

Hotel Aggregator Analysis

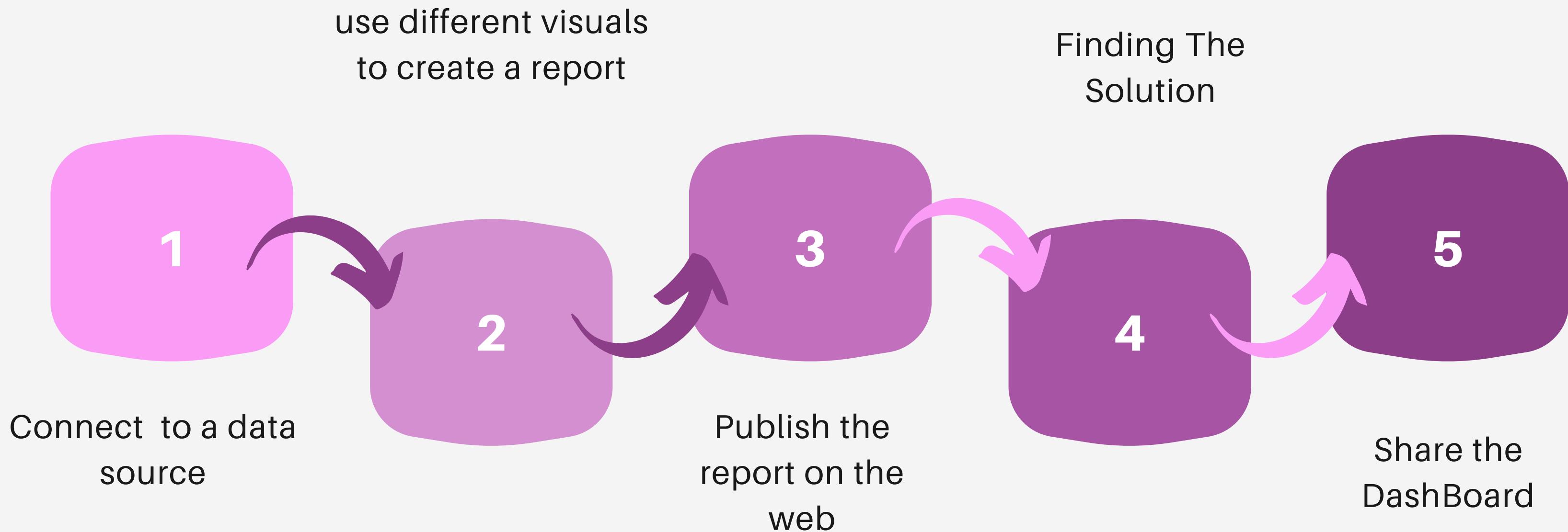
using Power BI

By Saravana . M



INTENTION

Analyzing Trends and Understanding Implications





Power BI is used to build

1. Reports :A report is a collection of multiple visuals or charts arranged in a specific manner to represent different findings and insights from data
2. dashboards : it is a collection of reports.

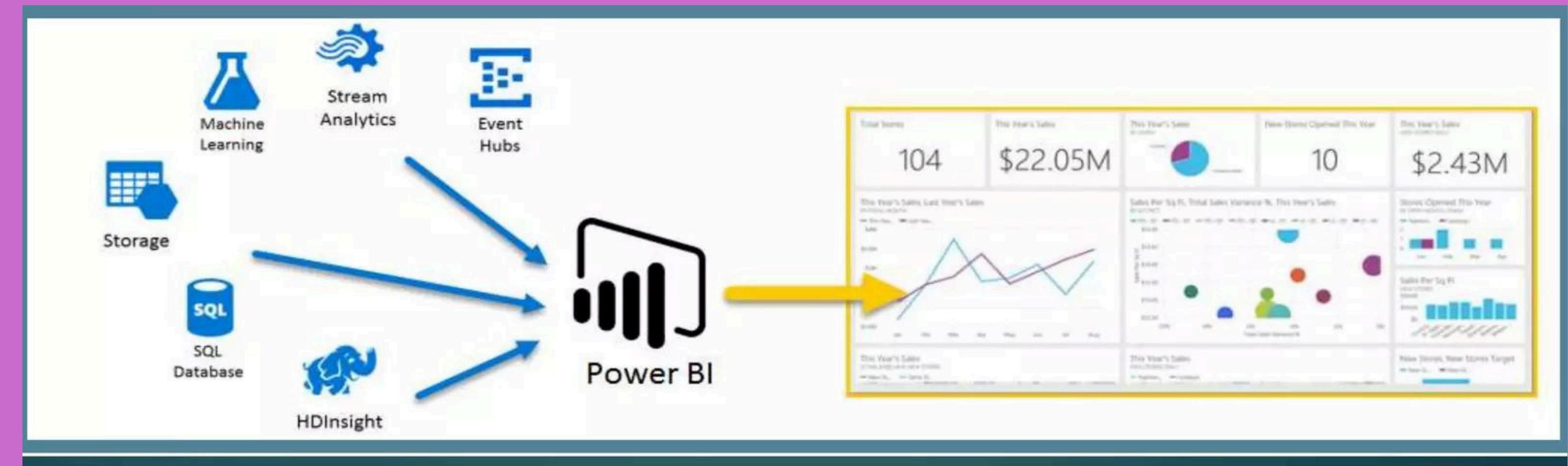


Käytöohjeet
Nämä takuuohjeet
eivät vakuuta lakisääteisön olleuksesta.
Huolto

Is olos pree
ção Restric

1.Power BI is a Microsoft's self-service BI platform for both on premise and cloud-based data

2. it provides business users with tools for aggregating , analyzing , visualizing and sharing data





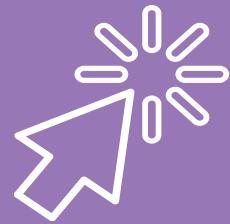
1

Geographical
Insights:



2

Pricing and
Availability
Analysis:



3

Host
Performance:



4

Review Scores
and Guest
Satisfaction:



5

Property Type
and Room
Analysis:

**PURPOSE OF THE ANALYSIS: A DATASET OF HOTEL AGGREGATOR
ANALYSIS USING POWER BI.**

IMPORTING THE DATASET INTO POWER BI DESKTOP



Review the Data:

Handle Missing Values:

Remove Duplicates:

Split Columns (if needed):

Filter Data (if needed):

Sort Data (if needed):

Preview Data:

The screenshot shows the Microsoft Power BI Desktop application's Query Editor. The interface includes a ribbon bar with tabs like Add Column, View, Tools, and Help, and various toolbar icons for data manipulation. The main area displays a table with 13 rows of data, each containing columns for id, listing_url, scrape_id, last_scraped, source, and name. A formula bar at the top shows a DAX query: = Table.ReplaceValue(#"Replaced Value6", "N/A", "within an hour", Replacer.ReplaceText, {"host_response_time"}). Below the table, a preview pane shows detailed information for the first few rows, including descriptions and neighborhood_overview details.

id	listing_url	scrape_id	last_scraped	source	name	neighborhood_overview
1	https://www.airbnb.com/rooms/10803	2.02309E+13	05-09-2023	city scrape	Rental unit in Berwick - ★4.86 · 3 bedrooms · 3 beds · 1 bath	Our street is quiet & secluded but within walking distance to almost anything you need
2	https://www.airbnb.com/rooms/12936	2.02309E+13	05-09-2023	previous scrape		
3	https://www.airbnb.com/rooms/38271	2.02309E+13	04-09-2023	city scrape		
4	https://www.airbnb.com/rooms/41836	2.02309E+13	05-09-2023	previous scrape		
5	https://www.airbnb.com/rooms/43429	2.02309E+13	04-09-2023	city scrape		
6	https://www.airbnb.com/rooms/1181117	2.02309E+13	05-09-2023	city scrape		
7	https://www.airbnb.com/rooms/1188388	2.02309E+13	05-09-2023	city scrape		
8	https://www.airbnb.com/rooms/603007	2.02309E+13	05-09-2023	previous scrape		
9	https://www.airbnb.com/rooms/607674	2.02309E+13	04-09-2023	city scrape		
10	https://www.airbnb.com/rooms/1192689	2.02309E+13	05-09-2023	city scrape		
11	https://www.airbnb.com/rooms/44082	2.02309E+13	04-09-2023	city scrape		
12	https://www.airbnb.com/rooms/1201338	2.02309E+13	05-09-2023	city scrape		
13						

1. Geographical Insights:

- Create a Map Visualization
- Analyze Distribution
- Filter by Location:
- Aggregate Data:
- Visualize Trends Over Time:

Microsoft Power BI Home Screen

File Home Insert Modeling View Optimize Help Format Data / Drill

Paste Cut Copy Format painter Get data workbook hub Data SQL Server Enter data Dataverse Recent sources Transform Refresh data New visual Text box More visuals Insert New measure Quick Sensitivity Calculations Sensitivity Share

Clipboard Sum of host_listings_count by host_location

host_location	Sum of host_listings_count
Sydney, Australia	~0.2M
Victoria, Australia	~0.15M
Melbourne, Australia	~0.15M
Australia	~0.1M
Carlton, Australia	~0.05M
Chesterham, Australia	~0.05M
Brisbane, Australia	~0.05M
Collingwood, Australia	~0.05M
Taiwan	~0.05M
Rye, Australia	~0.05M
Doncaster, Australia	~0.05M
Nunawading, Australia	~0.05M
Elwood, Australia	~0.05M
South Yarra, Australia	~0.05M
Singapore	~0.05M
Docklands, Australia	~0.05M
St Kilda, Australia	~0.05M
Oakleigh South, Australia	~0.05M
Saint Helena, United Kingdom	~0.05M
Footscray, Australia	~0.05M
Middle Park, Australia	~0.05M
London, United Kingdom	~0.05M
Forest Hill, Australia	~0.05M
Yarra Junction, Australia	~0.05M
Burwood, Australia	~0.05M
Fitzroy, Australia	~0.05M

Sum of calculated_host_listings_count and Sum of calculated_host_listings_count_entire_homes by host_neighbourhood

● Sum of calculated_host_listings_count ● Sum of calculated_host_listings_count_entire_homes

host_neighbourhood	Sum of calculated_host_listings_count	Sum of calculated_host_listings_count_entire_homes
Brunswick	~0.25M	~0.25M
Newtown	~0.15M	~0.15M
Southbank	~0.1M	~0.1M
Central Business District	~0.1M	~0.1M
Richmond	~0.1M	~0.1M
South Yarra	~0.1M	~0.1M
South Melbourne	~0.1M	~0.1M
Port Melbourne	~0.1M	~0.1M
Balwyn	~0.1M	~0.1M
Elwood	~0.1M	~0.1M
Docklands	~0.1M	~0.1M
St Kilda	~0.1M	~0.1M
North Melbourne	~0.1M	~0.1M
Carlton	~0.1M	~0.1M
Cogee	~0.1M	~0.1M
Middle Park	~0.1M	~0.1M
Central	~0.1M	~0.1M
West Melbourne	~0.1M	~0.1M
South Wharf	~0.1M	~0.1M
Finsbury	~0.1M	~0.1M
Yarraville	~0.1M	~0.1M
Burnley	~0.1M	~0.1M
River Vale	~0.1M	~0.1M
Hawthorn	~0.1M	~0.1M
Fitzroy	~0.1M	~0.1M

latitude

The map displays the city of Melbourne, Victoria, Australia, with a focus on the northern and eastern suburbs. It shows a network of roads and major highways (e.g., M2, M3, M4, M5, M8, M9, M10) and the Yarra River. Numerous neighborhoods are labeled, including Keilor, Sunshine, Coburg, Preston, Heidelberg, Doncaster, Nunawading, Glen Waverley, Oakleigh, Moorabbin, Springvale, and Mordialloc. The map uses color coding to represent the density of host listings, with darker shades indicating higher concentrations.

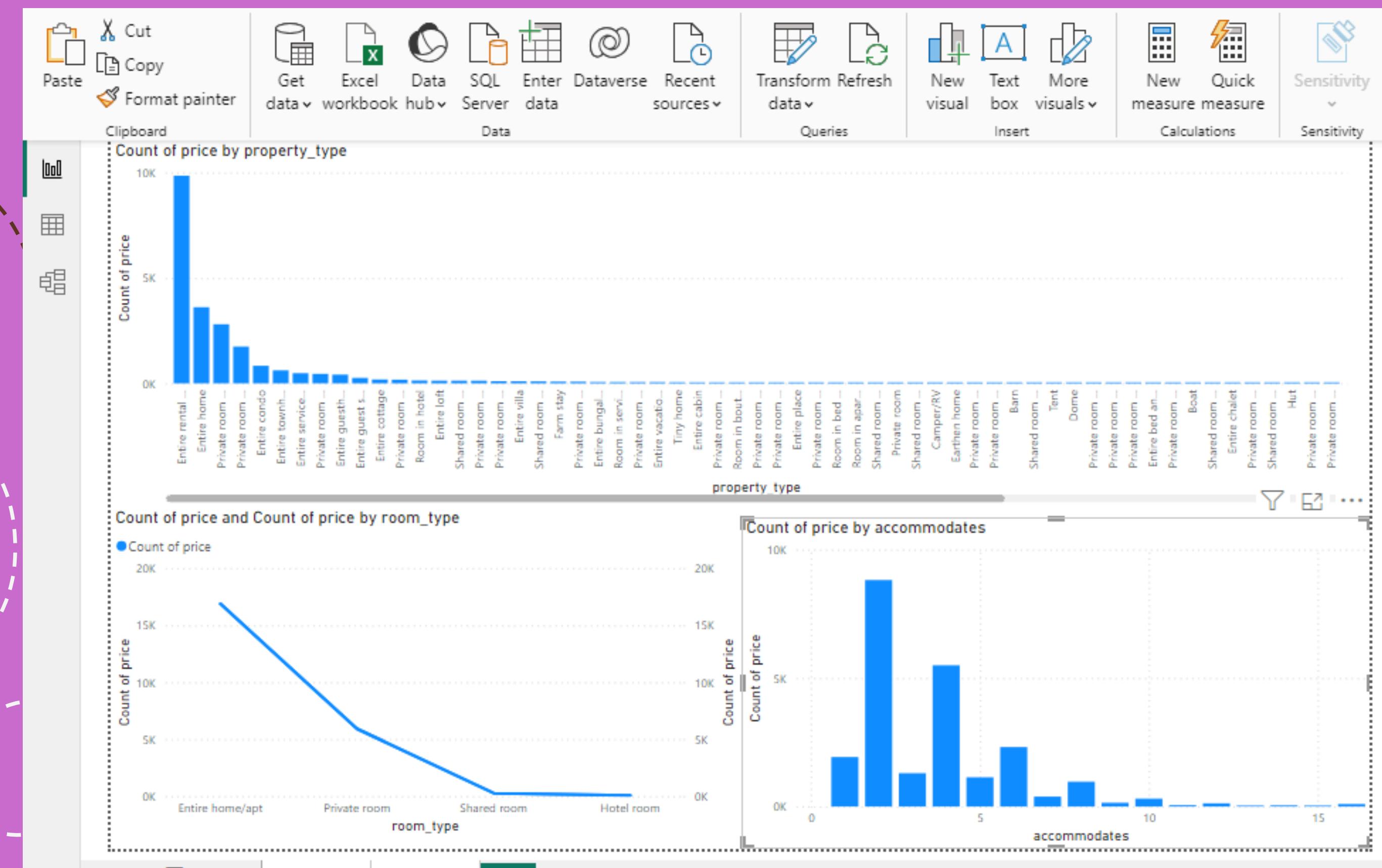
Key i

Compare Geographical Regions

2. Pricing and Availability Analysis:



- Analyze the range, median, and outliers in pricing to understand the market landscape

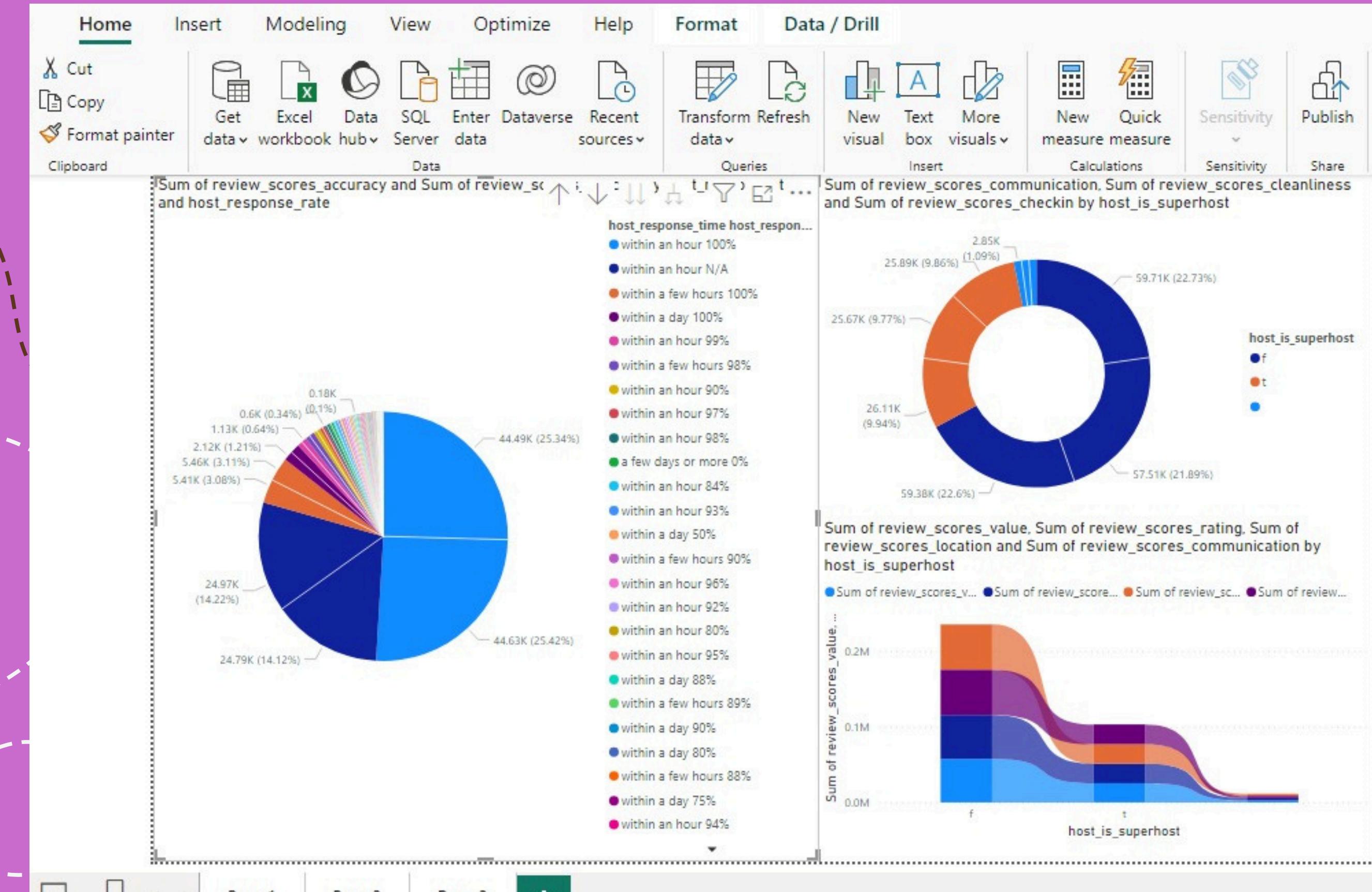


3. Host Performance:

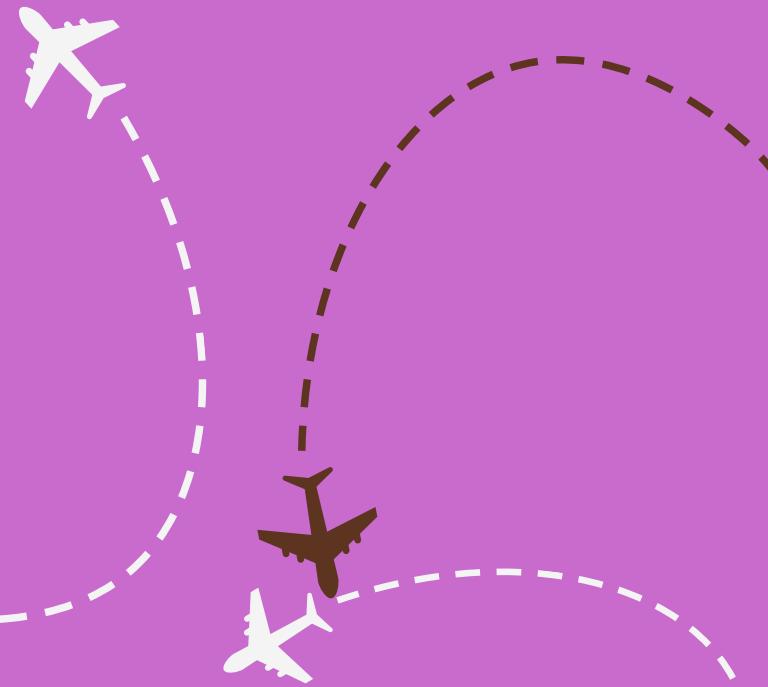


1. Visualize the number of bookings over time to understand booking patterns and trends

2. Analyze peak booking periods and identify opportunities to optimize pricing and availability.

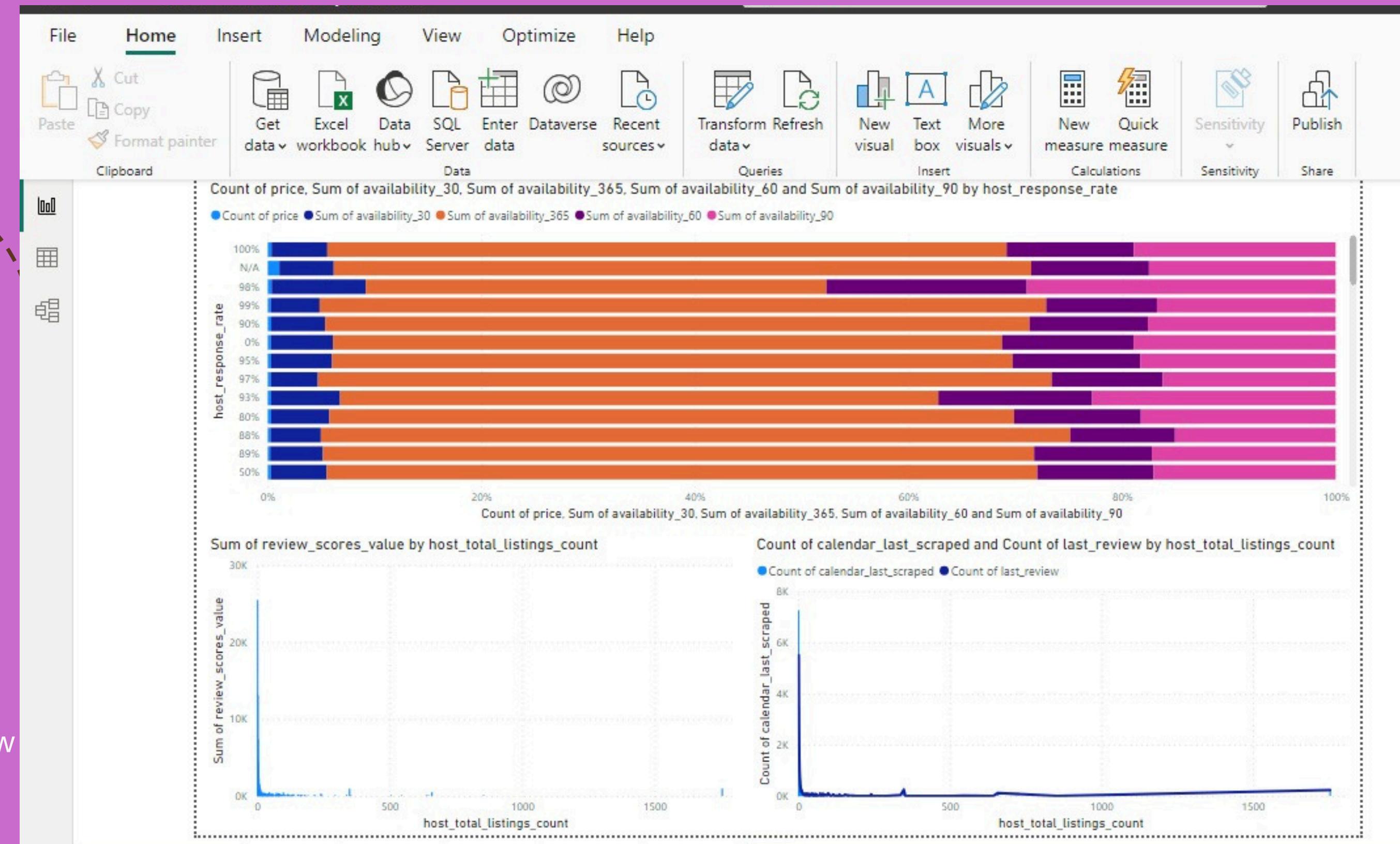


4. Review Scores and Guest Satisfaction:

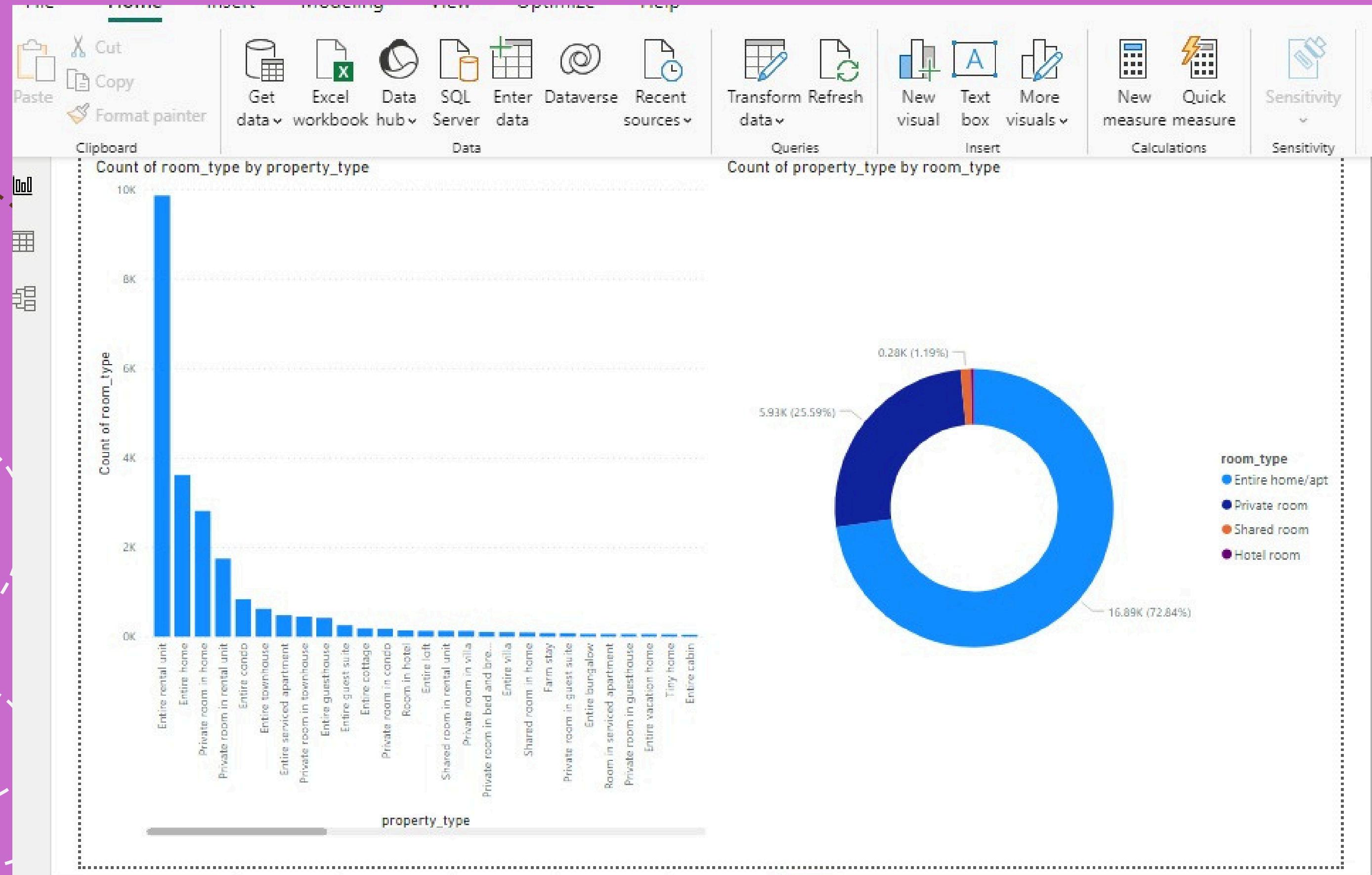


Visualize the sentiment distribution to understand the overall sentiment of guests towards the listings.

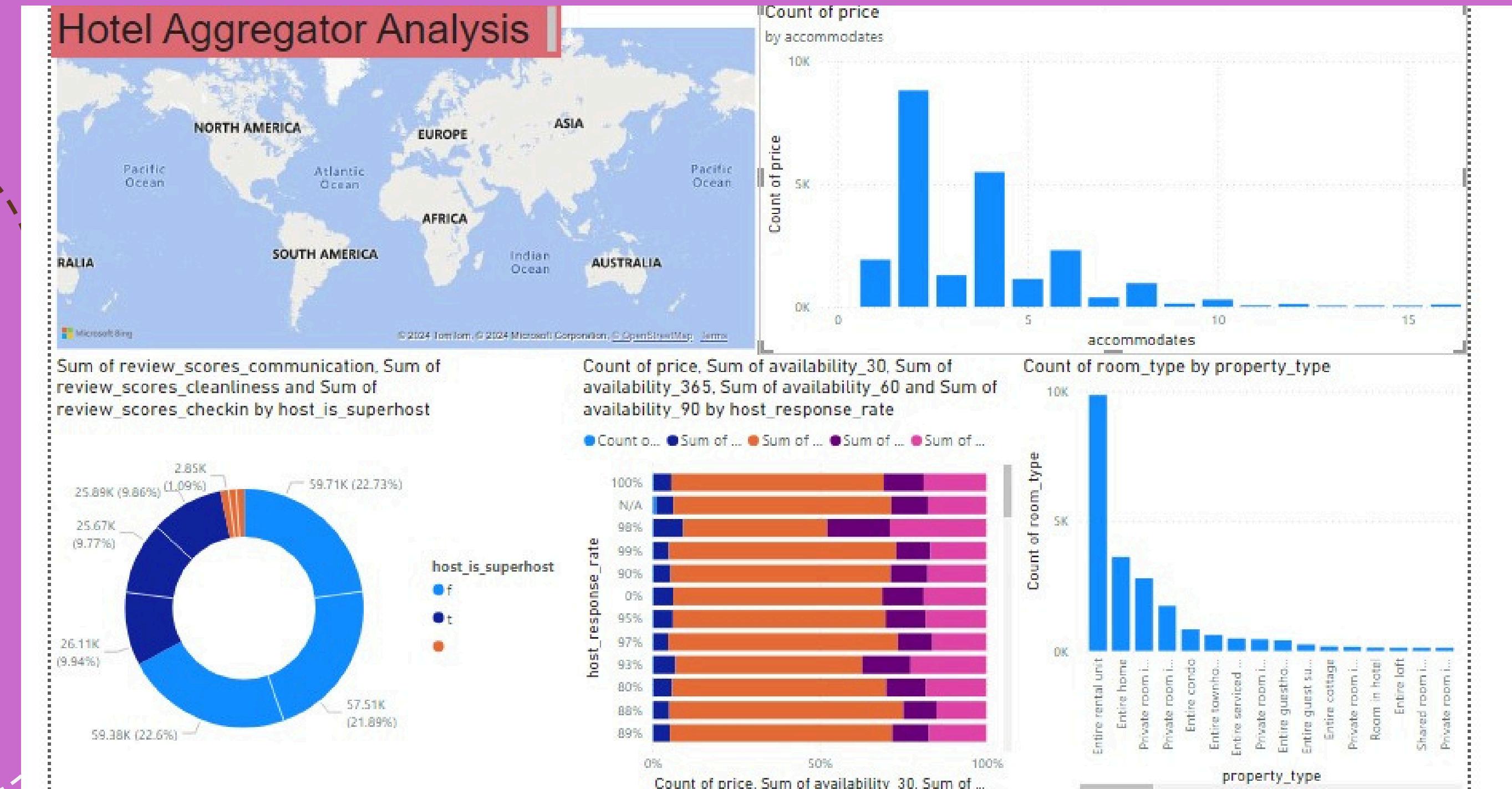
Analyze the correlation between review scores and booking performance metrics such as occupancy rate and booking conversion rate.



5. Property Type and Room Analysis:



Power BI dashboards:



Overall, the analysis of property types and room types empowers hosts and the aggregator platform to make data-driven decisions, optimize their inventory, and enhance the guest experience. By leveraging these insights, they can stay competitive in the dynamic vacation rental market and continue to deliver exceptional value to guests.

Conclusion:-

Reflection on the significance of using Power BI for hotel aggregator data analysis.

Potential areas for future research or analysis.

Summary of key findings from the analysis.

References:-

**Acknowledgment of any libraries or tools utilized
(e.g., Power BI).**

**List of data sources, with tools for aggregating ,
analyzing , visualizing and sharing data**

Connect with us.



Github

<https://github.com/saravanaayyapa28>



Social Media

www.linkedin.com/in/saravana28

