

# Storytelling Case Study: Airbnb, NYC

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# Objective

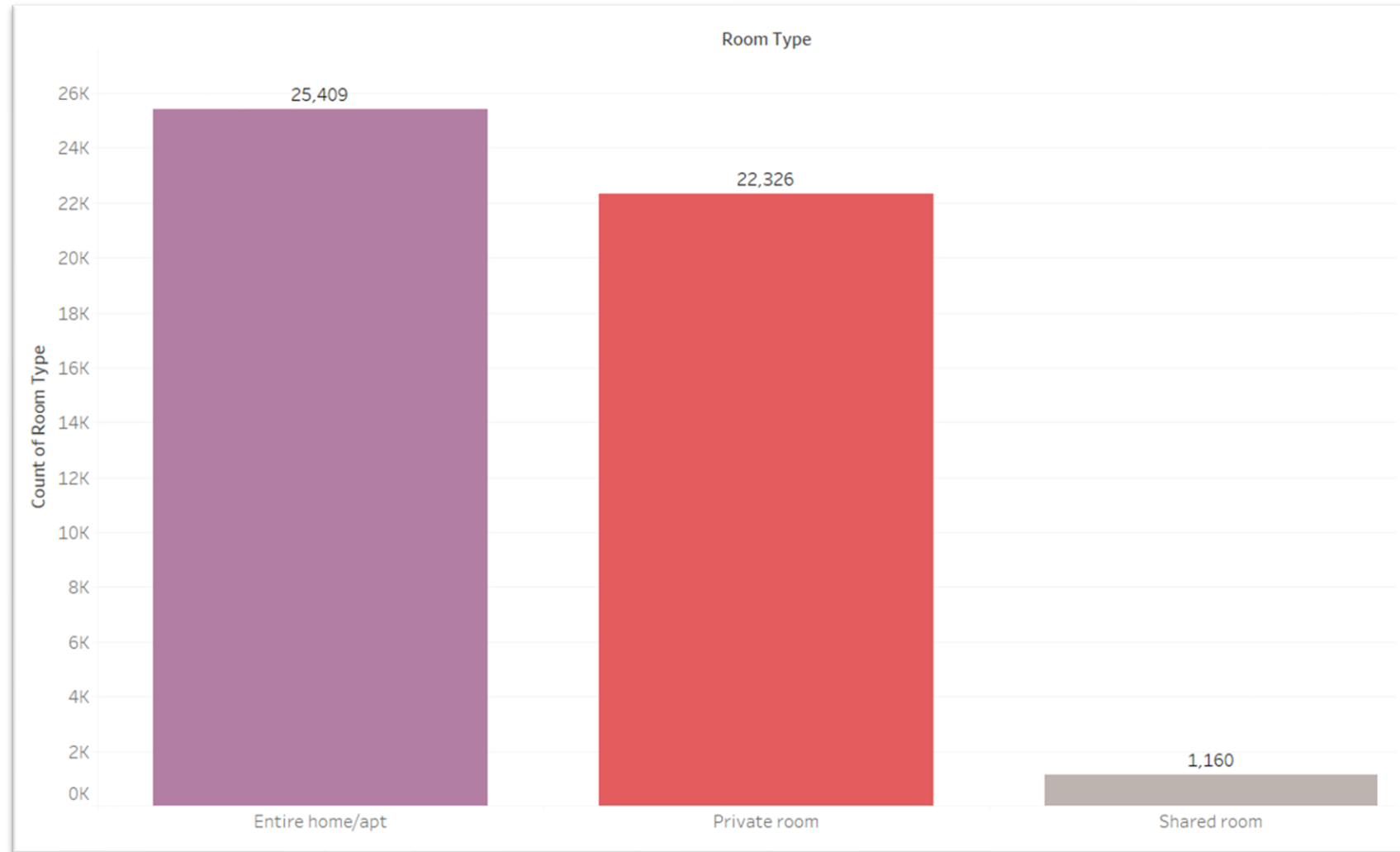
- Airbnb is an online platform using which people can rent their unused accommodations.
- During the covid time, Airbnb incurred a huge loss in revenue.
- People have now started travelling again and Airbnb is aiming to bring up the business again and is ready to provide services to customers.

# Data preparation

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

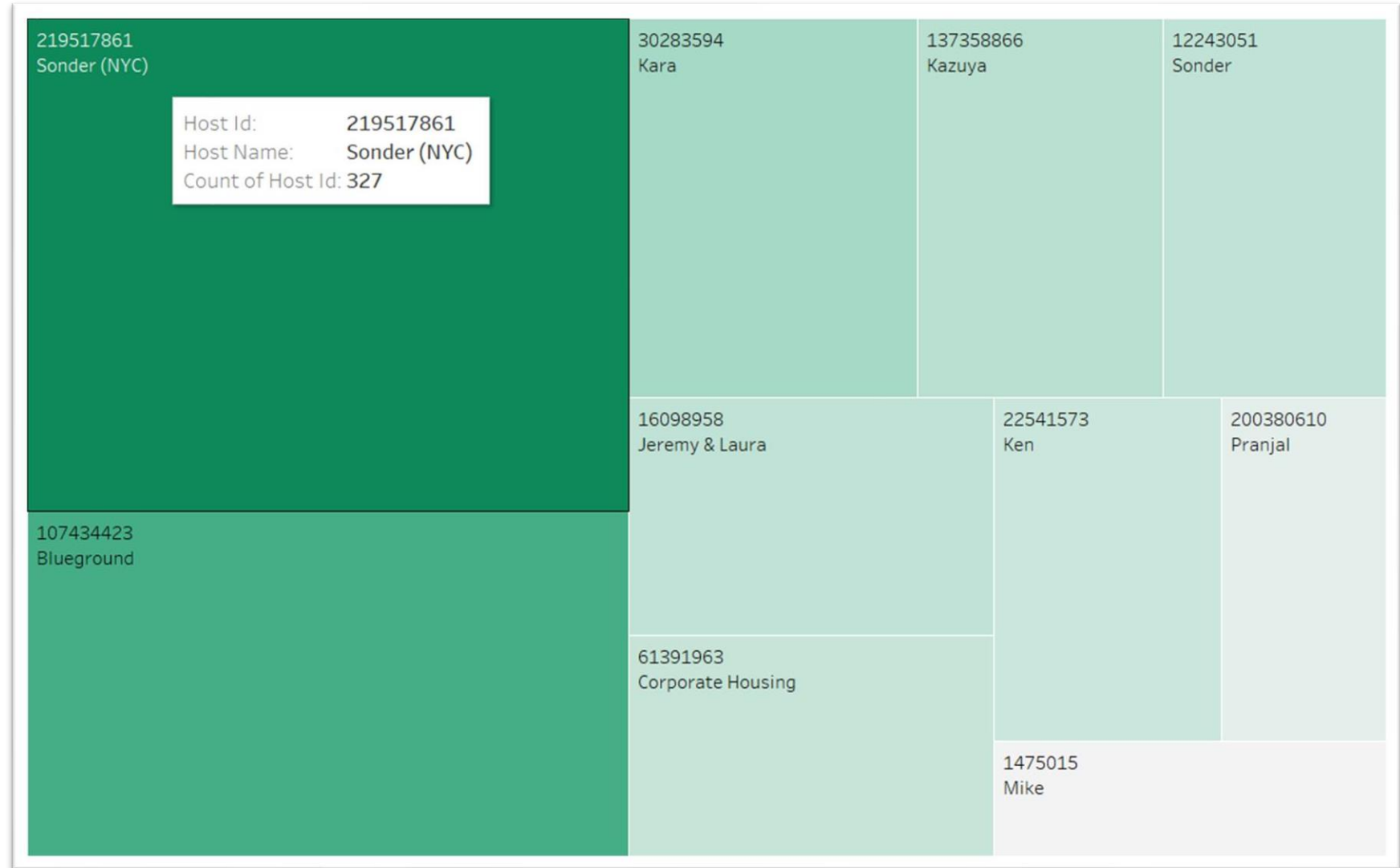
## Most preferred Property type

- **Most preferred property type is 'home/apt' and 'private room':** More than 25,000 people opted to stay in 'Entire home/apt', whereas around 22,000 people opted to stay in private room.
- Data implies that mostly people use Airbnb while travelling with family.
- Only 1,160 times shared rooms have been booked by people which is very less percentage of total booked properties.



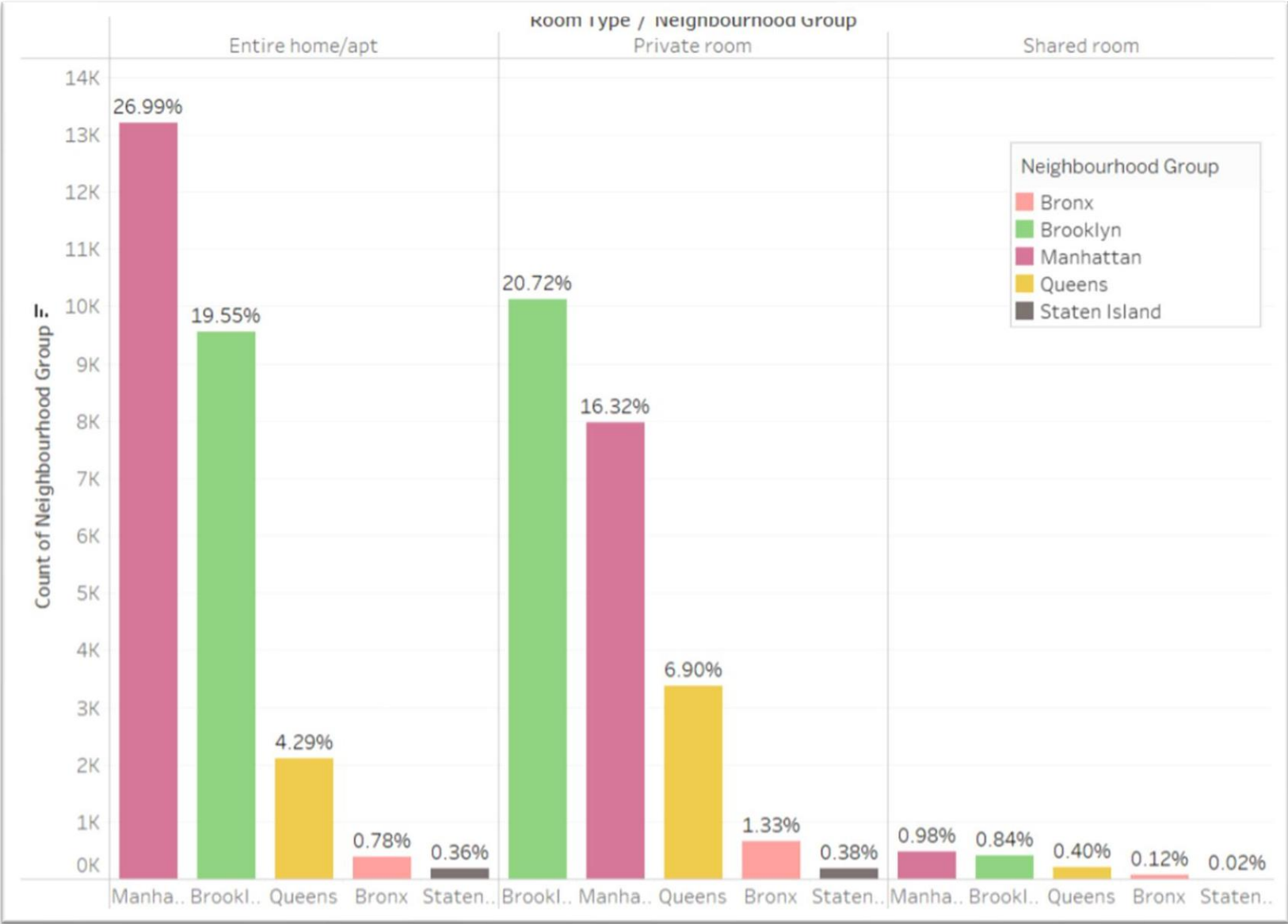
## Top 10 hosts

- **Host Sonder** (id 219517861), has been booked most number of times i.e. 327.
- **Host Blueground** is the second popular host.
- Then there are other hosts like Kara, Ken, Pranjal, Jeremy and Mike that fall under top 10 hosts.



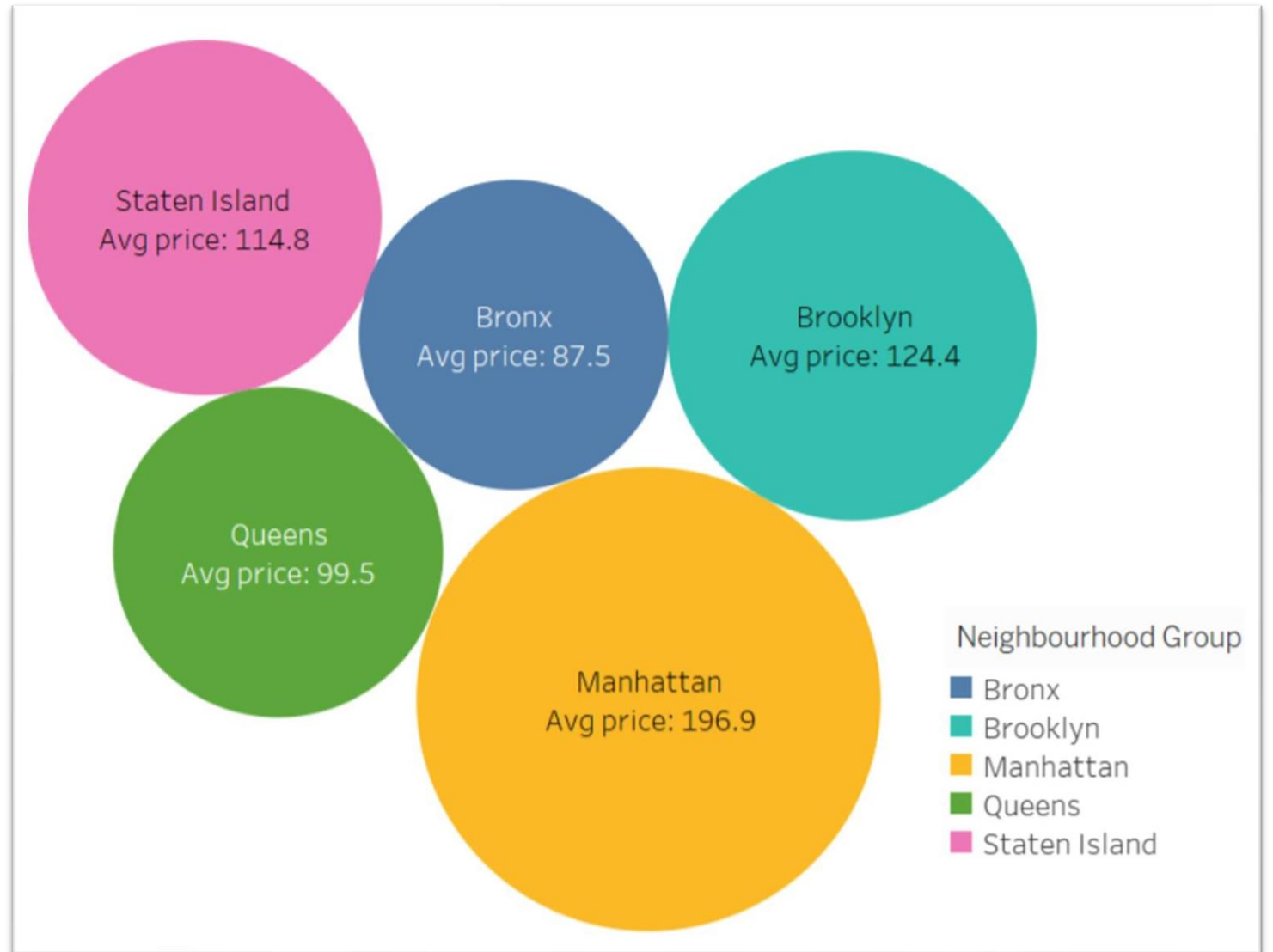
# Preferred Room type w.r.t Neighbourhood group

- Manhattan and Brooklyn are top neighbourhood groups and mostly people prefer to book the entire home or private room.
- Manhattan has highest number of home/apt properties, i.e. 27% of total listed properties.
- Maximum number of private rooms are available in Brooklyn i.e. around 21% of total listed properties.
- Very less number of shared rooms are available in each Neighbourhood group.



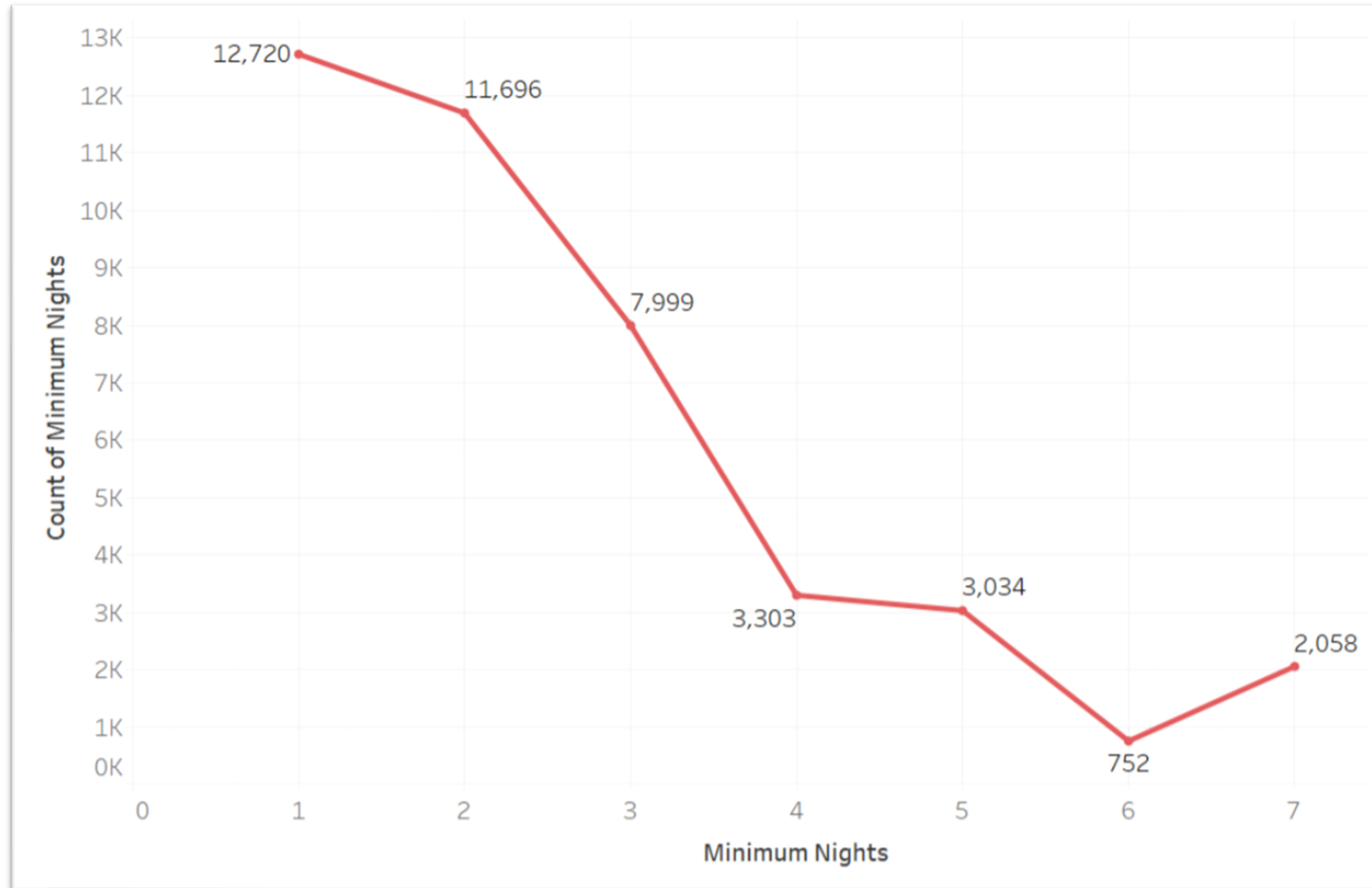
## Average price of Neighbourhood groups

- The average price of listed properties in Manhattan is around 196.9, which is highest among all neighbourhoods.
- Average price for Brooklyn is second highest i.e. 124.4.
- Bronx appears to be an affordable neighbourhood as the average price is almost half then Manhattan's average price.



## Minimum night stays

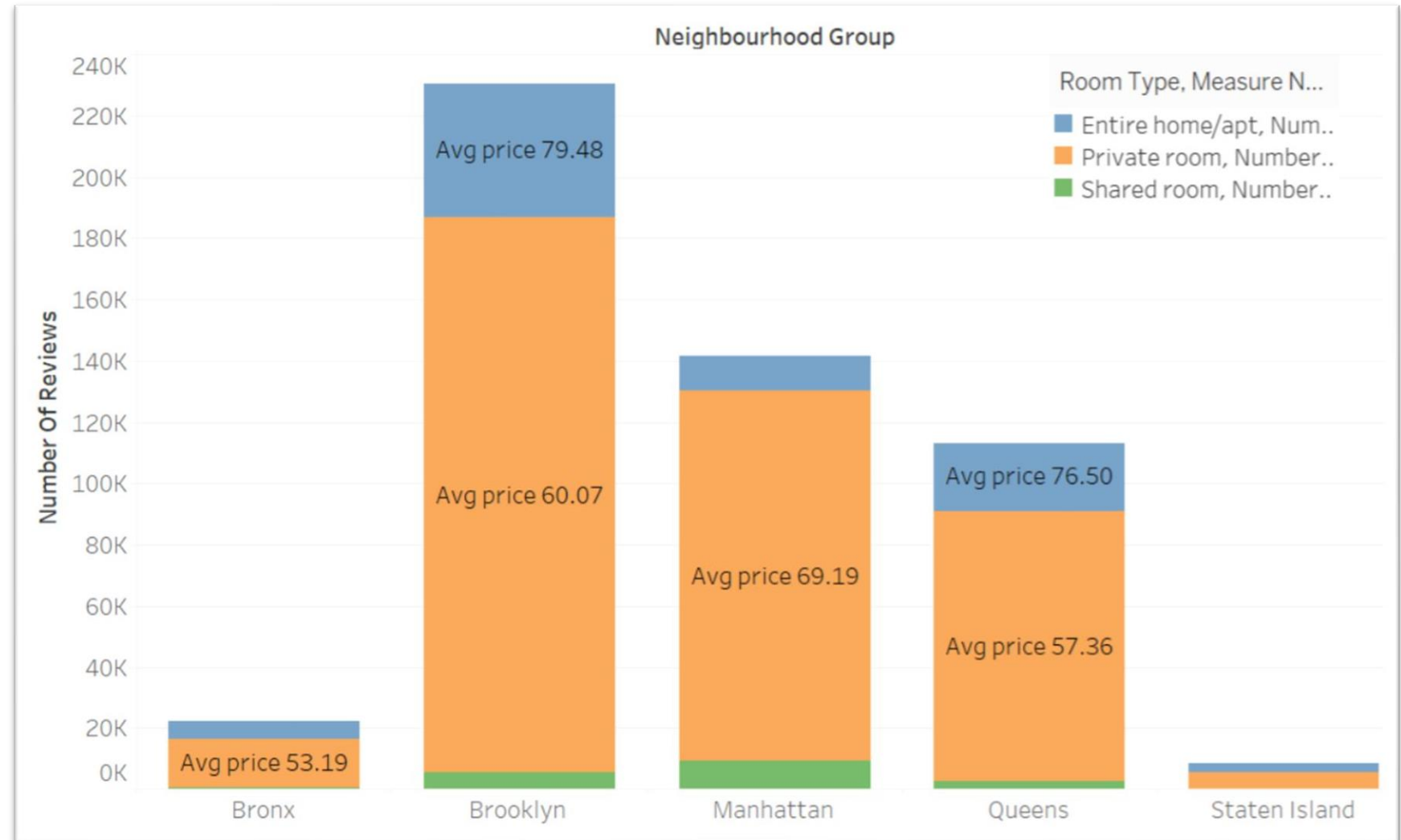
- Around 12000 people choose to stay for minimum 1 night in Airbnb property.
- Approx. 11000 people choose to stay for 2 nights and 7000 people choose to stay for 3 nights in Airbnb property.
- Around 3700 customers booked Airbnb property for a month.
- Count of customers who stayed for long durations like 2 months or more is mostly below 100.





## Preference of minimum night stays

- Number of reviews for Private room in Brooklyn is maximum and its average price is also less than Entire apartment.
- Number of reviews in each neighbourhood group for Private rooms is more than Entire apartment and Shared rooms.
- If a customer needs to choose Shared room, Manhattan could be a good option as the number of reviews for Shared rooms and home/apt are very similar



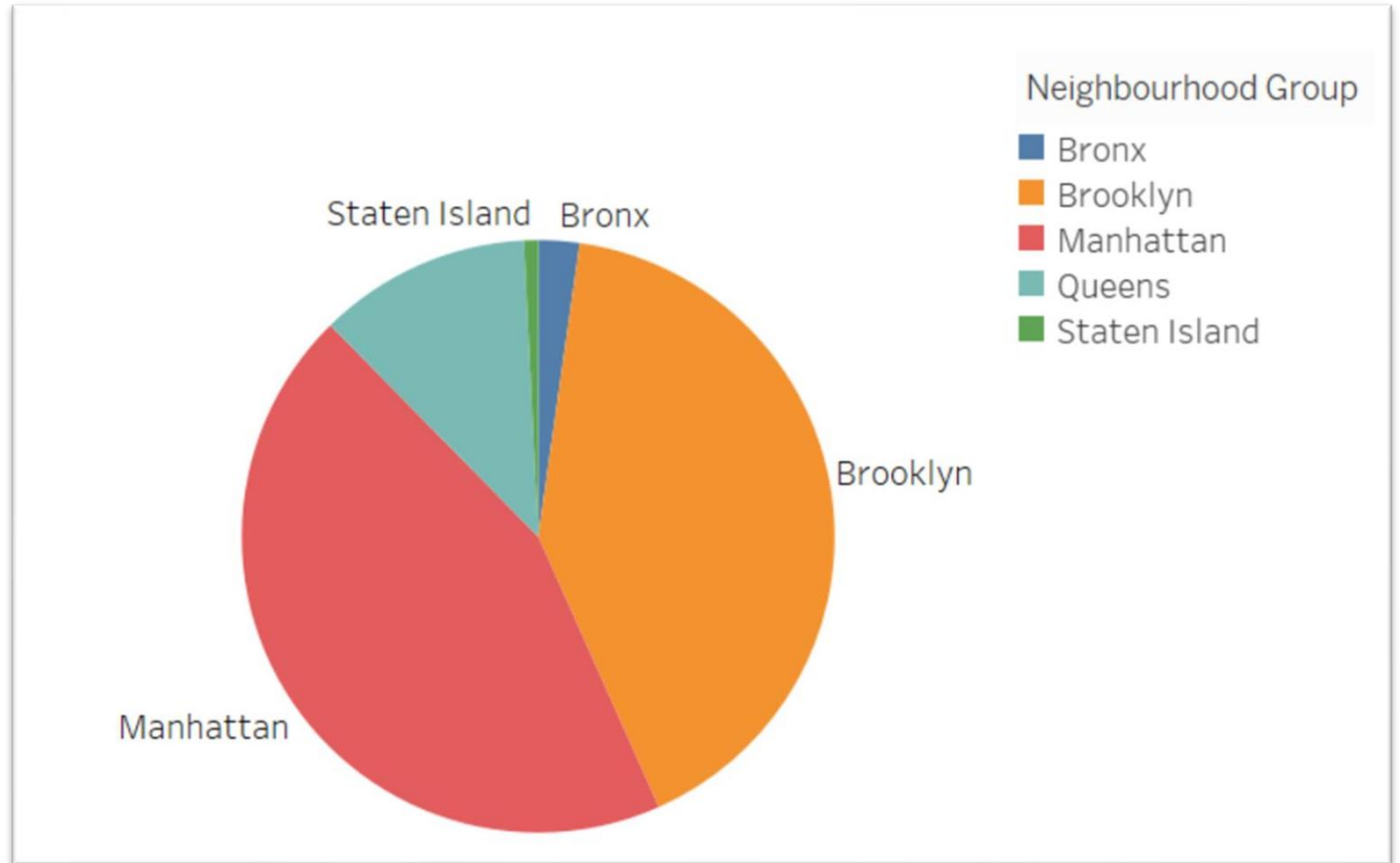
## Neighbourhood vs Availability

- Availability of Bedford is highest ,and its price is on the lower side. It is a good choice for customers.
- After Bedford, Harlem follows the same trend.
- East village's availability low but it is costly.
- On the other hand, William's price is high and has average availability.



## Properties in Neighbourhood group

- Manhattan & Brooklyn are popular choices among people.
- Most Airbnb properties are in Manhattan followed by Brooklyn.
- Staten Island holds least number of Airbnb properties.



# Data Methodology

We performed detailed analysis on data using below steps:

- Data cleaning
- Exploratory analysis to identify preferred Host, Room type, Neighbourhood etc.
- Derived insights from data using Tableau tool.