Amsterdam Airbnb Listings

DPS 960 - Group 1
Data Report

Andrew Davison
Dongwoo Kang
Saleh Babaei

Winter 2023

Intended Audience

The intended audience for this report is primarily focused on hosts and prospective hosts of Airbnb properties in large metropolitan cities across Europe, particularly Amsterdam. These hosts may be new to the Airbnb platform or may have been hosting for some time but are looking to gain a better understanding of the current market conditions in the region. Additionally, this report may also be of interest to investors who are considering purchasing properties for the sole purpose of renting them out on Airbnb.

For inexperienced hosts who are renting out their property for the first time, this report will provide valuable insights into the pricing trends and other factors that can impact the success of their listing. Additionally, investors who are looking to expand their Airbnb portfolio will benefit from the data analysis and recommendations included in this report.

Furthermore, travelers who are looking for tips and advice on how to make the most out of their Airbnb experience will also find this report helpful. This secondary audience can use the insights and recommendations in this report to make more informed decisions when booking an Airbnb rental and to ensure that they are getting the best value for their money.

Overall, the insights and recommendations in this report are intended to help hosts and prospective hosts of Airbnb properties, investors, and travelers make more informed decisions and navigate the current market conditions in Amsterdam and other large metropolitan cities in Europe.

Data Description

The data used in this report was obtained from Kaggle, a platform that provides access to various datasets, including Airbnb listings in some of the largest cities in Europe. The dataset was specifically selected for the purpose of this report, and it is split into listings for weekdays and weekends stays. The focus of this report is on the weekday listings for Amsterdam, as it offers a better understanding of how listings are priced and rated based on customer satisfaction, given certain features.

To provide a more comprehensive analysis, a new feature was created in SAS that describes the proximity of the listing to the city metro. This feature categorizes listings based on their distance

from the metro, with distances under 1km being classified as 'Very Close', distances between 1km-2km as 'Close', distances between 2km-3km as 'Kind of Far', distances between 3km-4km as 'Far', and distances over 4km as 'Very Far'. The distribution of the listings across these categories is shown in the frequency chart below.

The insights from this report can be particularly useful to inexperienced hosts who are renting out a location for the first time and investors who are looking for properties to Airbnb out. They can gain a better understanding of the current market in Amsterdam and make informed decisions about their listings. Furthermore, this report can also be helpful to travelers looking for tips and Airbnb rentals as they can use the insights to find the best Airbnb listings based on their preferences.

Figure 1, which is displayed below, shows the distribution of listings based on their proximity to the city metro. It is evident from the chart that a significant portion of the listings are either 'Very Close' or 'Close' to the subway, indicating that these listings are more accessible to travelers who rely on public transportation. Additionally, the chart shows that there are relatively few listings that are considered 'Far' or 'Very Far' from the metro, suggesting that these listings may be less attractive to some travelers.
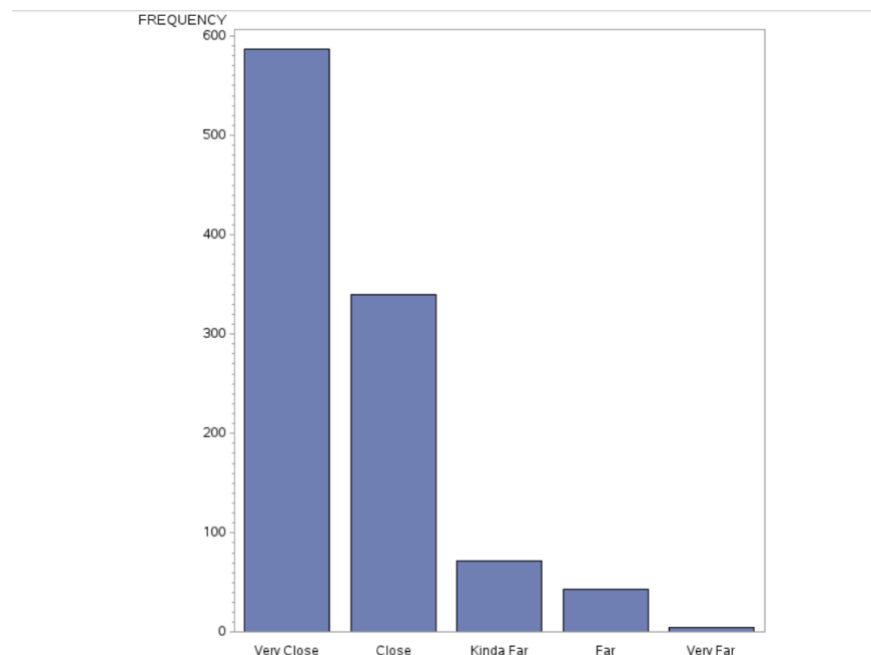

Figure 1

External Sources

In order to provide context and further insights, this report has referenced three external sources related to AirBnB hosting and rentals in Amsterdam.

The first external source, an article titled "How to avoid the dreaded 4-star review: A guide for AirBnB hosts," emphasizes the importance of achieving superhost status by consistently receiving five-star reviews. The article provides tips for hosts to improve their rating, such as setting realistic expectations for guests. It also highlights that a 4.8-star rating is required to maintain superhost status. The article is available online at the following link: https://medium.com/@campbellandia/how-to-avoid-the-dreaded-4-star-review-a-guide-for-airbnb-hosts-cdf482d083fe.

The second external source provides insights on the impact of the size of the listing, the number of properties managed, and the type of room on the cleanliness rating of an AirBnB property. The article found that cleanliness rating tends to increase as the number of guests and rooms increases, while it decreases as the number of properties managed increases. The article can be accessed at: https://bnbfacts.com/factors-that-impact-the-airbnb-cleanliness-rating/.

The third external source provides information on great locations and neighborhoods to rent in Amsterdam. It also presents some specific listings available in the city and discusses the pros and cons of each neighborhood. This article offers readers a good understanding of Amsterdam and provides a brief overview of the basics of AirBnB rentals in the city. The article can be accessed at: https://travelfoot.com/airbnb-in-amsterdam/.

By referencing these external sources, this report provides readers with a broader perspective on AirBnB rentals in Amsterdam and highlights additional factors that may influence the performance of AirBnB listings.

Findings

As depicted in Figure 2, it has been observed that approximately 70% of the total listings in Amsterdam are being managed by superhost hosts. This points towards the fact that achieving and sustaining the coveted superhost status is an arduous task. However, it is also evident that obtaining this status can prove to be a pivotal goal for individuals seeking to achieve success in the AirBnB hosting domain. This is primarily due to the special badge conferred upon superhosts by the platform, which serves as a mark of recognition for their outstanding performance.

Furthermore, superhosts also receive increased visibility and recommendations, which can potentially result in higher bookings and revenue generation. Hence, it can be stated that becoming a superhost on AirBnB is a significant milestone that requires consistent dedication and effort, but can ultimately lead to greater success in the hosting industry.
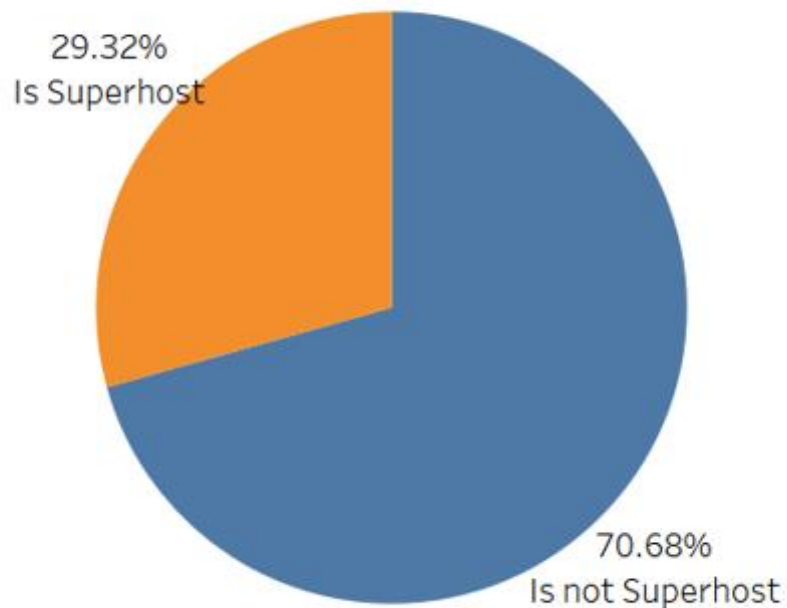
Percent of Superhosts

Figure 2

Figure 3, which is based on the analysis of the guest satisfaction ratings, highlights the importance of cleanliness scores and room types in determining guest satisfaction in AirBnB listings in Amsterdam. The graph also provides insights into the average price of the rentals based on the shading of the bars.

The results of the analysis indicate that the guest satisfaction rating is significantly influenced by the cleanliness score. Specifically, the graph shows that a cleanliness rating of 10 has the highest guest satisfaction, while a rating of 9 and below on average did not meet the satisfaction rating needed to obtain the coveted superhost status. It is worth noting that maintaining a 10-cleanliness rating is a challenging task, which could explain why only approximately 30% of the listings in Amsterdam are superhost listings.

Additionally, the findings reveal that the guest satisfaction trends down as the cleanliness rating decreases. Hosts must maintain a guest satisfaction score of 96/100 to achieve a superhost status of 4.8/5. Therefore, hosts should strive to maintain high cleanliness scores to increase guest satisfaction and improve their chances of obtaining a superhost status.

Furthermore, the graph shows that entire home rentals are preferred by renters, as they have the highest guest satisfaction rating compared to private room rentals. However, private room rentals also have a satisfactory guest satisfaction rating, and hosts with extra rooms may consider this rental option as an additional source of income.

In summary, the analysis suggests that maintaining a high cleanliness score is critical for achieving guest satisfaction and obtaining a superhost status. Additionally, offering entire home rentals can lead to higher guest satisfaction ratings, while private room rentals can also be a viable option for hosts with extra rooms.
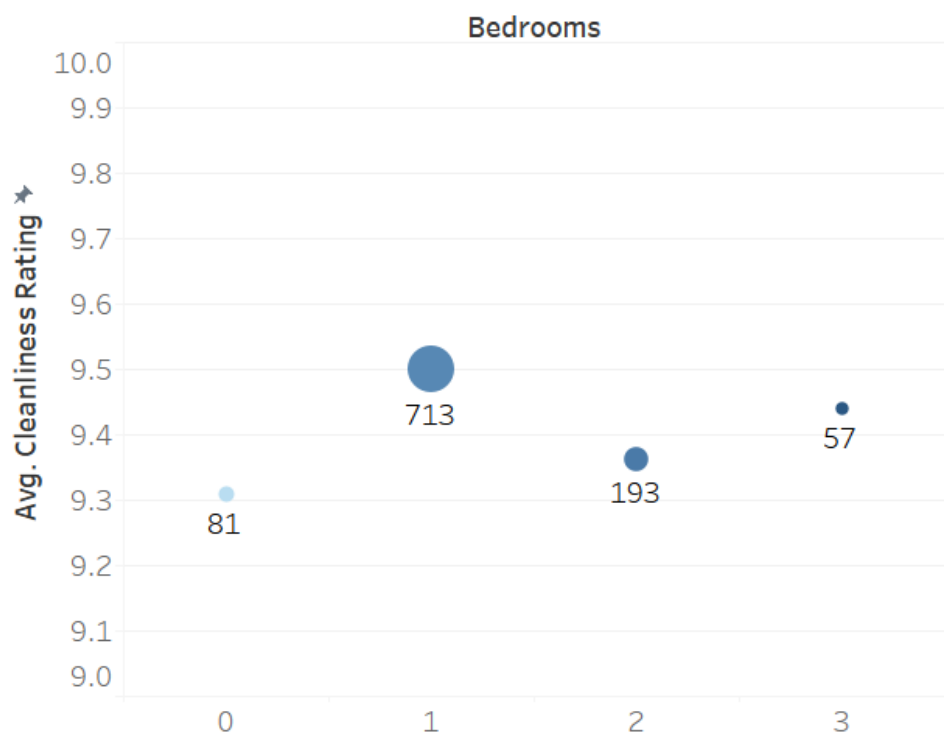
Cleanliness Rating vs Satisfaction rate
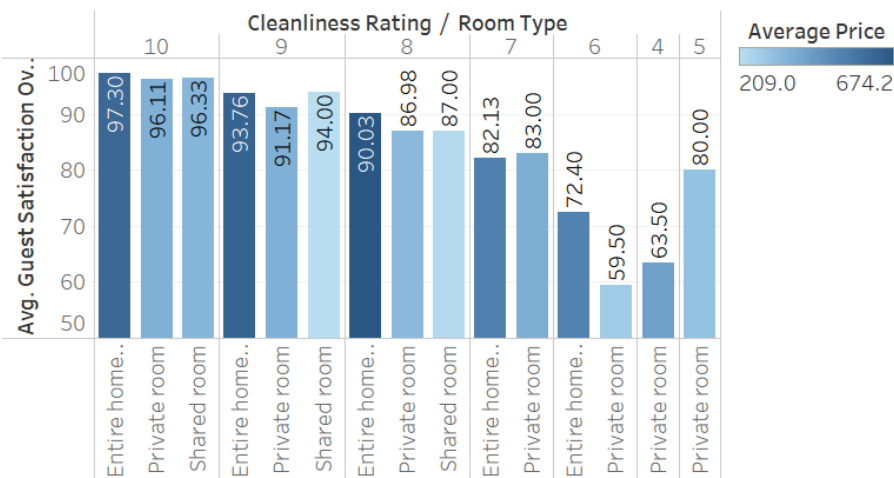
Average of Guest Satisfaction Overall for each Room Type broken down by Cleanliness Rating. Color shows average of Real Sum. The marks are labeled by average of Guest Satisfaction Overall.

Figure 3

Figure 4 showcases the relationship between bedroom options and average cleanliness rating of AirBnB rentals in Amsterdam. The data reveals that one-bedroom rentals have the highest average cleanliness rating, while studio rentals (with 0 bedrooms) have the lowest. This disparity in cleanliness rating could potentially be attributed to the fact that studio rentals tend to have a more cramped space and thus may be more challenging to maintain at a high level of cleanliness.

Furthermore, one-bedroom rentals were found to be the most common type of AirBnB rental in Amsterdam. This information is crucial for hosts and investors who are considering the AirBnB market in Amsterdam as it highlights the importance of offering one-bedroom options in order to appeal to a larger audience and potentially increase the chances of earning a high cleanliness rating.

Cleanliness by Bedroom Amount

Average of Cleanliness Rating for each Bedrooms. Color shows average of Guest Satisfaction Overall. Size shows count of Var1. The marks are labeled by count of Var1. The view is filtered on Bedrooms, which keeps 0, 1, 2 and 3.

Figure 4

The presentation of Figure 5 offers a comprehensive view of the average rental prices of various lodgings in relation to their proximity to the city centre in Amsterdam. It is noteworthy that the data indicates a positive correlation between the proximity of rentals to the city centre and their corresponding prices. The closer a rental is to the city centre, the higher the rental price tends to be. This trend can be attributed to the added convenience of being located in close proximity to the bustling city centre, which attracts many travellers.

However, despite the correlation between rental prices and distance from the city centre, guest satisfaction ratings remain fairly constant across all distances, except for locations farther than 7.48 km away, where satisfaction scores seem to experience a slight dip. This suggests that guests may be willing to pay a premium for the convenience of staying close to the city centre, but the proximity does not necessarily result in a more satisfactory experience.

Therefore, it may be advisable for those seeking to invest in the Amsterdam lodging market to take into consideration the distance of their rental properties from the city centre when setting prices. Hosts with listings near the city centre should ensure that their prices reflect the added convenience of their location, while those located farther away may need to adjust their prices to attract more bookings. Additionally, investors and hosts should also keep in mind that guest satisfaction is not solely determined by location, but other factors such as the quality of the accommodation, the level of cleanliness, and the overall guest experience also play significant roles in achieving high ratings.
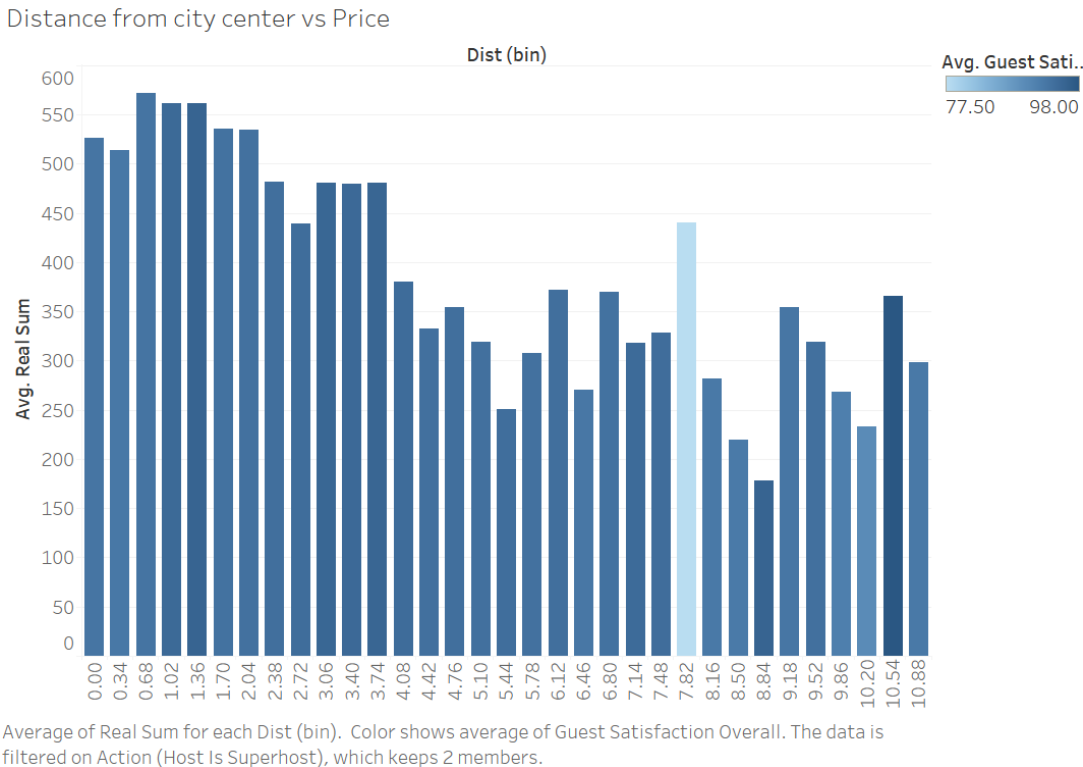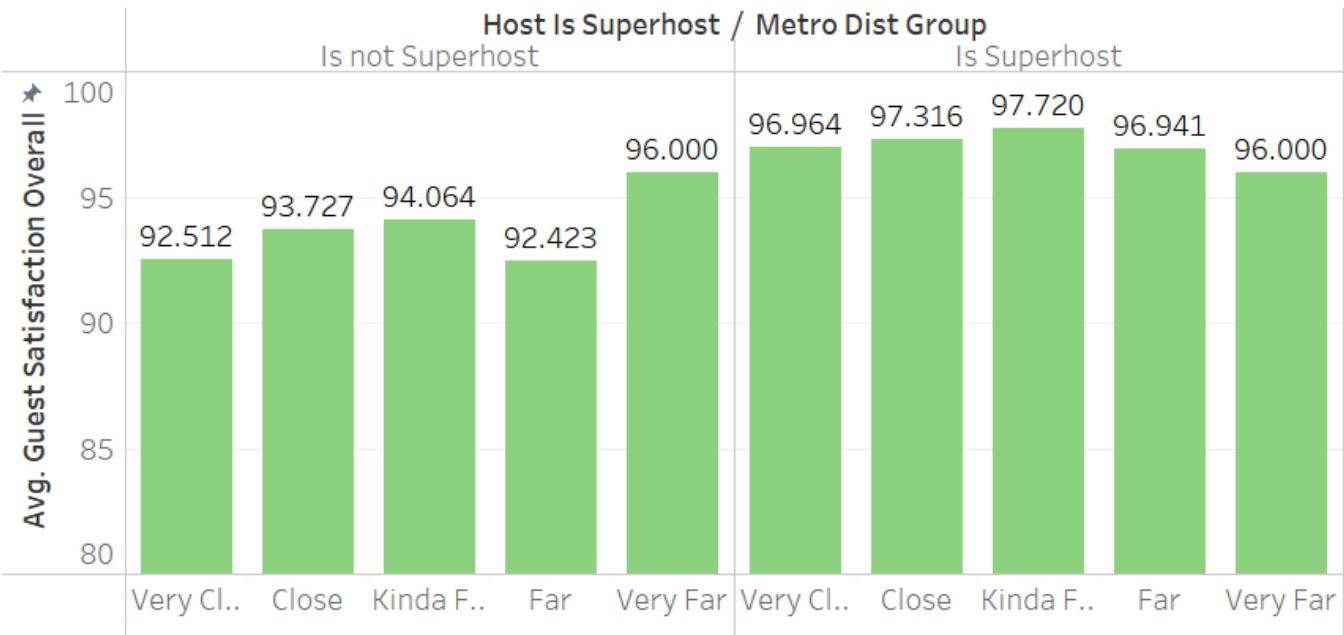

Figure 5

In Figure 6, a comparison between guest satisfaction ratings and the distance from the nearest metro station is presented. The graph shows that rentals which are categorized as "Kinda Far" from the metro receive the highest guest satisfaction ratings on average. It is intriguing to note that the rentals that are considered "Kinda Far" provide the most consistent guest satisfaction ratings, as opposed to rentals which are located "Near" or "Very Near" the metro, indicating that the proximity to a metro station may not be as crucial to guest satisfaction as previously thought.

These findings suggest that guests may prioritize being located in a quieter area, while still being close enough to the city centre or lively areas, over being located directly next to a metro station. It may also imply that rentals that are located too close to a busy area or a main road may receive lower guest satisfaction ratings due to the noise levels, while rentals that are further away can provide a peaceful and enjoyable stay for guests. Therefore, hosts may consider the balance between proximity to the metro and tranquility when choosing the location of their rental properties.

## Satisfaction rate vs Superhosts by Metro Distance

Average of Guest Satisfaction Overall for each Metro Dist Group broken down by Host Is Superhost. The marks are labeled by average of Guest Satisfaction Overall.

Figure 6

Figure 7 depicts a histogram that showcases the distribution of average satisfaction scores for different price ranges. The histogram reveals that while there were a handful of cheaper rentals with lower satisfaction scores, units at every price point tended to converge around the 94-95 satisfaction score range. The findings imply that price is not a major factor in determining guest satisfaction, provided that the rental is reasonably priced enough to attract guests. It indicates that other factors such as location, amenities, and cleanliness may play a more significant role in influencing guest satisfaction. Hosts may, therefore, focus on improving these factors to enhance the overall guest experience, instead of solely relying on lowering their rental prices.

Guest Satisfaction vs Price
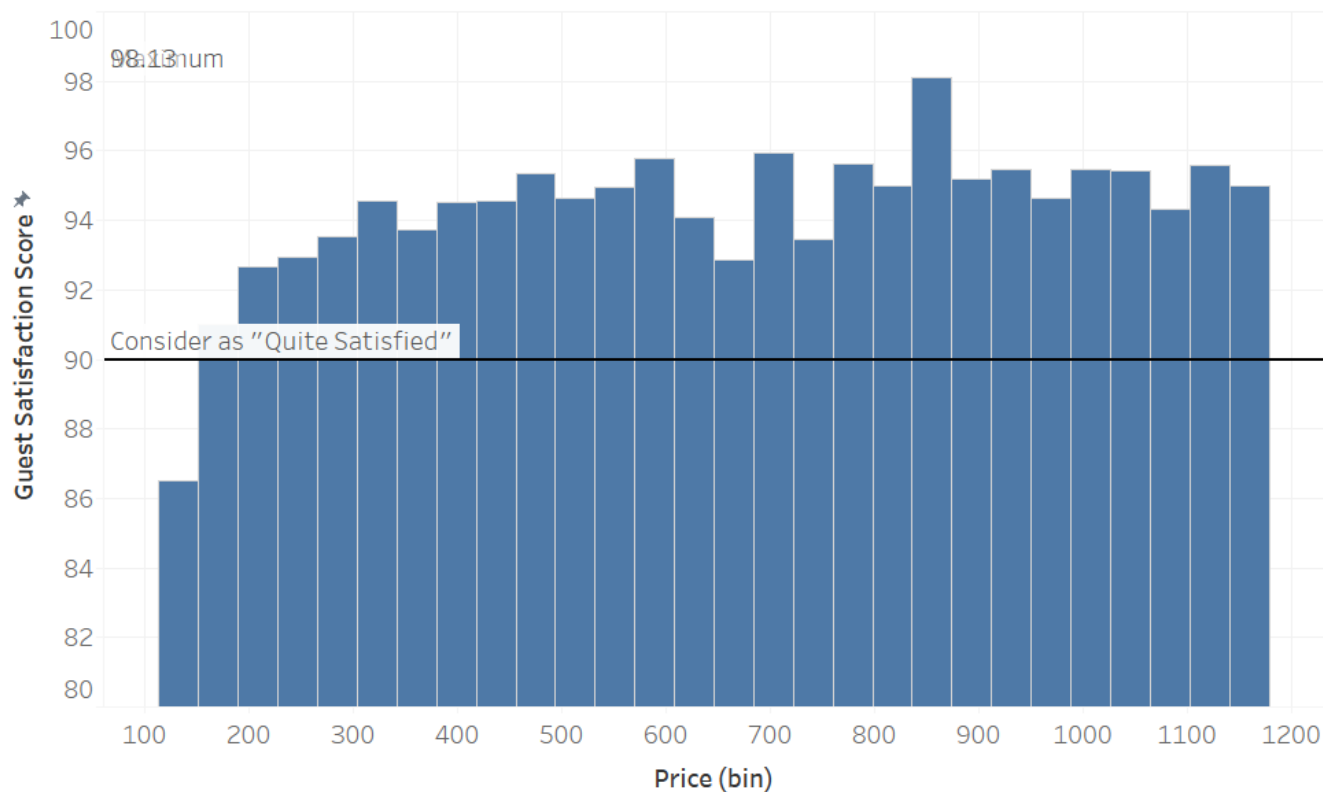
The trend of average of Guest Satisfaction Overall for Real Sum (bin).
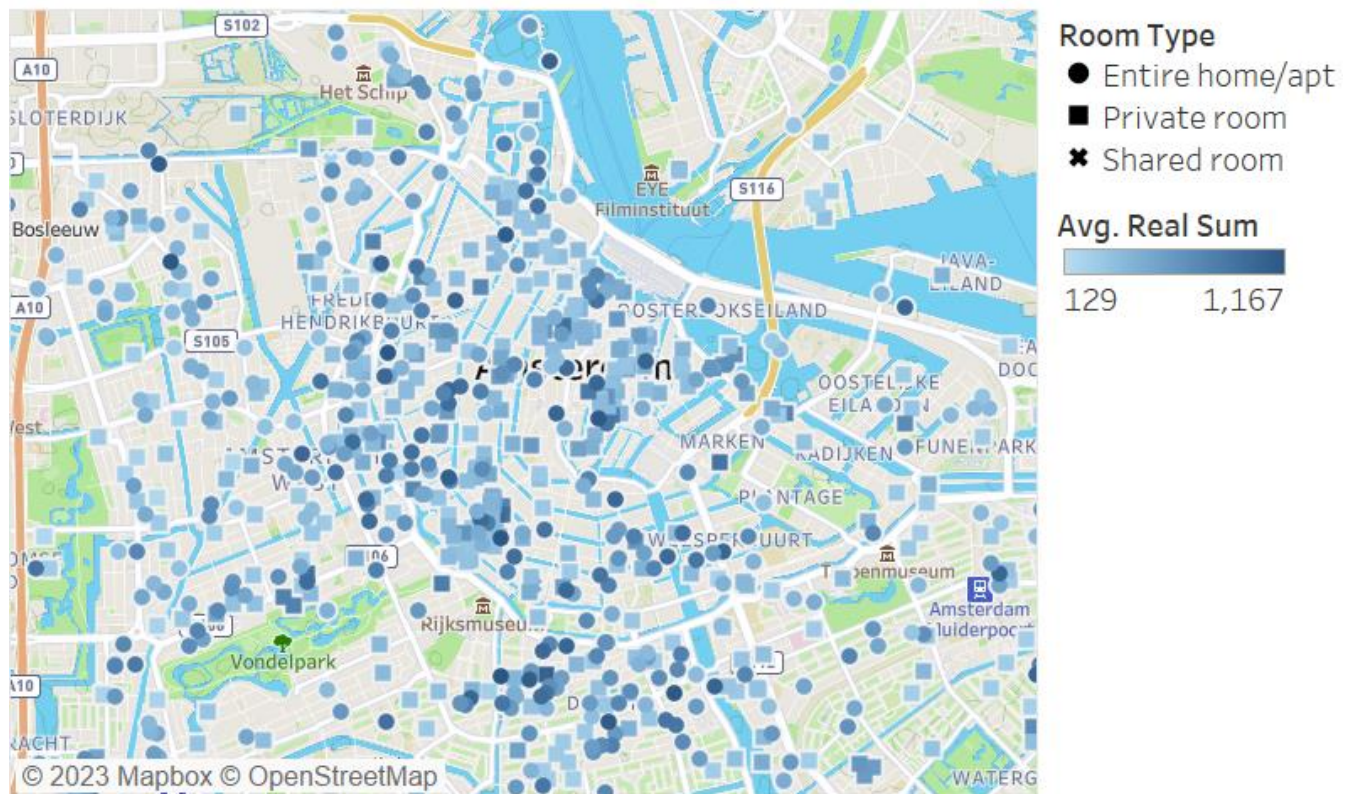
Figure 7

The final figure, Figure 8, provides a geographic representation of the Airbnb listings in Amsterdam, with entire homes represented by circles and private rooms by squares. The graphic also shows that the density of listings varies across neighborhoods, giving potential guests an idea of the prices they can expect to pay in different parts of the city.

Furthermore, the chart demonstrates that entire homes generally command a higher price than private rooms. This information can be valuable to Airbnb hosts and renters alike, as it allows them to tailor their listings and search criteria to specific neighborhoods and accommodation types based on their preferences and budget.

By analyzing the data presented in Figures 1-8, individuals interested in the Amsterdam Airbnb market can gain a more comprehensive understanding of the factors that influence guest satisfaction ratings and pricing. This knowledge can enable hosts to optimize their listings to increase their chances of earning superhost status and attracting more guests, while renters can use this information to find accommodations that best meet their needs and budget.

Location vs Price

Map based on Lng and Lat. Color shows average of Real Sum. Shape shows details about Room Type.

Figure 8

Recommendations

In light of the findings from the analysis, several recommendations can be made for both hosts and investors in the Amsterdam Airbnb market. One important factor to consider is the significance of achieving Superhost status, which can greatly enhance the promotion of a unit. Hosts are advised to prioritize maintaining a high level of customer satisfaction in order to achieve this status. The analysis revealed that a 10 cleanliness rating is crucial to achieving superhost status, while ratings of 9 and below did not meet the satisfaction threshold. However, this may be a challenging task as only 30% of the listings in Amsterdam are currently Superhost listings.

Furthermore, the analysis showed that entire home units are the most popular in terms of guest satisfaction scores, while private room rentals also performed relatively well. Hosts with extra rooms can therefore consider offering private room rentals as an additional source of income. It is also worth noting that cleanliness ratings were more easily achieved in one-bedroom units, while studio or zero bedroom units were more difficult to maintain. Investors looking to invest in the Amsterdam Airbnb market should therefore consider investing in one-bedroom units to maximize cleanliness scores.

Distance from the city centre was found to affect both the average price and satisfaction score of a unit. Hosts with listings closer to the city centre are advised to ensure that their prices are competitive, while those with listings farther from the city centre may need to consider lowering their prices to attract more interest. Investors should also consider investing in properties close to the city centre to optimize their chances of success. However, distance from the metro had less of an effect on guest satisfaction compared to distance from the city centre. Investors should consider other factors besides distance from the metro when looking for potential listings.

Finally, the analysis revealed that guest satisfaction scores remained consistent across different price points. Therefore, hosts should not be deterred from increasing their prices if they are still able to attract clients. Customers consider various factors such as location and size when choosing a rental unit. Hosts and investors are encouraged to consult the map of listings to better understand the market of listings around Amsterdam.