

## Airbnb Case Study

## Problem Statement

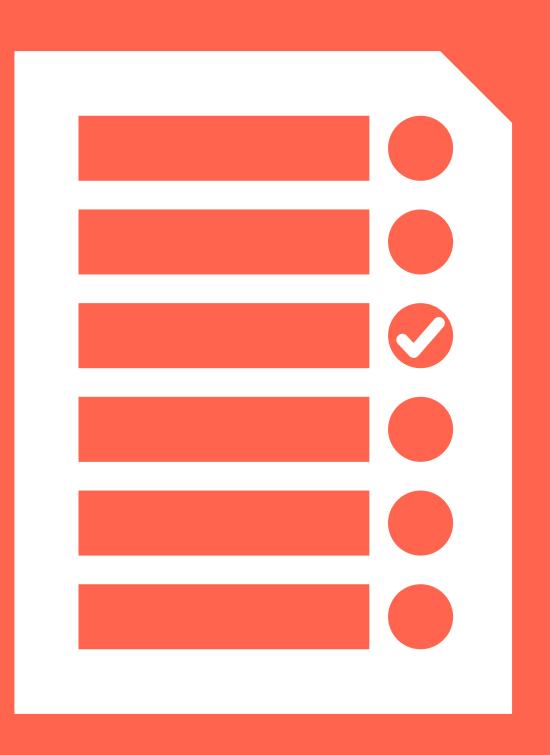


- The Covid-19 pandemic has severely impacted Airbnb's business, resulting in a decline in revenue.
- With the easing of restrictions and the reopening of travel, Airbnb is eager to make a successful comeback.
- As a data analyst, our goal is to analyse data from property listings on Airbnb in New York from 2019 to derive insights and formulate recommendations to improve the company's revenue post-lockdown.

## Agenda



- Analysis
- Key Takeaways



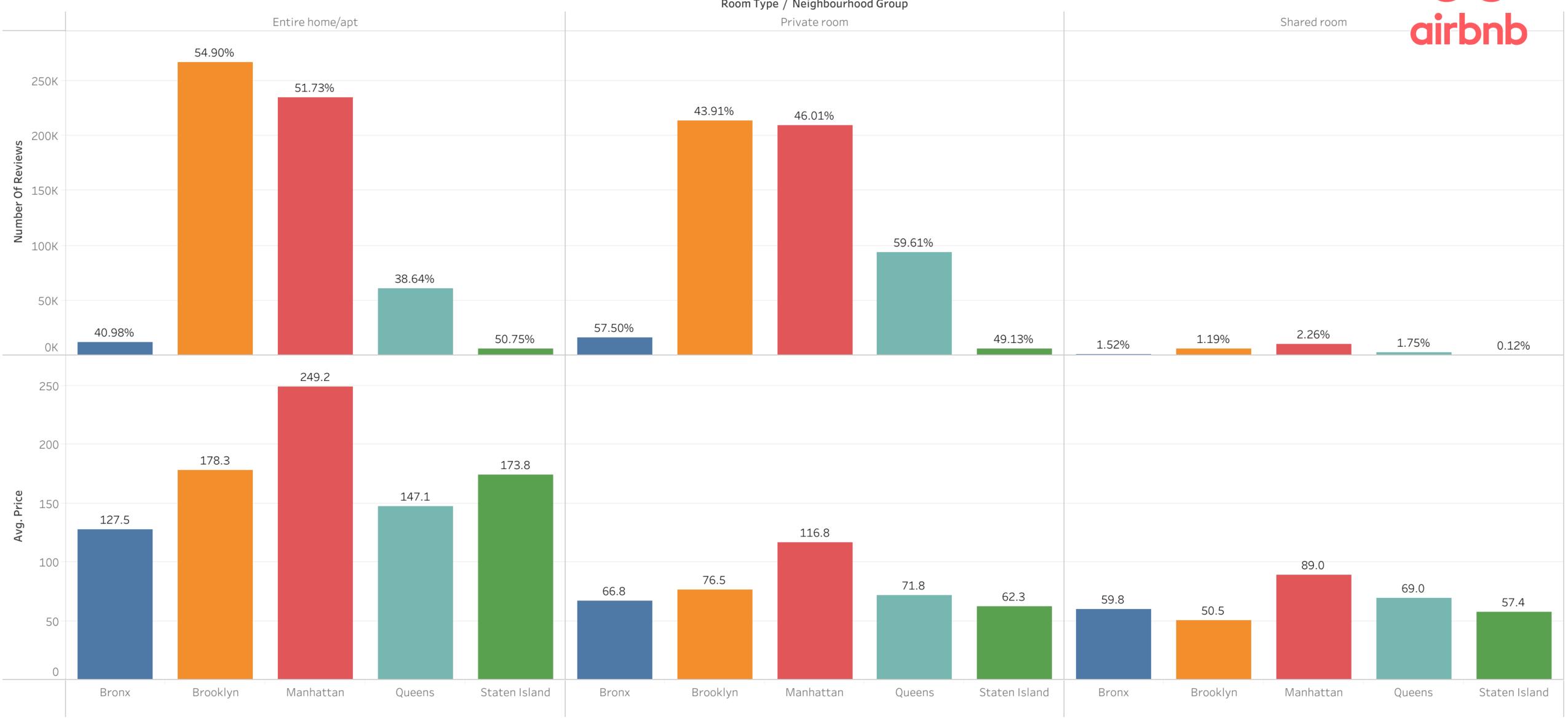


## Analysis

#### Reviews vs Price

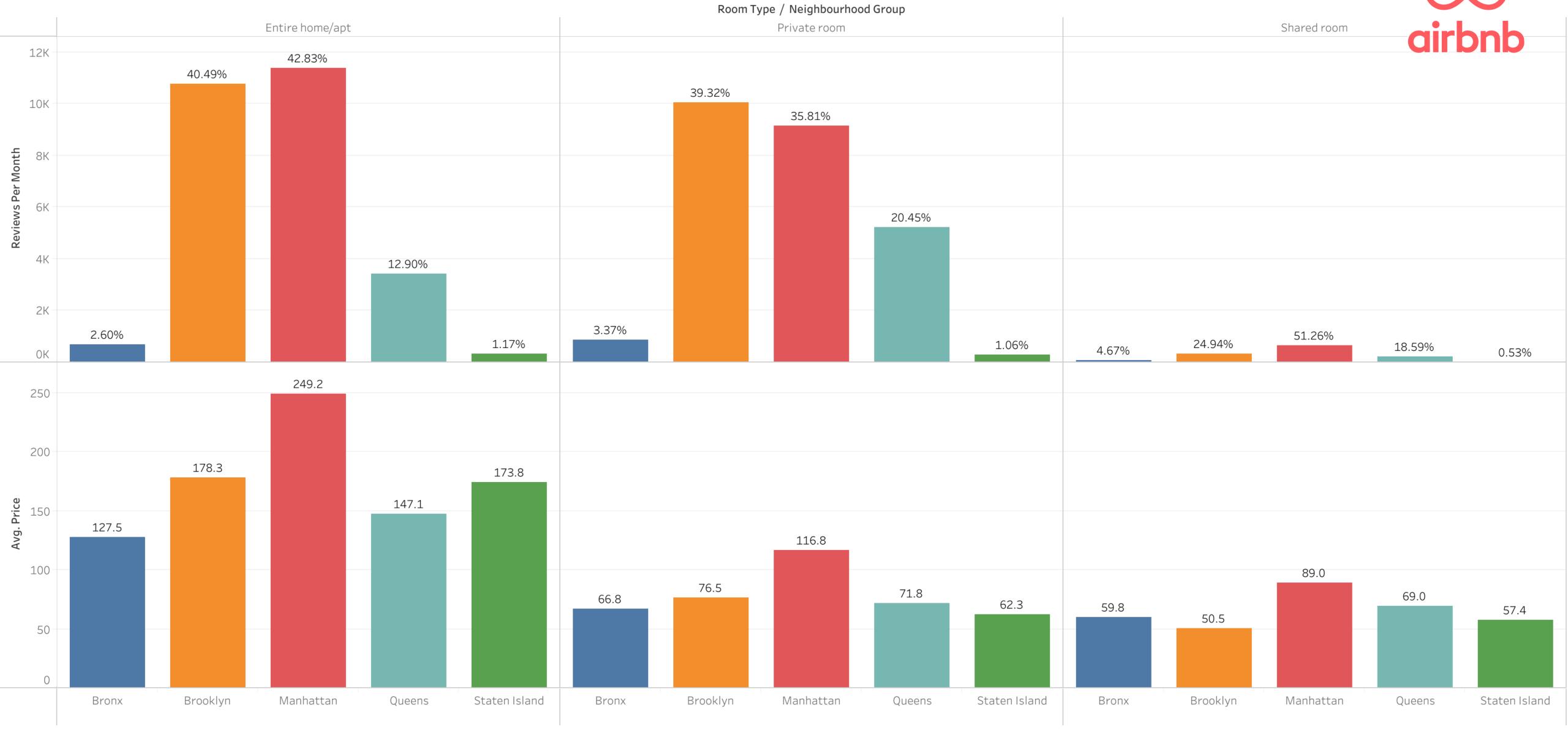


#### Room Type / Neighbourhood Group



#### Reviews per month vs Price







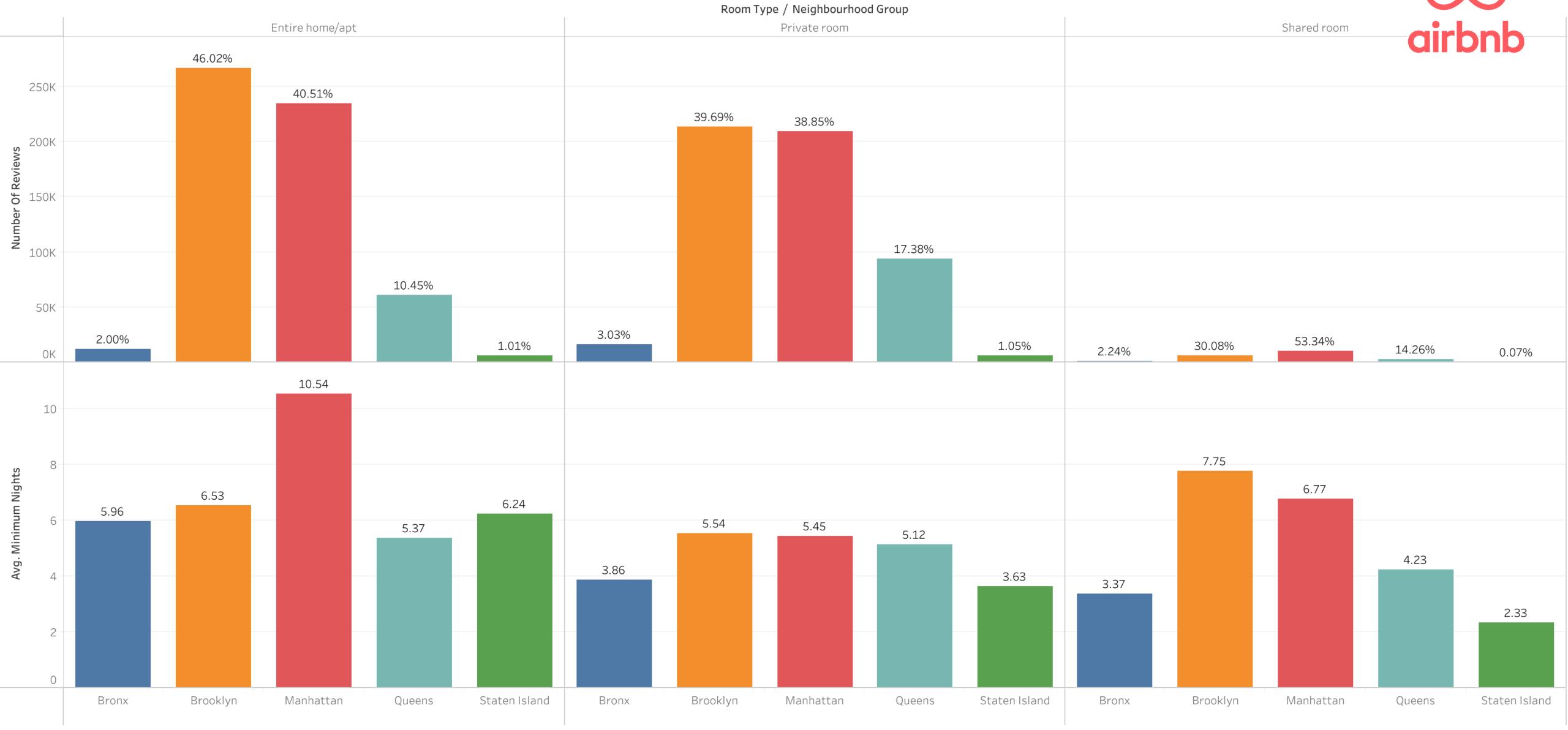
### Reviews

- The reviews don't seem to have any relationship with the price, except for perhaps 'Shared rooms' where the avg. price pattern closely matches the distribution of reviews across neighbourhoods.
- However, since we are not aware of the sentiment of the reviews (i.e. positive or negative) and only the number of reviews, we won't be able to correctly analyse the impact of the reviews on the booking patterns.



#### Reviews vs Min. Nights

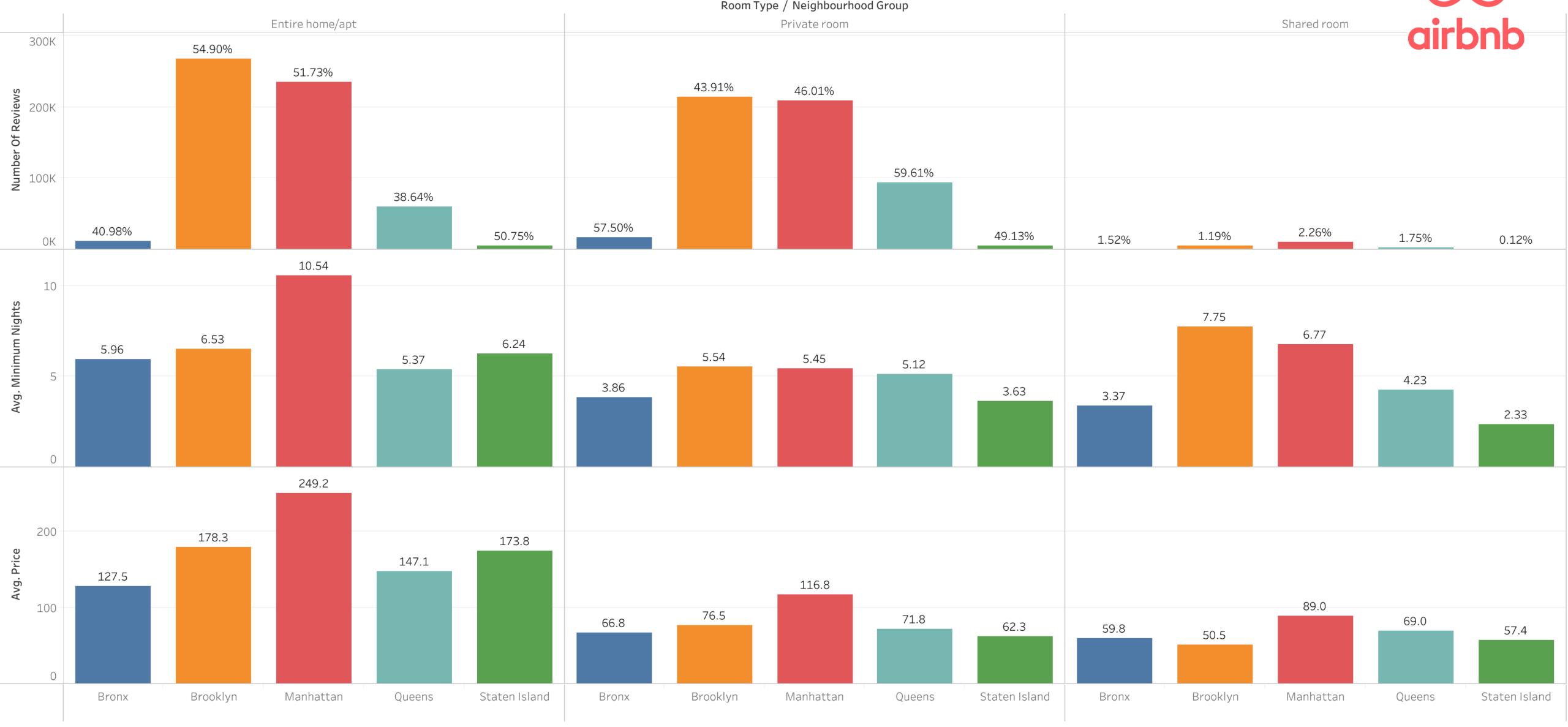




#### Reviews vs Min. Nights vs. Price



#### Room Type / Neighbourhood Group



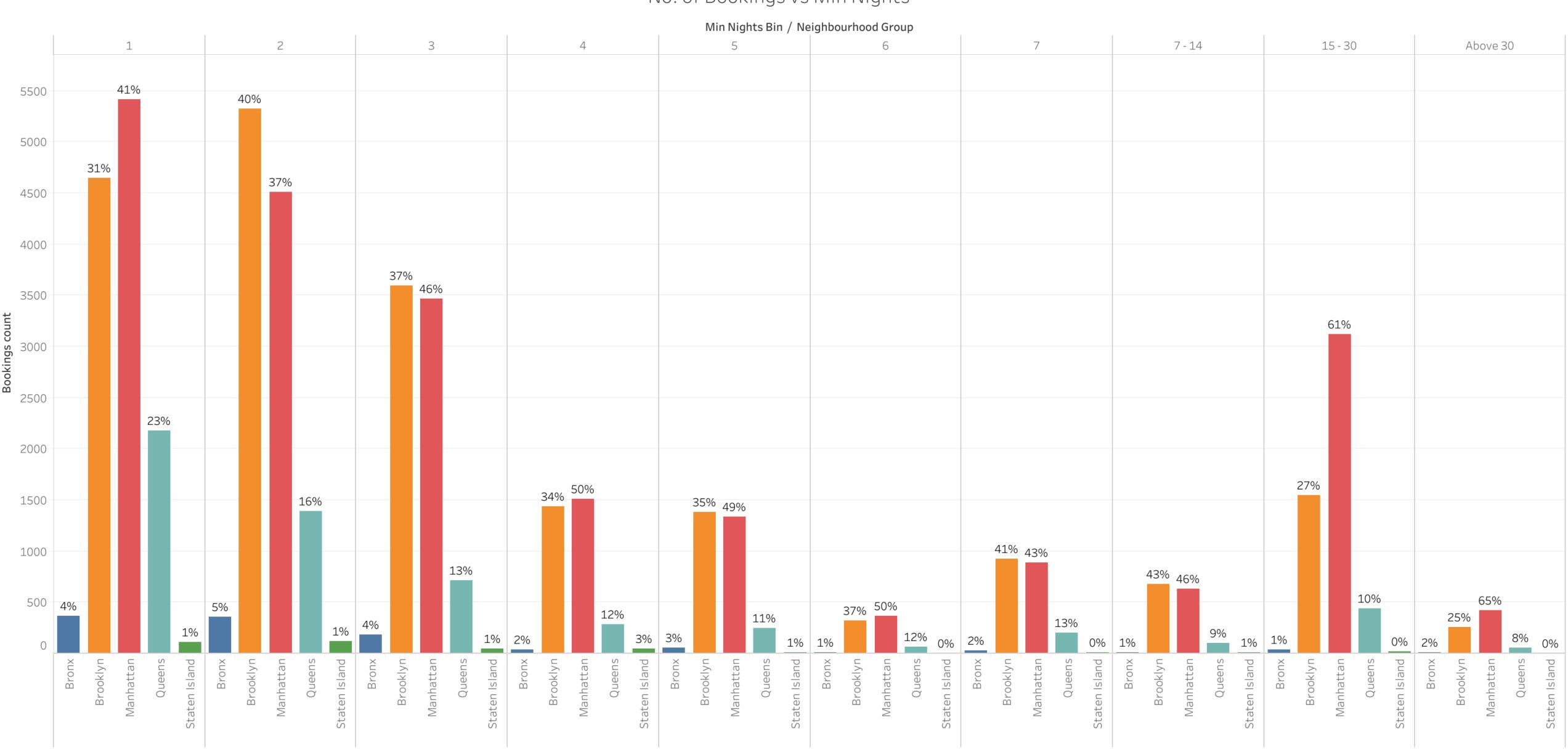


## Min. Nights (I)

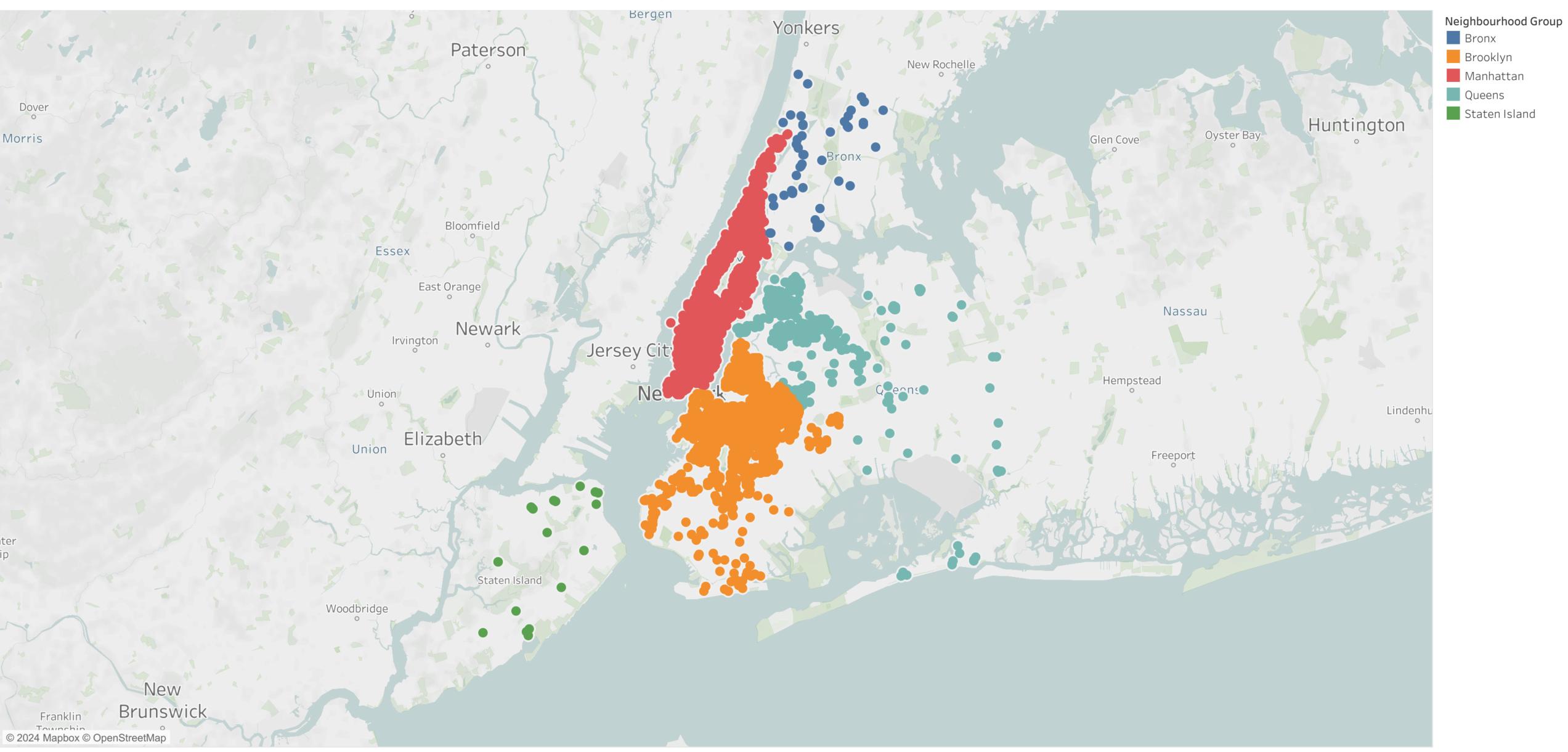
- Manhattan has the highest mandate of a minimum number of nights required in the entire home/apartment category for a stay which is >10.
- Other neighbourhoods have almost similar requirements for the min. nights in home/apt. and private rooms category.
- The minimum no. of nights required for staying in Shared rooms is comparatively higher in Manhattan and Brooklyn.
- Further analysis needs to be performed to understand the reason for the higher requirement of min. nights in Manhattan and Brooklyn, and also to understand why the avg. price of Shared rooms is cheaper in Brooklyn despite it being the second costliest neighbourhood for home/apts. and private rooms.



#### No. of Bookings vs Min Nights



#### Stay above 2 weeks

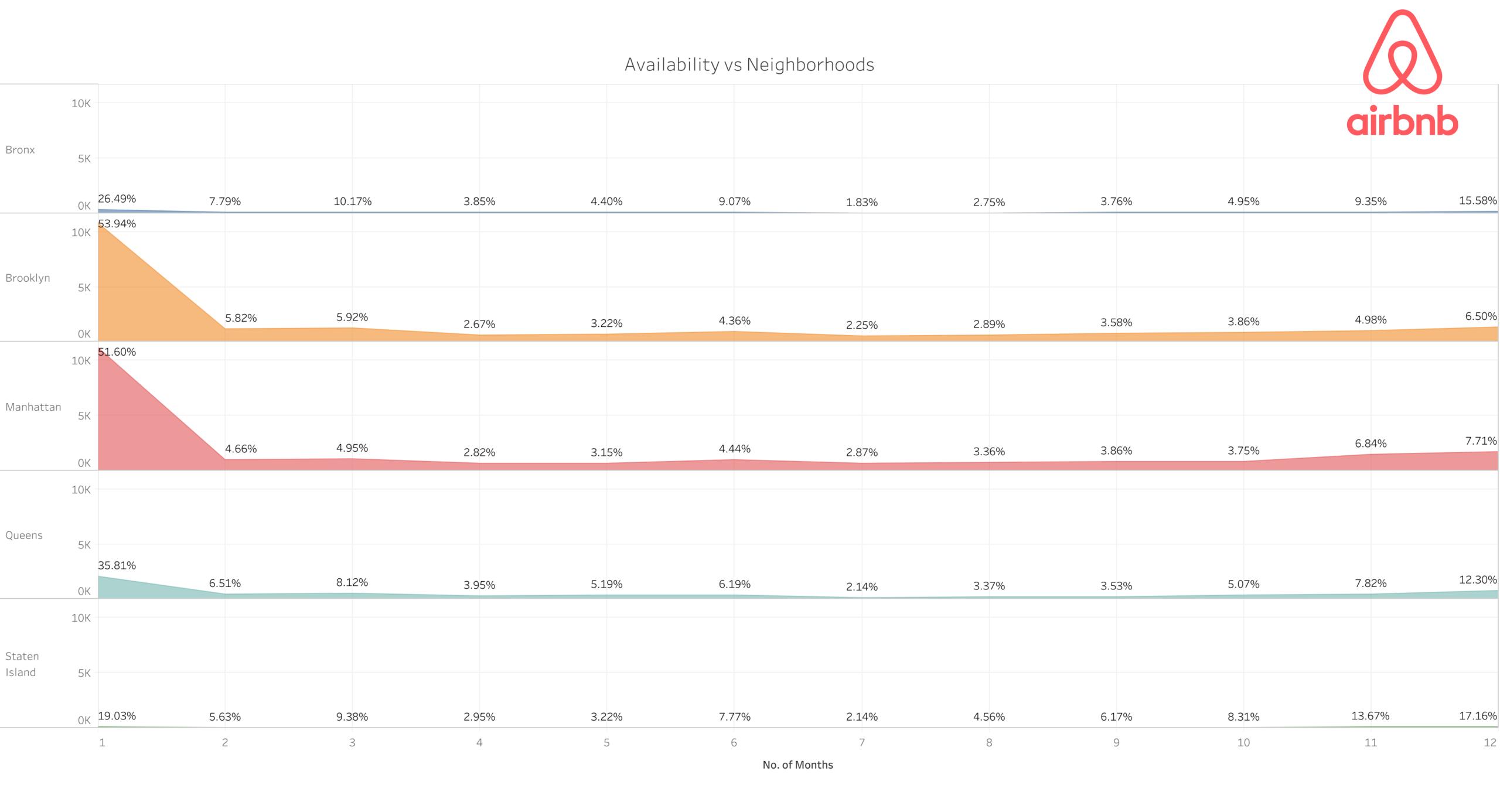




## Min. Nights (II)

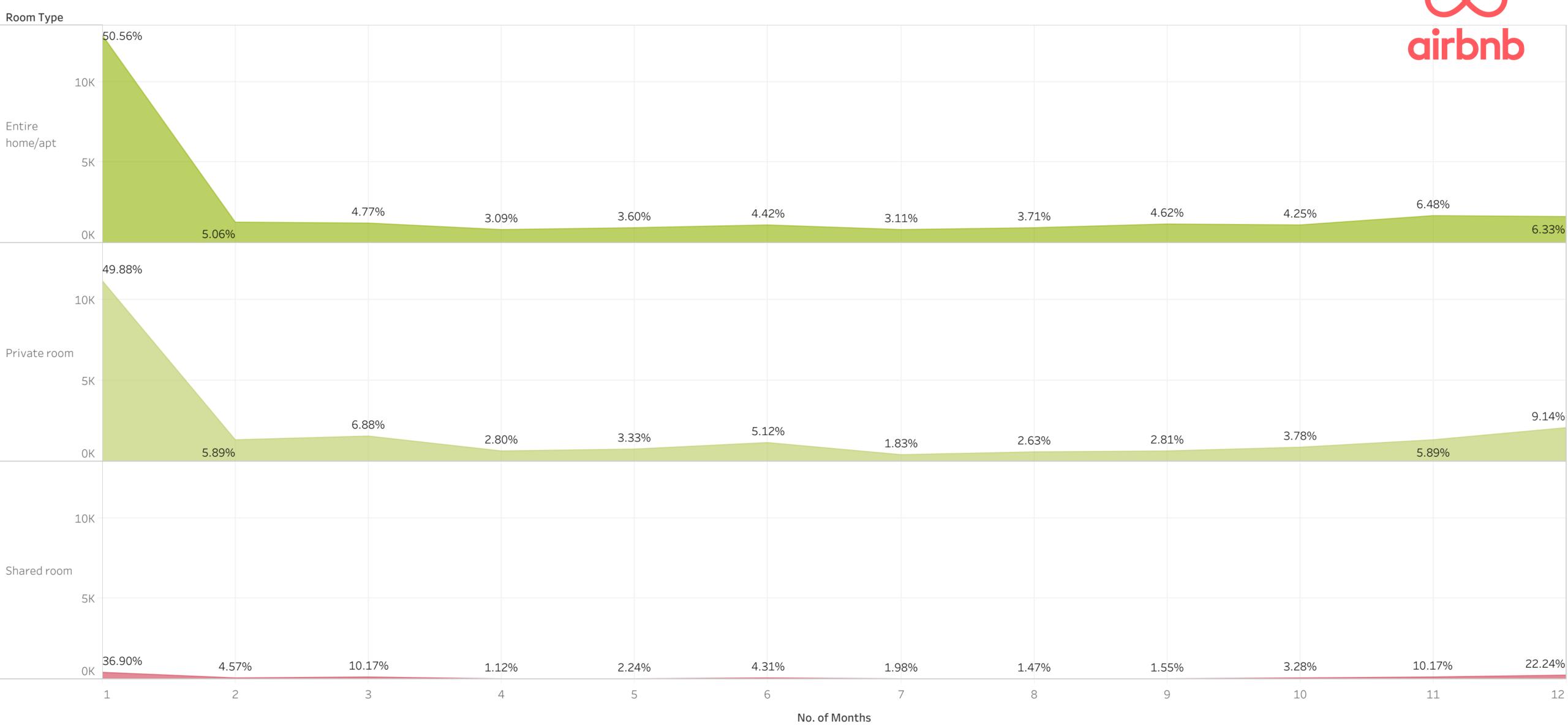
- Manhattan and Brooklyn can the preferred choices when stay duration is less than a fortnight.
- However, when the stay duration is more than 14 days, then Manhattan has the highest number of listings among other neighbourhoods.





#### Availability vs Room Type

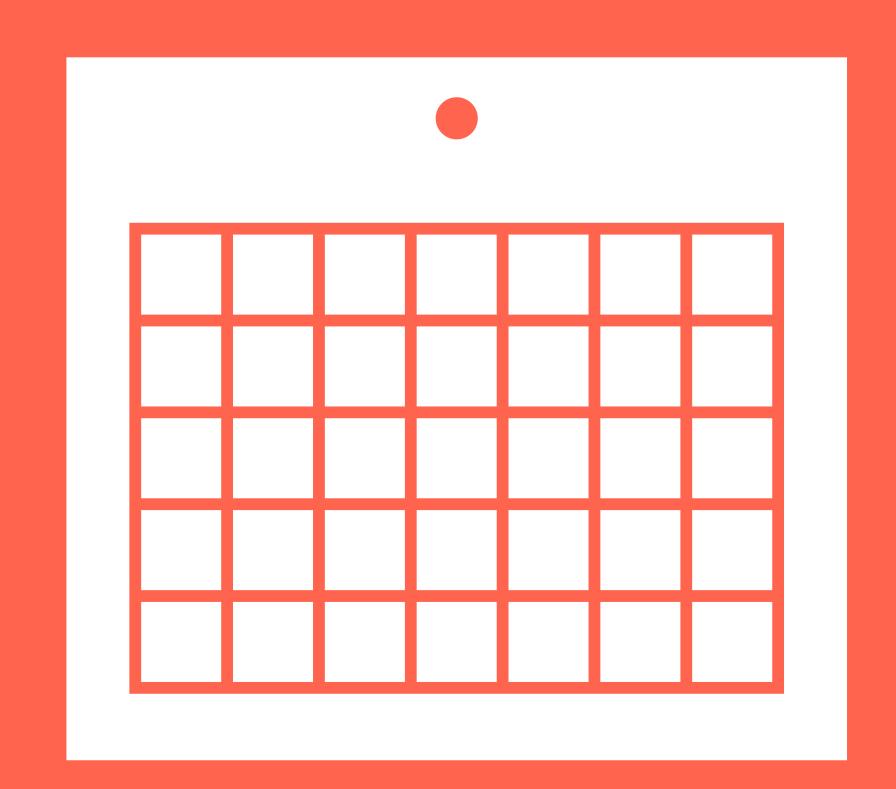






## Availabilty

- More than 50% of the properties in Manhattan and Brooklyn are available only for a month, whereas for Staten Island, Queens and Bronx more properties are available throughout the year comparatively.
- More than 50% of Entire Home/Apt. and Private Rooms are available only for a month.





# Key takeaways and potential recommendations for Airbnb



## 1. Neighbourhoods & Room Types

#### Focus on Manhattan and Brooklyn

These areas have the highest concentration of listings, bookings, and reviews, indicating higher demand. Tailor marketing strategies to these areas.

#### Diversify offerings in Queens and Bronx

Consider campaigns to incentivize entire home/apartment listings in these boroughs to cater to longer stays.





## 2. Price & Availability

#### Highlight competitive pricing in outer boroughs

Advertise cost-effective options in Queens and Bronx for budget-conscious travelers, especially for longer stays (>1 month) where availability is higher.

#### Offer flexible minimum stay options

Consider allowing shorter stays (less than a week) in Manhattan and Brooklyn, especially for entire home/apartments to cater to weekend getaways.





## 3. Understanding User Preferences

#### Analyze review sentiment

Additional need to analyse reviews to understand guest satisfaction across neighborhoods and room types. This can help identify areas for improvement for hosts.

#### Investigate minimum night requirements

Further research is needed to understand why Manhattan and Brooklyn have a higher minimum night stay requirement, particularly for entire home/apartments. This could be due to factors like higher demand or regulations.





## 4. Post-Pandemic Considerations

#### Target remote workers and extended stays

The pandemic has normalized remote work. Promote listings suitable for longer stays with amenities for remote work like dedicated workspace and reliable internet.

#### Highlight safety measures

Post-pandemic, travelers might prioritize hygiene and safety. Promote listings with enhanced cleaning protocols and clear communication regarding these measures.





By implementing these recommendations, Airbnb can capitalize on existing market trends, attract new user segments, and optimize post-pandemic recovery in New York City.

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