

Strategic Acquisition and Experience Enhancement

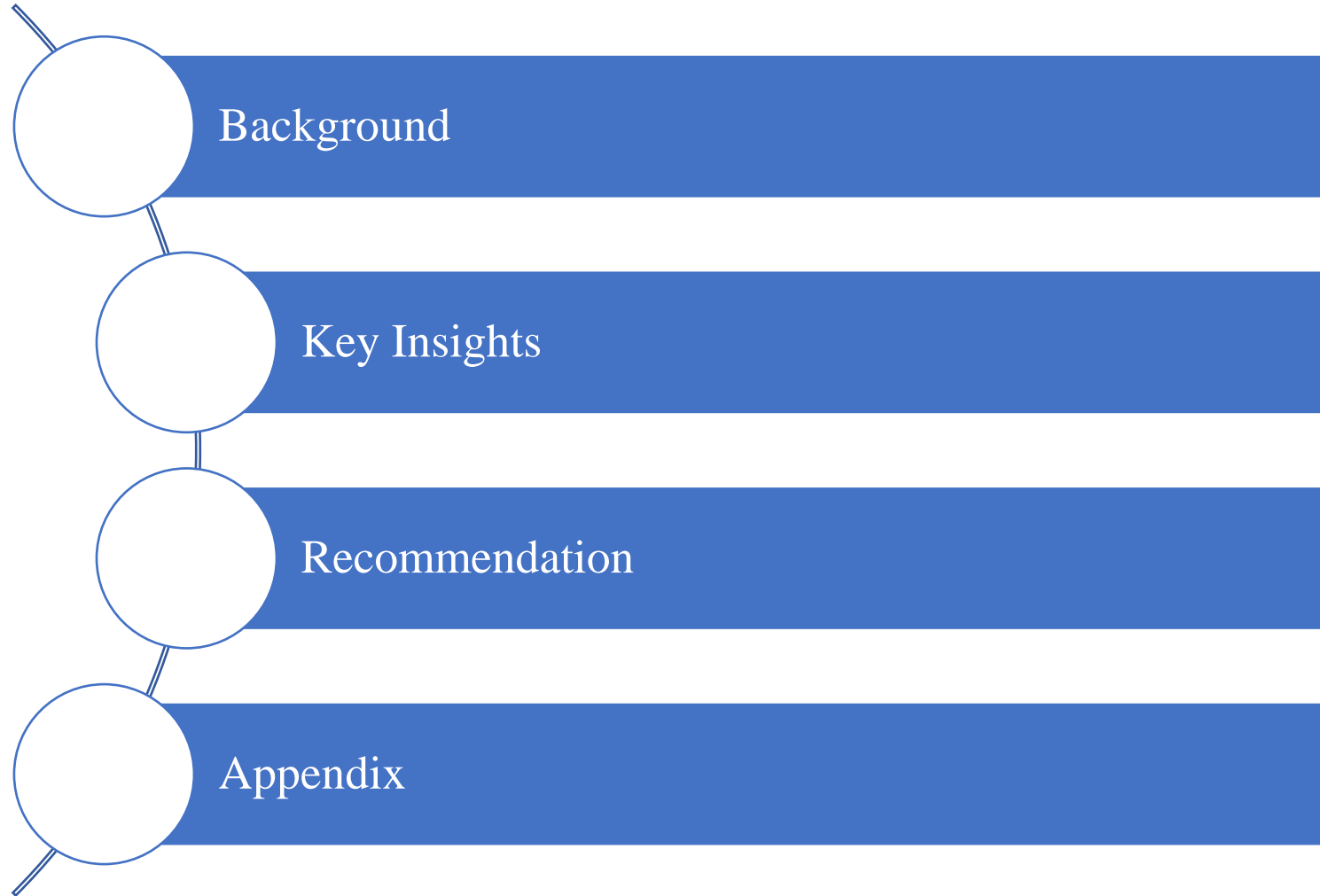
Boosting Airbnb's NYC Market Presence



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Agenda



Objective

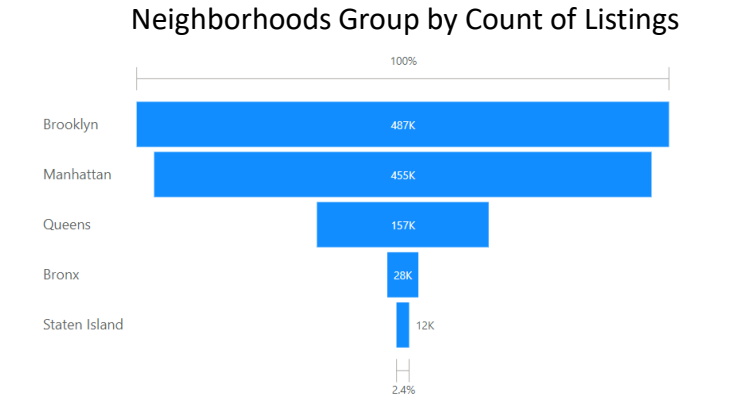
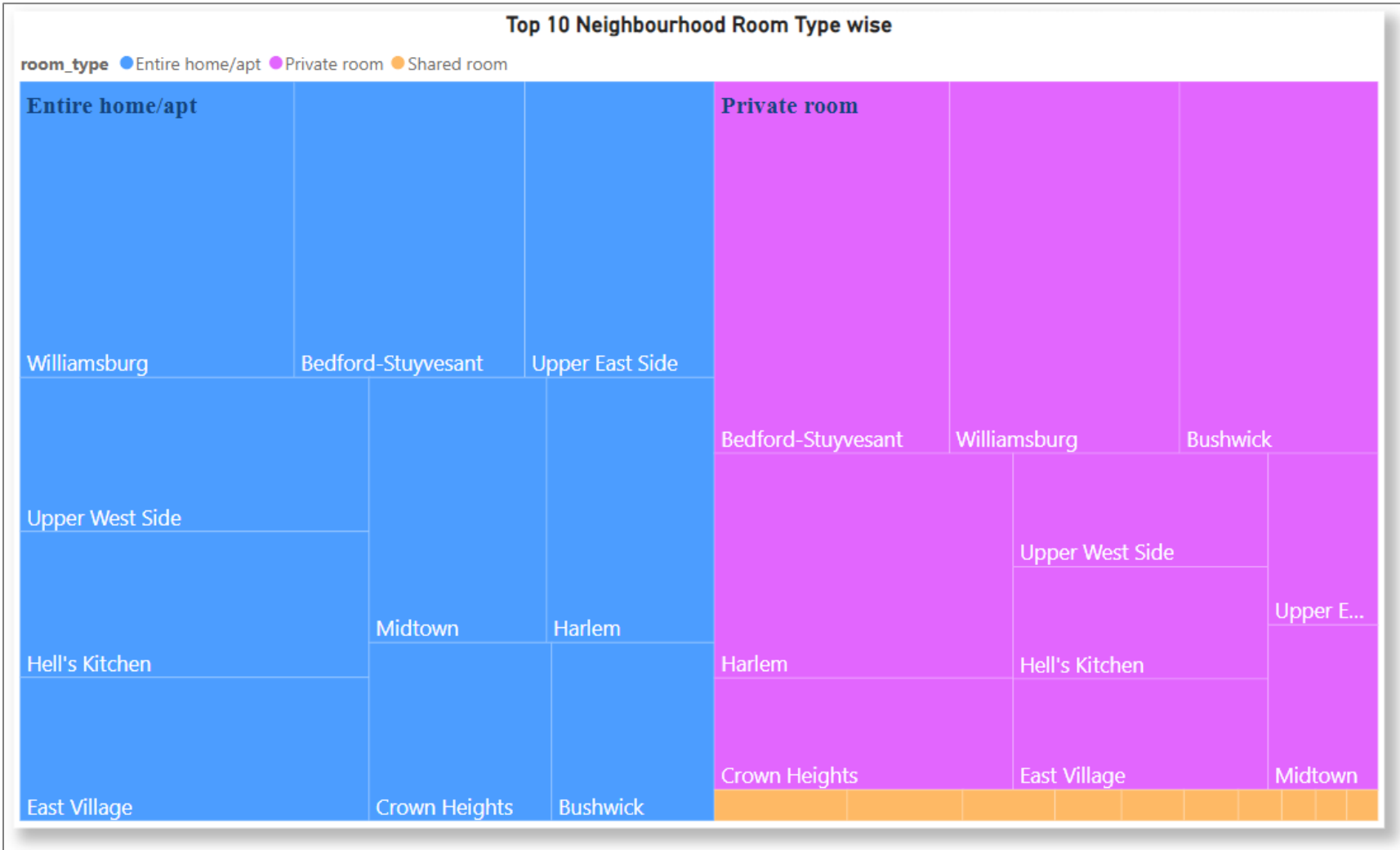
- Which type of hosts to acquire more and where?
- The categorization of customers based on their preferences.
- What are the neighborhoods they need to target?
- What is the pricing ranges preferred by customers?
- The various kinds of properties that exist w.r.t. customer preferences.
- Adjustments in the existing properties to make it more customer-oriented.
- What are the most popular localities and properties in New York currently?
- How to get unpopular properties more traction?

Background

- Past few months, Airbnb has seen a major decline in revenue.
- Now that the restrictions have started lifting and people have started to travel more, Airbnb wants to make sure that it is fully prepared for this change.
- The different leaders at Airbnb want to understand some important insights based on various attributes in the dataset so as to increase the revenue.

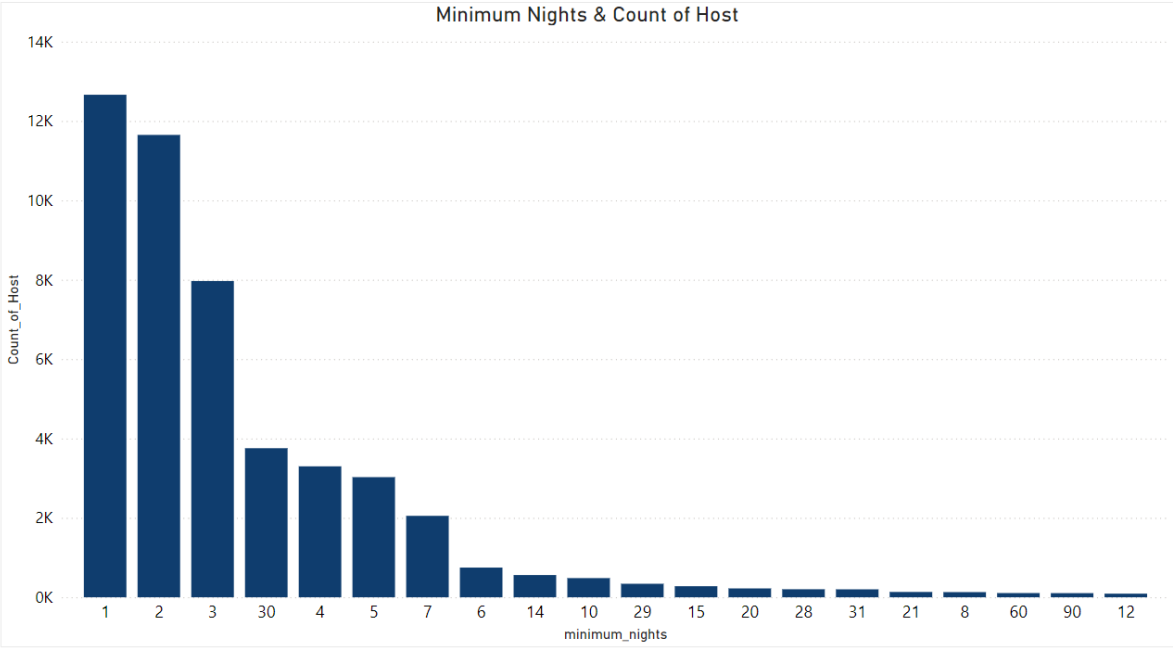
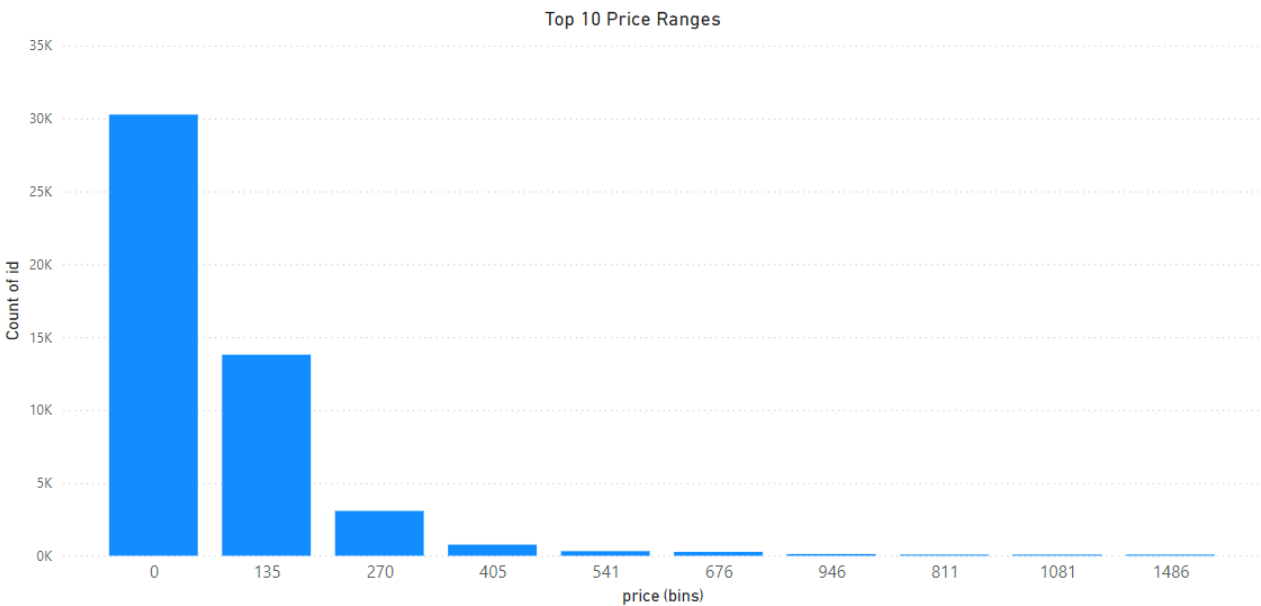
Type of Host to Acquire More and Where?

- Prioritize acquiring "Entire Home/Apt" and "Private Room" listings, as they are most popular with guests.
- Top Neighborhoods where we can acquire more hosts > Williamsburg, Bedford-Stuyvesant, Bushwick, East Village, Harlem
- Emphasize **Brooklyn** and **Manhattan** as primary boroughs to expand the host base.



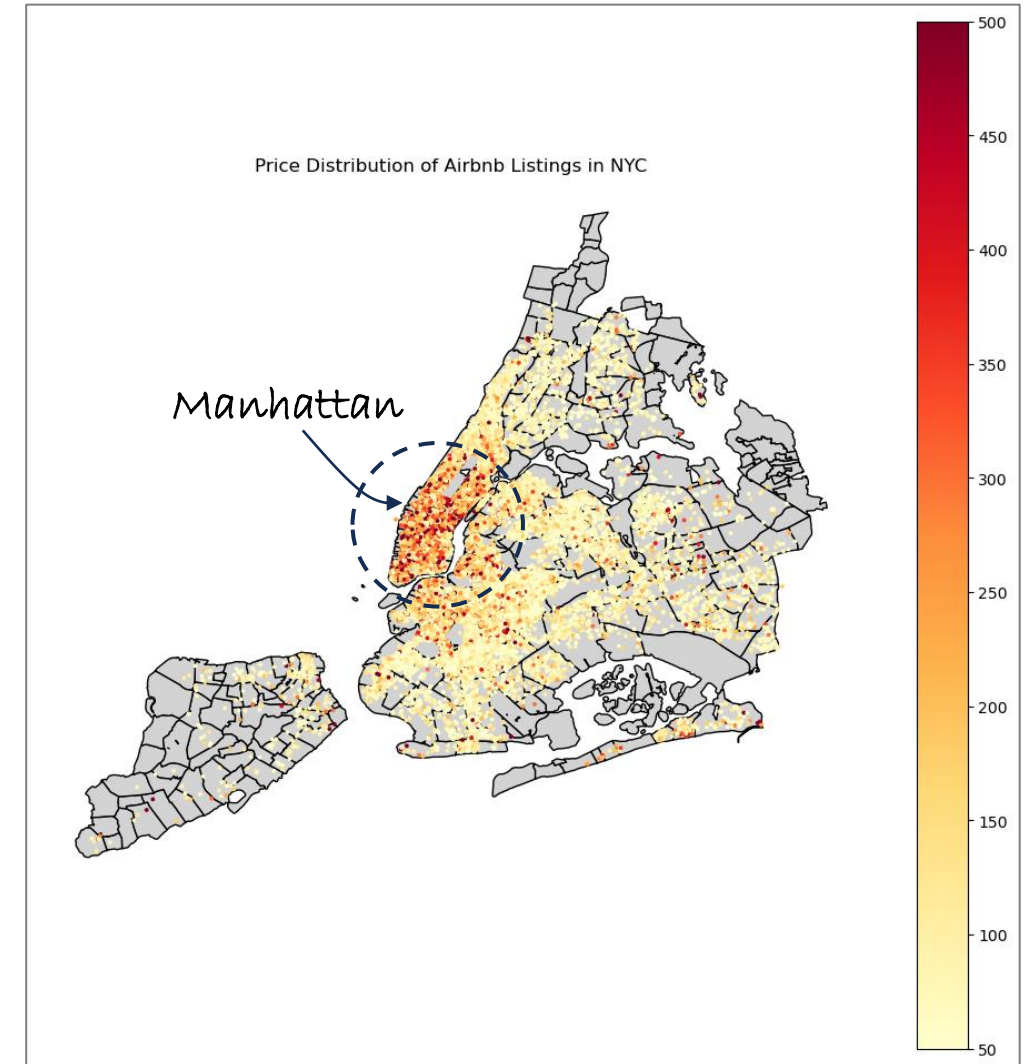
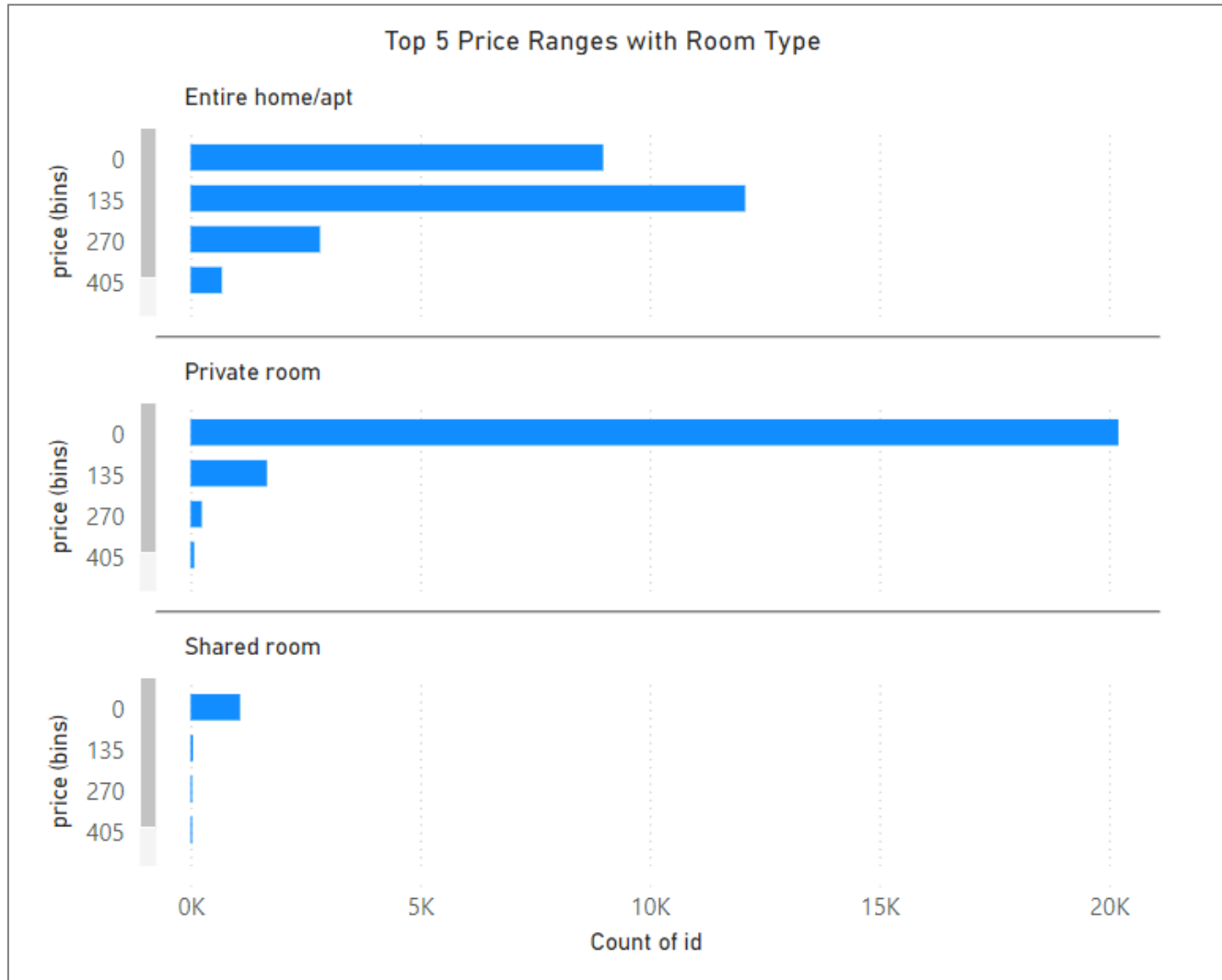
Categorization of customers based on their preferences

- Preferred price ranges from **\$0 to \$135**, suggesting that budget-friendly options are popular among customers.
- Most common minimum night stay requirement is **1 to 2** days, indicating flexibility and short-term booking preference.



Pricing Ranges Preferred By Customers

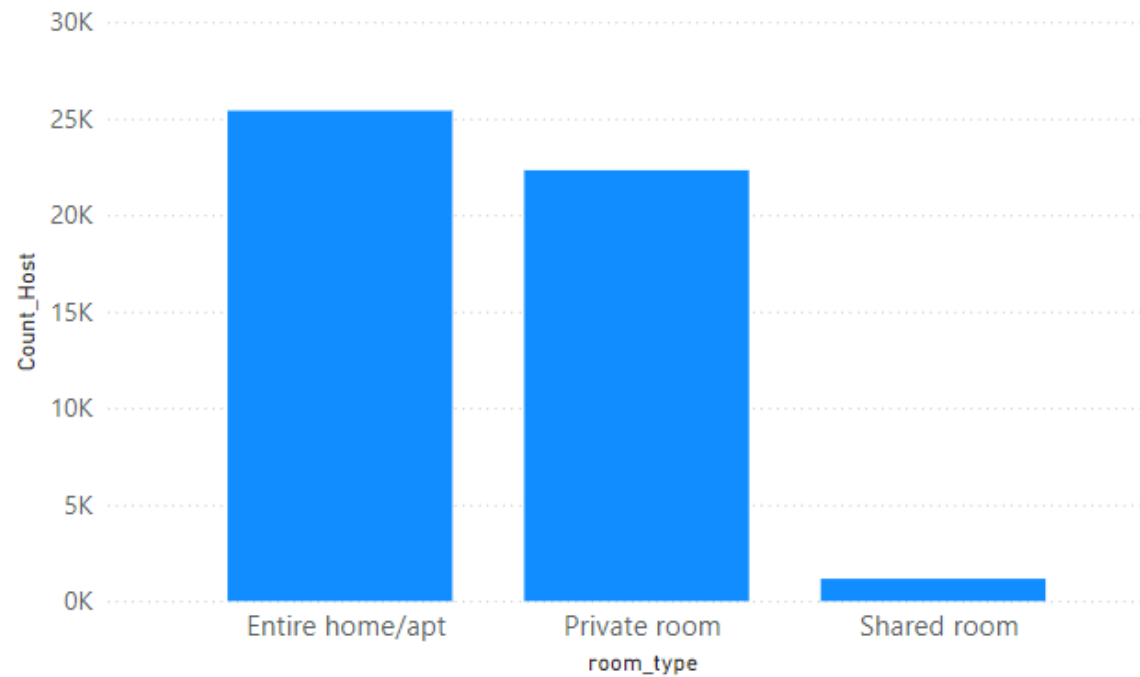
- Entire Home/Apt > Preferred price range is \$135 to \$270, with a secondary concentration below \$135.
- Private Room > Most listings are priced under \$135, catering to budget-conscious travelers.
- Shared Room > Nearly all listings are below \$135, making this the most affordable room type category.



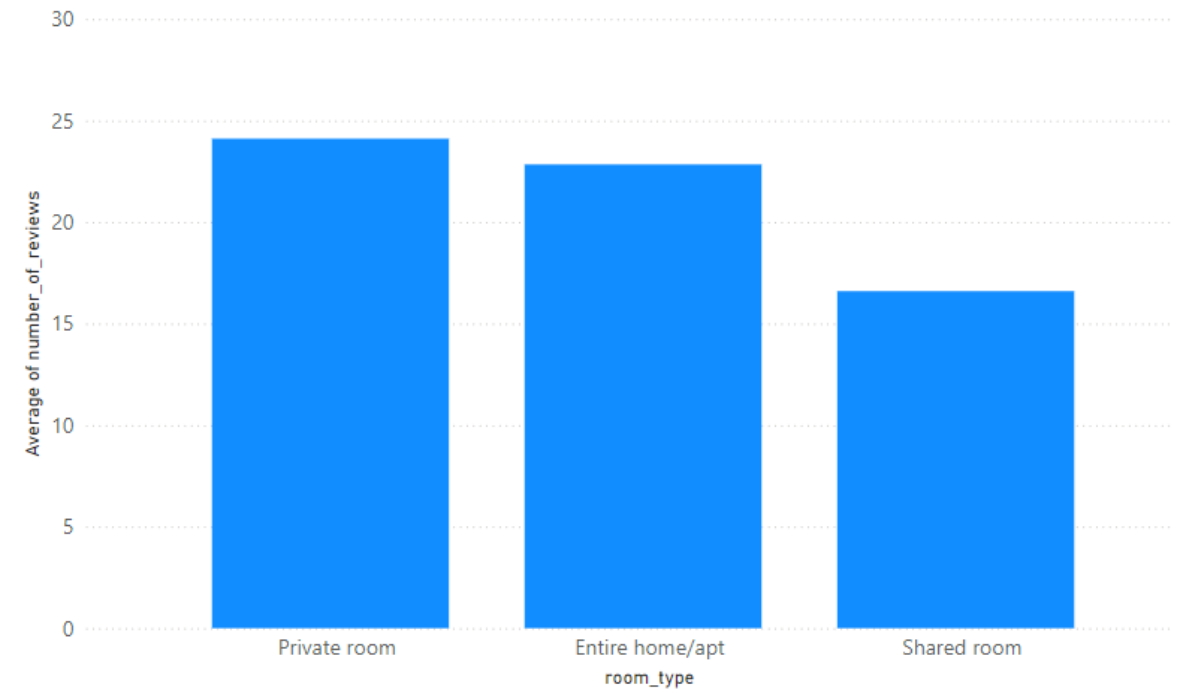
Various Kinds Of Properties That Exist W.R.T. Customer Preferences

- Entire Home/Apt: This is the **most prevalent room type**, indicating a high supply in the market.
- Private Room: Demonstrates **strong guest interest**, highlighting a preference for private yet affordable options.
- Shared Room: The **least preferred room** type, with limited demand compared to other options.

Count_Host by room_type

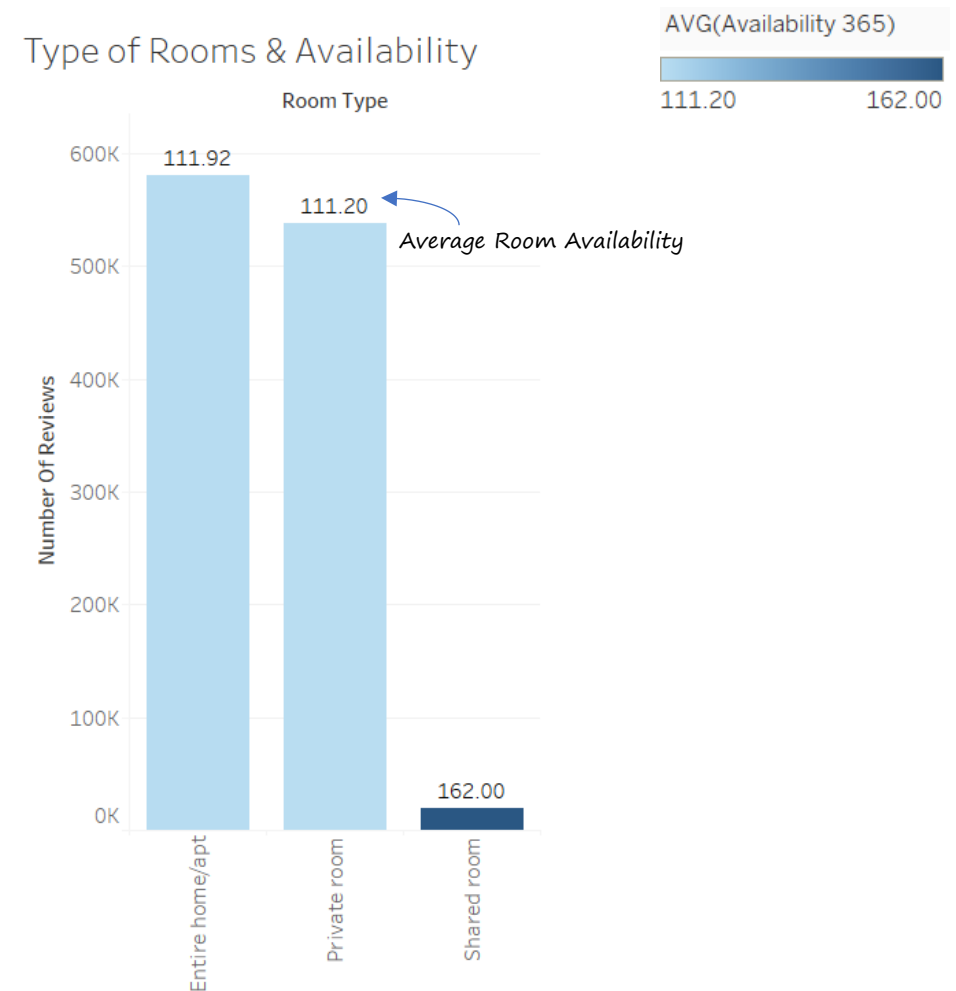
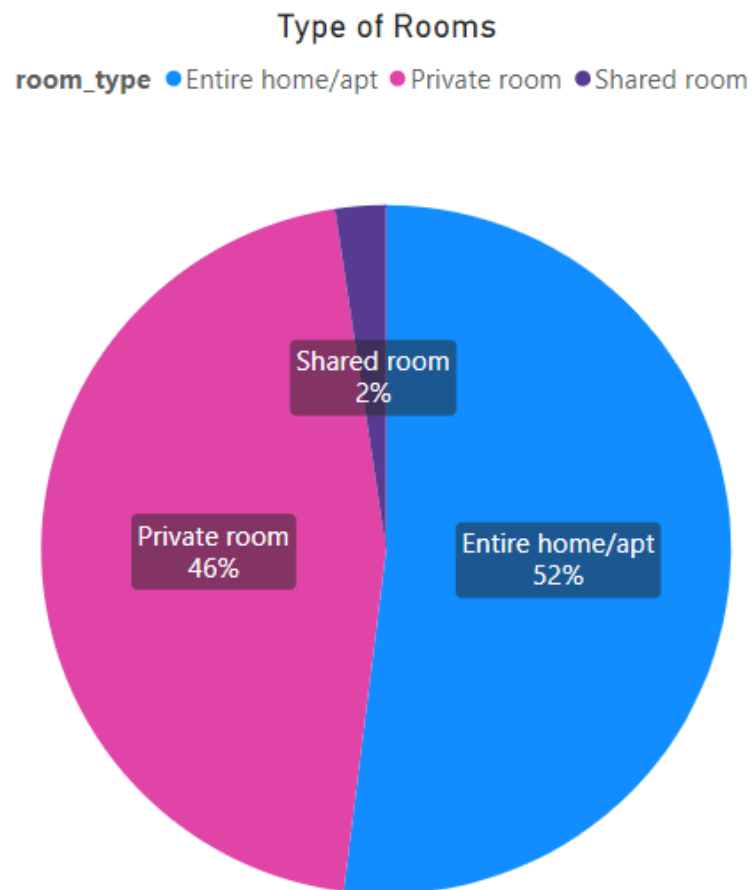


Average of number_of_reviews by room_type



Adjustments In The Existing Properties To Make It More Customer-oriented

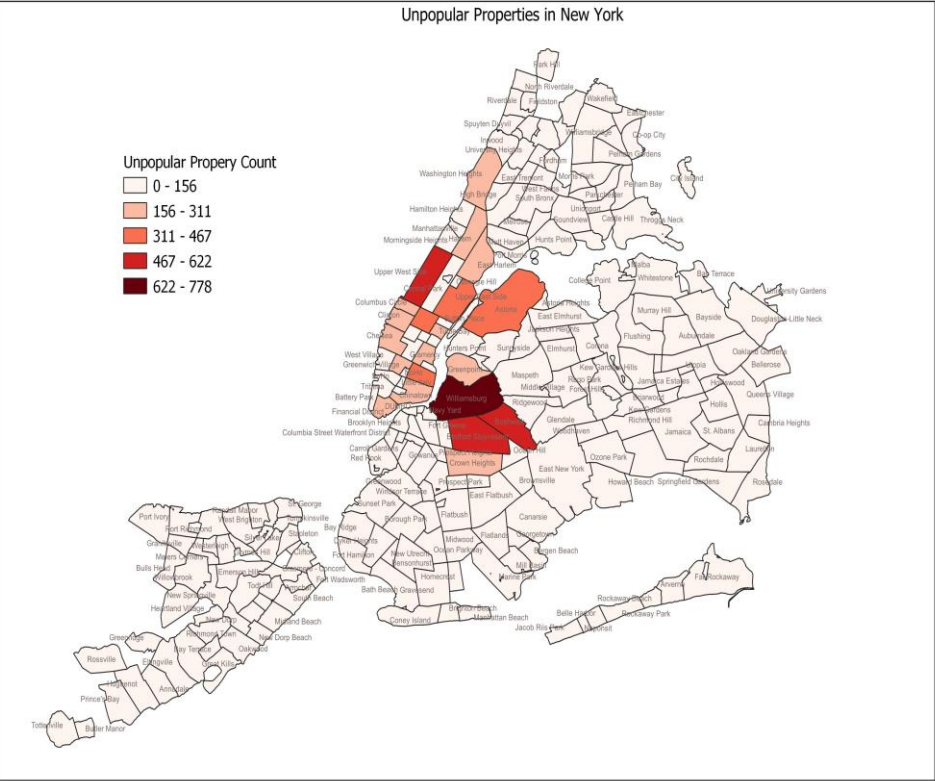
- Entire Home/apt & Private Rooms have strong customer preference, Both contributing 98% room type.
- But their average availability is very low (111days), we can increase availability.
- Shared room availability is high but demand is very low.



Unpopular Properties

- **Manhattan and Brooklyn** have high demand but also many underperforming properties.
- Highest underperforming properties in **Williamsburg** (Brooklyn)

Unpopular Properties Location



Unpopular Neighbourhood Group

Sr.No.	Neighbourho od Group	Total Number of Listings	Low Review Listings	% of Low Review
1	Manhattan	21661	5029	23.2
2	Brooklyn	20104	3657	18.2
3	Queens	5666	1092	19.3
4	Bronx	1091	215	19.7
5	Staten Island	373	59	15.8
Total		48895	10052	Avg. 20.6

Top 20 Neighbourhood

neighbourhood	neighbourhood_group	Sum of Low_review_01
Williamsburg	Brooklyn	757
Bedford-Stuyvesant	Brooklyn	573
Midtown	Manhattan	559
Bushwick	Brooklyn	521
Upper West Side	Manhattan	489
Harlem	Manhattan	452
Hell's Kitchen	Manhattan	426
Upper East Side	Manhattan	393
East Village	Manhattan	363
Crown Heights	Brooklyn	299
Chelsea	Manhattan	285
Greenpoint	Brooklyn	247
Financial District	Manhattan	235
Astoria	Queens	191
Washington Heights	Manhattan	178
Murray Hill	Manhattan	174
East Harlem	Manhattan	173
Lower East Side	Manhattan	173
West Village	Manhattan	158
Theater District	Manhattan	140
Kips Bay	Manhattan	133

Recommendation

- **Focus on High-Demand Neighbourhoods:** Promote and expand listings in high-demand neighborhoods with strong booking rates and positive reviews to capture increased market interest. E.g. Williamsburg, Bedford-Stuyvesant, Bushwick, East Village, Harlem
- **Dynamic pricing:** Based on seasonality, local events, and competitor pricing. Offering promotional discounts
- **Increase Room Availability:** Entire Home/apt & Private Rooms have strong customer preference, but having lower availability (111days).
- **Identify and Add Popular Amenities:** Through reviews and customer preference data, identify essential amenities missing in these listings (like Wi-Fi, workspace, or basic kitchen items)
- **Targeted Marketing Campaigns:** Market these listings on Airbnb's social media channels, emphasizing their unique aspects (e.g., historic buildings, cozy spaces, scenic views)
- **Flexible Cancellation Policies:** Encourage hosts of unpopular properties to adopt this option if feasible.
- **Use Guest Feedback:** for Targeted Improvements & Encourage Reviews for Recent Guests.

Appendix

Data Source:

- Airbnb Listings data: <https://learn.upgrad.com/course/5701/segment/55499/338854/1024750/5125128>
- Geospatial data/shapefile of New York: <https://data.cityofnewyork.us/City-Government/NTA-map/d3qk-pfyz>

Methodology:

- Data Acquisition
- Understanding Problem, objective, data
- Data Cleaning
- Data Analysis using Python, Power BI, Tableau, QGIS, Excel
- Insights
- recommendation

Assumptions:

- Airbnb assumes that after covid-19 pandemic travel activity will increase.
- Identified customer preferences using the number of reviews given by customers.