

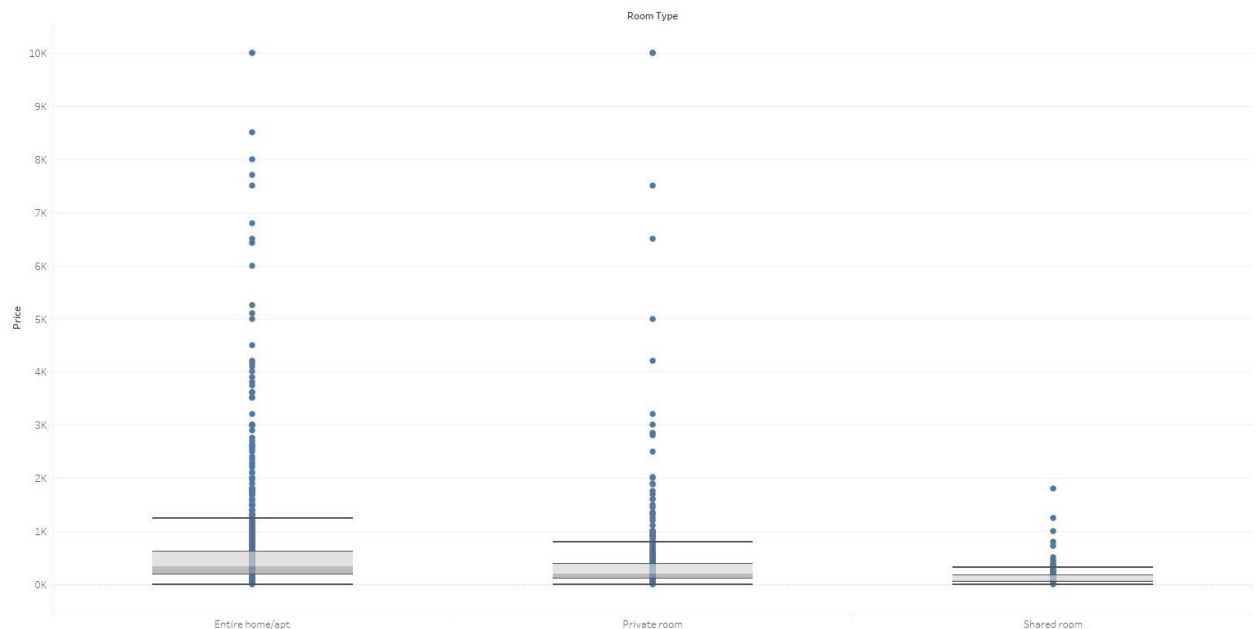
Data Methodology

Step 1: Storyboarding

- Went through the data & data dictionary to get familiarized with it and noted down important fields
- Made a list of various slides of the presentation
- Made a rough template based on this list

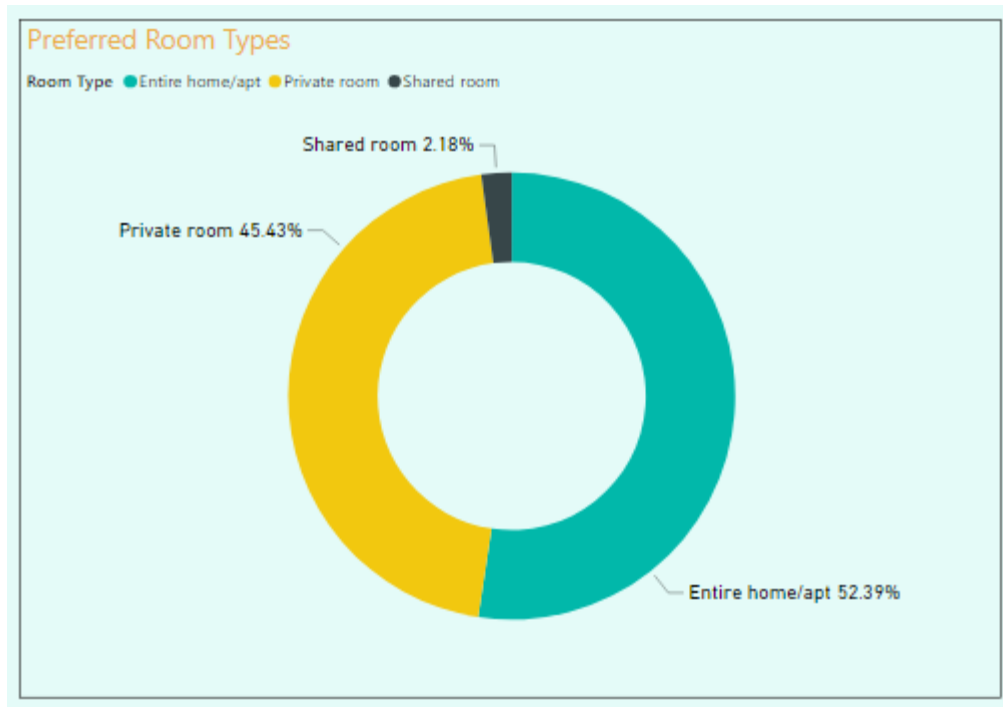
Step 2: Data Wrangling

- Did univariate analysis using Power BI on the fields to see their distributions, the unique values in a field, the missing values and to check for outliers if any
- There was a small proportion of null values which would not affect the analysis so kept it as it is
- Price was highly positively skewed so median was very close the lower quartile with some outliers as seen in the boxplot below

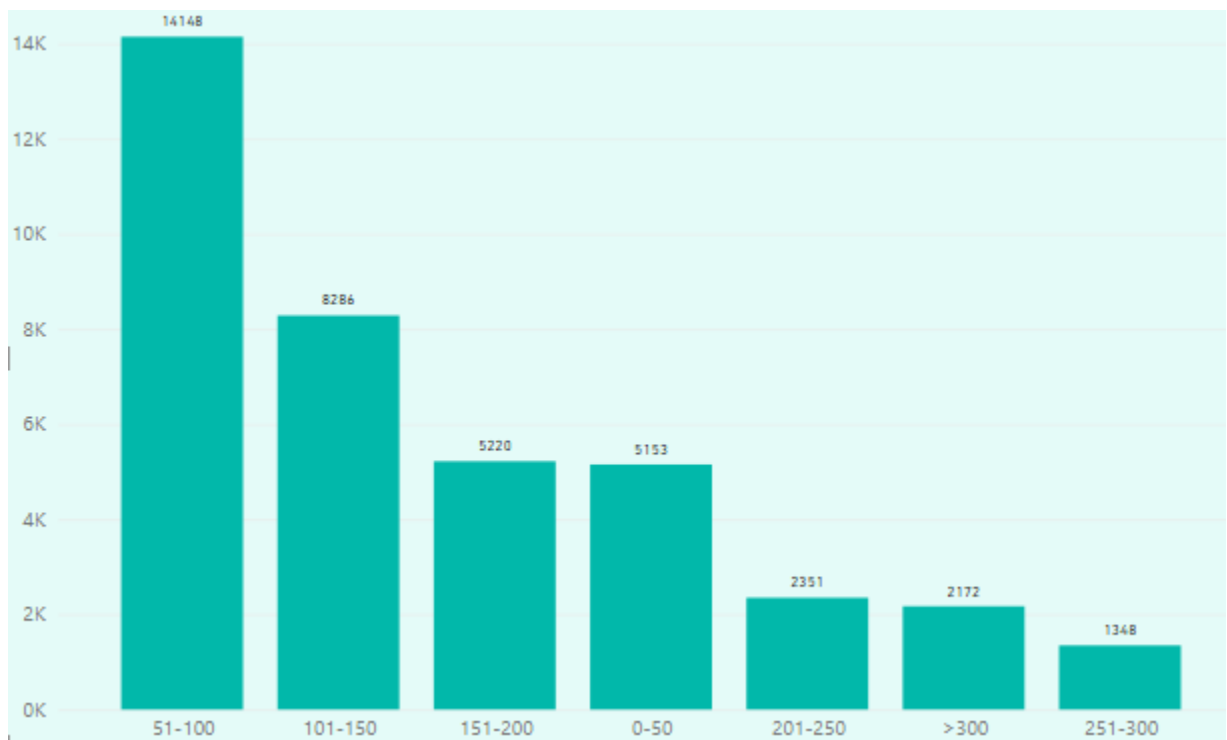


Price for each Room Type.

- Since price has outliers, used median instead of mean as the measure for price
- Host Listings count is maximum for entire apartment and private room and is very small for shared room as seen below



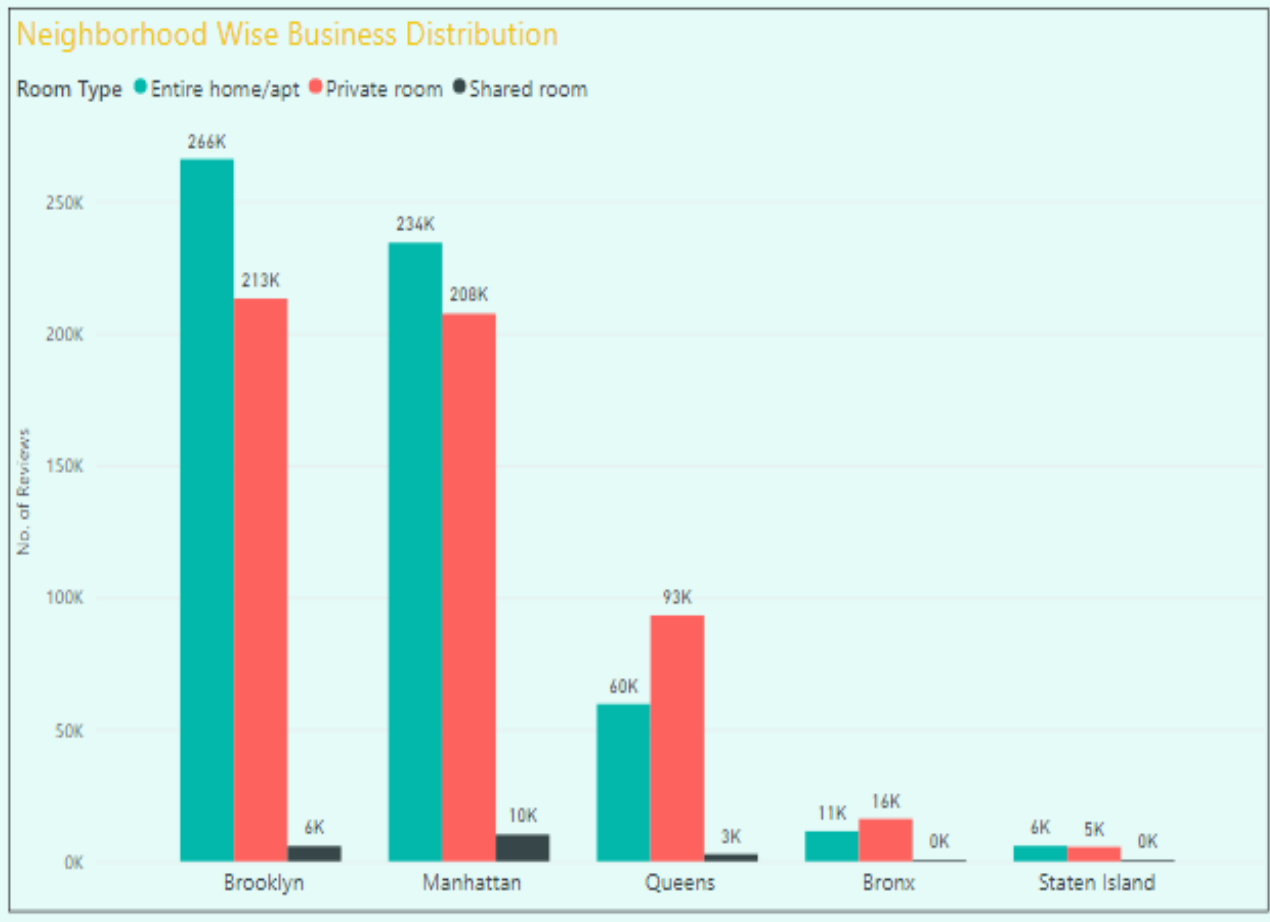
- Created a grouped field for price range assuming null values belonged to the category



- Created a calculated field of number of reviews per listing

Step 3: Data Analysis

- Checked neighborhood grouped wise distribution of price and room type

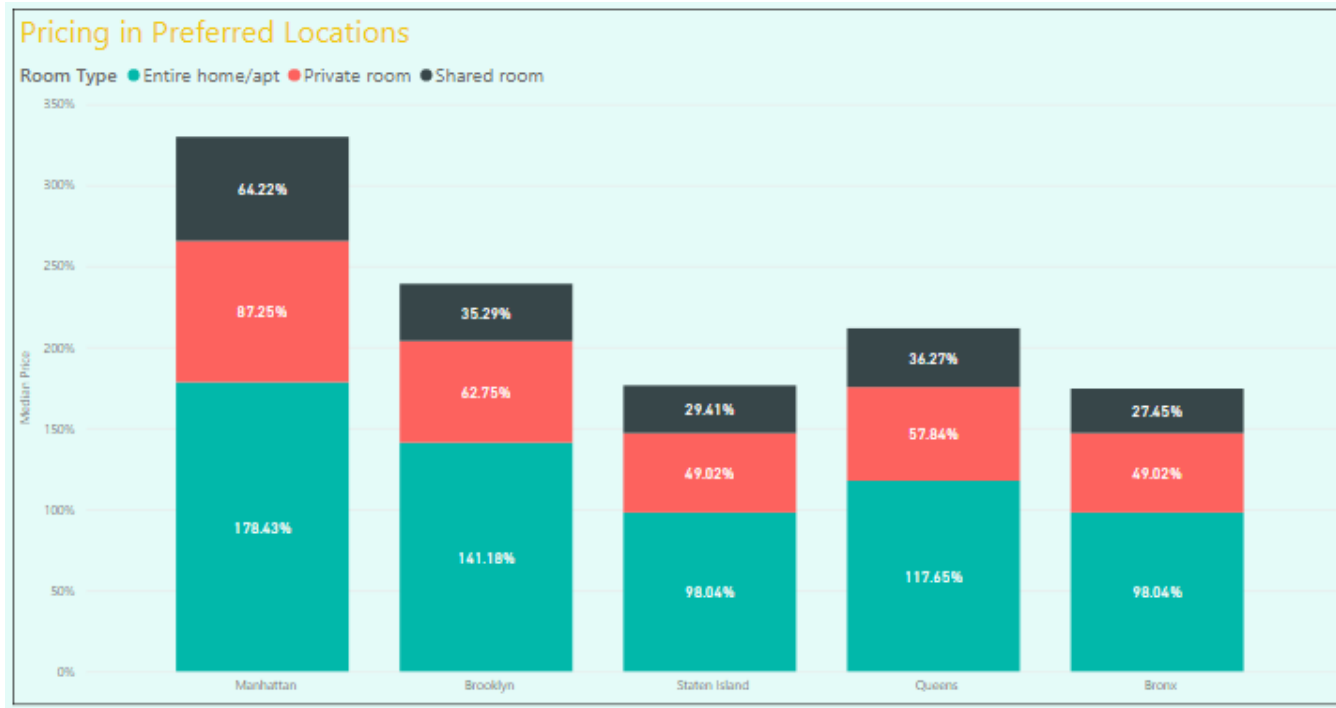


Pricing in Preferred Locations

Room Type ● Entire home/apt ● Private room ● Shared room



- Through these clearly:
 - Private rooms are most popular throughout New York > 25 reviews per listing
 - Entire home/apt are more popular in Manhattan & Brooklyn
 - Except Manhattan, all areas performed poorly in shared rooms with an average of 7.3 reviews per listing
 - Entire home/apt's price is ~100% more than private rooms except Brooklyn and Staten Island with ~150%
 - Private room's price is ~10% more than shared rooms except Brooklyn and Manhattan with ~40%
 - Manhattan is costliest overall and the cheapest are
 - Entire apt: Bronx
 - Private room: Staten Islands
 - Shared room: Brooklyn
- Found difference in prices between shared rooms, private rooms and entire apartments for each neighborhood as shown below



- Through this clearly we can say that:
 - Entire home/apt's price is ~100% more than private rooms except Brooklyn and Staten Island with ~150%
 - Private room's price is ~10% more than shared rooms except Brooklyn and Manhattan with ~40%

Step 4: Presentation

- Made the presentation adhering to best practices and pyramid principle
- Added recommendations for the respective departments