



# Project Management Optimization

-Manik Gupta

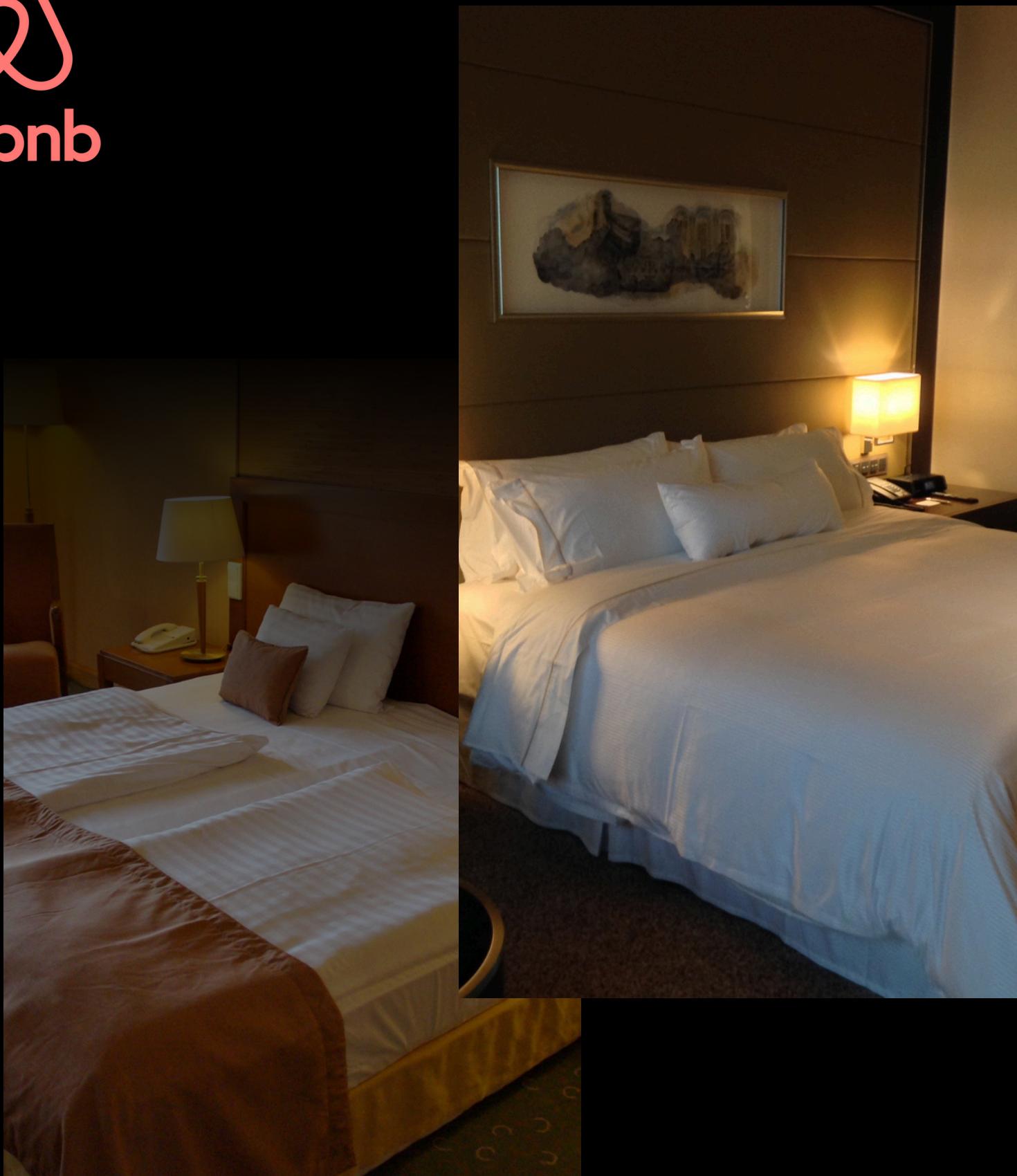


# ABOUT COMPANY

"BELONG ANYWHERE"

Airbnb is a global online marketplace that connects travelers with unique accommodations and experiences. Founded in 2008 and headquartered in San Francisco, it allows hosts to list properties ranging from apartments to castles, while guests can book stays tailored to their preferences. Offering flexible, community-driven solutions, Airbnb operates in over 220 countries and regions, revolutionizing travel by fostering authentic, local experiences and reshaping the hospitality industry with its innovative approach.



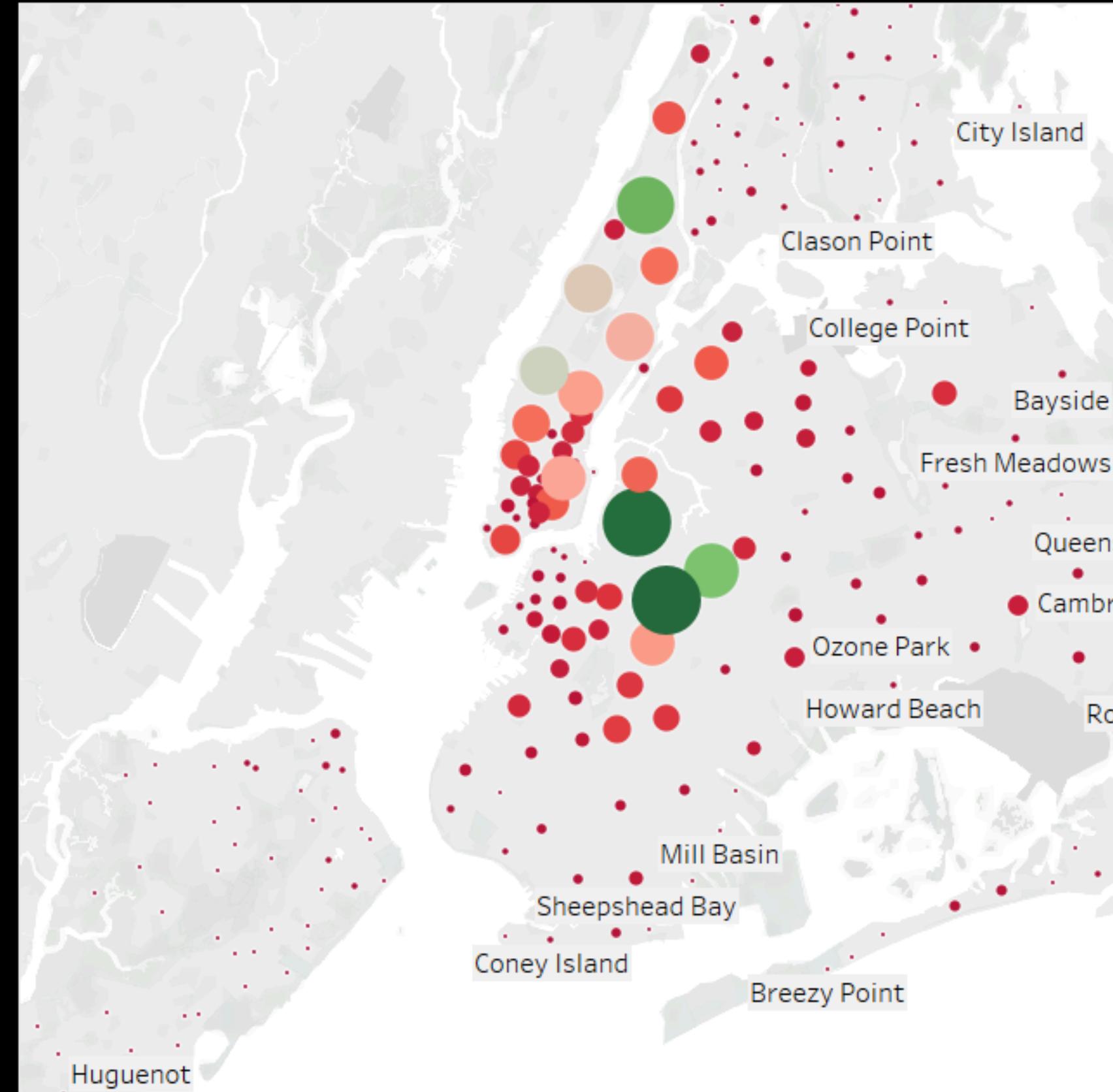


# PROJECT STATEMENT

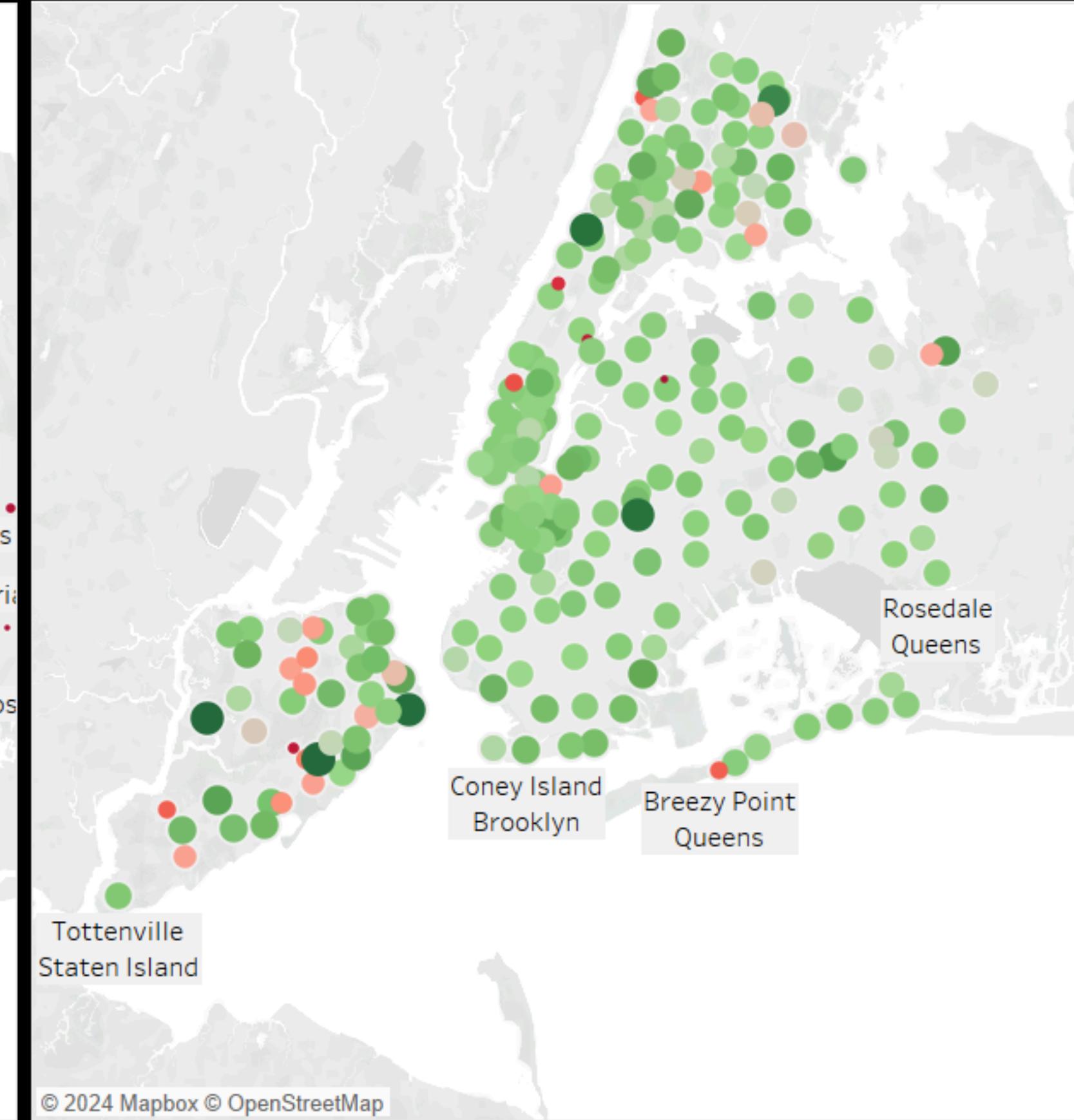
You are working as a Data Analyst at Airbnb, and Airbnb aims to develop a Tableau dashboard to optimize rental strategies, enhance customer satisfaction, and maximize revenue for property owners. Your role is to analyze Airbnb's dataset and generate valuable insights that will help improve decision-making for both Airbnb and its hosts.

# Neighborhood Popularity & Pricing

Neighbourhood Popularity



Neighbourhood Pricing



Distinct count of Id  
1 7,898

Distinct count of Id  
1 7,898

Avg. property\_price  
54.0 1,045.0

Avg. property\_price  
54.0 1,045.0

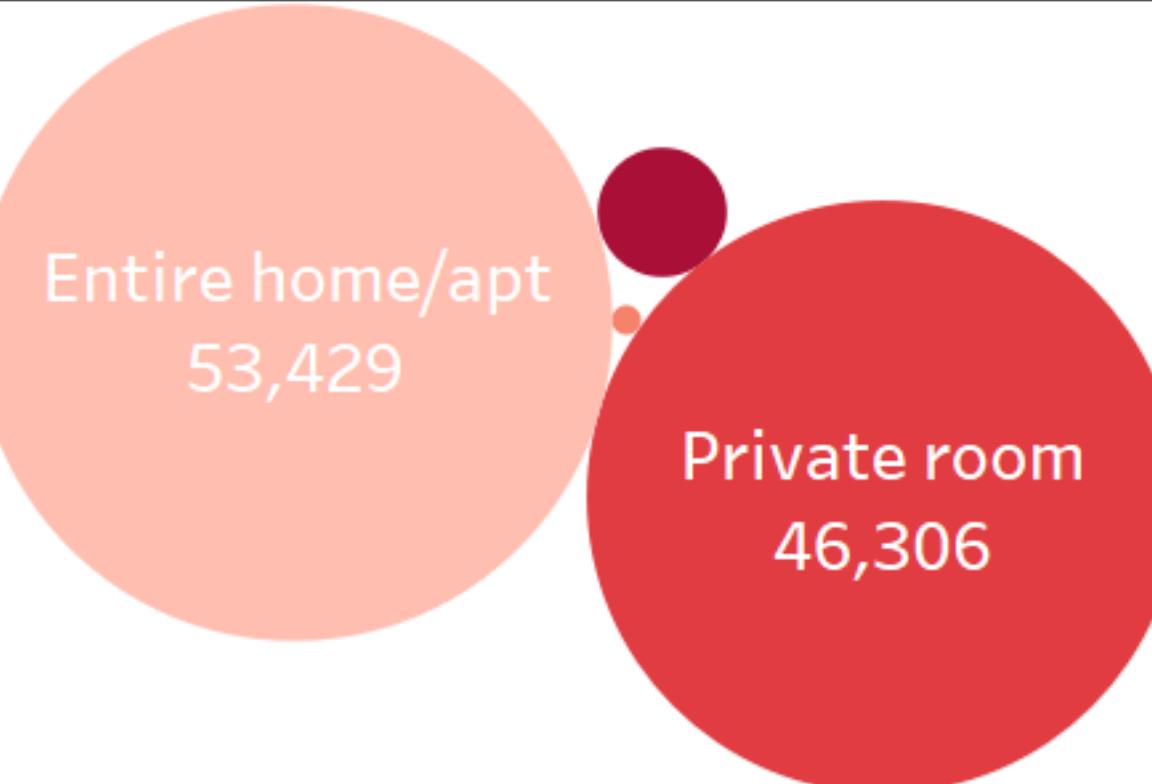
# KEY INSIGHTS

## Neighborhood Popularity & Pricing

- Manhattan and Brooklyn stand out with the highest concentration of Airbnb listings, reflecting a dense hosting activity in these areas.
- Queens has a significant presence in terms of listings, though it trails behind Manhattan and Brooklyn.
- The Bronx and Staten Island rank the lowest in total listings, suggesting limited competition or possibly lower market demand in these neighborhoods.
- The map showcases that some neighborhoods in Manhattan are marked by elevated property prices, while Brooklyn and Queens exhibit a broader spectrum of pricing levels.
- Property prices range significantly, spanning from \$54 to \$1,045, highlighting a diverse real estate market that accommodates a variety of guest budgets.
- Staten Island displays lighter green circles, suggesting lower average property prices, making them more budget-friendly.

# Property Type Distribution & Customer Satisfaction/Ratings

The Most Demanded Property Type



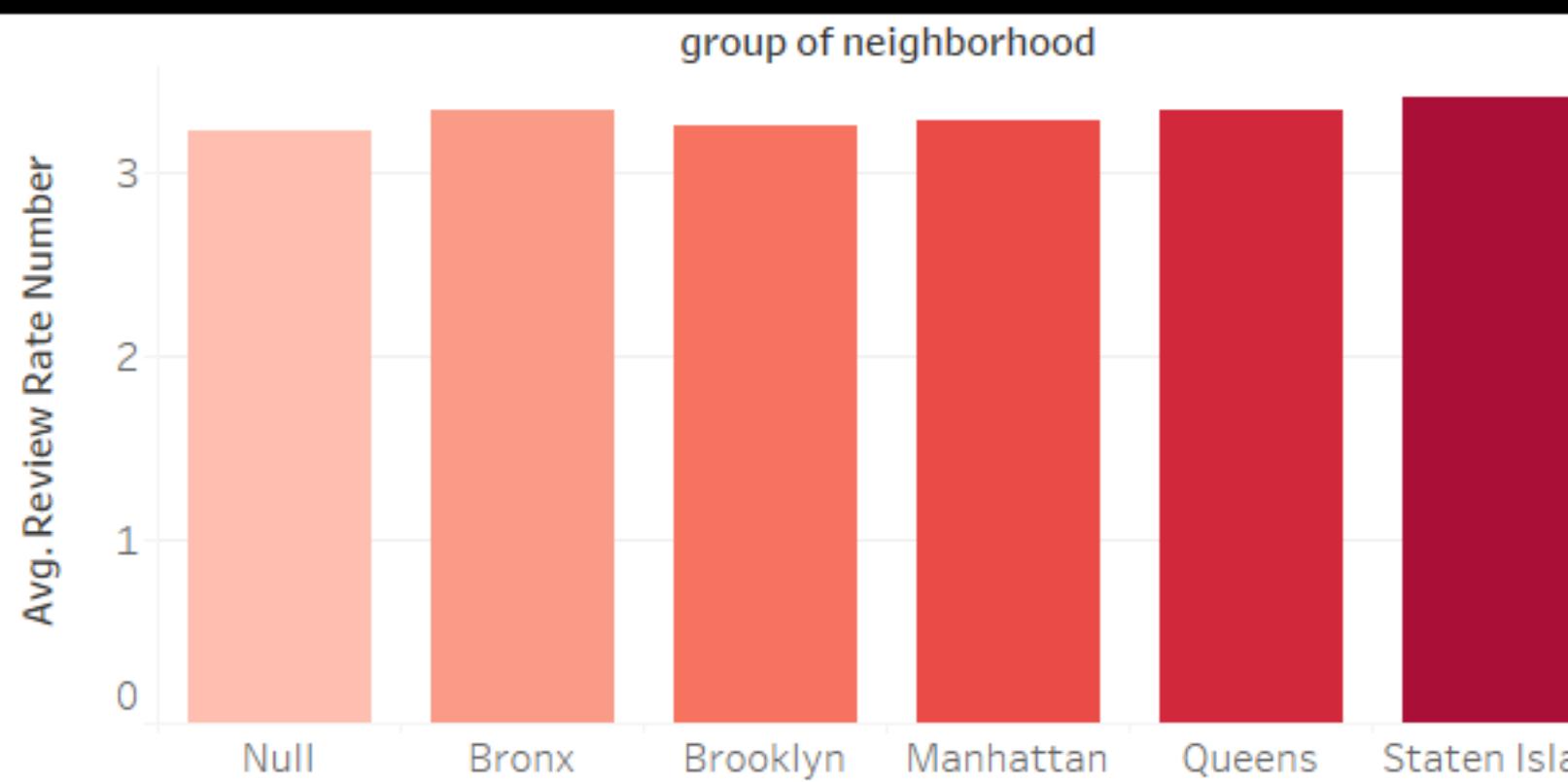
Corr. Listings Prices & Customer Review Ratings

-0.004576

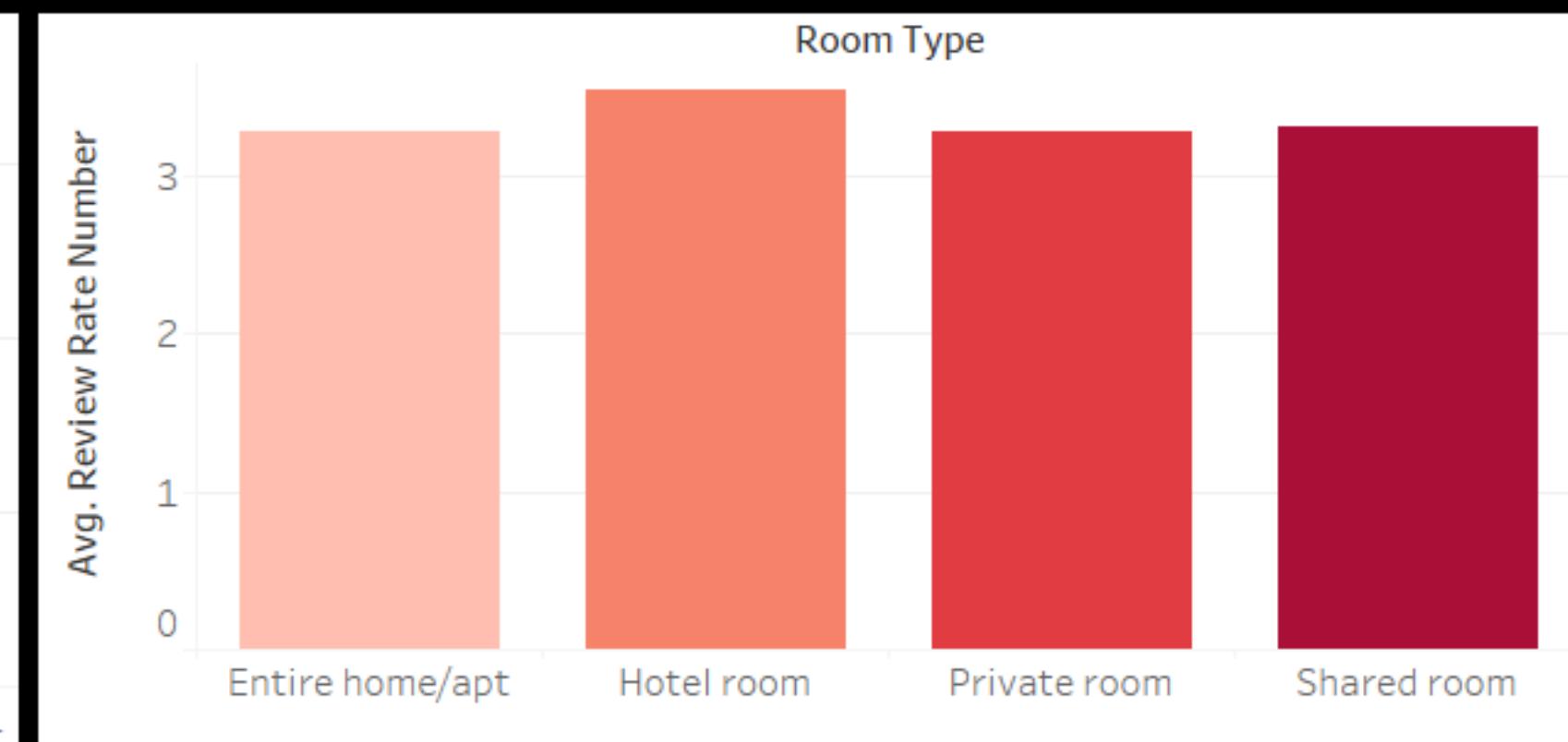
Room Type  
Entire home/apt  
Hotel room  
Private room  
Shared room

group of neighborho..  
Null  
Bronx  
Brooklyn  
Manhattan  
Queens  
Staten Island

Customer Satisfactory by Neighborhood



Customer Satisfactory by Room Type



# KEY INSIGHTS

## Property Type Distribution

- Entire homes/apartments are the most demanded property type, with 53,429 listings, indicating a preference for privacy and exclusivity.
- Private rooms follow closely with 46,306 listings, suggesting they are popular for budget-conscious travelers seeking a balance between cost and comfort.
- shared rooms and hotel rooms are less prominent in demand compared to entire homes and private rooms.

## Customer Satisfaction and Ratings:

- Hotel rooms in Brooklyn and Queens receive the highest average review ratings, while other room types across all boroughs typically maintain average ratings between 3.25 and 3.75. This reflects a consistent level of customer satisfaction regardless of the room type or location.
- The correlation between listing prices and customer review ratings is  $-0.004576$ , indicating no significant relationship between the two. This means customer satisfaction is largely unaffected by the price and depends more on factors like amenities, service quality, and overall experience.

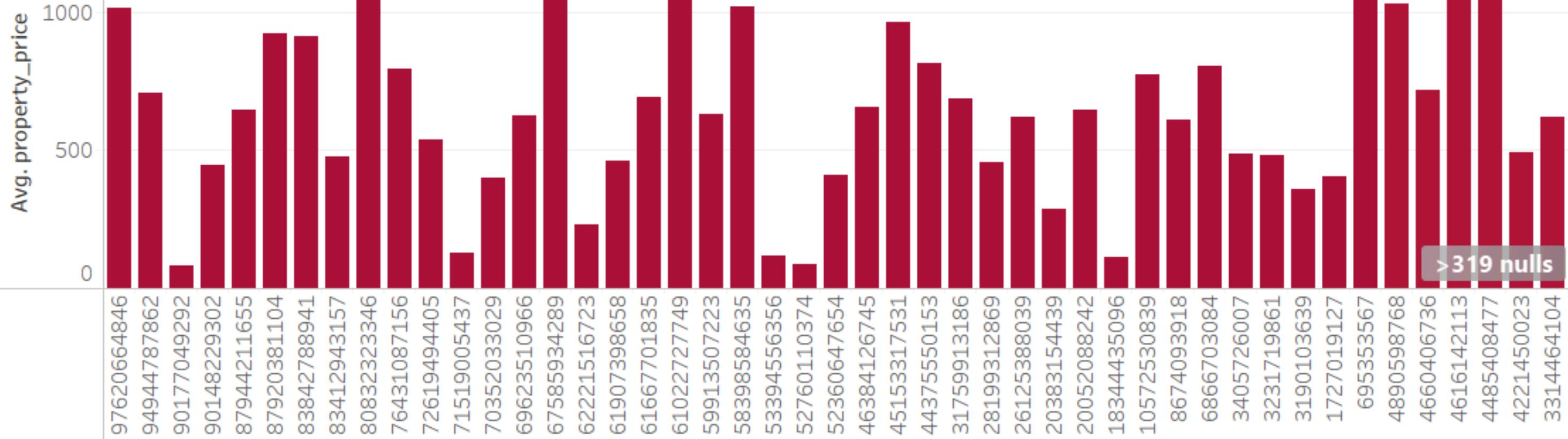
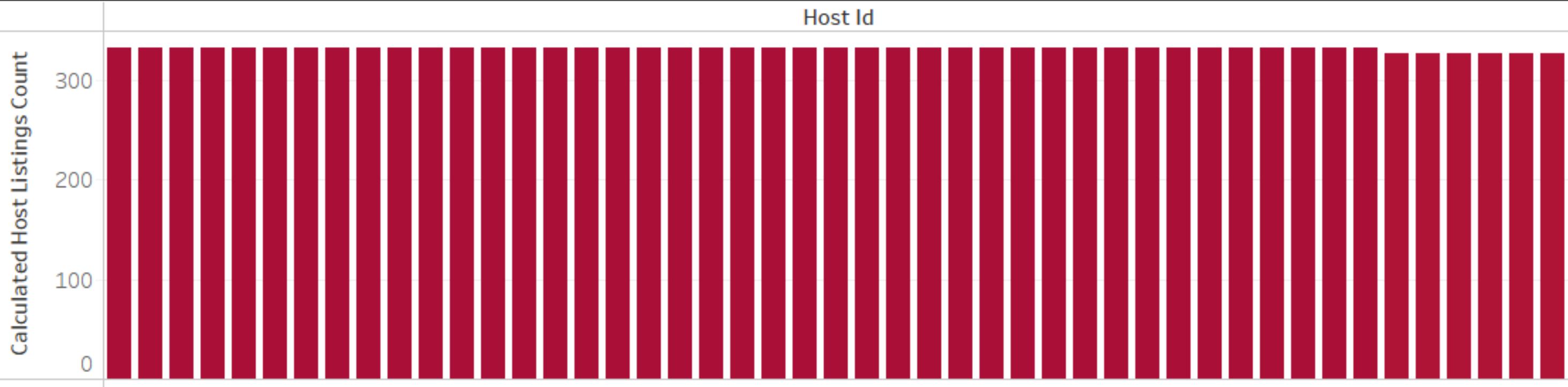
# Host and Listing Analysis:

## Highest Number of listings and Average Pricing by Host ID

Calculated Host Listings Count

1

332



Corr. Host Listing & Price

-0.0001057

>319 nulls

# KEY INSIGHTS

## Host and Listing Analysis

- **Highest Number of Listings:** The top hosts have consistently high listing counts, with many exceeding 300 properties. These hosts likely represent professional property managers or large-scale operators.
- **Pricing Strategy:** Despite having a high number of listings, these hosts show diverse average property prices, ranging from below \$200 to over \$1,200. The correlation between the number of listings and pricing is nearly zero (-0.0001057), indicating no significant relationship between a host's listing count and their pricing strategy.

## Impact of Amenities on Pricing

- **Amenities Influence Pricing:** Listings offering premium amenities such as pools, fitness centers, or high-speed internet often command higher prices compared to listings without these features. This reflects guests' willingness to pay for added convenience and luxury.
- **Basic vs. Luxury Amenities:** Basic amenities like Wi-Fi and air conditioning are considered standard and may not significantly affect pricing. However, unique or high-end amenities (e.g., hot tubs, rooftop access, or pet-friendly spaces) can lead to substantial price increases.

# RECOMMENDATION FOR STAKEHOLDERS



- Focus Marketing Efforts on Manhattan and Brooklyn: Prioritize these high-demand neighborhoods by showcasing premium listings and highlighting unique attractions.
- Expand Affordable Options in Staten Island and Bronx: Introduce budget-friendly listings in these areas to attract cost-conscious travelers and increase market share.
- Dynamic Pricing Strategies: Use dynamic pricing tools to optimize revenue in high-demand areas and during peak travel seasons while maintaining affordability in less competitive neighborhoods.
- Increase Entire Home Listings: Encourage hosts to list entire homes/apartments, especially in high-demand areas like Manhattan and Brooklyn, to align with guest preferences.
- Enhance Private Room Offerings: Focus on upgrading private room listings with better amenities and competitive pricing to attract more budget-conscious travelers.
- Reassess Shared Rooms and Hotel Room Strategies: Consider whether to phase out underperforming shared room listings or enhance their appeal through unique value propositions.
- Leverage High-Rated Hotel Rooms: Highlight hotel room listings in Brooklyn and Queens in marketing campaigns to capitalize on their superior customer satisfaction.
- Improve Overall Experience: Focus on factors like cleanliness, communication, and amenities that drive customer satisfaction, as price alone does not significantly impact ratings.

# RECOMMENDATION FOR STAKEHOLDERS



- **Collect Guest Feedback:** Regularly analyze guest reviews to identify recurring issues and implement corrective measures promptly.
- **Partner with Professional Hosts:** Collaborate with top-performing hosts to expand inventory and ensure consistent quality across multiple listings.
- **Provide Pricing Guidance:** Offer data-driven pricing recommendations to hosts to maximize revenue without compromising competitiveness.
- **Support Small-Scale Hosts:** Introduce tools and resources to help smaller hosts improve their operations and grow their presence.
- **Promote Listings with Premium Amenities:** Highlight listings with pools, fitness centers, and other luxury features in advertising campaigns to attract high-paying guests.
- **Encourage Amenity Upgrades:** Educate hosts on the benefits of adding high-demand amenities, such as pet-friendly spaces or rooftop access, to increase listing value.
- **Standardize Basic Amenities:** Ensure all listings meet minimum expectations for basic amenities like Wi-Fi and air conditioning to maintain competitiveness.



A large, white, cloud-shaped graphic with a dashed outline. Inside the cloud, the words "Thank you" are written in a large, red, cursive font. Below the cloud, several smaller, semi-transparent Airbnb logos are scattered.



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