



## **Data analysis for : Exploration of Airbnb Listings Data Project week#3**

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After conducting exploratory data analysis on a listings dataset, which included data cleaning, handling null values, dropping unnecessary data, and feature engineering, here's a summary of our insights:

### **Histogram Plot Insights:**

**Guest Distribution:** The histogram shape reveals the range and spread of guest accommodations in listings.

**Most Common Guests:** Peaks in the histogram indicate the most common number of guests, aiding in understanding typical occupancy preferences.

### **Scatter Plot Insights:**

**Rating and Price Relationship:** Higher-rated listings tend to have higher prices, suggesting perceived value correlates with rating.

**Pricing and Review Scores:** Understanding the relationship between pricing and review scores aids in pricing strategies and assessing property value.

### **Line Chart Insights:**

**Listing Distribution across Cities:** Identifying cities with the highest listing frequency helps in focusing marketing efforts.

**Patterns or Trends:** Trends in listing frequency across cities can indicate market demand and guide resource allocation.

## Recommendations:

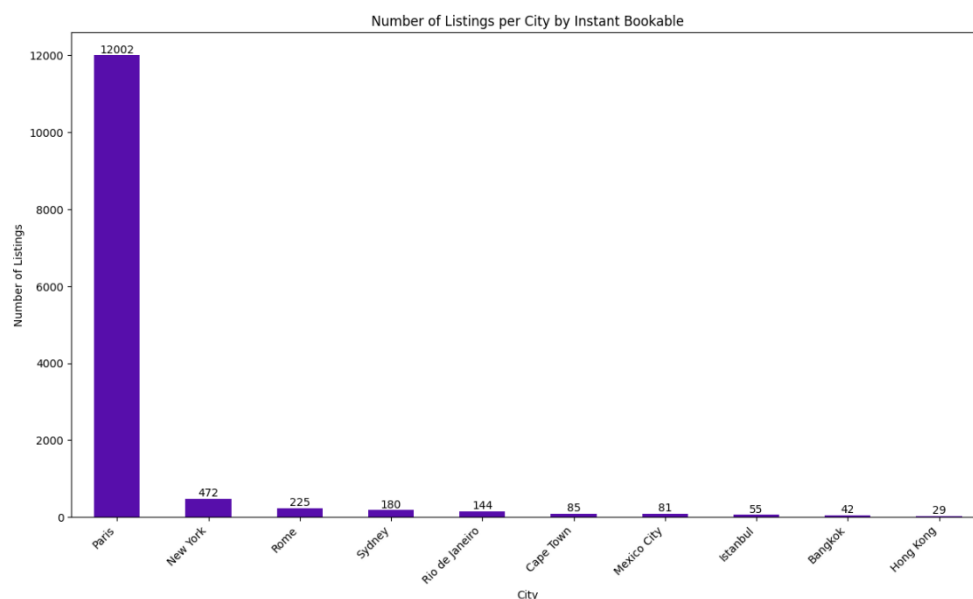
**Pricing Strategy:** Adjust prices based on review scores to reflect perceived value.

**Occupancy Preferences:** Tailor marketing efforts based on common guest numbers to attract specific target groups.

**Focus on High-Frequency Cities:** Concentrate resources on cities with the highest listing frequency to maximize market opportunities.

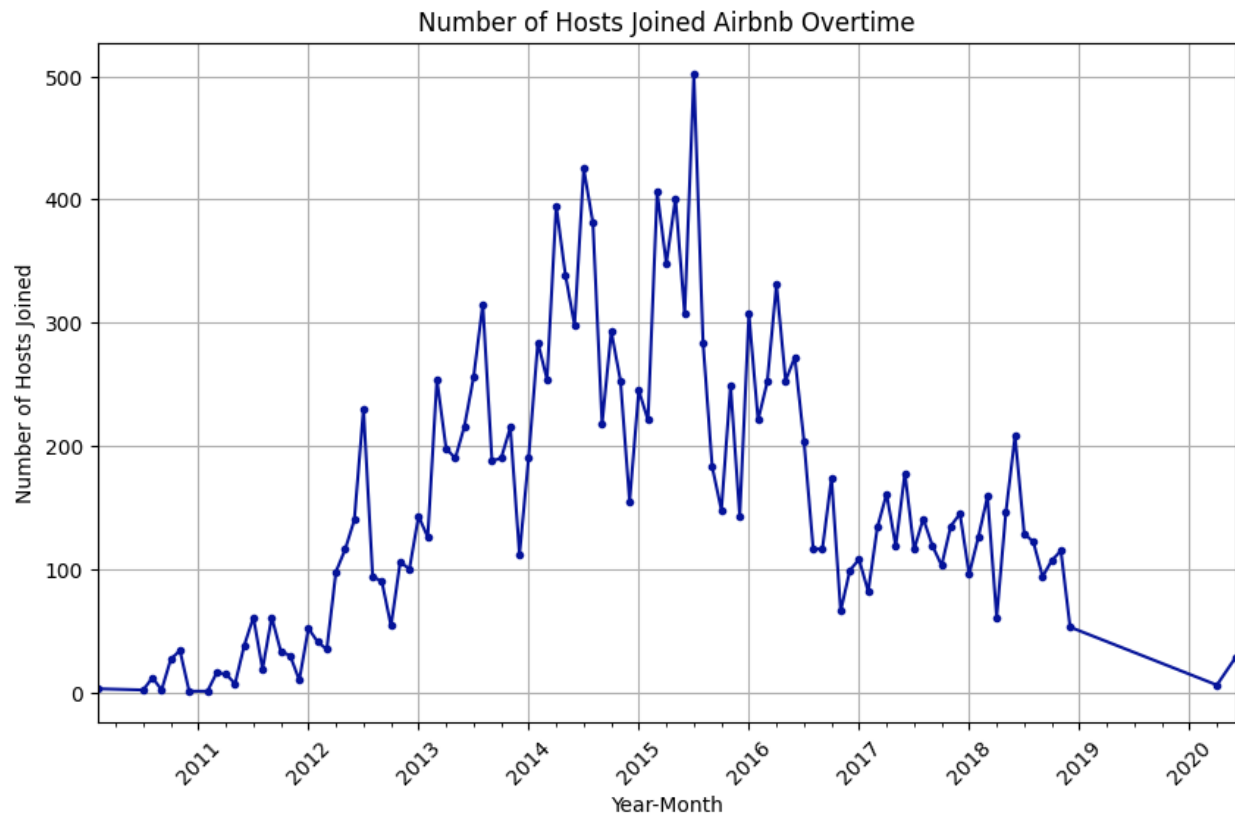
In conclusion, our analysis provides valuable insights for optimizing pricing, occupancy preferences, and marketing strategies to enhance listing performance.

## 1-What are the main differences in the Airbnb markets between cities?



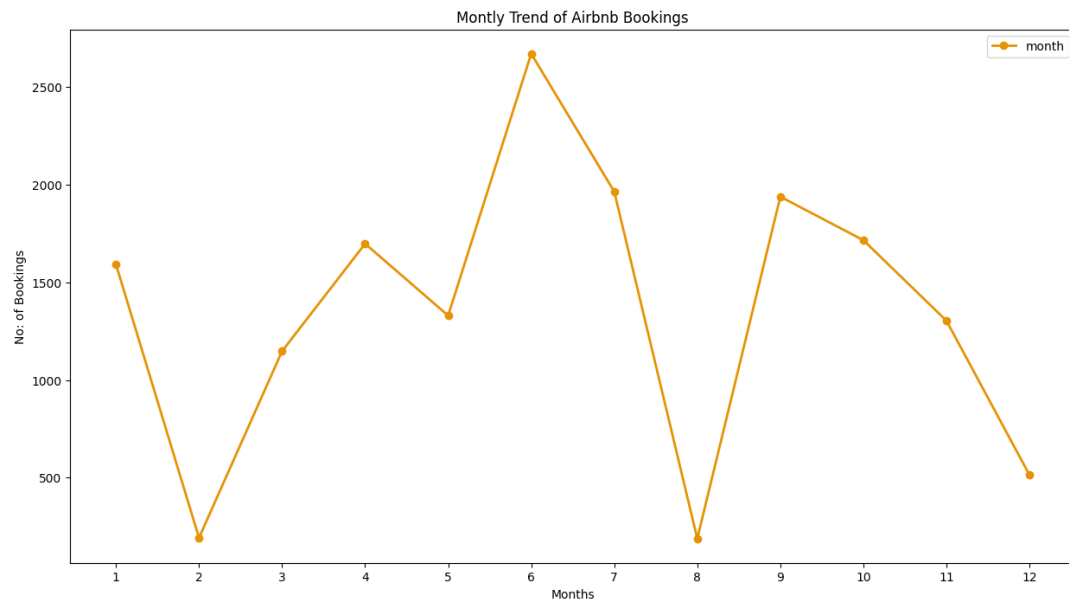
Paris has the highest number of instant bookings with a total of 12002 bookings and Hong Kong has the least number of instant bookings with 29.

## 2-Which factors exert the most significant influence on Airbnb listing prices?



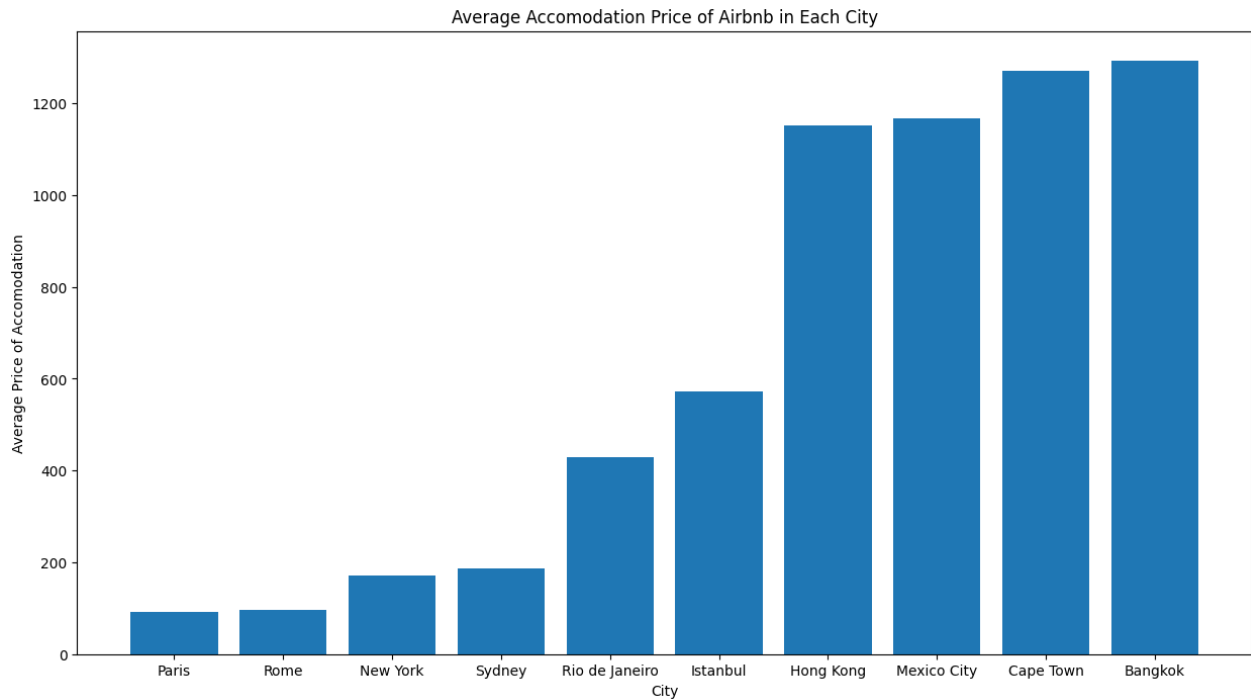
Based on the graph provided, it is evident that there was a substantial surge in hosts joining Airbnb during the years 2015 and 2016. However, the number of there was a noticeable downward trend in the year 2017.

### 3-Can you detect any patterns or recurring trends in Airbnb review data?



The highest percentage of reservations is for June, while the lowest percentage is for October and February.

#### 4-Which city offers the best value for travelers considering Airbnb accommodations?



Cape Town has the highest average price for Airbnb accommodations, whereas Rome has the lowest average price for Airbnb accommodations.