

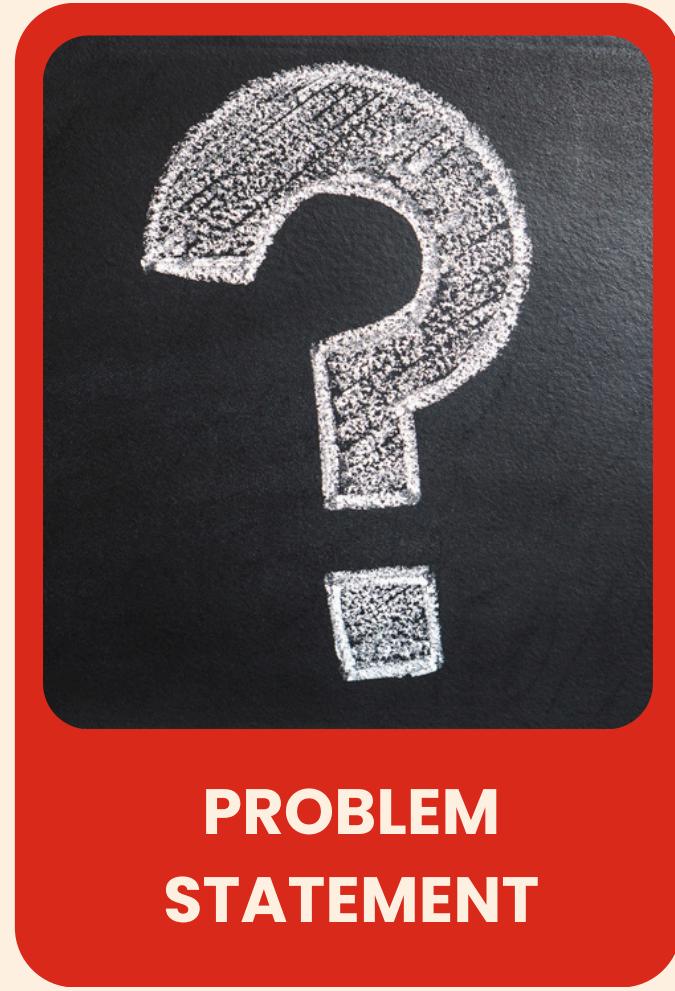
Anchal Dayal



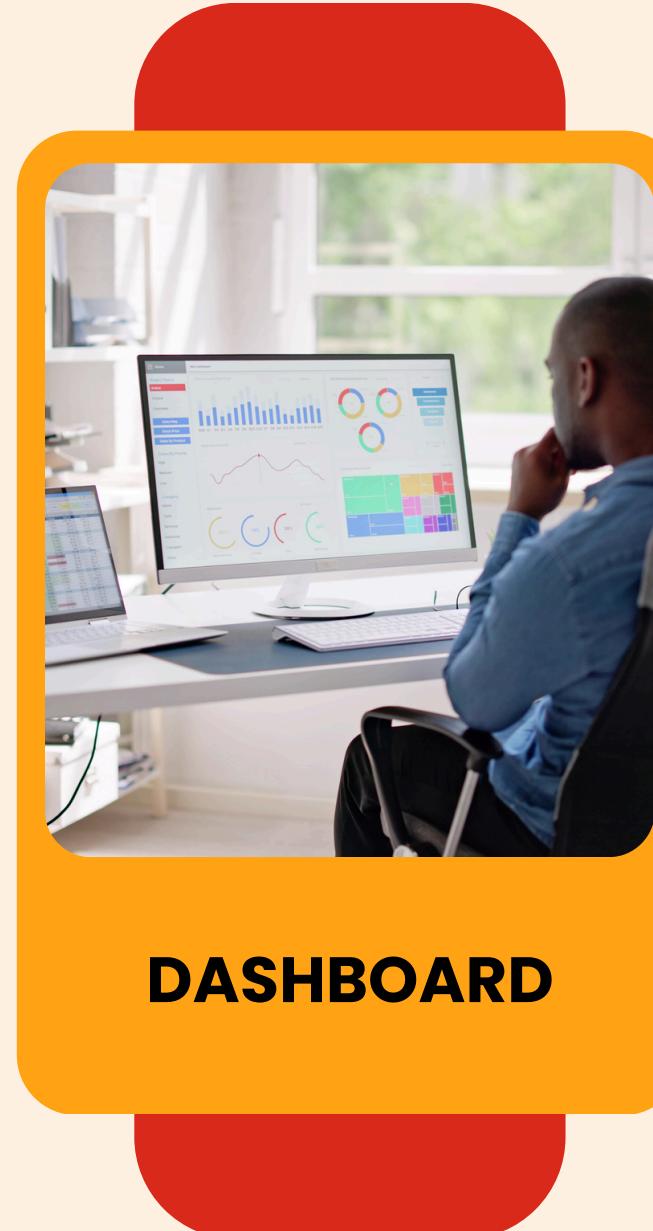
airbnb
Property Management
Optimization

Presented by Anchal Dayal

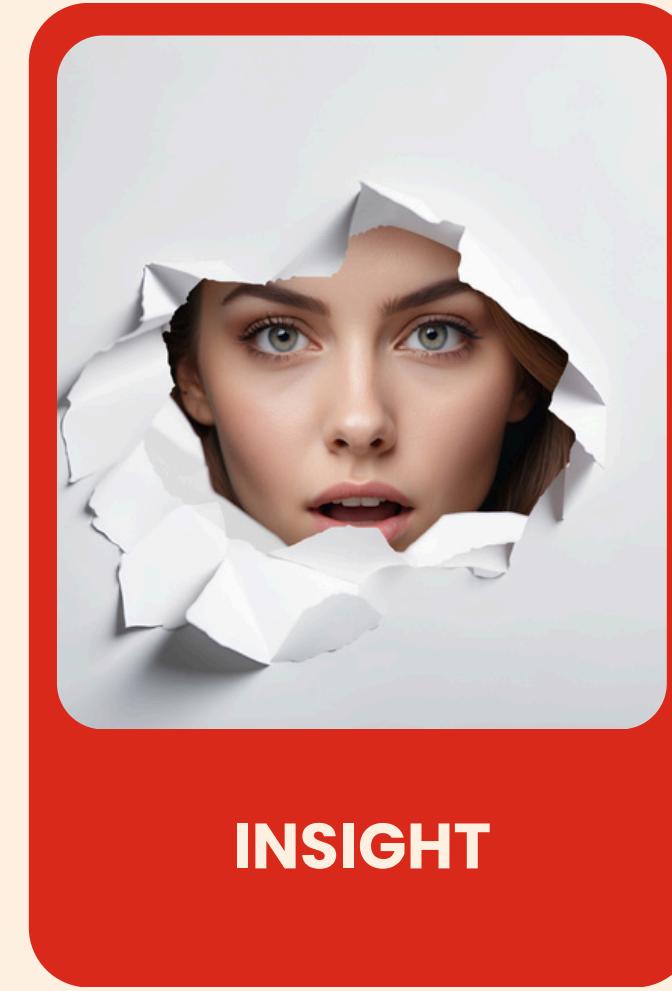
Anchal Dayal



**PROBLEM
STATEMENT**



DASHBOARD



INSIGHT

Meet the Content

In this presentation, we are going with multiple pages of slides that will cover the introduction, problem statement, dashboard, insight and conclusion about the project. This presentation will use various slides to cover the problem statement, dashboard, and project insights.

Introduction

Airbnb is an online marketplace that connects people looking for accommodations with hosts offering their homes, apartments, or unique spaces for rent. Founded in 2008, it has revolutionized the travel industry by offering more personalized and diverse lodging options in over 220 countries. Airbnb enables both short-term stays and long-term rentals, catering to a wide range of travelers seeking unique, affordable, or luxury experiences.

[More Information](#)

60%
bookings are for entire
homes or apartments





Problem Statement: Airbnb Property Management Optimization

As a Data Analyst at Airbnb, your primary objective is to optimize rental strategies, enhance customer satisfaction, and maximize revenue for property owners. Airbnb aims to leverage data-driven insights by developing a Tableau dashboard that provides a comprehensive view of various factors affecting its property management system. The dashboard should help hosts make informed decisions about pricing, property types, and seasonal trends to improve their business outcomes.

Dashboard



Airbnb Property Management Optimization

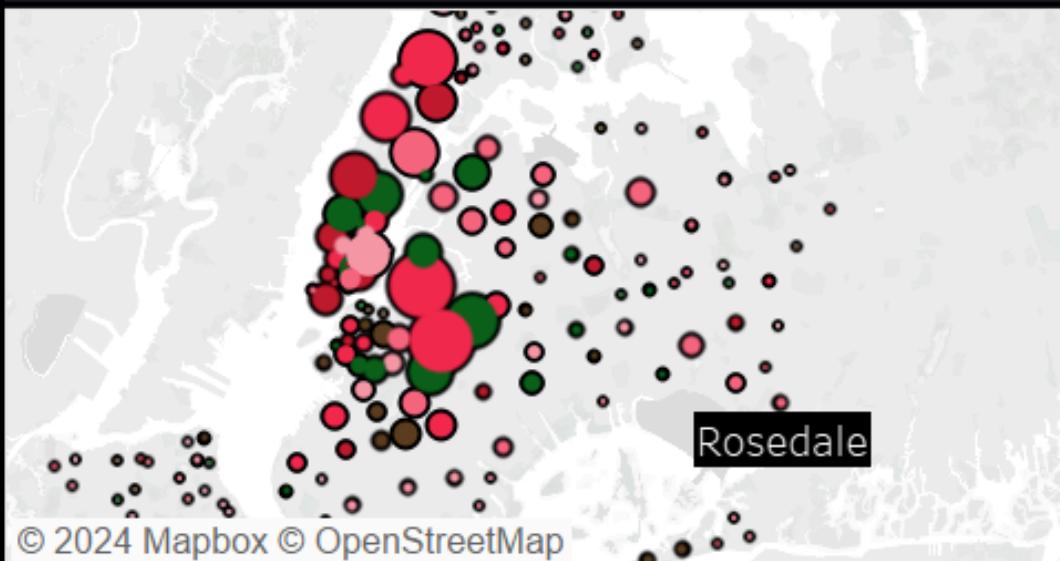
Customer Satisfaction and Ratings

-0.004627

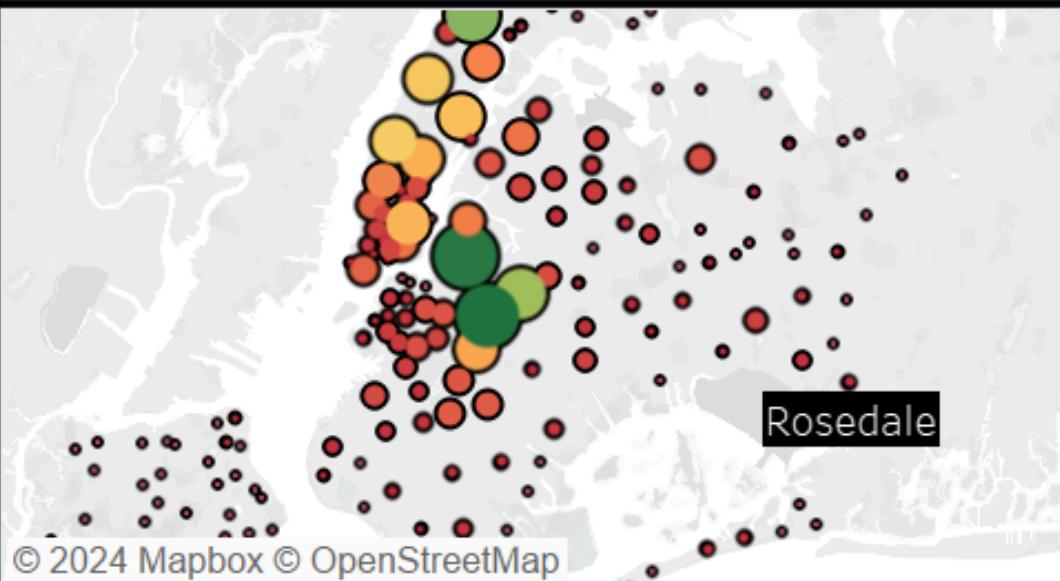
Corr- Host Listing and Price

-0.00008811

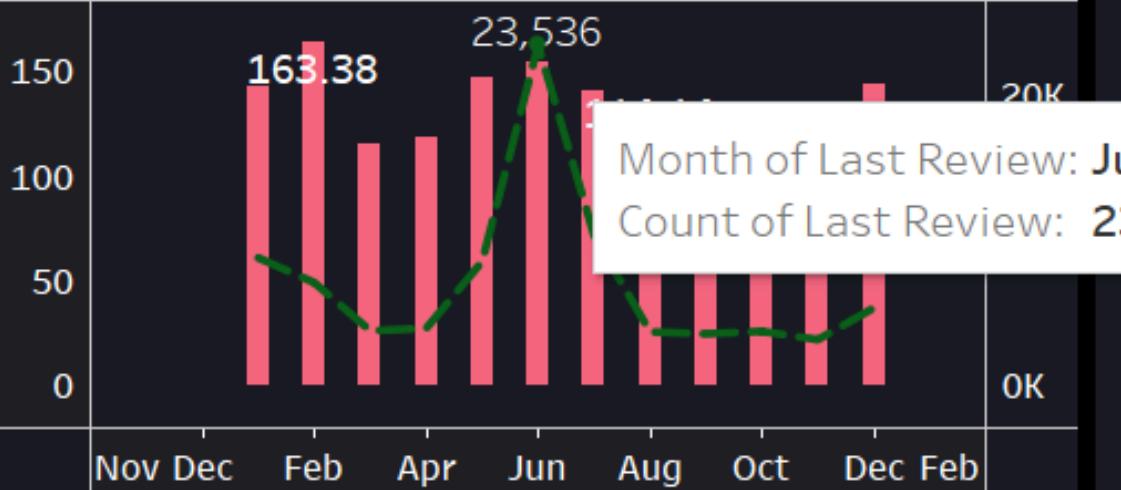
Neighborhood Popularity



Neighborhood Pricing



Seasonality and Booking Trend



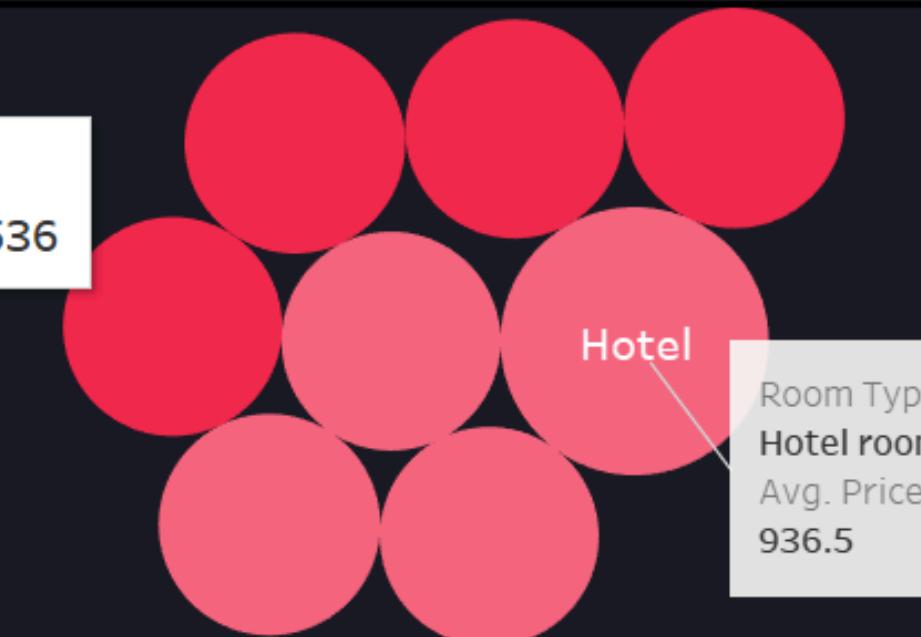
Rating by Property Type

Neighbourhood	Entire home/apt	Hotel room	Private room	Shared room
Bronx	3,378	5,135	382	
Brooklyn	66,531	30	66,343	2,743
Manhattan	86,260	350	53,042	2,937
Queens	17,112	30	25,398	1,214
Staten Island	1,560		1,591	53

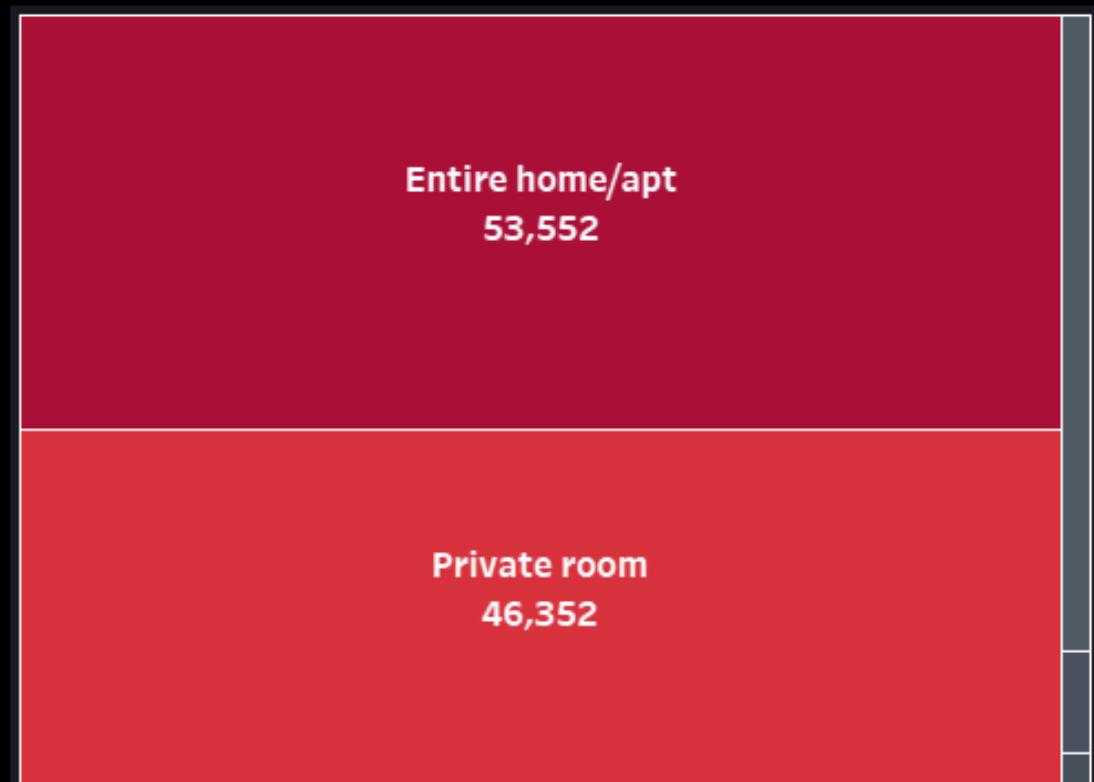
Top Locations



Long-Term vs. Short-Term Rentals



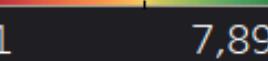
Property Type Distribution



Neighbourhood

- Null
- Allerton
- Arden He..
- Arrochar
- Arverne
- Astoria
- Bath Bea..
- Battery P..

Count of Price



Neighbourhood Gr..

- (All)

Count of Id



Measure Names

- Avg. Availab..
- Count of Las..

Review Rate Num..



Instant Bookable

- (All)
- Null
- False
- True

Categorize listi..

- Long-Term
- Short-Term



Insight

1. Customer Satisfaction and Ratings

This value indicates the relationship between customer satisfaction ratings and other factors (likely listing features or guest experience). A slightly negative correlation suggests that as certain factors (like booking frequency or service quality) change, the customer satisfaction ratings slightly decrease. However, because the correlation is very weak (-0.0046), the effect is minimal, meaning that satisfaction ratings are not heavily influenced by this factor

2. Host Listings and Price :

This negative correlation shows the relationship between the number of host listings and pricing. A very small negative value (-0.00008811) suggests that as hosts increase the number of properties they list, the average price might decrease slightly. Hosts with multiple listings may be lowering prices to ensure higher booking volumes, but again, the correlation is very weak, so the effect is minimal.

3.Neighborhood Popularity and Pricing:

Manhattan has the highest listing density, followed by Brooklyn. These areas also have higher pricing.

Less popular areas like Staten Island and Rosedale have fewer listings and lower prices.



4. Seasonality and Booking Trends:

June has the peak booking activity, with 23,536 reviews. Bookings dip in the fall and winter months, indicating off-peak seasons.

5. Property Type Distribution:

The majority of Airbnb listings (53,552) are for entire homes/apartments, which are suitable for families or larger groups. Private rooms(46,352), on the other hand, are more appealing to solo travelers or budget-conscious guests.

6. Long-Term vs. Short-Term Rentals:

Hotels dominate Long-Term rentals, with an average price of \$936.50. Long-term rentals are more common than short-term ones.

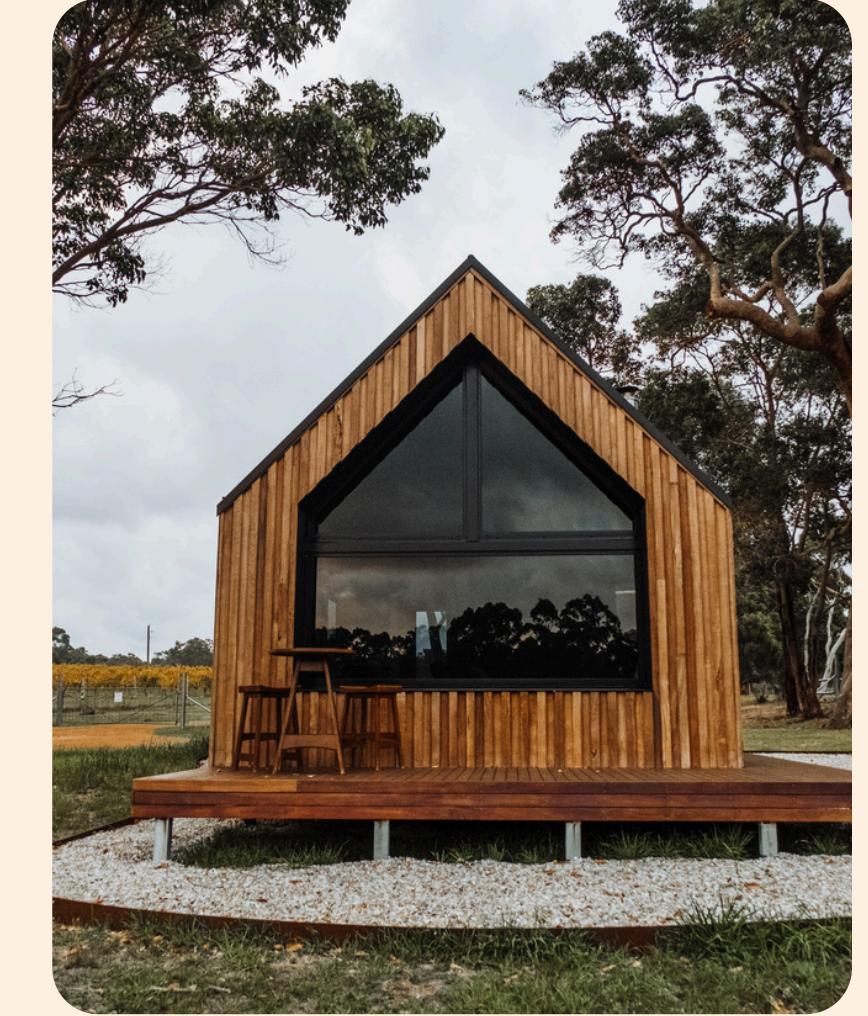
Property owners should assess whether they want to focus more on short-term or long-term rental strategies depending on their revenue goals.



7. Ratings by Property Type:

Manhattan has the highest number of reviews for entire homes (86,260), while private rooms are popular in Brooklyn and Queens. In Manhattan, entire homes/apartments are the most prevalent in terms of both listings and customer feedback.

This indicates that the area presents a great opportunity for hosts, particularly for larger properties.



8. Top Locations:

Manhattan and Brooklyn account for the largest share of Airbnb listings, making them highly competitive markets, offering high demand but also likely more competition for hosts. Pricing and property quality will be key factors in maximizing success here.



Strategic Recommendations for Shareholders:

Maximize Opportunities in High-Priced Neighborhoods:

Focus on Manhattan and Brooklyn for premium-priced listings. These areas have the highest demand, but pricing and quality of service will be crucial to standing out.

Seasonal Pricing Strategies:

Implement dynamic pricing to take advantage of peak booking seasons (April–May). Consider promotional discounts in low-demand months (December–February) to maintain a steady booking rate.

Long-Term vs. Short-Term Rentals:

Evaluate the potential for long-term stays, especially in lower-demand months. Short-term rentals are clearly dominant, but long-term guests might provide steady income during off-peak seasons.

Expand Listings in Growing Areas:

Although Manhattan and Brooklyn are highly popular, expanding listings in up-and-coming neighbourhoods like Queens or Bronx could capture market share as these areas grow in popularity.

Property Type Differentiation:

Continue to offer a wide range of property types. The dominance of entire homes/apartments suggests it is a valuable asset class, but niche markets for private rooms or shared spaces could target different customer segments (budget travelers, students, etc.).



Conclusion of Airbnb Property Management Optimization Project

The Airbnb Property Management Optimization project reveals key insights to enhance rental strategies and maximize revenue. Popular neighborhoods like Manhattan and Brooklyn drive higher demand and pricing, while seasonality highlights peak booking periods in April

and May, suggesting opportunities for dynamic pricing. The dominance of short-term rentals and entire homes/apartments shows where the market focus lies, though expanding into long-term rentals or emerging neighborhoods could provide growth opportunities. Tailoring strategies around property type, seasonality, and neighborhood trends will help boost both occupancy and customer satisfaction, ultimately improving overall profitability for property owners.

Thank For Your Attention

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