



Data Story Telling Case Study

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Problem Statement

The revenue of Airbnb has significantly decreased during the last few months. Now that restrictions have started to loosen, and people have started to travel more. Airbnb wants to make sure that the company is completely ready for this transformation



Objectives

Identify

Identify and analyze the factors contributing to the revenue during the past few months.

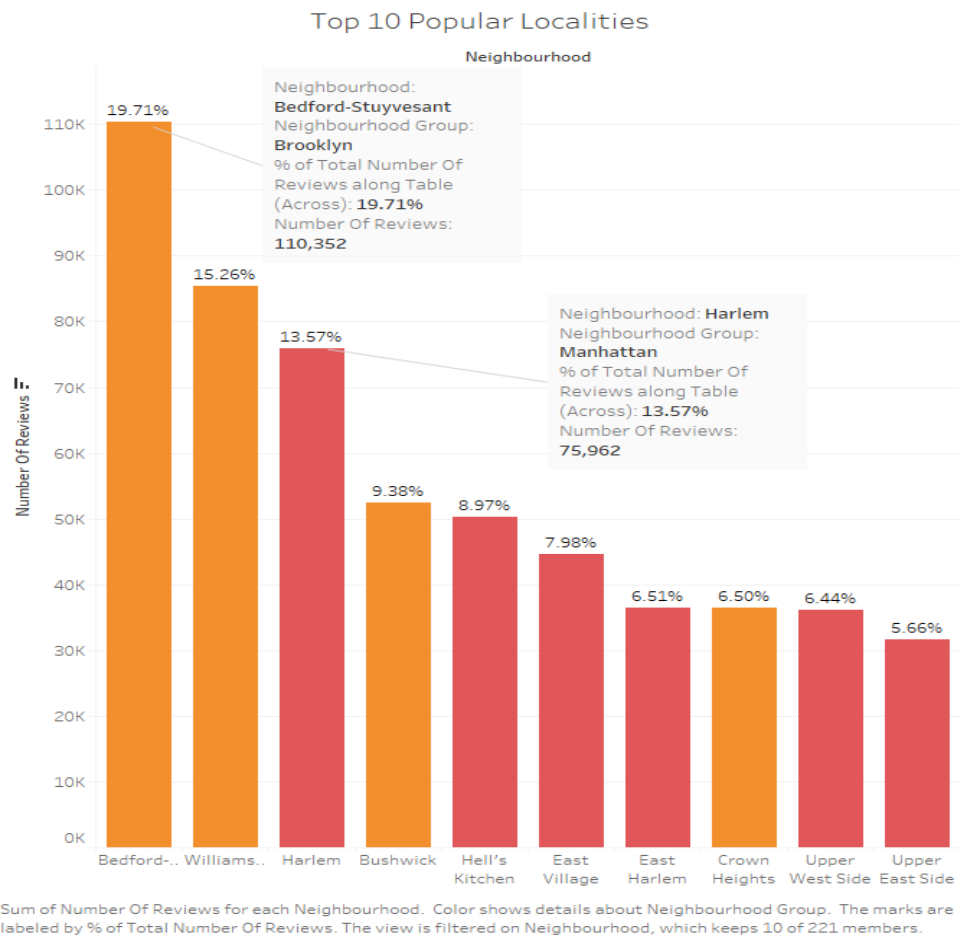
Understand

Gain a deep understanding of customer preferences and behavior to enhance the user experience and business revenue.

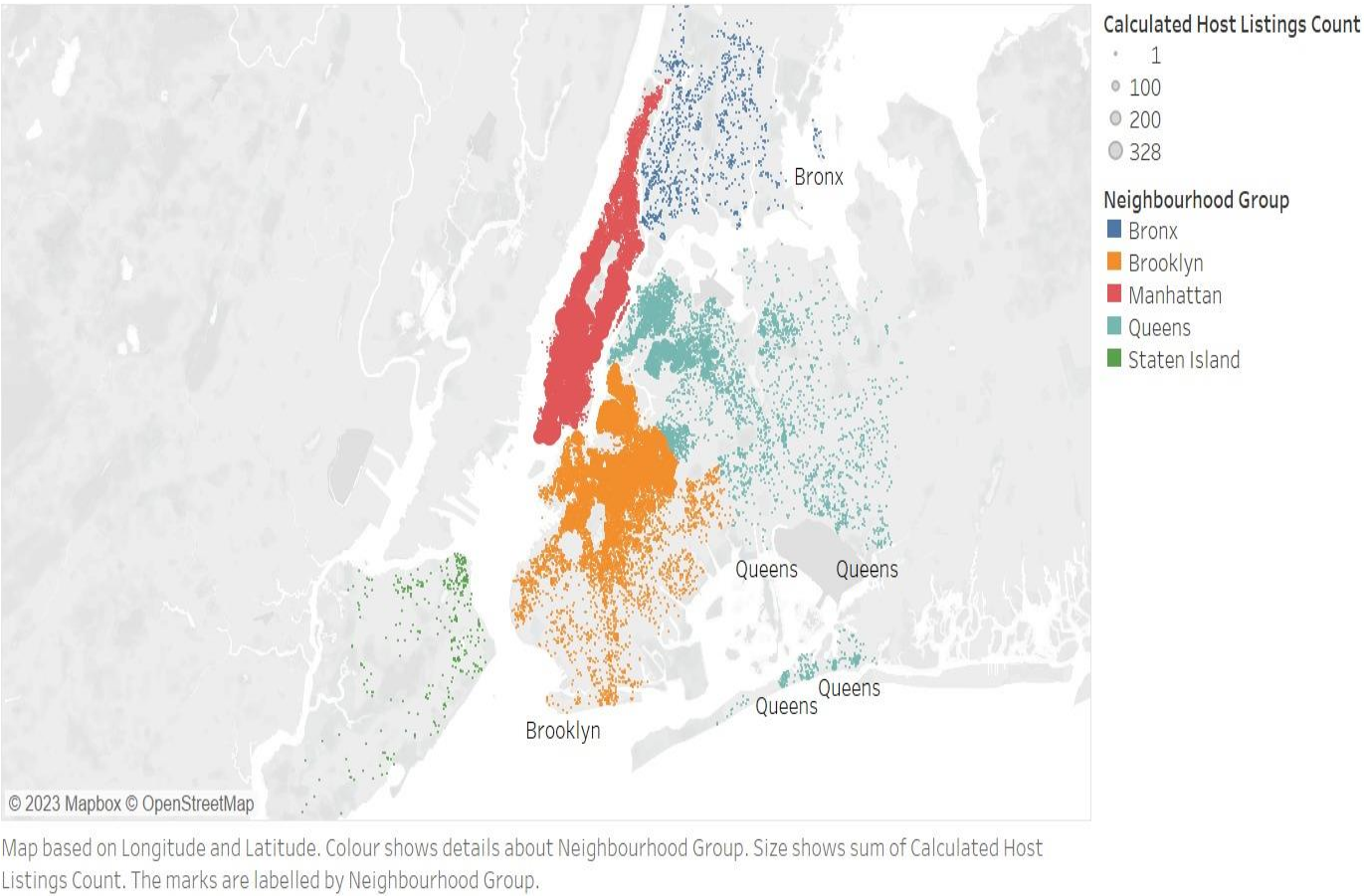
Implement

Increase revenue by implementing strategies that attract more bookings and drive higher occupancy rates.

Most Popular Localities in New York



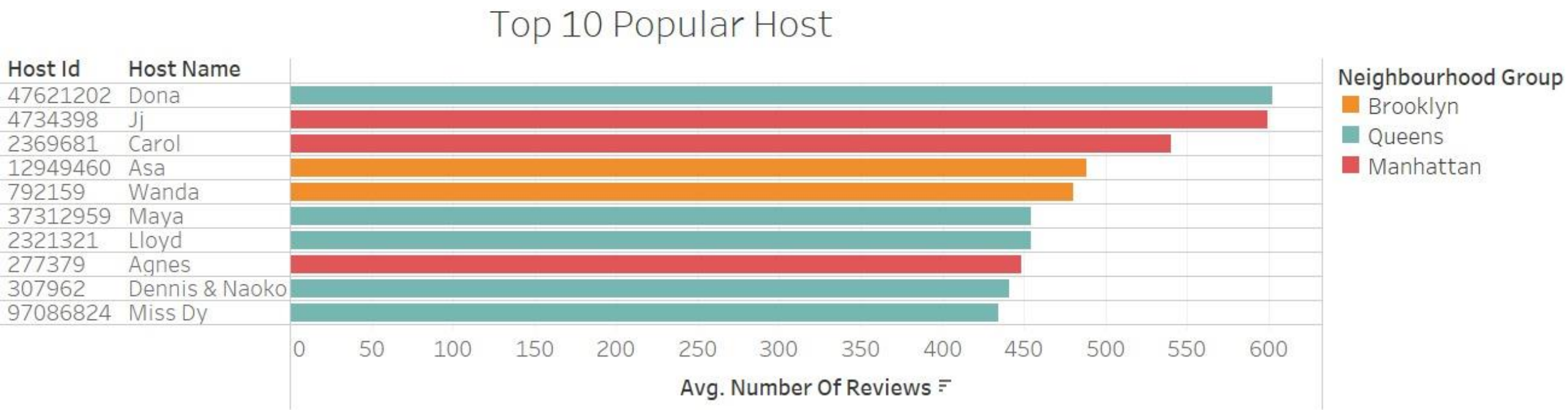
Location wise number of property available



Bedford-Stuyvesant in Brooklyn and Harlem in Manhattan are the most popular localities in New York

Analyzing the Top 10 Hosts on Basis of Reviews

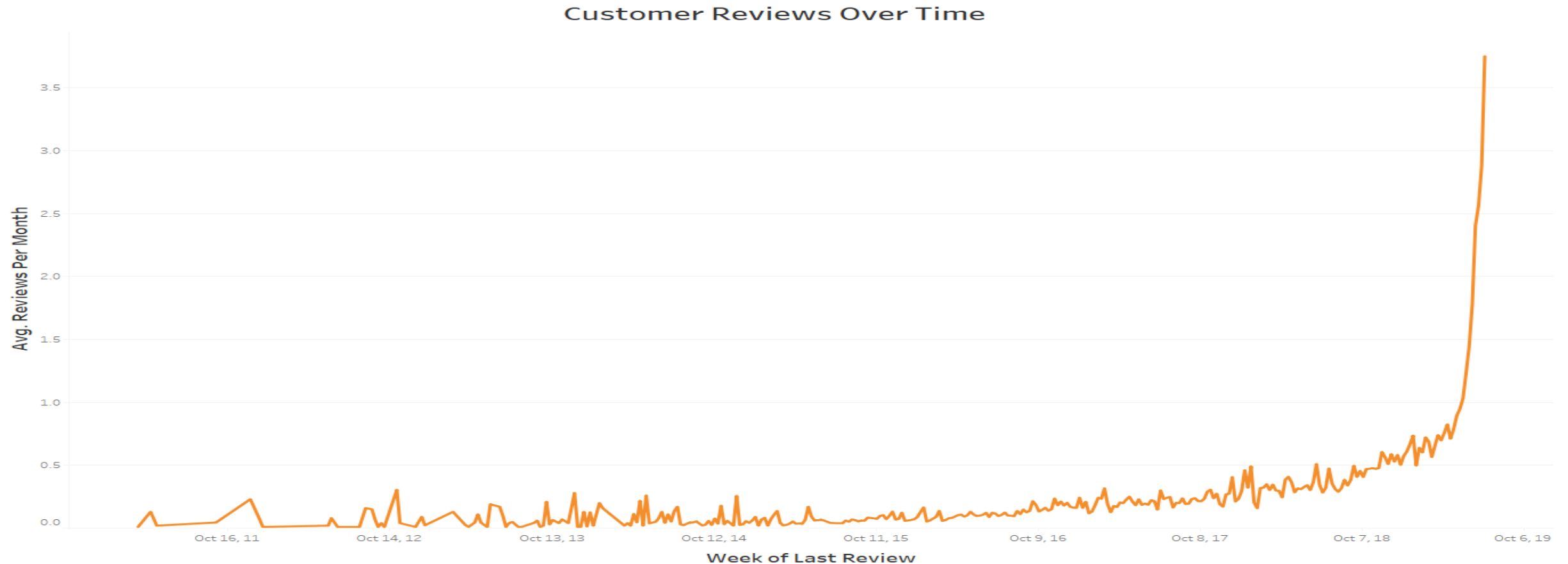
- Sought-after top 10 hosts with their respective neighborhood groups.
- The majority of hosts in the list are located in Queens.
- Among the top hosts, Dona (ID: 47621202), Jj (ID: 4734398), and Carol (ID: 2369681) stand out with the highest number of reviews.



Average of Number Of Reviews for each Host Name broken down by Host Id. Colour shows details about Neighbourhood Group. The view is filtered on Host Id, which keeps 10 of 37,457 members.

Trends in Neighborhood Groups

- In July 2019, there was a significant increase in reviews across all Neighborhood Groups
- Review activity tends to peak during the winter months (December, January, February) and summer months (April, May, June, July).

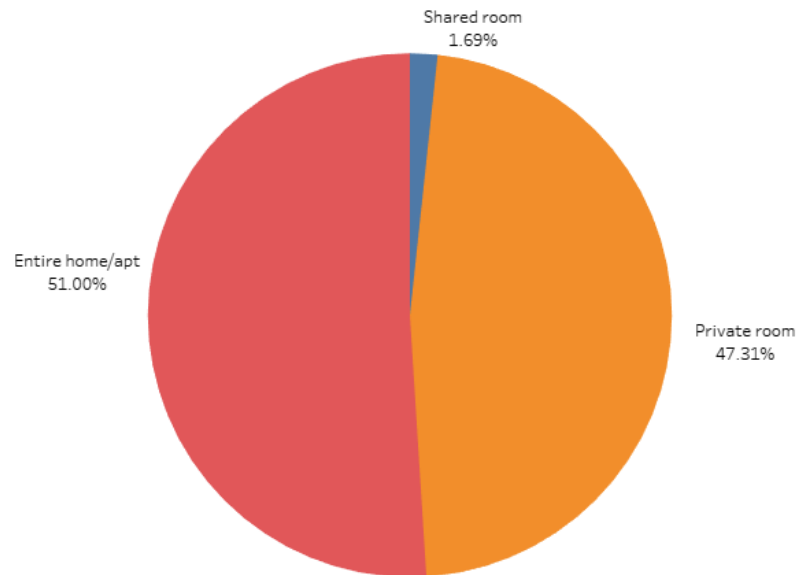


The trend of average of Reviews Per Month for Last Review Week. The data is filtered on Last Review Month, which excludes January 2010.

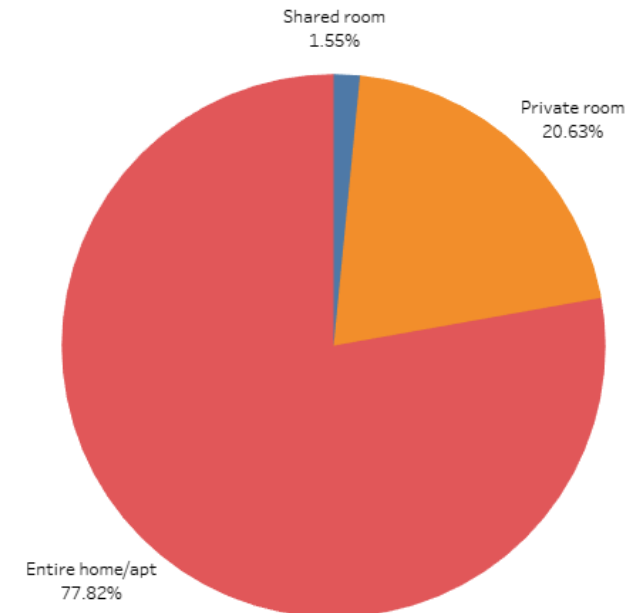
Room Type Based on Popularity and Availability

- Room Type Entire Apartments and Private rooms are equally popular
- Whereas the availability of entire apartments is more than the private room
- Airbnb should focus more on increasing the number of private properties as their popularities is more and availability is less

Popular Room Types



Available Properties





APPENDIX - DATA SOURCES:

- Here is a snapshot of our data dictionary.
 - Different Airbnb listings along with their hosts, locations, prices, and other attributes.
 - Properties information such as location, price, reviews, type of Room.
- The team used the following data sources:
 - New York Airbnb Dataset
 - Survey conducted in 2019



APPENDIX - DATA METHODOLOGY

- We conducted a thorough analysis of the AirBnb Data. The process included:
 - Cleaning and analysis were done using Python.
 - Analysis was done using Excel.
 - Visual Insight using Tableau.



Assumptions

- The number of reviews provided in the dataset is considered a positive measure to analyze customer preferences and satisfaction.
- We acknowledge the presence of properties with the existence of outliers. However, for the purpose of our analysis, we assume that these outliers will not significantly impact our findings and conclusions.
- Null values present in the dataset are assumed to have no significant impact on the analysis conducted



Suggestions

- Airbnb should focus more on increasing the number of private properties as their popularities is more and availability is less
- During peak seasons like winters and summers, Airbnb should prioritize acquiring the top 10 hosts who offer both high-priced properties and possess a significant number of listings.
- It is recommended to focus on Bedford-Stuyvesant in Brooklyn and Harlem in Manhattan, as these two localities are widely recognized as the most popular areas in New York. Acquiring resources and targeting promotions in these neighborhoods can attract more guests and potentially drive higher bookings.

Thank You

For Your Attention

