

# **STORY TELLING AIRBNB – NYC METHODOLOGY**

**ARCHANA KHAWARE  
SHASHANK SACAMURI**

# Methodology

- Neighbourhood Groups & Property Distribution:
  - The attributes considered in column are “neighbourhood group” and rows as count of “calculated host listing count”. The Labels are highlighted to understand the % of property distribution in a region.
  - **Observations**:- Almost 85% of Airbnb properties are located in Manhattan & Brooklyn region.
- Price Variation based on location:
  - Latitude and longitude are taken as the column and rows values along with the tooltip as prices and Neighbourhood groups as colour.
  - **Observations**:- From the Map we see the regions as price is relatively high in center part of Manhattan & Brooklyn.
- Avg Price for a listing based on Neighbourhood & Neighbourhood group:
  - Created a Tree MAP taking dimensions as average price and Neighbourhood and Neighbourhood group as labels.
  - **Observations**: The average price varies from 47.3 to 800 max.
  - Both the neighbourhood listing with Maximum (800) and Minimum (47.3) average price comes under “Staten Island” neighbourhood group.
  - Among all neighbourhood groups, Queens has a listing with least Max. Average price (274.7) followed by Bronx (442.1).

# Methodology cont.

- Average Review count per Neighbourhood property:
  - The attributes considered for a bar graphs in column are “Avg no of reviews” and in rows as Neighbourhood.
  - **Observations:** The average reviews count varies from 0 to 118.5 per neighbourhood.
    - Properties located in “Silver Lake” that comes “Staten Island” neighbourhood group has maximum average of reviews count of 118.5.
    - Whereas there are few other properties located in area such as “Fort Wadsworth”, “Woodrow” of “Staten Island” neighbourhood group has lowest average reviews count of 0.0.
- Reviews per Property Type:
  - The attributes considered for a bar graphs in column are “Room Types” and in rows as “Average no. of Reviews”.
  - **Observations:** The maximum average nos. of reviews is for “Private room” property type followed by “Entire home/apt” and “Shared room”.
- Avg Reviews Per Neighbourhood Group:
  - The attributes considered for a bar graphs in column are “Neighbourhood groups” and in rows as “Average no. of Reviews”.
  - **Observations:** Compared to other neighbourhood groups, listings located in “Staten Island” has maximum average nos. of reviews followed by Queens, Bronx, Brooklyn and Manhattan.

# Methodology cont.

- Review last date vs Avg price.
  - The attributes considered for a line chart in column as “Year of last review” and in rows as “Average price”.
  - **Observations:** Visualization shows review last date for a particular average price with variation of price across the year.
- Avg Price Variations based on Neighbourhood area & Reviews per month:
  - The attributes considered for a line chart in column as “Neighbourhood Group & Reviews per month” and in rows as “Average price”.
  - **Observations:** Visualization shows average price variation based on reviews per month per neighbourhood area. Brooklyn being the highest as average price of 7,500 with the reviews of 6.15 per month.
- Minimum Nights for properties with median price greater than 100.
  - The attributes considered for a bar graph in column as “Avg Minimum Nights” and in rows as “Median Price above 100 of Neighbourhood group”.
  - **Observations:** The minimum nights for properties with a median price greater than 100 is 1. It varies from 1 to 30.

# Methodology cont.

- Avg Price and Minimum Nights Per Rental Property Type:
  - The attributes considered for a bar graphs in column are “Room Type, Measure names” and in rows measure values (Avg Price & Avg Minimum Nights).
  - Observations: There are 3 different property types namely:
    - *Entire home/apt*
    - *Private Room*
    - *Shared Room*
  - Among these Shared Room type has comparatively lesser avg. price and cheaper
  - Avg. minimum nights is more for “**Shared Room**” in comparison to “**Private room**” type but lesser than “**Entire home/apt**”.

Thank You