Airbnb Project Task Part III: Executive Summary
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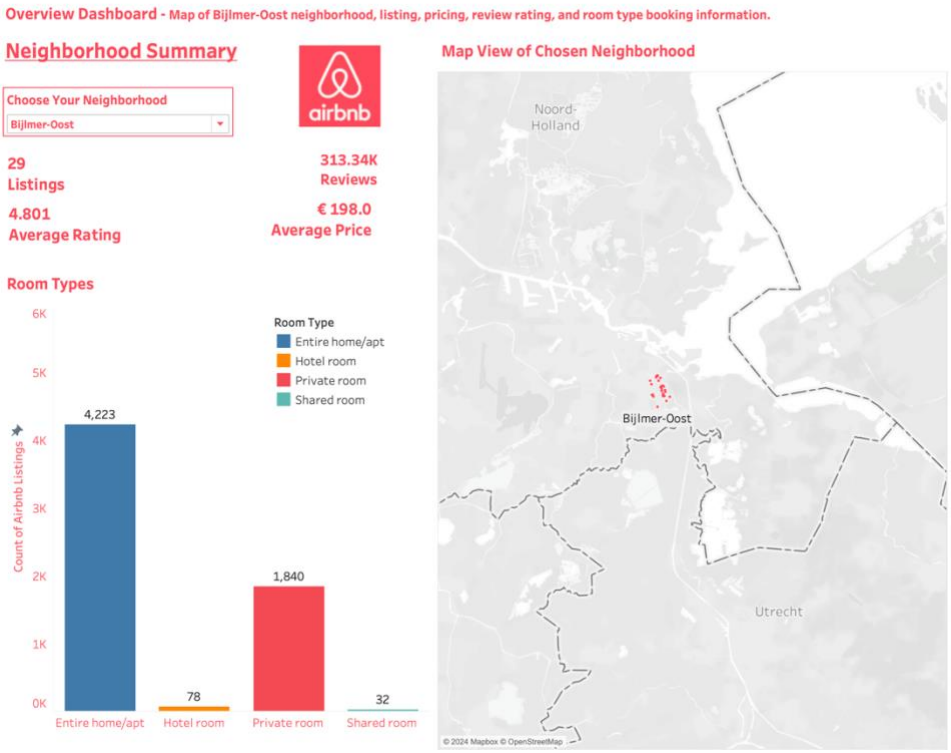
Tableau Dashboard Link:

https://public.tableau.com/app/profile/anita.elias/viz/VisualStorytellingAssignment_AnitaElias/OverviewDashboard?publish=yes

Dashboard I

For the first Tableau dashboard, I have created a map Chart showing the listings available as per the chosen neighborhood filter. Also includes a summary metric which gives information on the number of listings, the total number of reviews, average rating, and average price. A bar chart depicting the distribution of different types of rooms available in the neighborhood.

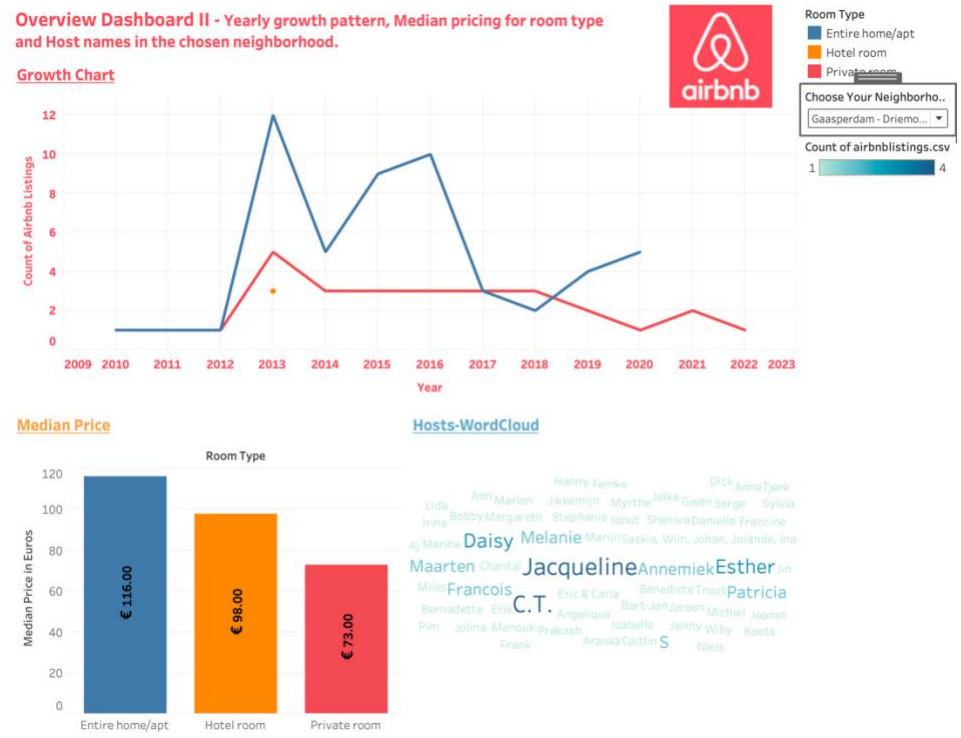


Dashboard I Summary:

In the Gaasperdam - Driemond neighborhood, Airbnb hosts a total of 77 listings with an impressive 313.34K collective reviews and a high average rating of 4.801. The average price for accommodations stands at 198 Euros. Most of the available properties are entire homes/apartments, which significantly outnumber hotel rooms, private rooms, and shared rooms, as depicted by the bar chart. The map visualization highlights the distribution of listings throughout the neighborhood, indicating a concentration of options for potential guests.

Dashboard II

For the second Tableau dashboard, I have focused on creating charts that showcases the growth of Airbnb listings across the different years in the neighborhood, the **overview of top hosts** in the neighborhood, as well as the pricing distribution across the different room types in the neighborhood.



Dashboard II Summary:

The dashboard reveals a fluctuating growth pattern in Airbnb listings, with a notable peak around 2013. Currently, entire homes/apartments are the most expensive room type with a median price of 116.00, followed by hotel rooms and private rooms. The word cloud suggests a diverse host community, with names hinting at a mix of local and international hosts, contributing to the vibrant Airbnb market in the selected neighborhood.

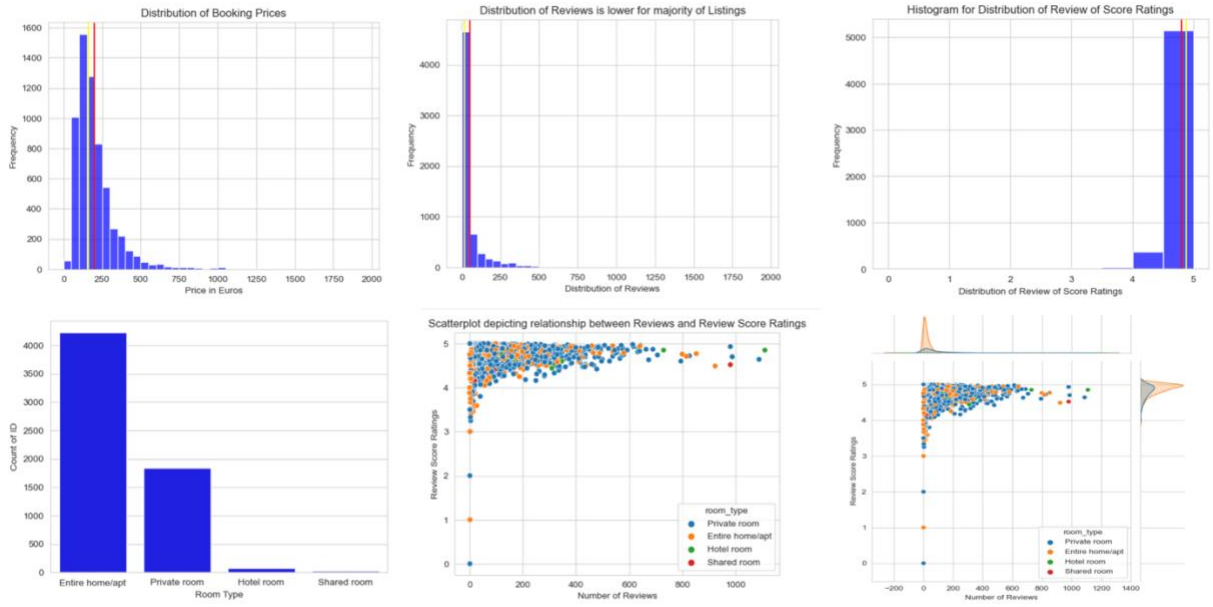
Introduction:

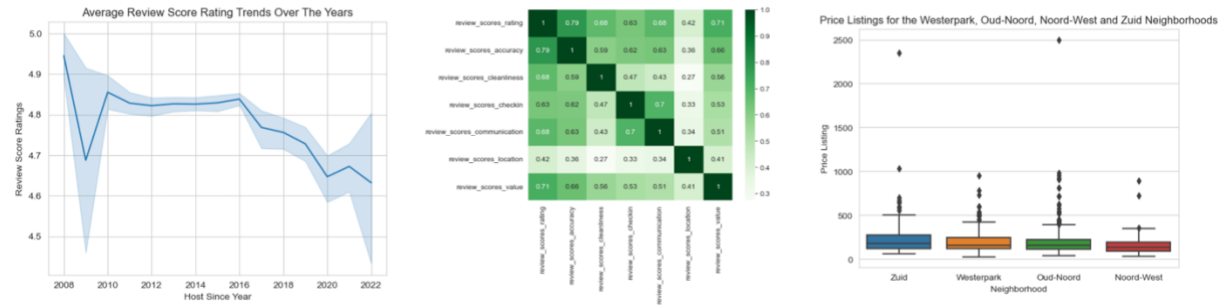
Airbnb is an online American marketplace that allows property owners to list their properties on the platform and connect with travelers who are looking for a place to stay. To support the company in this endeavor, I have worked on extraction and analysis of data for the city of Amsterdam.

My analysis included several years of Airbnb's listings data from 2008 to 2022, delving into the analysis of the distribution of properties across different neighborhoods, the average price per room type, the number of listings per host, or the ratings and reviews of properties. The

culmination of this effort is the executive summary presented below, featuring key findings, valuable insights, and actionable recommendations.

Data Analysis Insights and Recommendations from Python Charts:





1. Airbnb in Amsterdam deals in **mainly 4 types of property and room listings** that include **Entire home/apartments, Hotel rooms, Private rooms, and Shared rooms** to suit the budget needs of their wide customer base. From the **booking patterns observations**, the most bookings have been made for Entire homes/apartments listing category with roughly about 4,223 bookings and the second most bookings have been made for Private rooms with about 1,840 bookings and least bookings are made for the Shared room type with only around 32 bookings.

2. The dataset shows a robust Airbnb market **with 6,173 listings**. Analysis indicates a **higher frequency of bookings for more affordably priced properties**, with bookings

declining as prices increase. The majority of bookings occur for rooms priced between 50 - 150 Euros, while rooms over 500 Euros are least booked, suggesting a preference for economical options over luxury stays.

3. On observing the **different review scores (including accuracy, cleanliness, check-in, communication, location, and value)**, we can see a generally high positive correlation which indicates that customer ratings across different aspects of the listing (accuracy, cleanliness, check-in experience, communication, location, and value) are positively related. This suggests that customers who are satisfied with one aspect of their stay are likely to be satisfied with other aspects as well. This information is valuable to understand the interconnectedness of customer satisfaction across different dimensions and to focus on improving overall quality and customer experience.

4. When we evaluate **average review score ratings**, a dip has been observed in scores ratings between 2008 and 2010, followed by an increase in ratings from 2010 onwards. This initial dip could be attributed to the early stages of Airbnb's operation in Amsterdam, during which the platform was still gaining popularity and establishing itself in the city. Post-2010, scores improved, suggesting better listings and services. A decline after 2016 may reflect increased competition, listing changes, shifting customer preferences, or external factors like Covid, indicating mixed perceptions of Airbnb's offerings.

5. There is a **positive relationship between the number of reviews and the review scores ratings**. This means that as the number of reviews increases, the review scores ratings also tend to increase. In addition, most of the properties received a rating in the highest range of **4.5-to-5.0-star rating (5000+)**. This could be indicative of a positive customer experience, positive brand perception or a bias towards leaving positive reviews. There is a significant drop in frequency as the rating decreases, with the next most popular rating category being **4.0-to-4.5-star rating** containing only roughly around 400 or so properties.

Conclusion:

In light of the current downturn in reservations, it is advisable for Airbnb to strategize on host recruitment, ensure comprehensive review data, and uphold high satisfaction to retain and attract customers. The company should prioritize obtaining reviews for unrated listings and uphold stringent cleanliness and communication standards to bolster trust and enhance the appeal of its offerings for its customer base.