



Hotel Aggregator Analysis

Power BI Project

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Problem Statement

This project aims to analyze a dataset of hotel aggregator listings using Power BI. The dataset comprises various attributes related to listings, hosts, reviews, and availability. The objective is to create comprehensive visualizations and insights that shed light on trends, patterns, and factors influencing the performance of listings.

Project Objectives

1. Geographical Insights:

Visualize the distribution of listings on a map to identify popular neighbourhoods.

2. Pricing and Analysis:

Analyze pricing trends based on property type, room types, and accommodation capacity.

3. Host Performance:

Evaluate host characteristics, including super host status, response times, and verification methods.

4. Review Scores and Guest satisfaction:

Examine review scores and their impact on overall listings performance.

5. Property Type and Room Analysis:

Analyze the distribution of property types and room types.



Load the Dataset in Power BI

File Home Help Table tools Column tools Share

Name id Format Whole number Sum Data category Uncategorized Sort by column Data groups Manage relationships New column

Structure Formatting Properties Sort Groups Relationships Calculations

Data

Search

Hotel Aggregator dataset

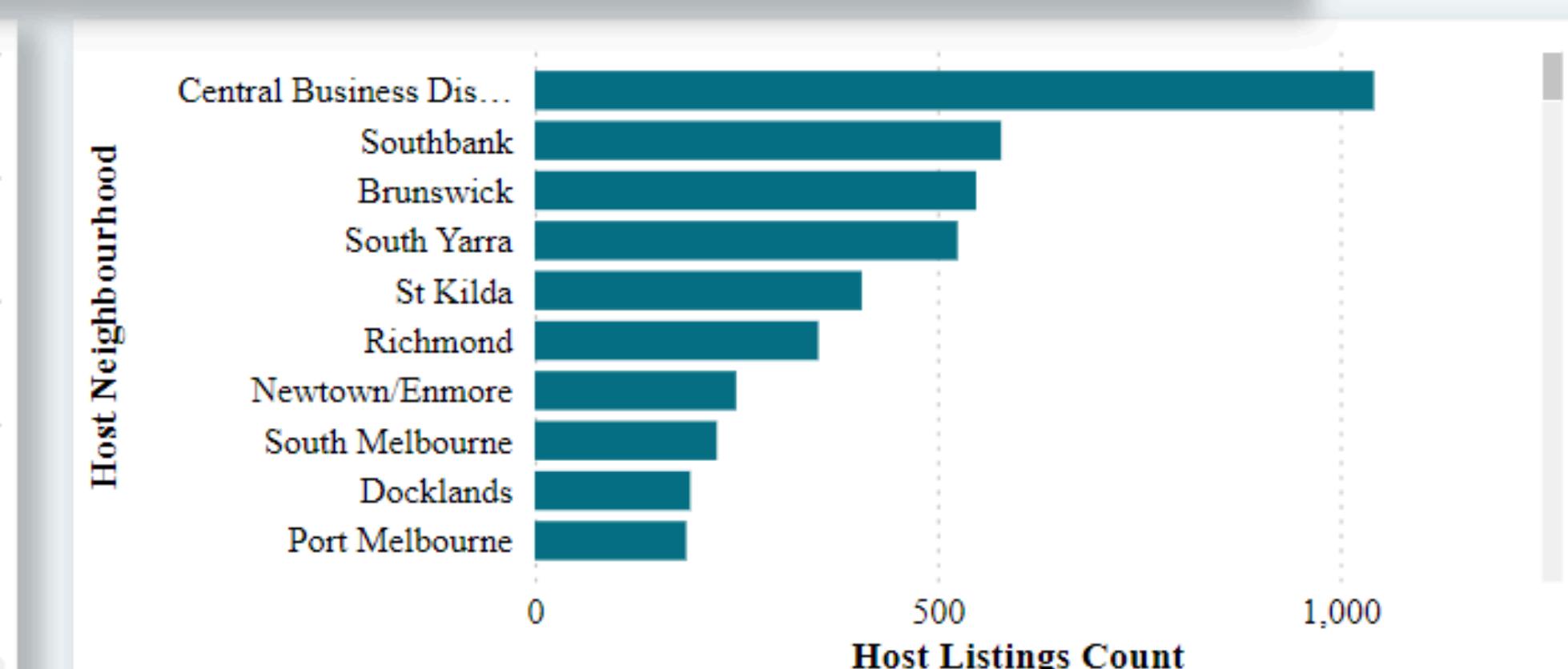
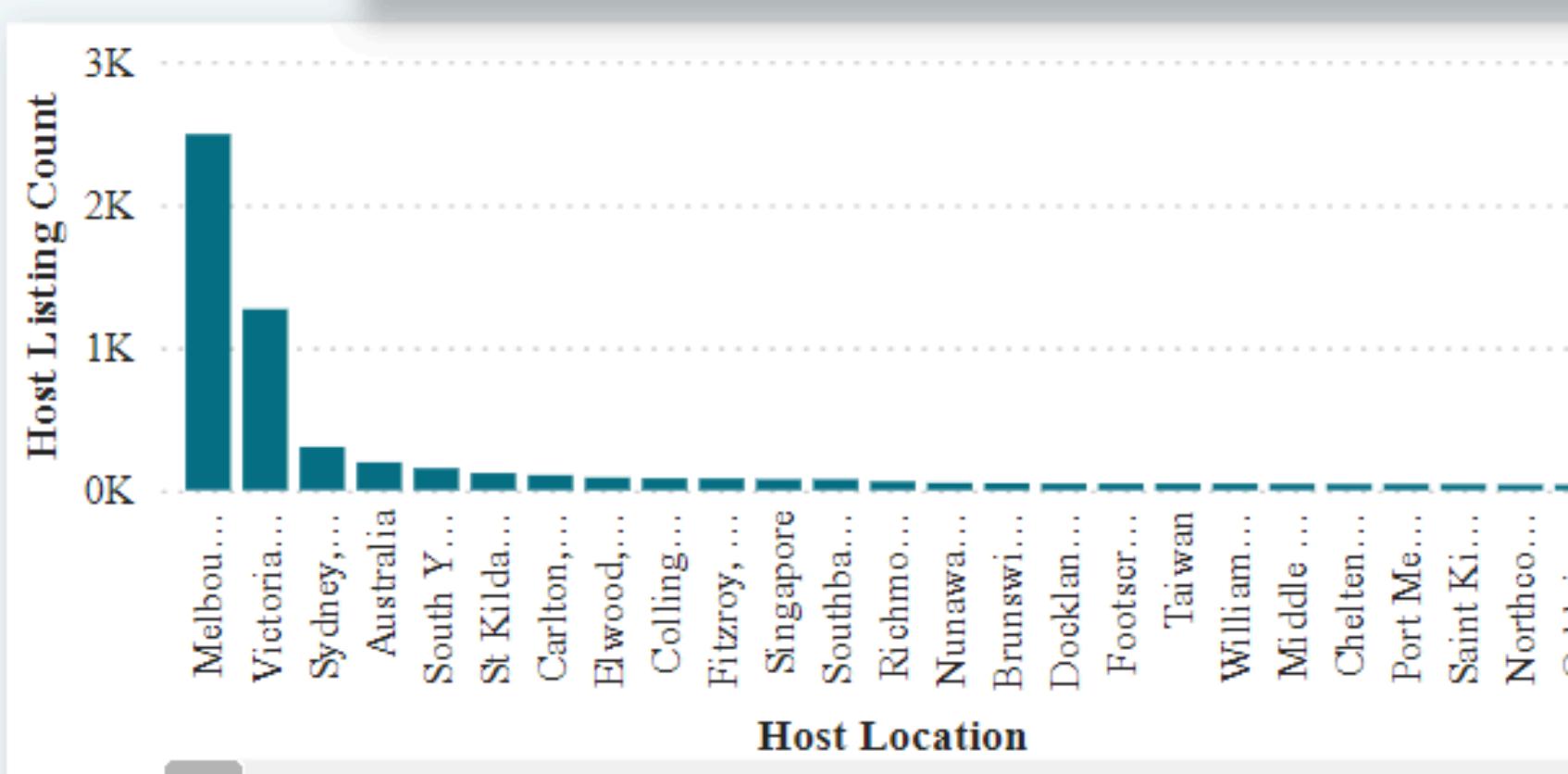
- Σ accommodates
- amenities
- Σ availability_30
- Σ availability_365
- Σ availability_60
- Σ availability_90
- bathrooms_text
- Σ bedrooms
- Σ beds
- Σ calculated_host_listings_count
- Σ calculated_host_listings_coun...
- Σ calculated_host_listings_coun...
- Σ calculated_host_listings_coun...
- Σ calculated_host_listings_coun...
- calendar_last_scraped
- calendar_updated
- description
- first_review
- has_availability
- host_about
- host_acceptance_rate
- host_has_profile_pic
- Σ host_id

id	listing_url	scrape_id	last_scraped	source	name	description
1273768	https://www.airbnb.com/rooms/1273768	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in Fitzroy · ★4.60 · 1 bedroom · 1 bed · 1 bath	Compact apartment with all the necessities for a long stay.
1557274	https://www.airbnb.com/rooms/1557274	20230904181306	Tuesday, September 5, 2023	previous scrape	Rental unit in South Yarra · ★4.67 · 1 bedroom · 1 bed · 1 bath	If you're looking for a self contained place that's close to the city, look no further!
982577	https://www.airbnb.com/rooms/982577	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in Toorak · ★4.57 · 1 bedroom · 1 bed · 1 bath	Please note: WiFi is currently not available. A quiet and comfortable space in the heart of Toorak.
1002094	https://www.airbnb.com/rooms/1002094	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in Melbourne · ★4.86 · 1 bedroom · 1 bed · 1 bath	The space Spacious apartment fully furnished.
456950	https://www.airbnb.com/rooms/456950	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in Melbourne · ★4.67 · 1 bedroom · 1 bed · 1 bath	You are invited to be mesmerised by spectacular living.
534083	https://www.airbnb.com/rooms/534083	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in St Kilda · ★4.59 · 2 bedrooms · 1 bed · 1 bath	At the St Kilda Junction, walking distance to beach.
1832876	https://www.airbnb.com/rooms/1832876	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in Melbourne · ★4.90 · 1 bedroom · 1 bed · 1 bath	Embrace the vibe of city living in this light-filled corner unit.
557900	https://www.airbnb.com/rooms/557900	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in Melbourne · ★4.93 · 1 bedroom · 1 bed · 1 bath	Soak up the natural light from the beautiful steel windows.
2156314	https://www.airbnb.com/rooms/2156314	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in St Kilda West · ★4.94 · 1 bedroom · 1 bed · 1 bath	Stay in your own glorious Art Deco apartment nestled in the heart of St Kilda.
2051170	https://www.airbnb.com/rooms/2051170	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in Melbourne · ★4.75 · 2 bedrooms · 2 beds · 1 bath	2 bedroom modern apartment filled with wonder.
2079865	https://www.airbnb.com/rooms/2079865	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in Southbank · ★4.88 · 1 bedroom · 4 beds · 1 bath	Welcome to my spacious self-contained apartment.
2099179	https://www.airbnb.com/rooms/2099179	20230904181306	Tuesday, September 5, 2023	previous scrape	Rental unit in Saint Kilda East · ★4.96 · 1 bedroom · 1 bed · 1 bath	*Please message us first to check suitability before booking.
2112034	https://www.airbnb.com/rooms/2112034	20230904181306	Tuesday, September 5, 2023	previous scrape	Rental unit in Fitzroy · ★4.37 · 3 bedrooms · 3 beds · 1 bath	This 3 bedroom, pet friendly, apartment with sun-drenched balconies.
3430420	https://www.airbnb.com/rooms/3430420	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in Southbank · ★4.57 · 2 bedrooms · 5 beds · 1 bath	No parties/noisy groups permitted-No smoking in the apartment.
4086374	https://www.airbnb.com/rooms/4086374	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in South Yarra · ★4.66 · 2 bedrooms · 2 beds · 1 bath	Patrick - a modern, stylish pad located in the heart of South Yarra.
3655585	https://www.airbnb.com/rooms/3655585	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in Melbourne · ★4.73 · 2 bedrooms · 2 beds · 1 bath	Yvette - your chance to position yourself in the heart of Melbourne.
4211458	https://www.airbnb.com/rooms/4211458	20230904181306	Tuesday, September 5, 2023	previous scrape	Rental unit in Toorak · ★4.83 · 2 bedrooms · 2 beds · 1 bath	Our fantastic apartment in beautiful toorak is set in a quiet street.
4606896	https://www.airbnb.com/rooms/4606896	20230904181306	Tuesday, September 5, 2023	previous scrape	Rental unit in Elwood · 1 bedroom · 1 bed · 1 bath	Apartm in Elwood free over summer! Create urself a home away from home.
3769632	https://www.airbnb.com/rooms/3769632	20230904181306	Tuesday, September 5, 2023	previous scrape	Rental unit in Richmond · 1 bedroom · 1 bed · 1 bath	The apartment is split over two levels and hovers above the ground floor.
4318856	https://www.airbnb.com/rooms/4318856	20230904181306	Tuesday, September 5, 2023	previous scrape	Rental unit in Brunswick · ★4.81 · 1 bedroom · 1 bed · 1 bath	Spacious, convenient & comfortable home among friends.
4824945	https://www.airbnb.com/rooms/4824945	20230904181306	Monday, September 4, 2023	city scrape	Rental unit in Seddon · ★4.59 · 2 bedrooms · 2 beds · 1 bath	Lovely 2 bedroom apartment with great park outlook.
4824947	https://www.airbnb.com/rooms/4824947	20230904181306	Monday, September 4, 2023	city scrape	Rental unit in Hawthorn East · ★4.63 · 2 bedrooms · 3 beds · 1 bath	Stylish and spacious 2 bedroom, 2 bathroom apartment.
4419297	https://www.airbnb.com/rooms/4419297	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in St Kilda · ★4.84 · 1 bedroom · 1 bed · 1 bath	Taylor - Simply a St Kilda Gem! In one of Melboune's most sought after areas.
4817439	https://www.airbnb.com/rooms/4817439	20230904181306	Tuesday, September 5, 2023	city scrape	Rental unit in South Melbourne · ★4.75 · 2 bedrooms · 6 beds · 1 bath	An awesome family space to enjoy your holidays in a safe and secure environment.
5653532	https://www.airbnb.com/rooms/5653532	20230904181306	Tuesday, September 5, 2023	previous scrape	Rental unit in Brunswick East · ★4.79 · 1 bedroom · 1 bed · 1 bath	Our modern 1 bedroom ground floor apartment is perfect for a short stay.
5920942	https://www.airbnb.com/rooms/5920942	20230904181306	Tuesday, September 5, 2023	previous scrape	Rental unit in Richmond · 1 bedroom · 1 bed · 1 bath	This comfortable modern apartment is located in a quiet residential area.
5979434	https://www.airbnb.com/rooms/5979434	20230904181306	Tuesday, September 5, 2023	previous scrape	Rental unit in Northcote · ★4.95 · 1 bedroom · 1 bed · 1 bath	Our top floor apartment is situated on High St in Northcote.

Table: Hotel Aggregator dataset (2,692 rows) Column: id (2,692 distinct values)

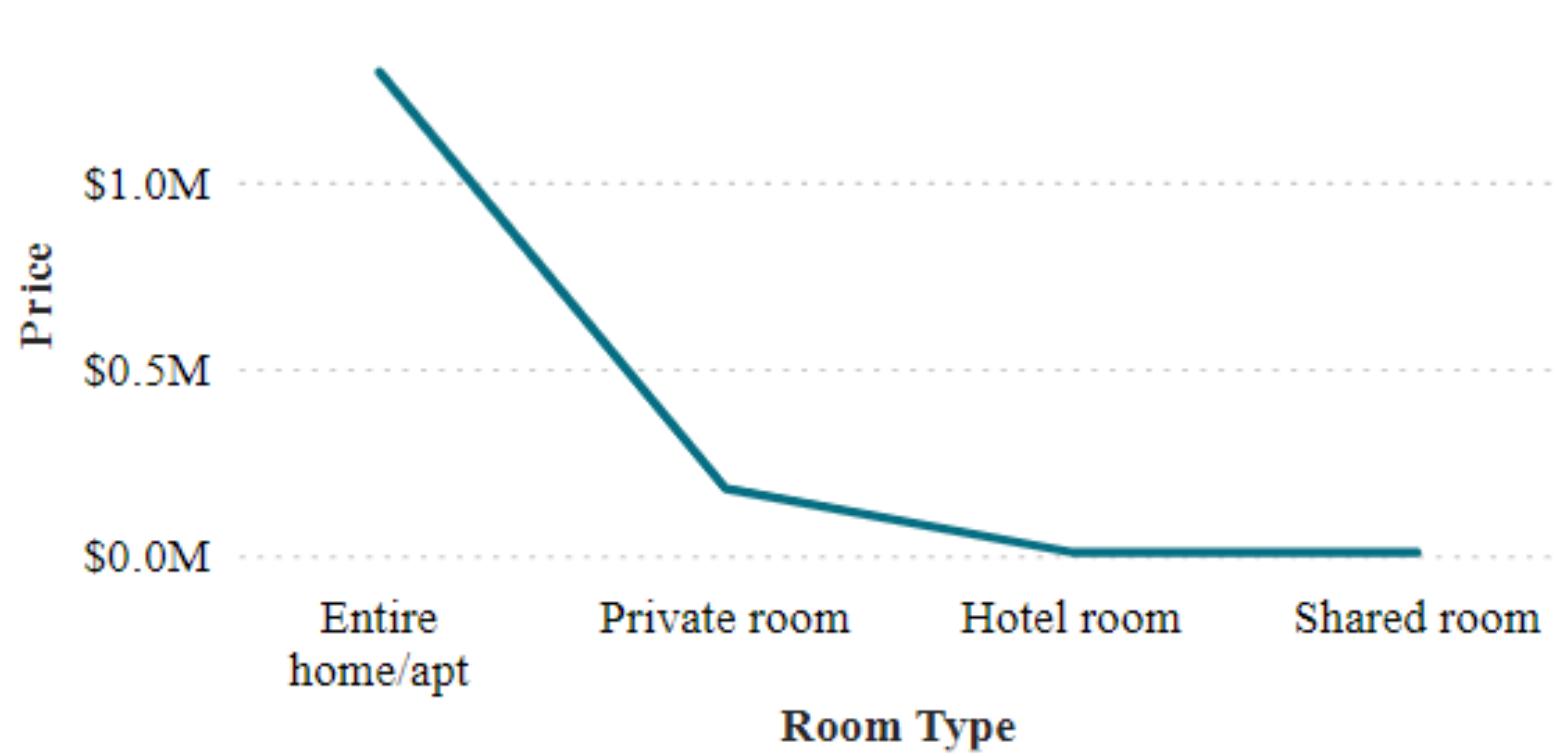
Table: Hotel Aggregator dataset (3.682 rows) Column: id (3.682 distinct values)

GEOGRAPHICAL INSIGHTS

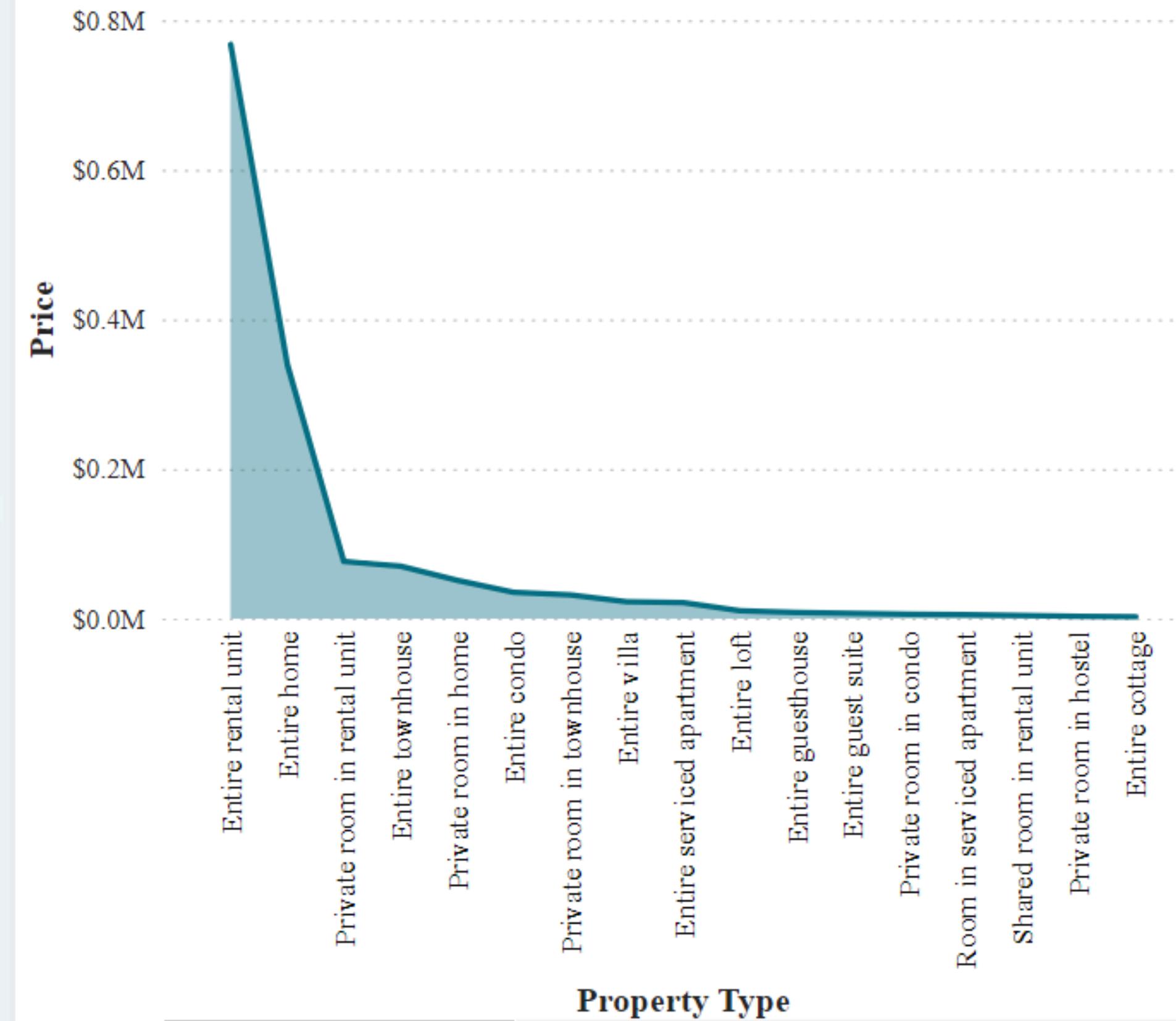


PRICING AND AVAILABILITY ANALYSIS

Price by Room Type



Price by Property Type



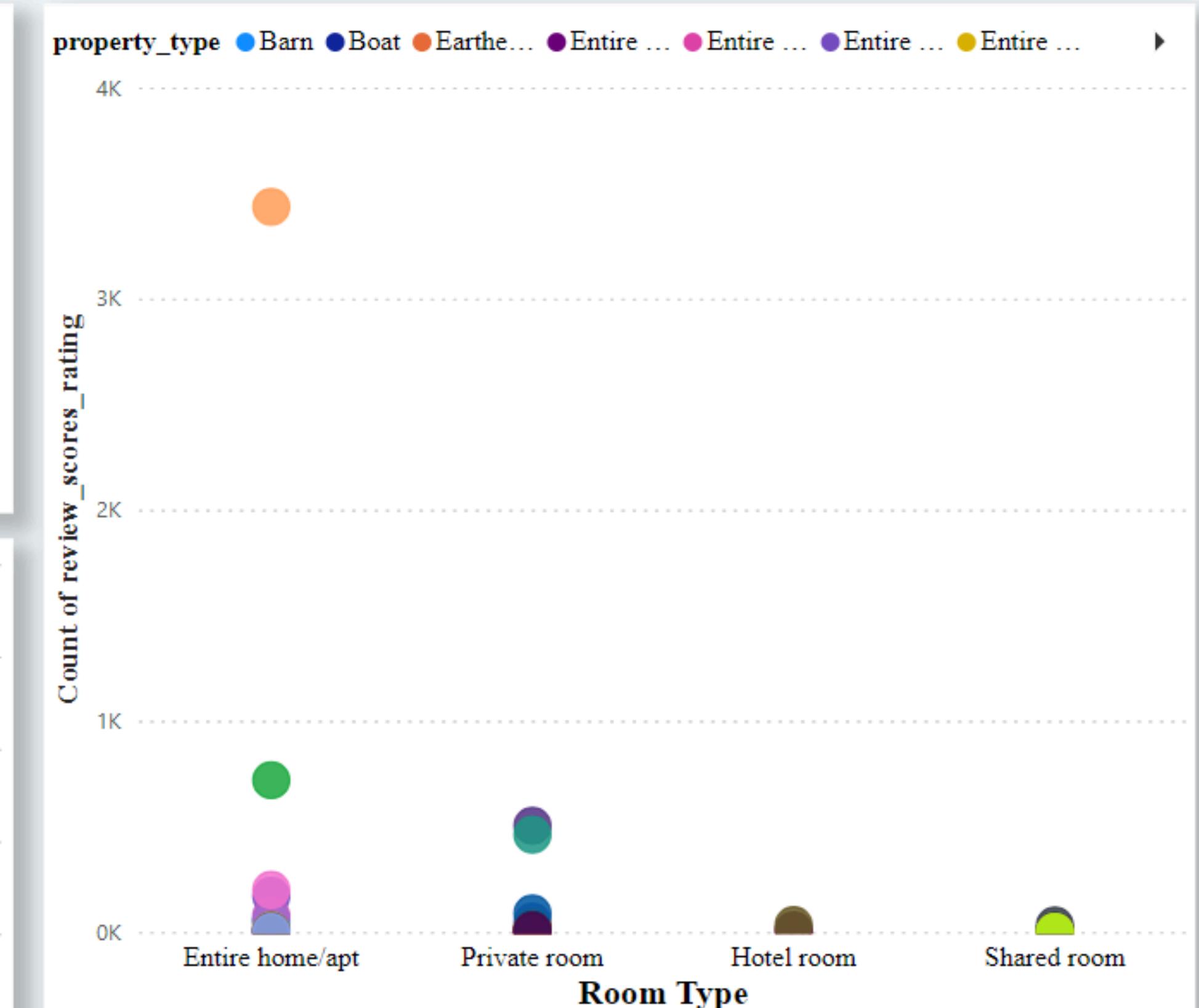
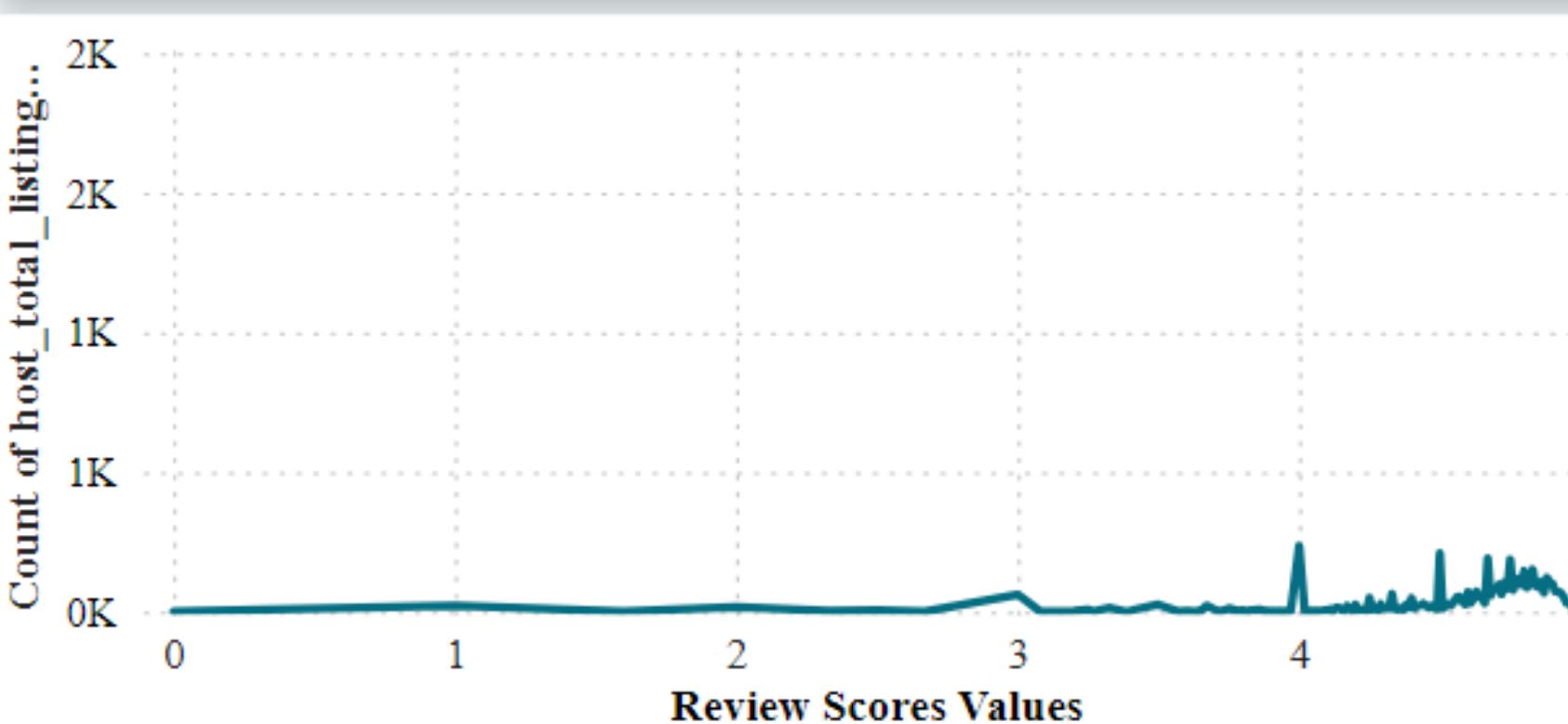
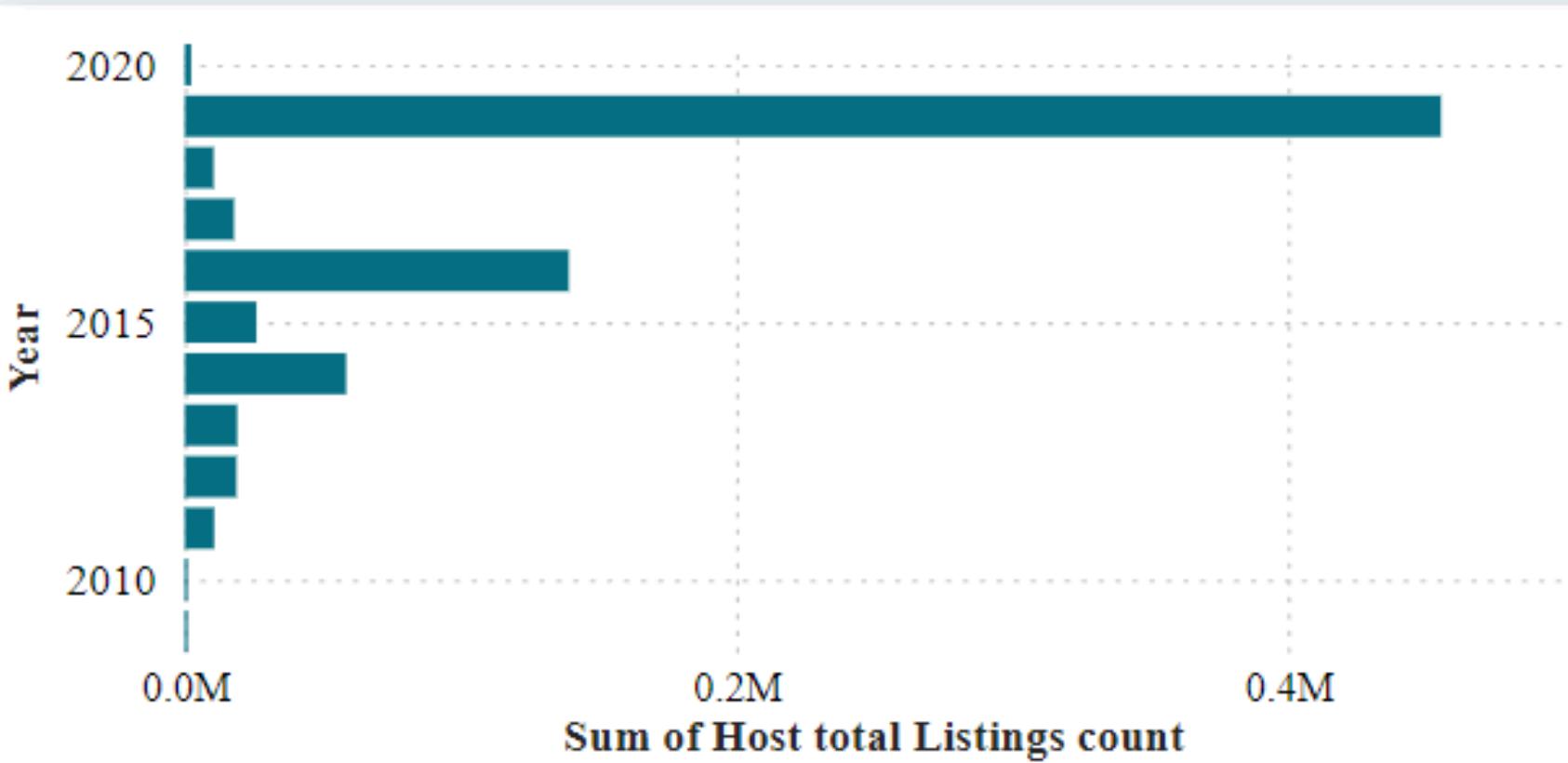
Price by Accomodates



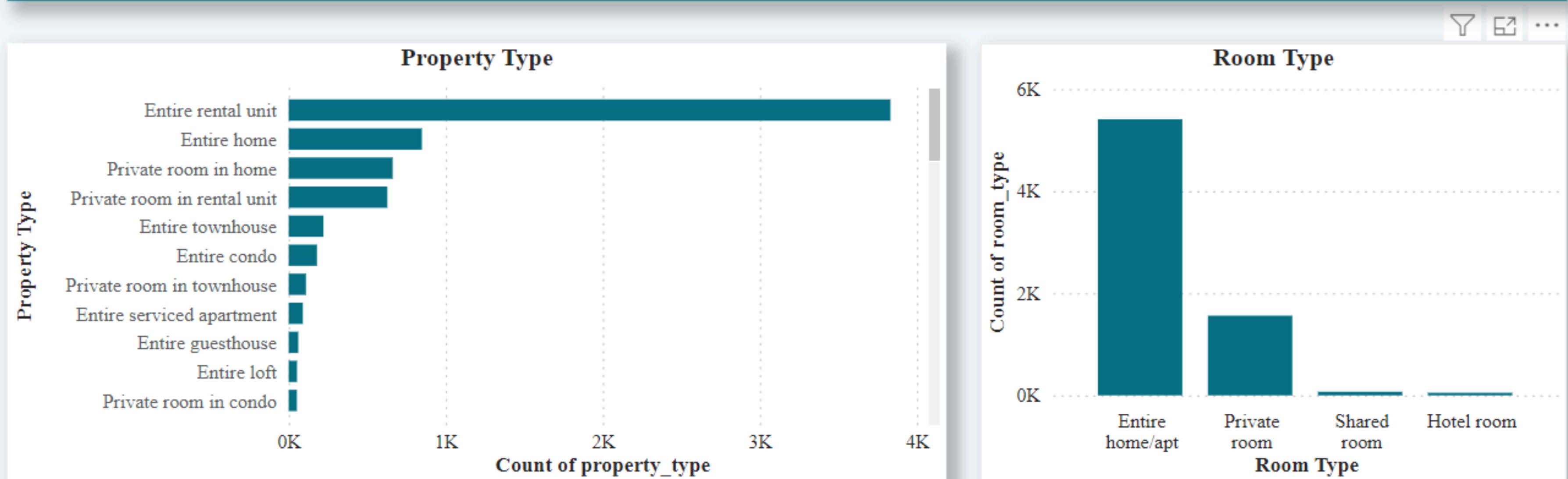
HOST PERFORMANCE

Sum of host_id	Host response time	Count of host is superhost	Count of host total listings count	Host verifications
167303318322	within an hour	1991	1991	['email', 'phone']
152612341120	N/A	1898	1898	['email', 'phone']
88745175366	within an hour	1306	1306	['email', 'phone', 'work_email']
99520223634	N/A	651	651	['email', 'phone', 'work_email']
32506298709	within a few hours	398	398	['email', 'phone', 'work_email']
21617294614	within a few hours	317	317	['email', 'phone']
9746686198	within a day	121	121	['email', 'phone']
15646610707	N/A	120	120	['phone']
3587442088	within a day	97	97	['email', 'phone', 'work_email']
12122152712	within an hour	79	79	['phone']
2718246532	a few days or more	50	50	['email', 'phone']
1342766773	N/A	17	17	['email']
838601074	within an hour	13	13	['phone', 'work_email']
730497439	N/A	8	8	['phone', 'work_email']
626814229	within a day	8	8	['phone']
758694688	within a few hours	7	7	['phone']
288892570	N/A	5	5	[]
33714945	a few days or more	3	3	['email', 'phone', 'work_email']
45555095	a few days or more	1	1	['phone']
16848054	N/A	1	1	['email', 'work_email']
40514323	within a few hours	1	1	['phone', 'work_email']
610848689192		7092	7092	

REVIEW SCORES AND GUEST SATISFACTION



PROPERTY TYPE AND ROOM ANALYSIS



Key Insights

- 1. Geographical Insights:** Provides Insights into the distribution of listings in popular neighborhoods, host location, and host neighborhoods. It shows the host from which location and which areas are popular among hosts and guests.
- 2. Pricing & Availability:** It showcase average price of property types, room types, and based on accommodates.
- 3. Host Performance:** Present insights into host performance such as host response time, host verification, host is superhost or not and their counts.
- 4. Review scores & guest satisfaction:** Displays the relationship between review score values and host total listings count by year, and review scores based on property and room types.
- 5. Property and room Analysis:** Presents the count of different property types and room types, showcasing the distribution of accommodation options.

Recommendations

- Adjust pricing based on accommodates to maximize revenue and occupancy.
- The shared room type is the only affordable room type.
- Consider seasonality in pricing & availability. Prices might be higher during peak tourist seasons and lower during off-peak times.
- There is a strong and clear proportional relationship between the count of total reviews and the total listings count. Thus giving more opportunity for rating makes the hosts more popular.
- Capacity of accommodation doesn't have a proportional relationship with the price.
- Track guest satisfaction levels over time to identify areas for improvement.

Thank You!