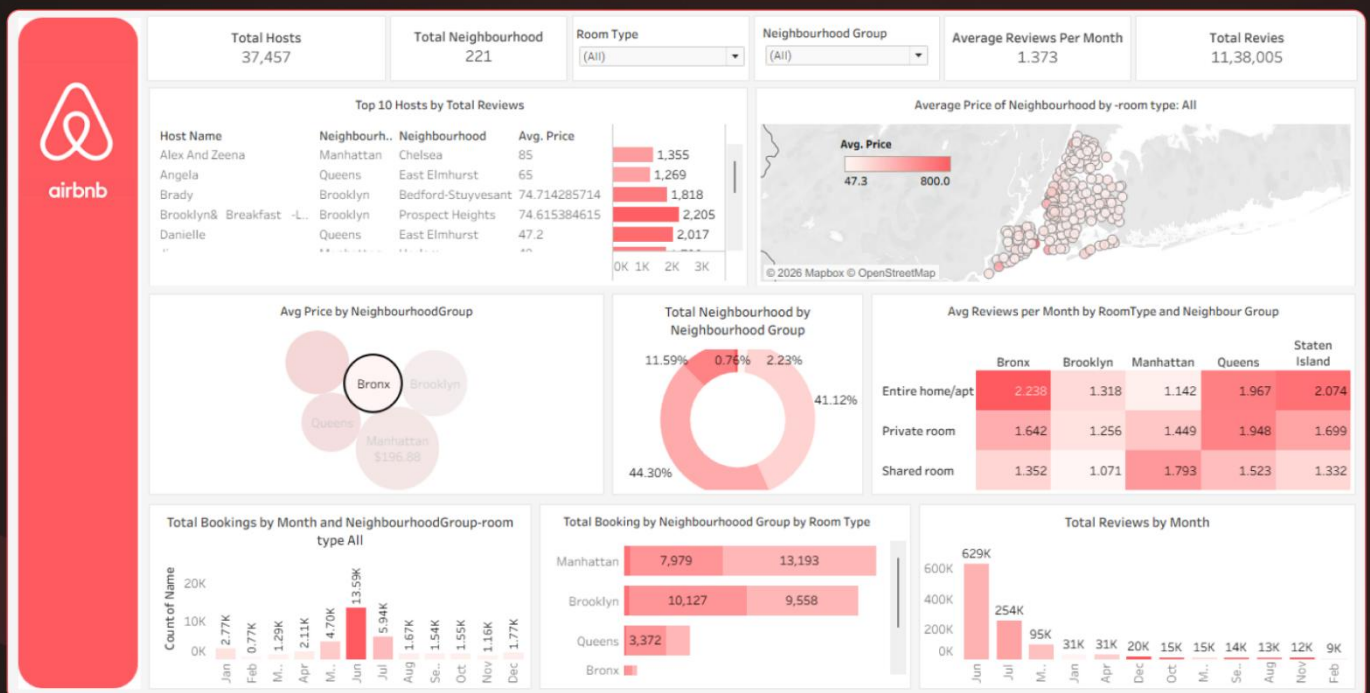


Airbnb

Data Analysis Project Report Tableau



+ a b l e a u



Airbnb Data Analysis Dashboard | Tableau Project



KUMAR BOSTE

Github : https://github.com/KumarBoste/Airbnb_Data_Analysis_Dashboard

Project Overview

This project presents an interactive Tableau dashboard that analyzes Airbnb listings, pricing, bookings, and customer engagement across different neighborhoods and room types. The goal is to uncover data-driven insights that can help hosts, analysts, and stakeholders understand market trends, optimize pricing strategies, and identify high-demand locations.

The dashboard provides a clear view of host performance, neighborhood-wise pricing, booking trends, and review behavior using intuitive visualizations.

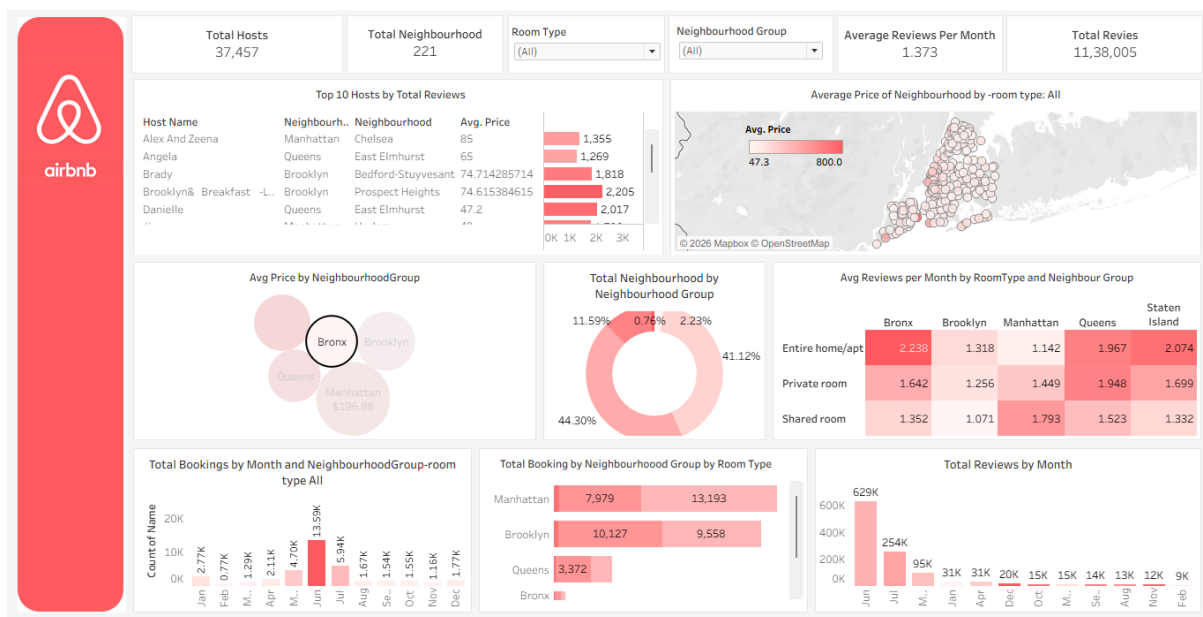
Problem Statement

Airbnb stakeholders often struggle to answer key business questions such as:

- Which neighborhoods generate the highest bookings and reviews?
- How does pricing vary by neighborhood and room type?
- Which room types are most popular across locations?
- What are the monthly booking and review trends?
- Which hosts receive the highest customer engagement?

This project addresses these challenges by converting raw Airbnb data into actionable insights through Tableau visual analytics.

DASHBOARD



Dashboard Features & Visualizations

Key Performance Indicators (KPIs)

- Total Hosts: 37,457
- Total Neighborhoods: 221
- Total Reviews: 1,138,005

- Average Reviews per Month: 1.373

Top Hosts Analysis

- Top 10 hosts ranked by total reviews
- Average price comparison by host and neighborhood
- Helps identify high-performing and trusted hosts

Geographical Price Distribution

- Map visualization showing average price by neighborhood
- Highlights high-cost and budget-friendly areas
- Useful for pricing and investment decisions

Neighborhood Group Insights

- Bubble chart showing average price by neighborhood group
- Donut chart showing listing distribution
- Manhattan and Brooklyn dominate in listings and pricing

Room Type & Review Patterns

- Heatmap of average reviews per month by room type and neighborhood
- Entire home/apartment listings receive higher engagement

Booking Trends Analysis

- Monthly booking trends across neighborhood groups
- Peak booking periods observed in mid-year months
- Manhattan and Brooklyn lead in total bookings

Reviews Trend Over Time

- Monthly total reviews visualization
- Highlights seasonality and user activity patterns

Key Insights

- Manhattan and Brooklyn are the most profitable and active neighborhoods
- Entire homes/apartments attract higher reviews and bookings
- Pricing varies significantly based on location
- Booking and review activity shows strong seasonal trends

Tools & Technologies Used

- Tableau – Data visualization and dashboard development
- Microsoft Excel / CSV – Data preprocessing
- Data Analysis Techniques – Aggregation, filtering, KPI creation

Future Enhancements

- Add revenue and occupancy rate metrics
- Include predictive pricing analysis
- Year-over-year trend comparison
- Host segmentation based on performance

Conclusion

This project demonstrates the power of data visualization in uncovering meaningful insights from complex datasets. It showcases practical skills in data analysis, business storytelling, and Tableau dashboard design, making it ideal for real-world analytics applications.