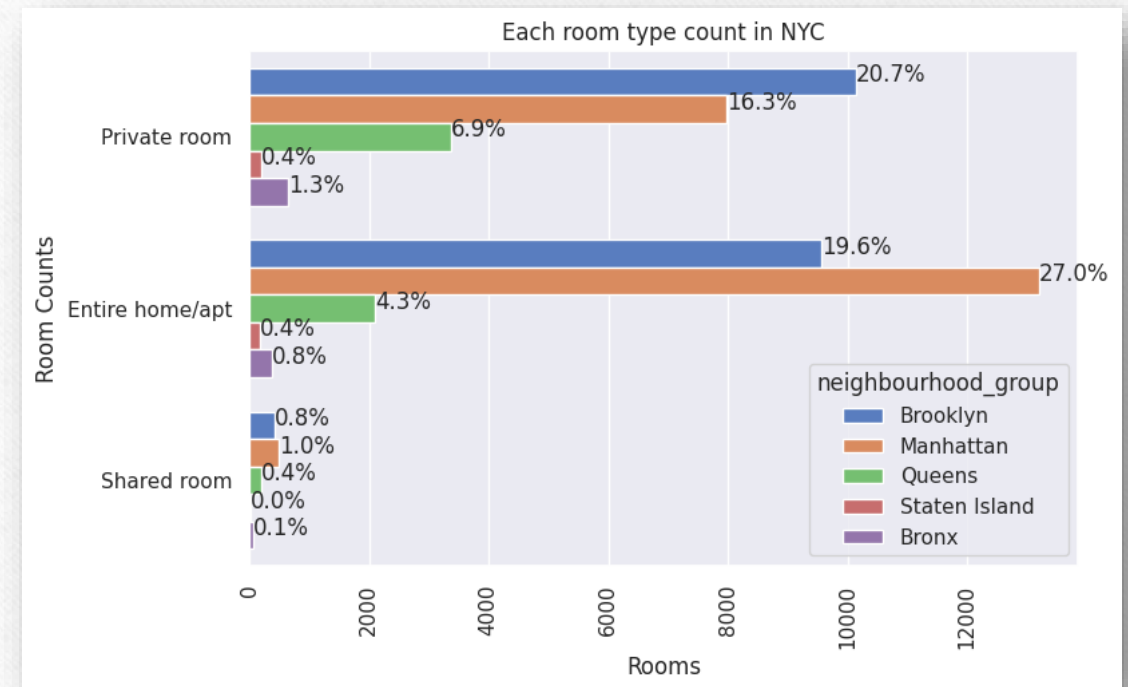


## Room type with respect to Neighbourhood group:

- There are three types of rooms: Entire home/Apartment, Private room & shared room.
- Customers appear to prefer private rooms (46%) or entire homes (52%) in comparison to shared rooms (2%) , on average.



- Manhattan has more listed properties with home/apartment around 27% of total listed properties followed by Brooklyn with around 19.6%.
- Private rooms are more in Brooklyn as in 20.7% of the total listed properties followed by Manhattan with 16.3% of them. While 6.9% of private rooms are from Queens.



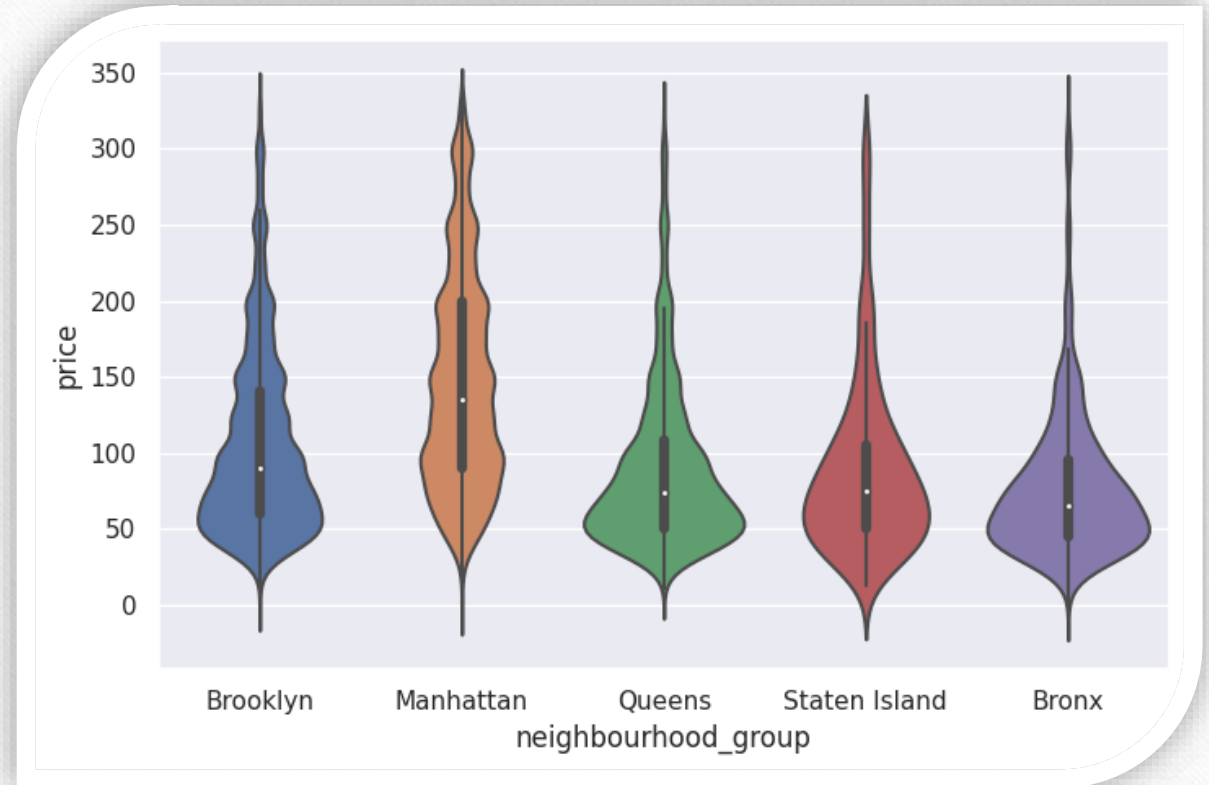


- Very few of the total listed have shared rooms listed on Airbnb where there's negligible or almost very rare shared rooms in Staten Island and Bronx.
- We can infer that Brooklyn, Queens, Bronx has more private room types while Manhattan which has the highest no of listings in entire NYC has more Entire home/apt room types.



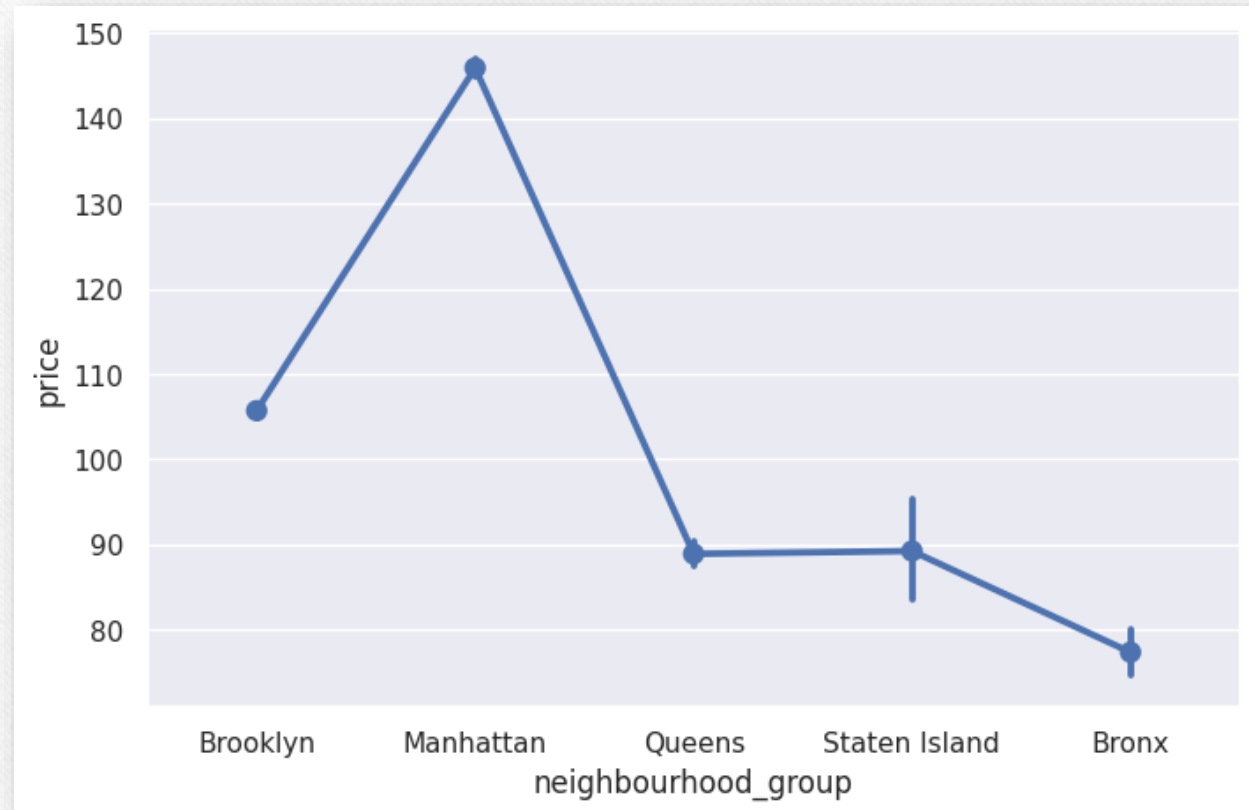
## Average price of Neighbourhood groups:

- The average price of listed properties in Manhattan is around 140USD which is highest among all neighbourhoods.
- Average price for Brooklyn is second highest.
- Bronx appears to be an affordable neighbourhood as the average price is almost half than Manhattan's average price.



## Price Analysis Neighbourhood wise:

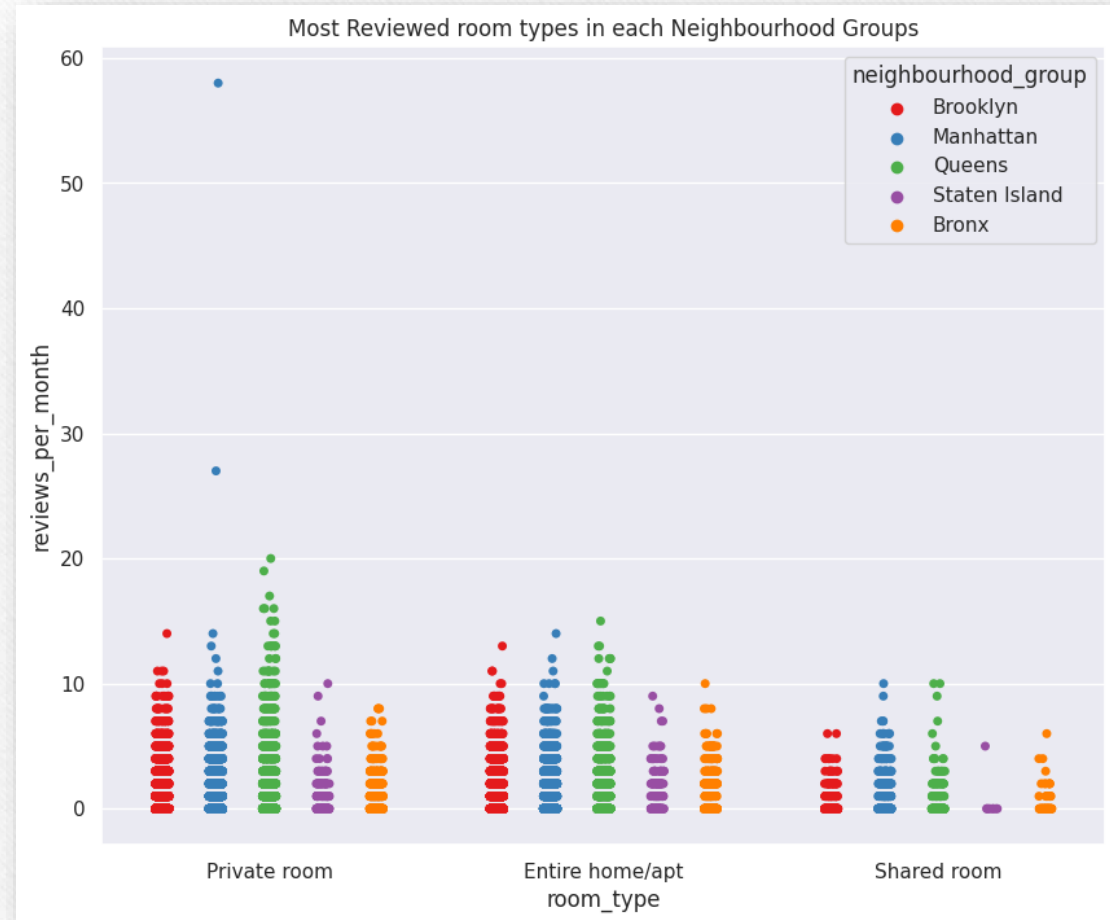
- Most of the outliers in Price column are for Brooklyn and Manhattan.
- Also, Manhattan has the highest range of prices for the listings.
- Bronx is the cheapest of them all.
- Let's take a closer look at the cost of living since it is the most crucial aspect for anyone considering renting a home or using Airbnb.





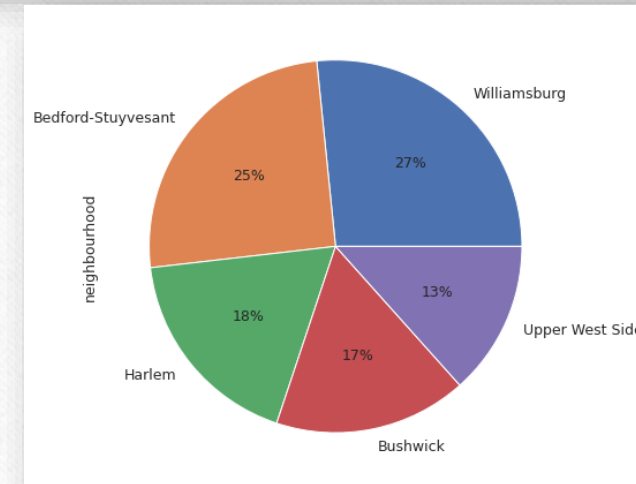
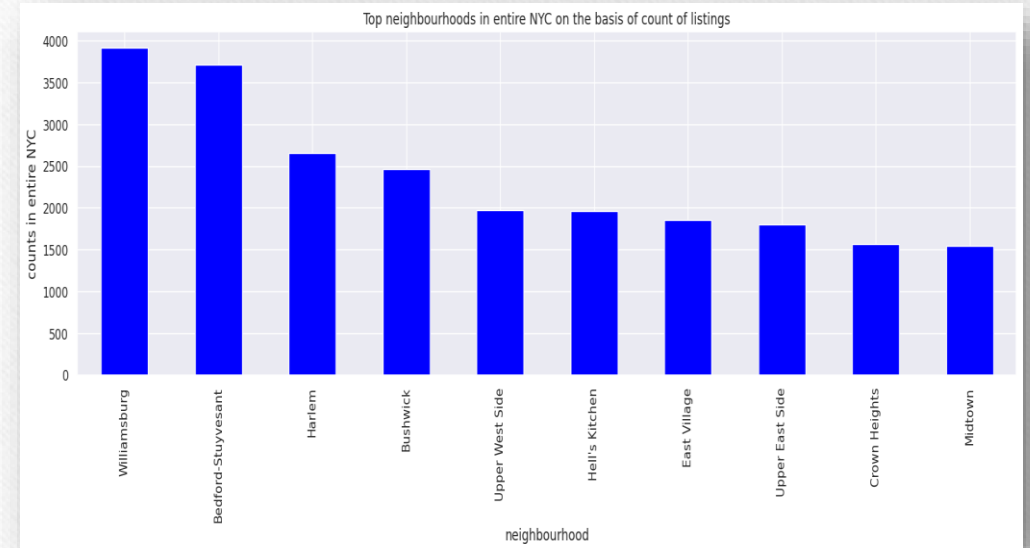
# Most reviewed room:

- With more than 50 reviews every month, Manhattan received the most reviews for Private rooms, which received the most reviews overall. Manhattan was close behind.
- The most reviews for the entire home/apartment room type were found in Manhattan and Queens.
- Shared rooms received fewer ratings than other accommodation options, and those that did come from Staten Island and the Bronx.



# Popular Neighborhoods:

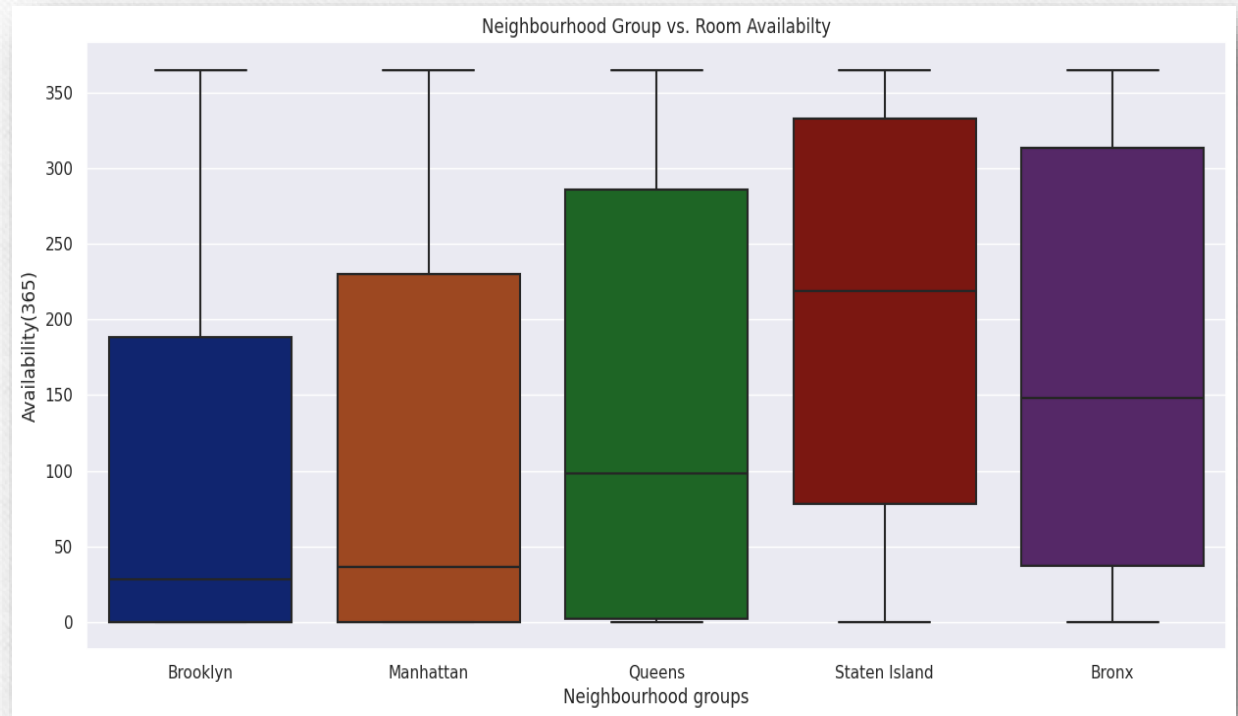
- We see that Williamsburg with 27% the highest popular.
- The higher number of customer reviews imply higher satisfaction in these localities.





# Neighbourhood vs Availability:

- We can deduce that postings in Staten Island are more readily available throughout the year to more than 300 days from the aforementioned Categorized box plot. These postings are typically available for 210 days each year on average, with the Bronx coming in second with 150 days per year.



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*Thank you!*