

Airbnb Amsterdam

Executive Summary

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Introduction

Airbnb is an online american marketplace that allows property owners to list their properties on the platform and connect with travelers who are looking for a place to stay.

I have **Analyzed the Landscape of Airbnb** in the **city of Amsterdam**.

The data was collected from the official Airbnb website. The data are freely available for public use. [\(Click Here\)](#)

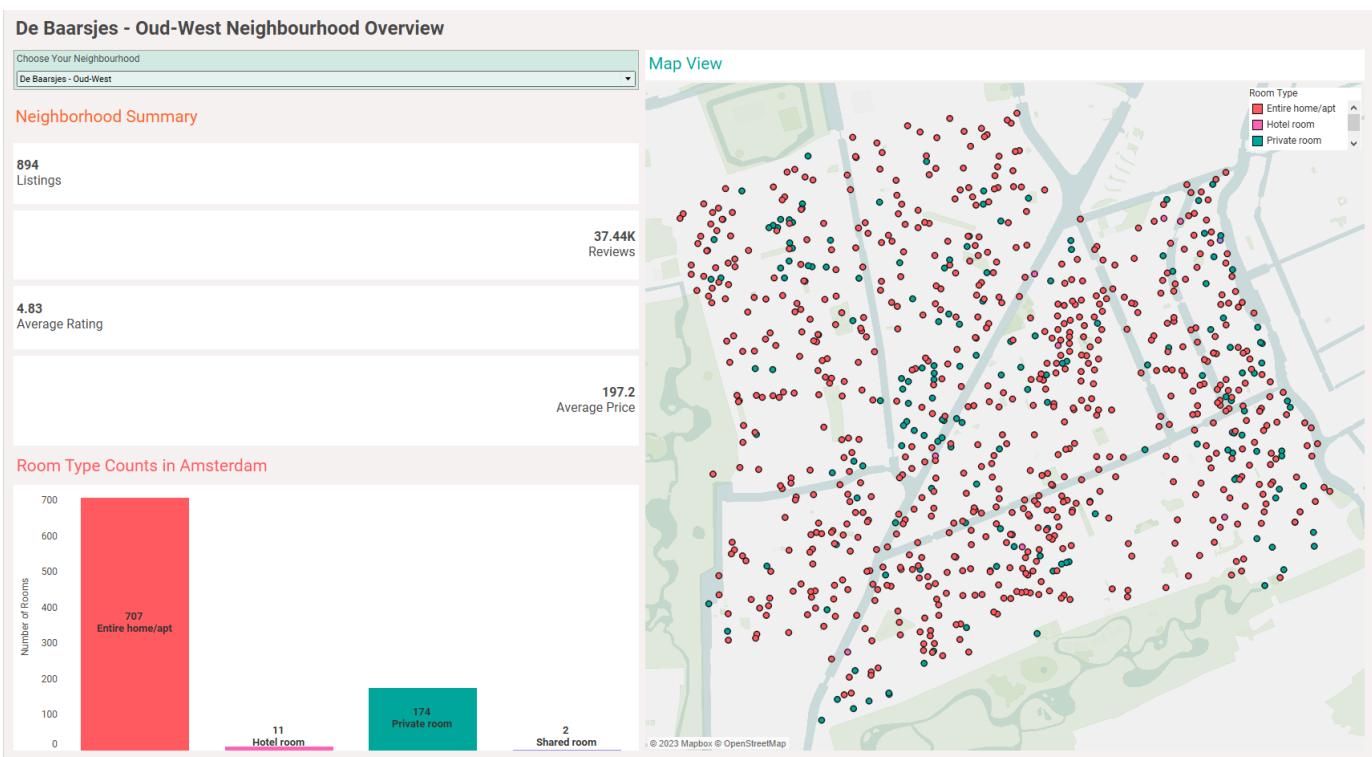
Provided Dataset is a subset of a larger dataset. The subset dataset contains data of the city of the Amsterdam.

The analysis was performed using **Tableau BI & Analytics software** and **Python Programming Language**.

The tableau dashboards can be found in the link here -> [\(Go to Tableau Public Dashboard\)](#)

Dashboards

- Both dashboards are fully interactive, You can choose the neighbourhood from the dropdown.
- Dashboard below shows the Bar chart of listings Filtered by Room type .
- A map view for better viewing which part of neighbourhood has most cluster of listing.
- The Neighbourhood Summary Shows:
 - Total Listings
 - Total Reviews
 - Average Ratings
 - Average Price (in \$)



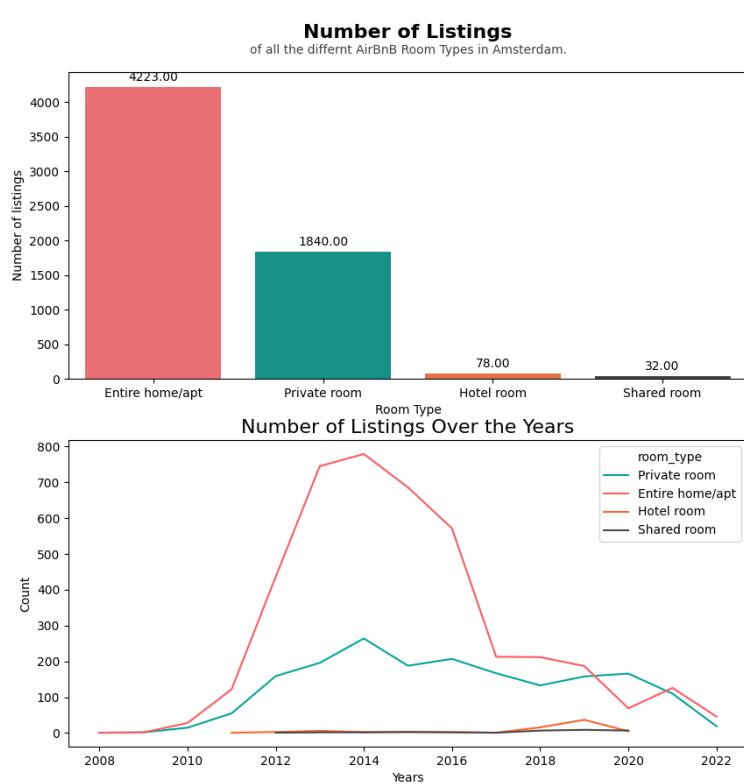
- Dashboard below shows the Bar chart of Median Price Categorized by Room type .
- A word cloud is used to get Hosts with highest number of listings in the neighbourhood.
- The Growth chart consists of Two plots:
 - a. Line plot: The line plot shows us the number of listings over the years.
 - b. Bar plot: The bar plot shows us the price range categorized by room type.



Insights

The tableau dashboards can be found in the link here -> [\(Go to Tableau Public Dashboard\)](#)

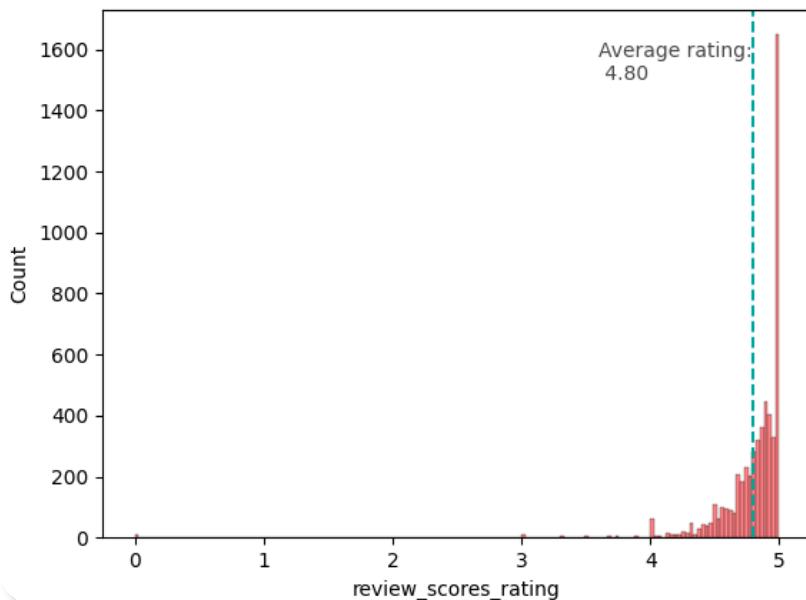
- There are **total 6,173 listings** in the city of Amsterdam.



- Entire Home/apt has highest number of listings with total of 4223.00.
- Shared room has lowest number of listings with total of 32.00
- Hotel Rooms were not listed till 2011.
- Shared room were not listed till 2012.
- Shared room and Hotel Rooms were not listed after 2020.
- Entire Home/apt peaked in year 2014.

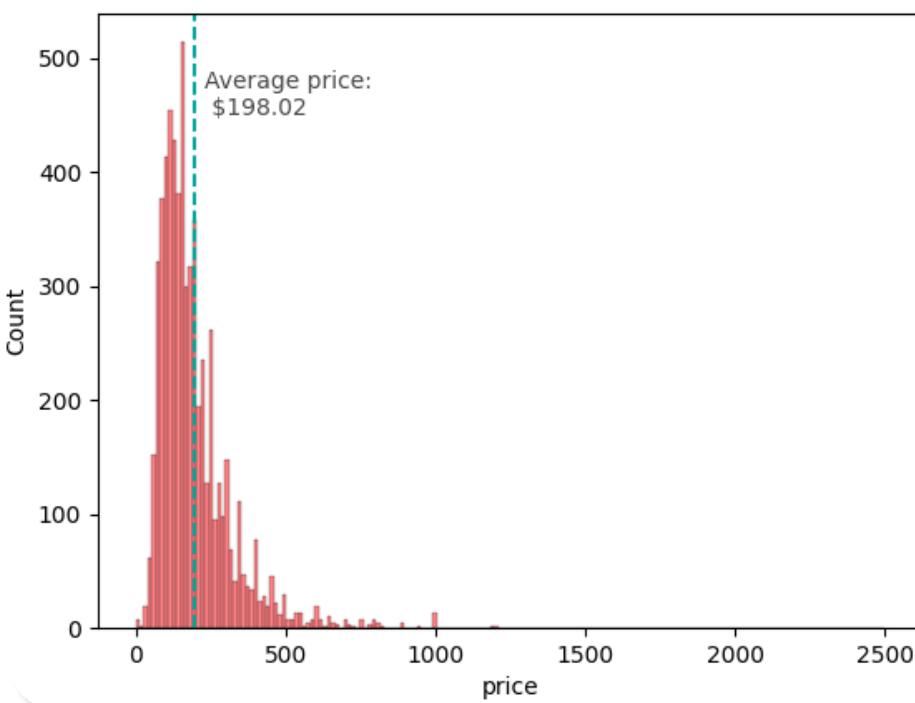
- **4.80** is the average rating of all the listings in the city of Amsterdam.

Average Rating
of all the AirBnB listings in Amsterdam.

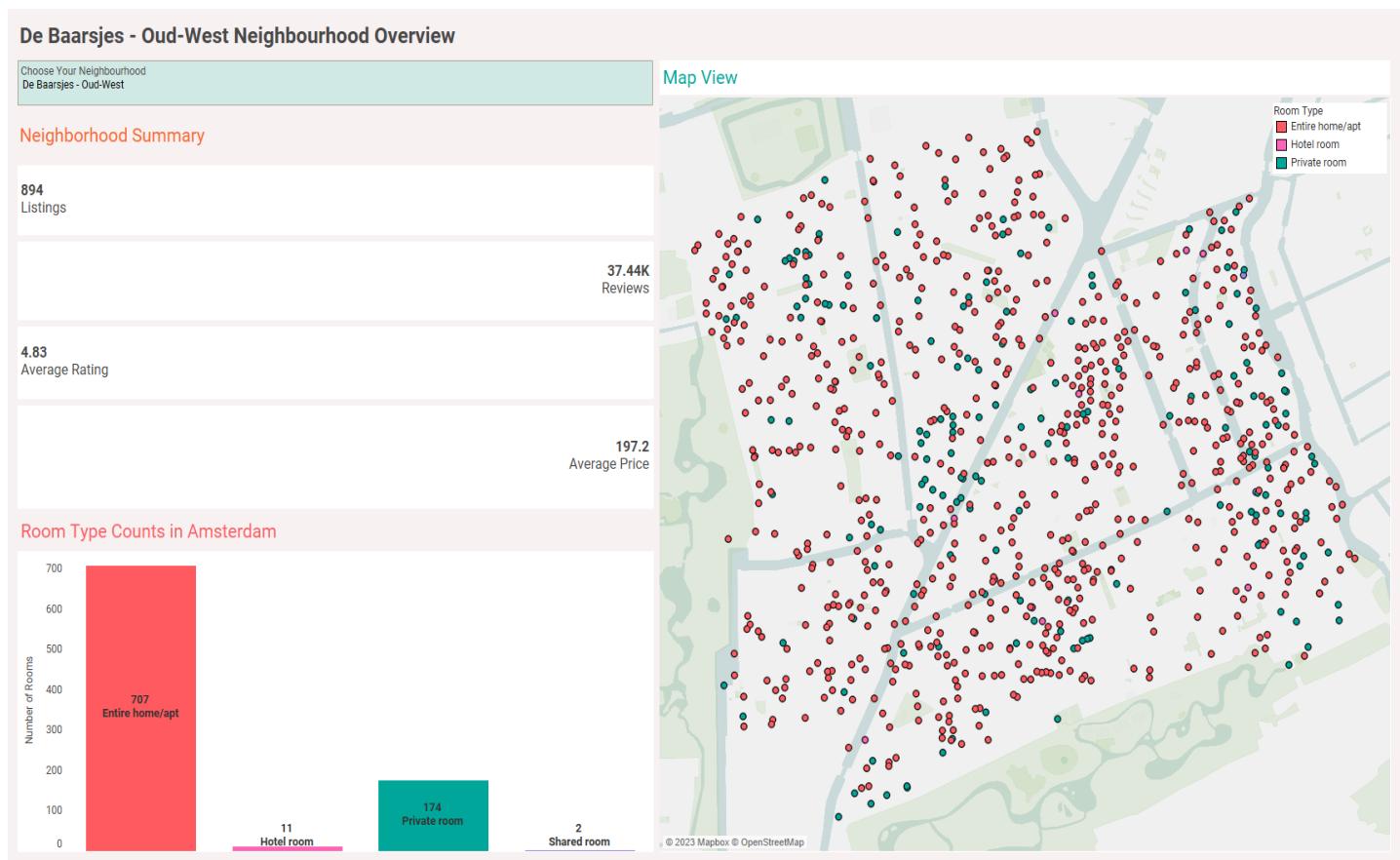


- The average price of all the listings is **\$198.02**

Average Price
of all the AirBnB listings in Amsterdam.



De Baarsjes - Oud-West is observed as neighbourhood with highest number of listings (894)

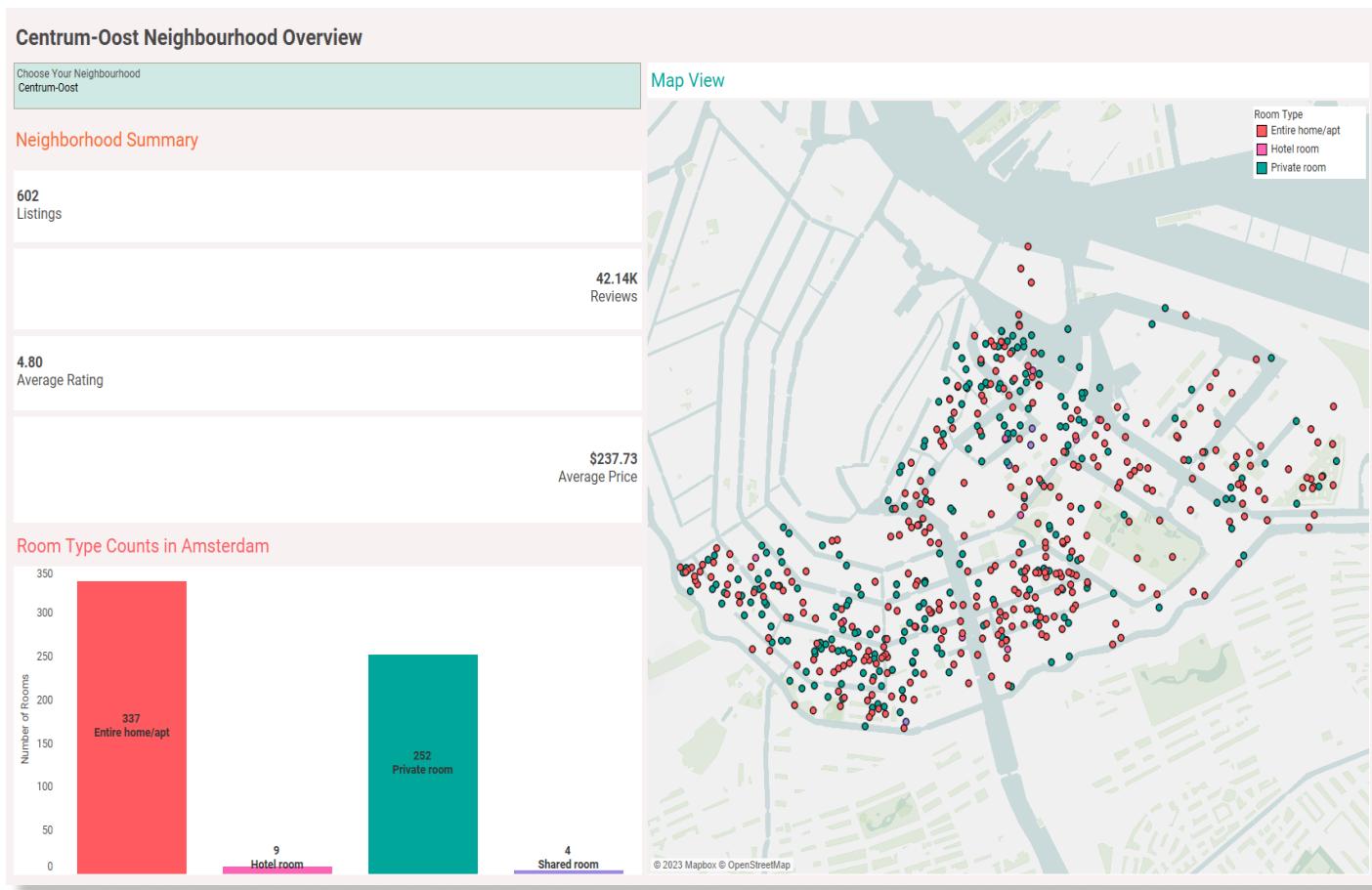


1. The above dashboard shows that most of the listings in the neighbourhood is of Entire home/apt type with total of 707 listings.
2. An average price of \$197.2, average rating of 4.83, and total of 894 listings have been recorded.

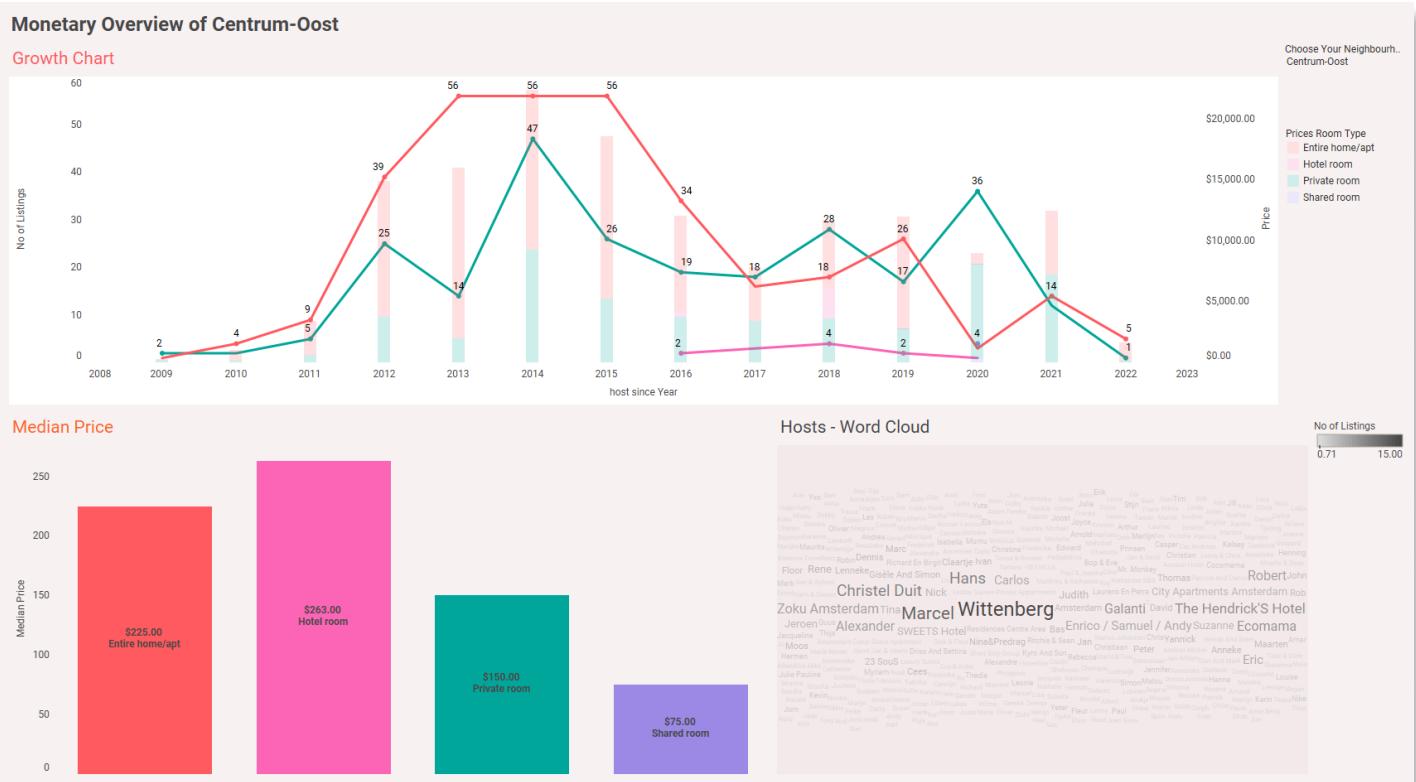


1. **Shared room** has the highest median price in the neighbourhood followed by **Hotel rooms**.
2. Highest number of listings for **Entire home/apt (139)** and **Private room (44)** were recorded in 2014.
3. 2016 to 2017 was a downward trend.
4. **Hotel Not Hotel** are the owners recorded as highest listers in neighbourhood.

Centrum-Oost is observed as neighbourhood with **highest average price of \$237.73**



1. With Total of 602 listings the neighbourhood has 337 Entire home/apt and 252 Private rooms.
2. The Average Price is \$237.73



1. Hotel Rooms has highest median price of \$263.00.
2. 56 listings of Entire home/apt were recorded in 3 consecutive years (2013-2015)
3. Private room has highest Price share in 2020.
4. Wittenberg has highest number of listings followed by Marcel, Hans, and Christel Duit.

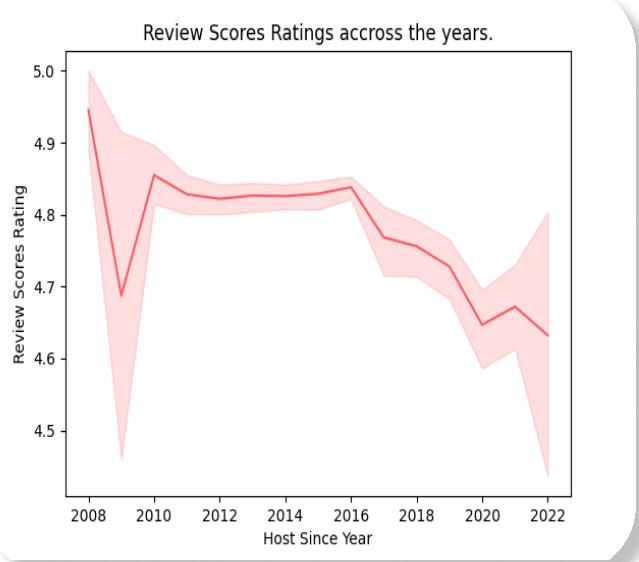
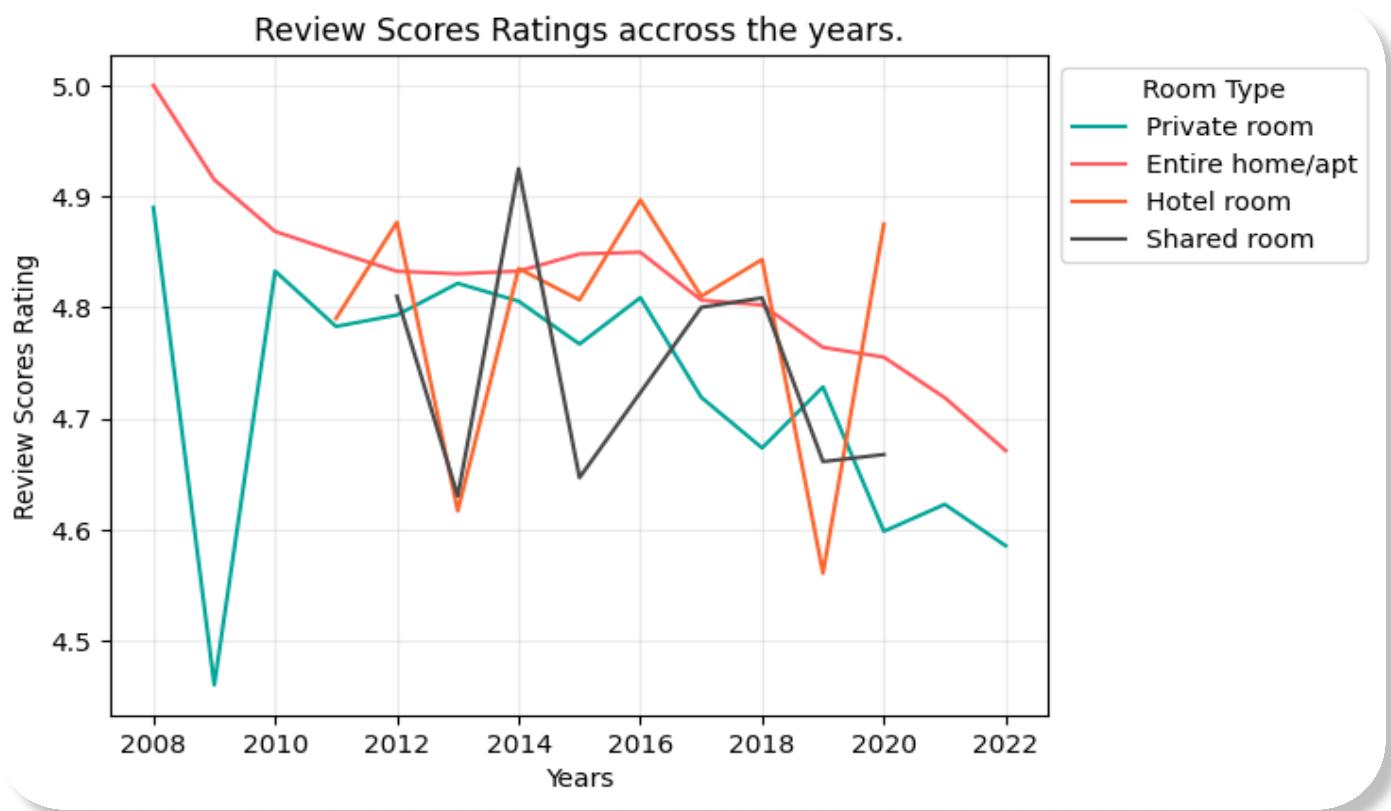
Ratings

Correlation Matrix of Review Scores.



1. Review Scores Cleanliness Is Highly related to review scores rating (More the Cleanliness, more the rating).
2. Communication is also key factor in getting good ratings.

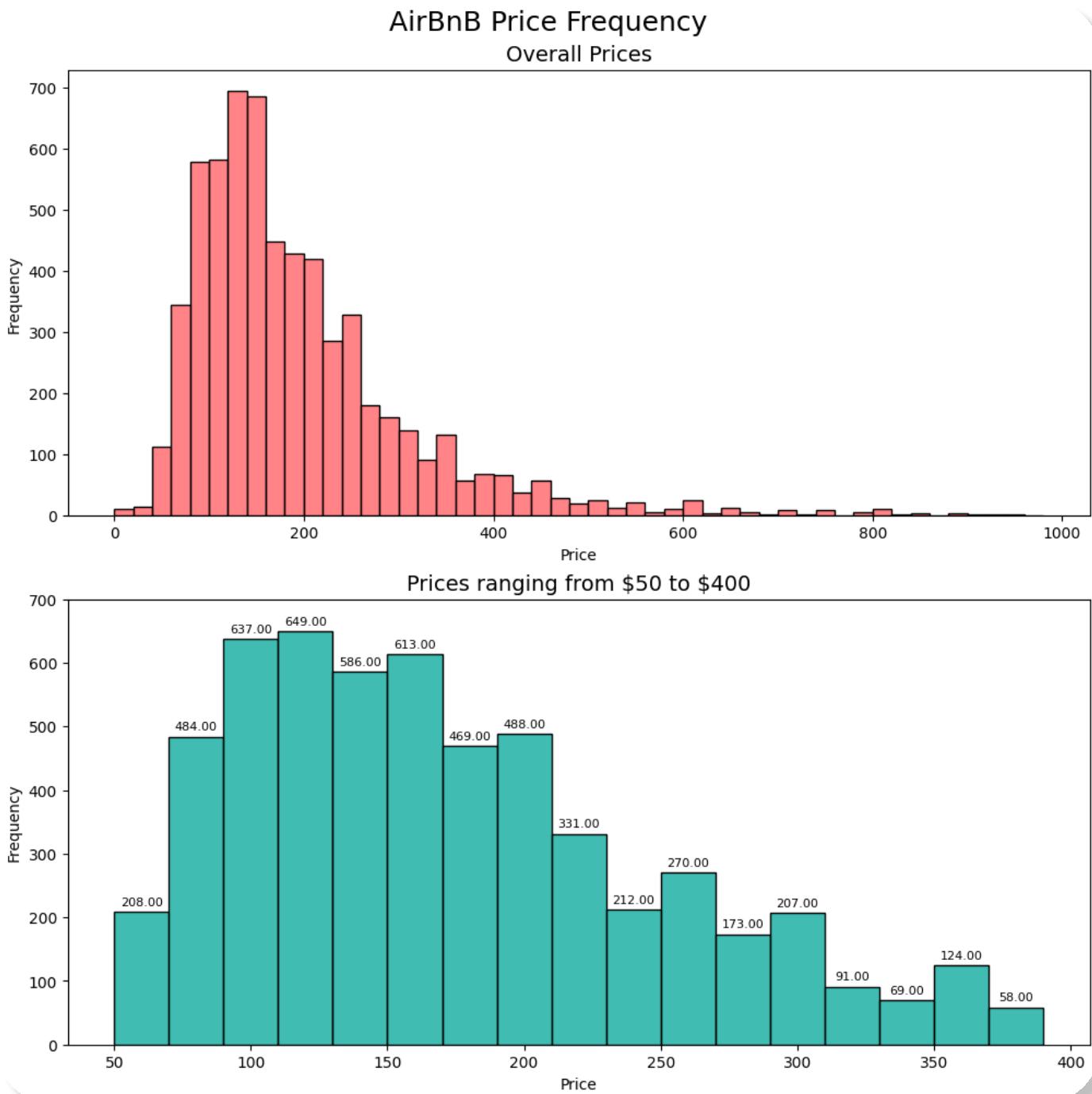
Observation of Ratings accross the years.



1. Review Scores took a downward trend between 2008 and 2009.
2. Review Scores hit a plateau with a slight rise between 2012 and 2016.
3. Private room type had a huge drop in rating scores between 2008 and 2009
4. Entire home/Apt was mostly rated ≥ 4.8 between 2008 and 2018.

Price Distribution

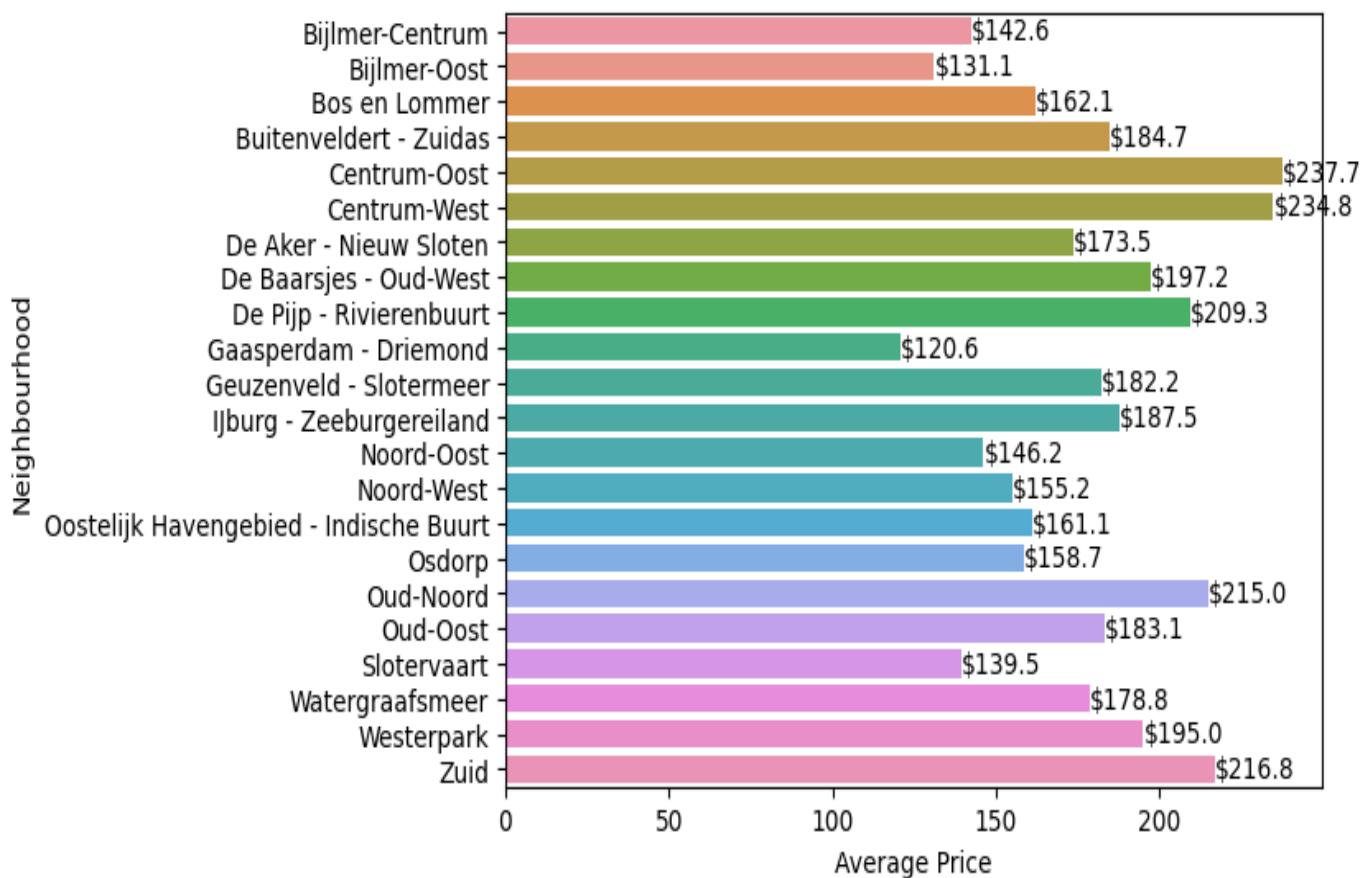
- The minimum price starts from \$25 and Max price is around \$950.
- \$100 to \$150 is the price range with the highest frequency.
- Hotel and Shared room were not listed after 2020.
- The frequency starts dropping as we go to the right from \$400 mark.



Neighbourhood Pricing

- Average Prices of all the neighbourhood in Amsterdam is \$198.02
- Gaasperdam - Driemond has recorded lowest average pricing of \$120.6
- Centrum - Oost has recorded highest average pricing of \$237.7
- Most of the Average prices fall between \$140 to \$200

Average Price
of all the neighbourhoods in Amsterdam.



Summary

- Entire Home/apt has highest number of listings, average ratings, and average price.
- Average rating of the Amsterdam city was 4.80 out of 5
- Hotel and Shared room were not listed after 2020.
- Shared room has least number of listings.
- When cleanliness was good and communication was great, The ratings were better for the listing.
- Ratings are mostly distributed between 4.8 to 5.0.
- The Price distribution mostly lies between \$100 to \$200, Specially between \$100 to \$180.
- Ratings have seen constant downward trend from 2016.

Recommendation

- Find out the reason why there are maximum number of Entire Home/Apt listings.
- Ratings have seen downward trend beginning from 2016. Try to have maximum cleanliness / hygiene and better facilities at the listings.
- Try to maximize number of Private room and hotels in the city for the tourists in the neighbourhood.
- Does costly neighbourhood have a tourism attraction spot or is an industrial area?