

Executive Summary: Airbnb in Amsterdam

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Introduction

The data indicates that Airbnb has been operating in Amsterdam since 2008. From 2008 to 2022, Airbnb has operated in 22 neighborhoods and offers 6,173 listings. The types of listings available are hotel rooms, entire homes or apartments, private rooms and shared rooms.

Descriptive Statistics

The data includes 4,222 listings that are entire home or apartments, 1840 listings that are private rooms, 78 hotel rooms and 32 shared rooms. The median price for all listings is 160 units of the local currency. The average using rating for all listings is 4.85 on a scale 0 to 5.

Growth Chart

Source: Airbnb Listings Data Set

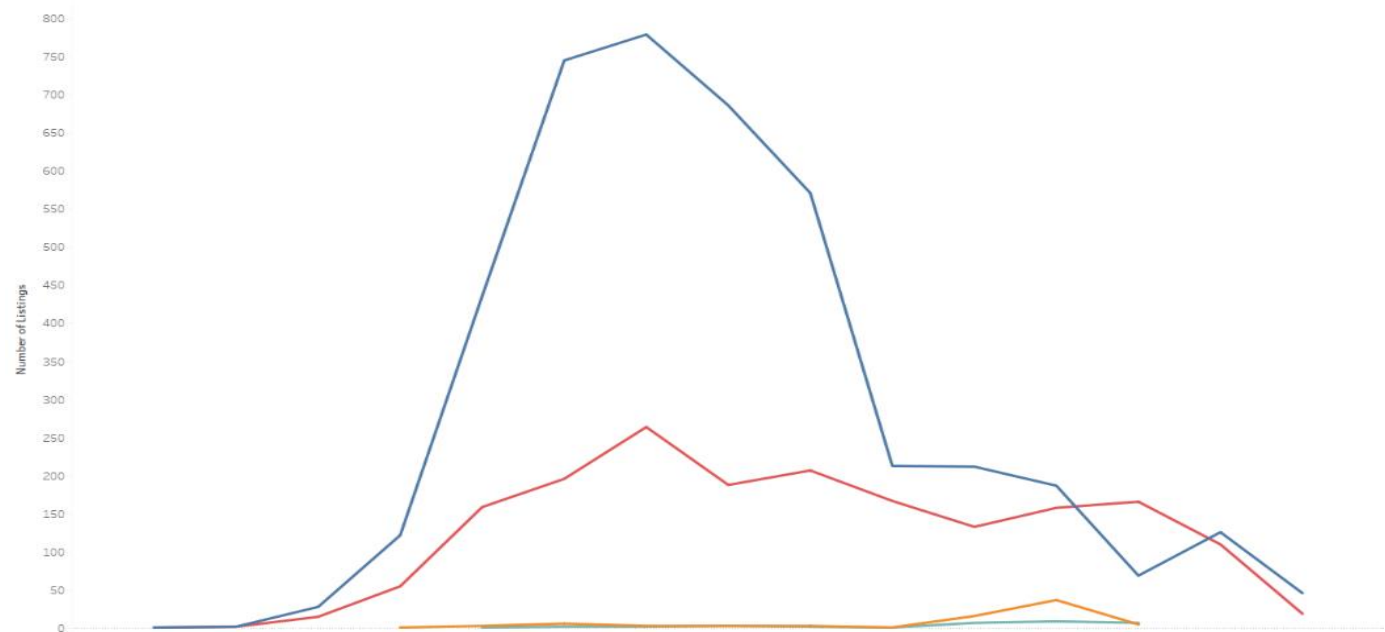
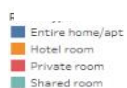


Figure 1 Growth Rate of Listings 2008-2021



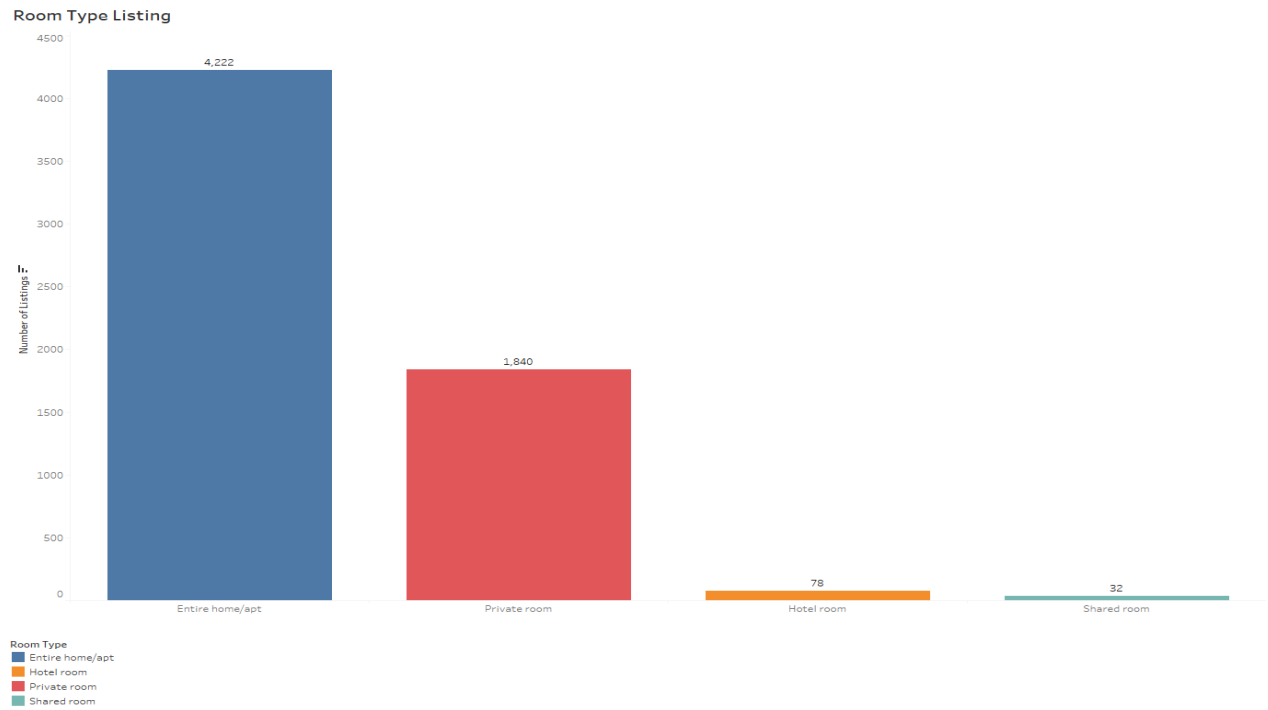


Figure 2 Listings by Room Type

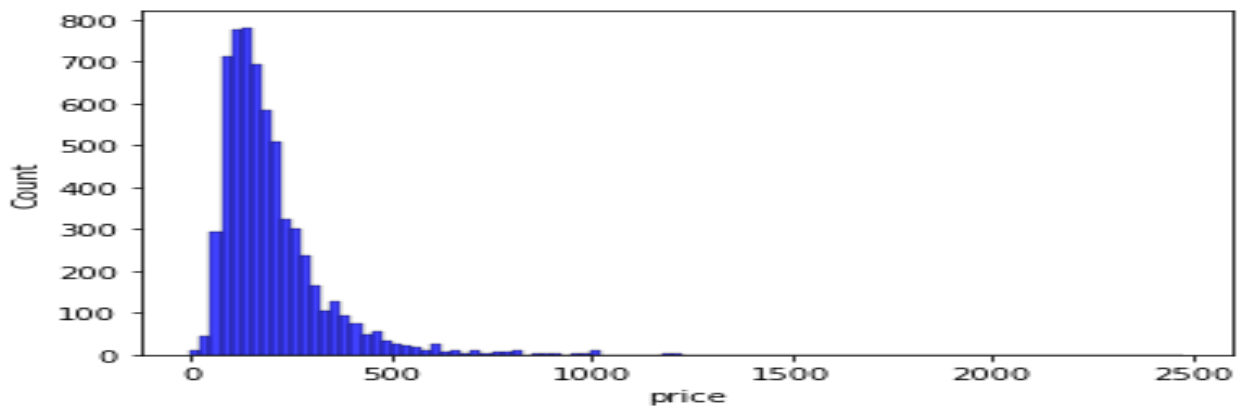


Figure 3 Price Distribution

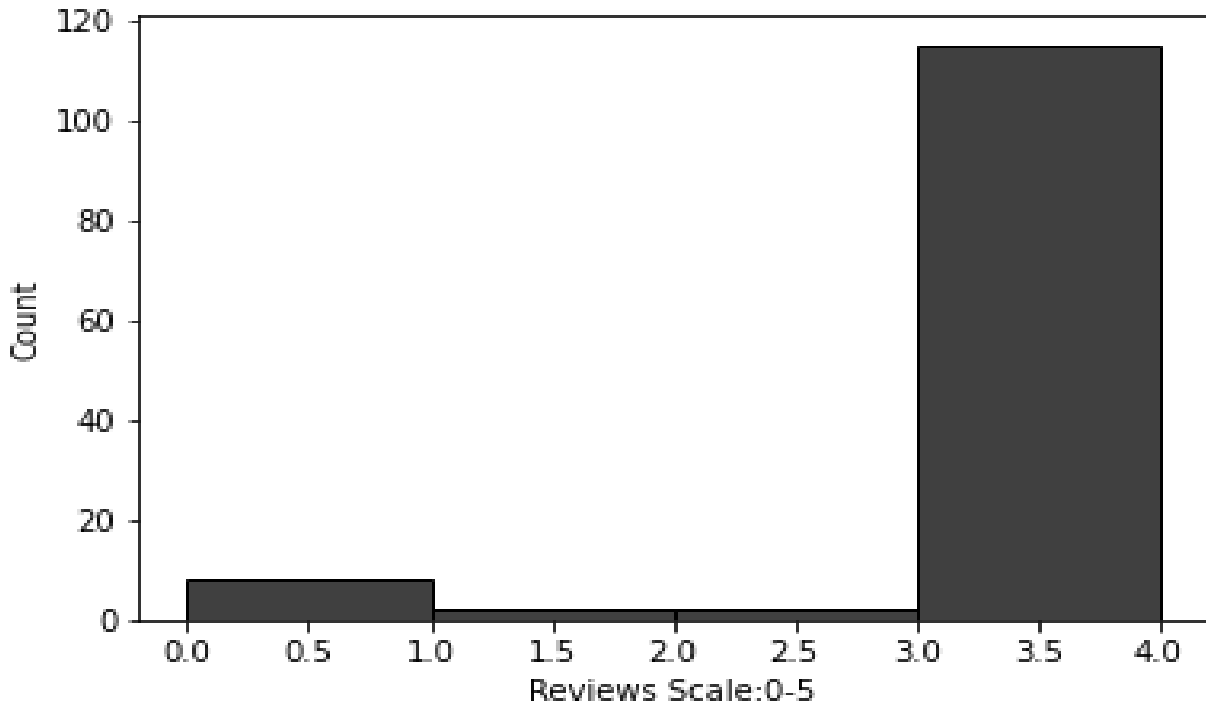


Figure 4 Review Ratings

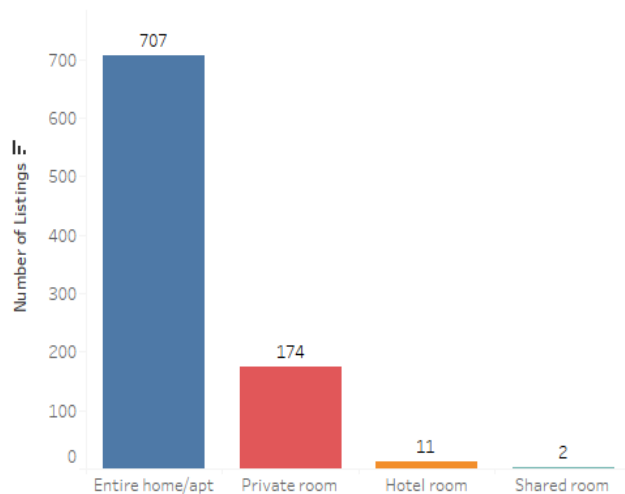
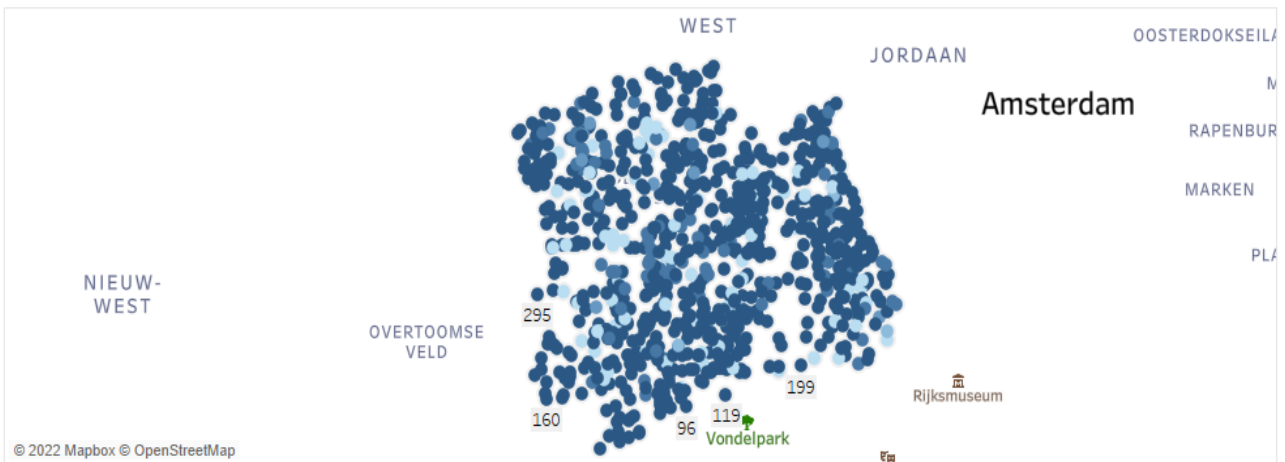
Trends By Room Type

The most popular room type (Figure 2) is the entire home / apartment followed by listings that offer a private room. Both of these listing types had similar growth trends. They both peaked in 2014 and then steadily declined to date. The growth rate of listings that offer hotel rooms and shared rooms have remained relatively constant and are the least popular type of listing. (Figure 1)

Trends by Neighborhood

The top five neighborhoods for number of listings are De Baarsjes- Oud-West, Centrum-West, Centrum-Oost, De Pijp – Rivierenbuurt and Westerpark.

De Baarsjes - Oud-West



NEIGHBORHOOD SUMMARY FOR

De Baarsjes - Oud-West

AVERAGE RATING: 4.827

AVERAGE PRICE: 197.2

REVIEWS: 3,885

LISTINGS: 894

Figure 5 De Baarsjes - Oud-West Neighborhood Summary

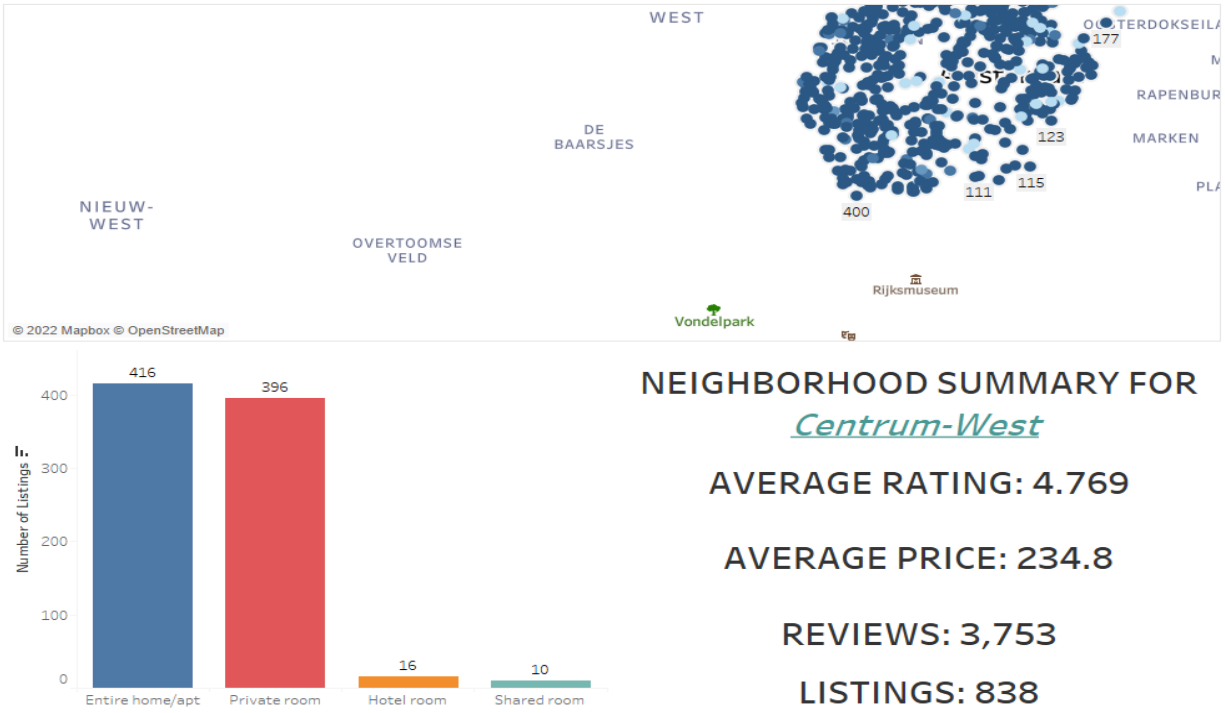
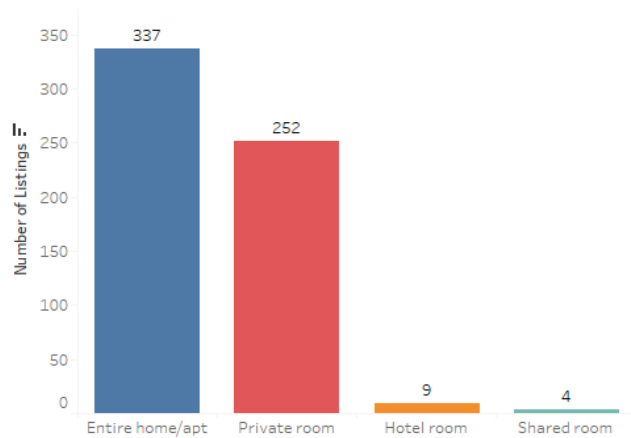


Figure 6 Centrum-West Neighborhood Summary



NEIGHBORHOOD SUMMARY FOR

Centrum-Oost

AVERAGE RATING: 4.804

AVERAGE PRICE: 237.7

REVIEWS: 2,604

LISTINGS: 602

Figure 7 Centrum-Oost Neighborhood Summary

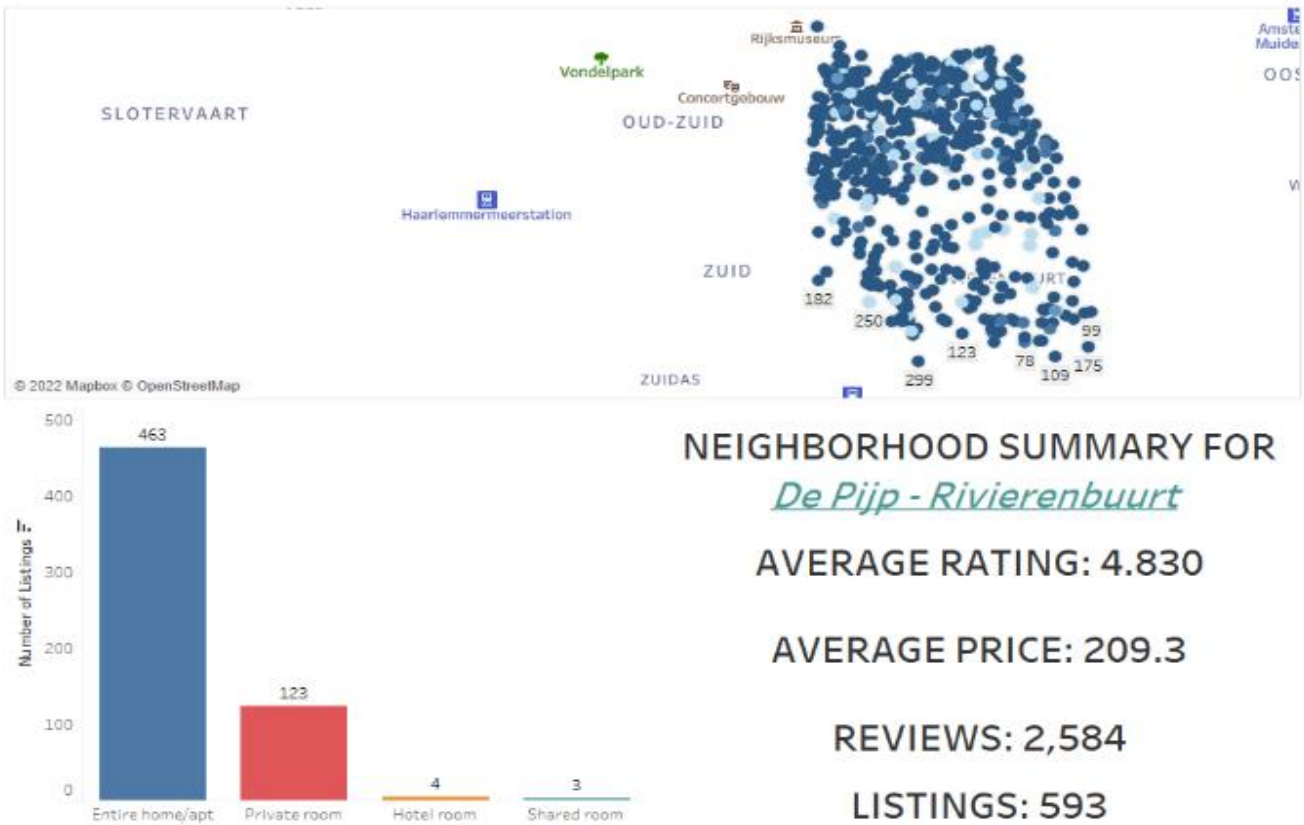
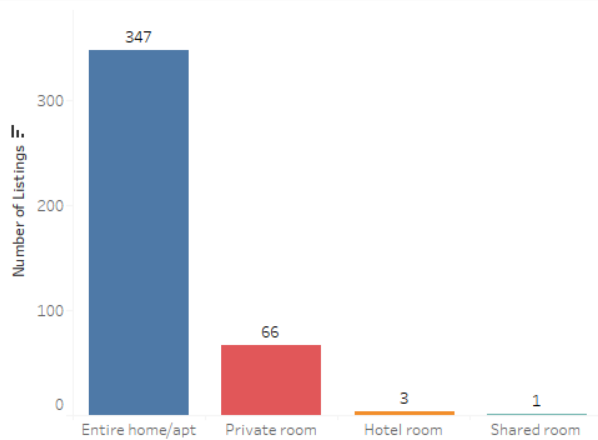
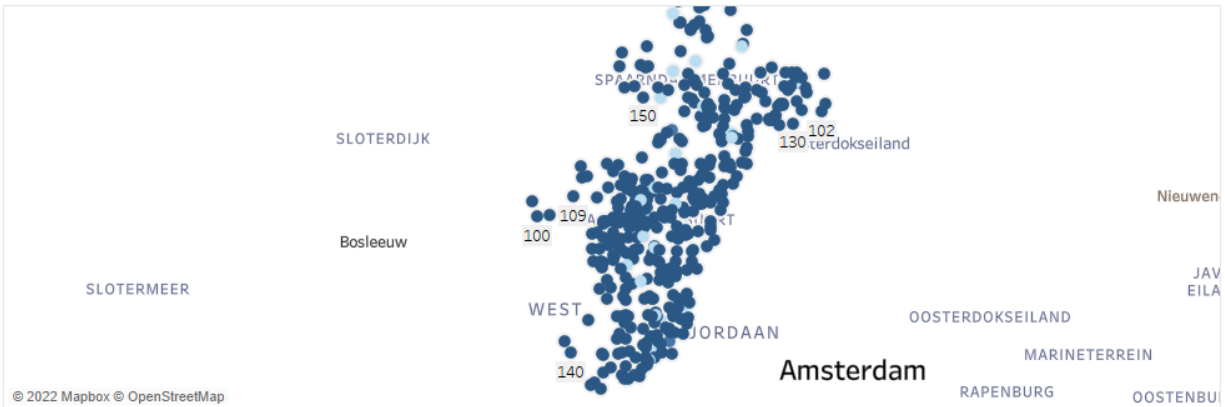


Figure 8 De Pijp-Rivierenbuurt Neighborhood Summary



NEIGHBORHOOD SUMMARY FOR

Westerpark

AVERAGE RATING: 4.804

AVERAGE PRICE: 195.0

REVIEWS: 1,888

LISTINGS: 417

Data Analysis

A correlation analysis was done between the number of reviews a listing had and the review scores rating. The results were that there is a statistically significant negative correlation between these variables. However, this correlation is weak and while statistically significant, it is not functionally significant. There was a correlation analysis conducted between the variables associated with review scores. The results are given in Figure

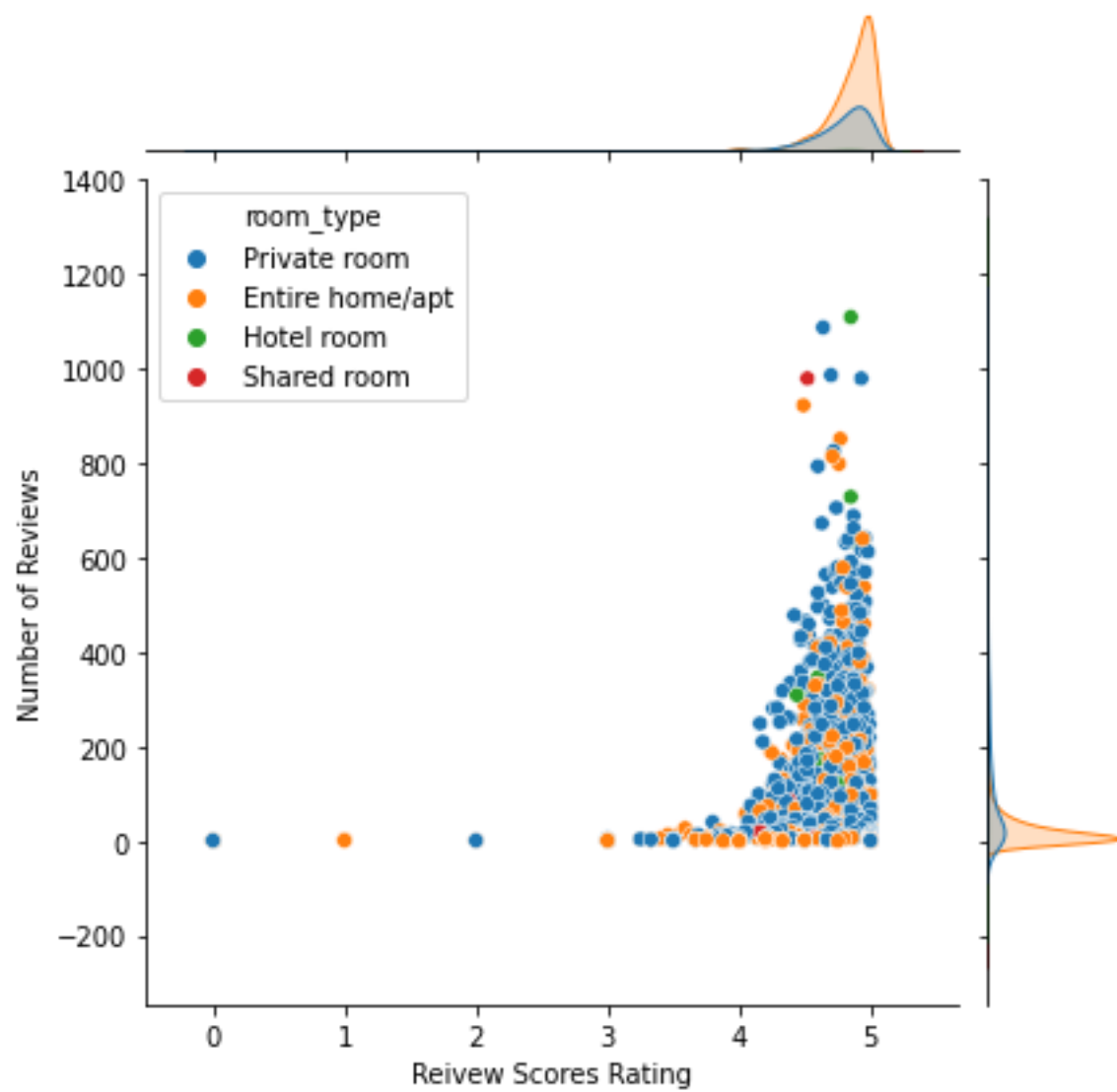


Figure 9 Correlation Between Number of Reviews and Review Scores Rating

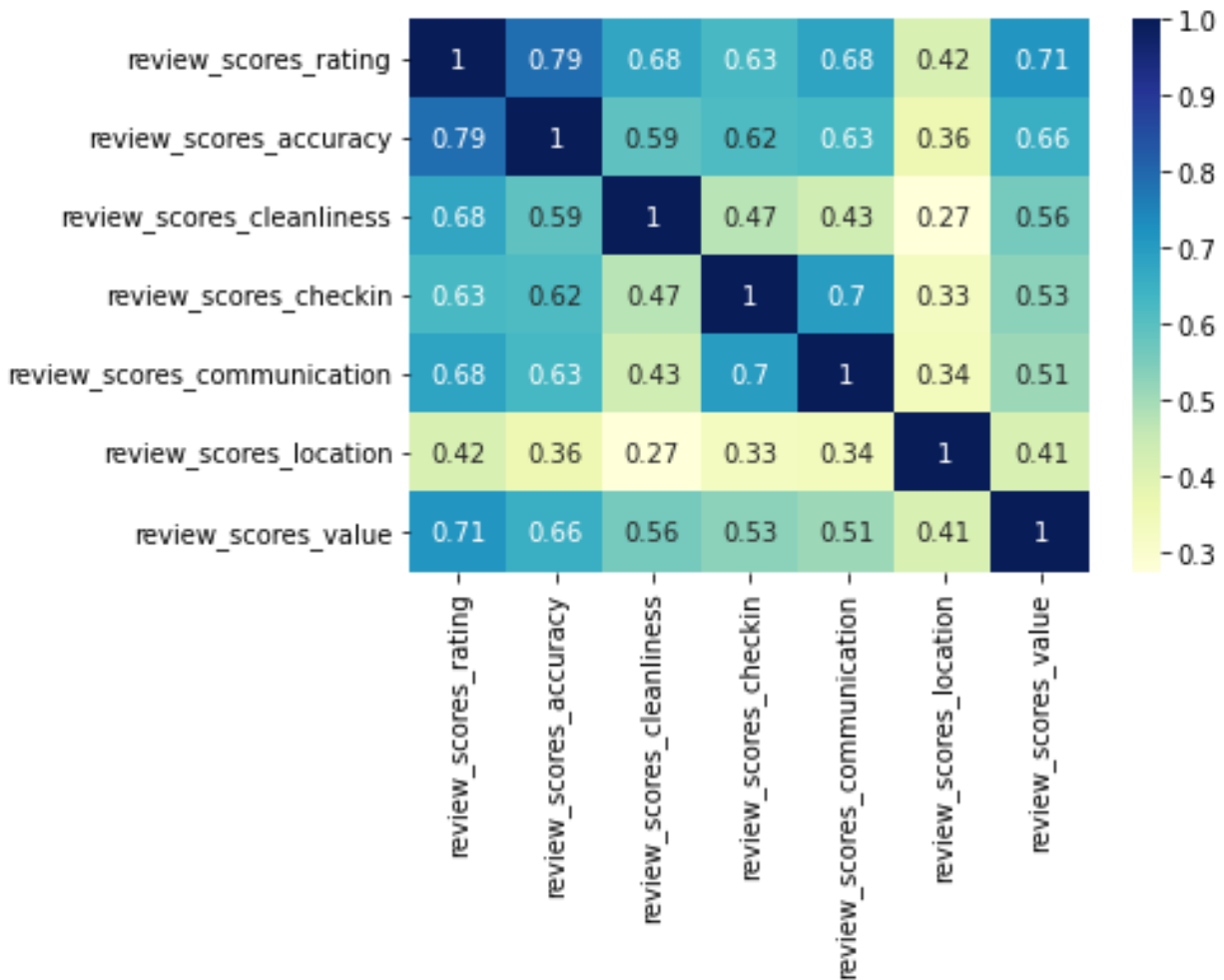


Figure 10 Correlation Between Review Variables

Summary

The Airbnb listings in Amsterdam reached a peak in the number of listings in 2014. After that time, the number of listings that offered entire home or apartments or privates rooms decreased to date. The listings that offer hotel rooms and shared rooms have remained approximately constant. The decrease in listings indicates that further analysis could be conducted to determine the cause of the decrease. Given that the review ratings have also decreased, on average, from 2016 to 2022, one possible cause decrease in listings could be due to the problematic or unregulated hosting practices. Other possibilities

that could be revealed with further investigation are government regulations or a change in the number of visitors to Amsterdam. It would be worthwhile to attempt to examine data sets from other cities to determine if there are variables that can increase listings after a decline and to determine if the conditions and variables in Amsterdam favor such an increase.

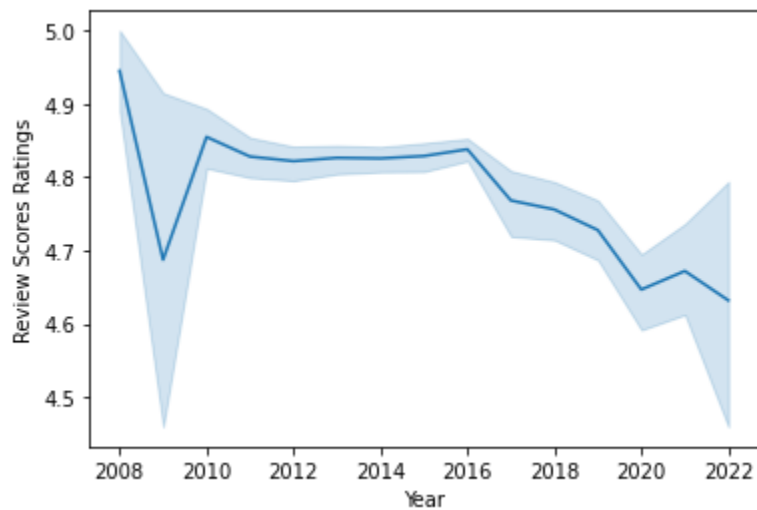


Figure 11 Review Score Ratings Over Time