# Airbnb Property Management Optimization

Room

Null



Type	Ratings	by Ne	ighbourho	bo

Neighbourho Entire home/apt Hotel room Private room Shared room od Group Bronx 3.3545 Brooklyn 3.3370 3.5000 Manhattan 3.3911 Queens 3.3520 3.3262 3.4738 3.5333 Staten Island

Room Type

#### Monthly Review Count Trend



#### Neighbourhood Group

Avg. Review Rate Number

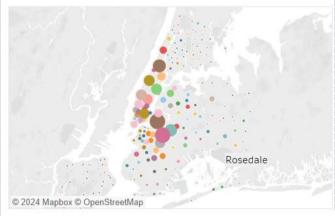
3.2222 3.7500

#### Count of House Rules

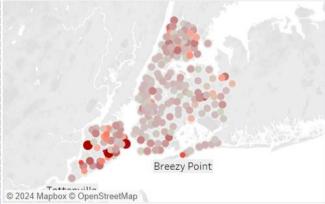


the correlation between prices and rating and host listings and prices stategies were near neutral, which implies that there are other factors which depend upon the customer satisfaction other than prices and the same is for calculated host

### Neighbourhood Listings Distribution

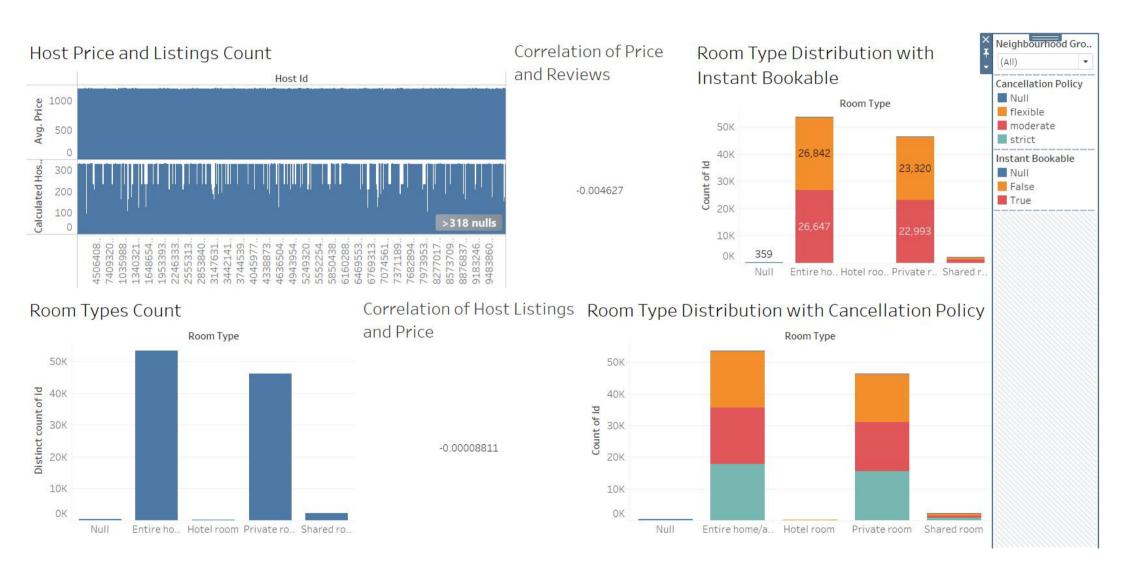


#### Price Range by Neighbourhood



## Neighborhood Distribution by Count





#### Airbnb Property Management Optimization Dashboard

This dashboard provides a detailed overview of Airbnb listings, focusing on various aspects such as room types, review trends, and neighbourhood distributions.

- Host Price and Listings Count: A bar chart displaying the average price and count of listings for each host, highlighting the pricing strategies and host activity.
- <u>Correlation of Price and Reviews</u>: This section indicates a very weak negative correlation (-0.004627) between listing prices and the number of reviews, suggesting that higher prices don't necessarily result in fewer reviews.
- Room Type Distribution with Instant Bookable: A stacked bar chart showing the
  distribution of room types (Entire home/apt, Hotel room, Private room, Shared
  room) with respect to instant booking availability.
- <u>Room Types Count</u>: A bar chart presenting the count of different room types, useful for understanding the supply of various accommodation options.
- Correlation of Host Listings and Price: Shows an almost negligible negative
  correlation (-0.00008811) between the number of listings a host has and the price,
  indicating that host pricing strategies are not significantly affected by the number of
  properties they manage.
- Room Type Distribution with Cancellation Policy: A stacked bar chart showing room type distribution with different cancellation policies (flexible, moderate, strict), providing insights into guest preferences and booking flexibility.
- <u>Customer Favourite Overview</u>: A word cloud showcasing popular dishes based on customer preferences, with items like Aloo Paratha, Samosa, Kachori, Poha, Butter Chicken, Biryani, and more. The size of each word indicates the popularity of each dish.

- <u>Customer Review Distribution by Service Type</u>: A treemap showing the distribution
  of customer reviews for different service types like Delivery, Dine-out, Desserts, and
  Cafes. Delivery has the highest count, followed by Dine-out, Desserts, and Cafes.
- Average Cost for 2 by Location: A bar chart displaying the average cost for two
  people across various locations, with locations like Sarjapur Road and Sadashiv
  Nagar having higher costs compared to others.
- <u>Customer Preferences and Review Analysis</u>: Both dashboards emphasize understanding customer preferences, whether it's for room types and booking options in Airbnb or favourite dishes and service types in the food industry.
- <u>Data Visualization</u>: They use a variety of charts (bar charts, <u>treemaps</u>, heatmaps, and word clouds) to effectively communicate complex data, making it easier for stakeholders to derive actionable insights.
- <u>Pricing Strategies</u>: The Airbnb dashboard includes analyses of pricing correlations, while the food service dashboard shows average costs by location, helping businesses optimize their pricing strategies based on customer behaviour and preferences.
- <u>Trend Analysis</u>: Both dashboards track trends (monthly review counts for Airbnb, review distribution by service type for food services), which can help businesses forecast and plan accordingly.