Airbnb analysis: For Data Analysis Managers and Lead Data Analyst

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Agenda

- Objective
- Background
- Key Findings
- Recommendations
- Appendix: Data Methodologies

Objectives

o To better understand customers needs at Airbnb
o Measures to be taken to gain more traction
o To give accurate recommendations to the Top Management at Airbnb

Background

o Airbnb is an American company that operates an online marketplace for lodging, primarily homestays for vacation rentals, and tourism
o The company has seen a major decline in revenue in the past few months
o Due to lifting of travel restrictions, the company is expecting to be prepared to target the customers

Room Type- Analysis

Types of Rooms

Entire home/apt

room_type

52%

2% — Shared room

46%
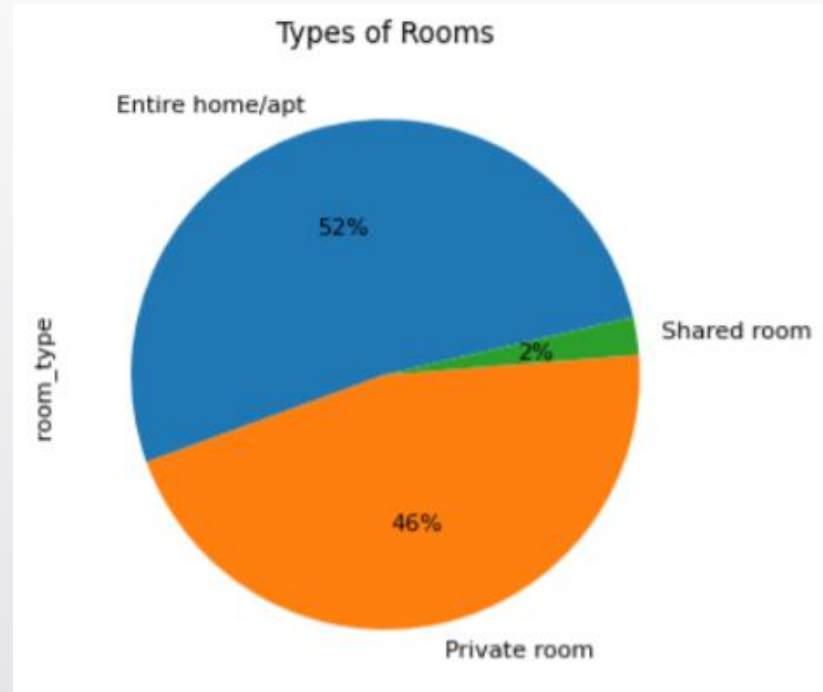
Private room

o The most popular room type seems to be the Entire home/apt with 52% of the share, hence customers prefer larger spaces for vacationing
o Private Rooms account for a close second with 46% and 2% prefer Shared rooms
o Hence we can focus on these two types of rooms namely: Entire home/apt and Private Rooms since they are the most popular

Which Neighborhood is Preferred?
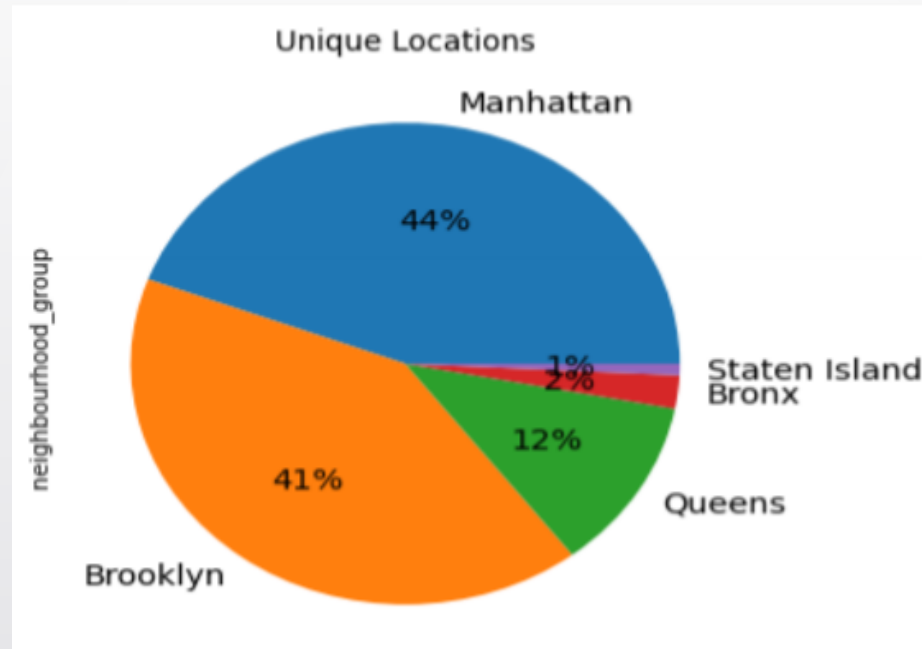
o Manhattan is the most popular neighborhood with 44% and following closely with Brooklyn at 41% of the share

o Queens accounts for 12% of the share and Bronx and Staten Island 2% and 1% respectively

o Therefore Manhattan and Brooklyn are the most popular places and Staten Island is the least popular
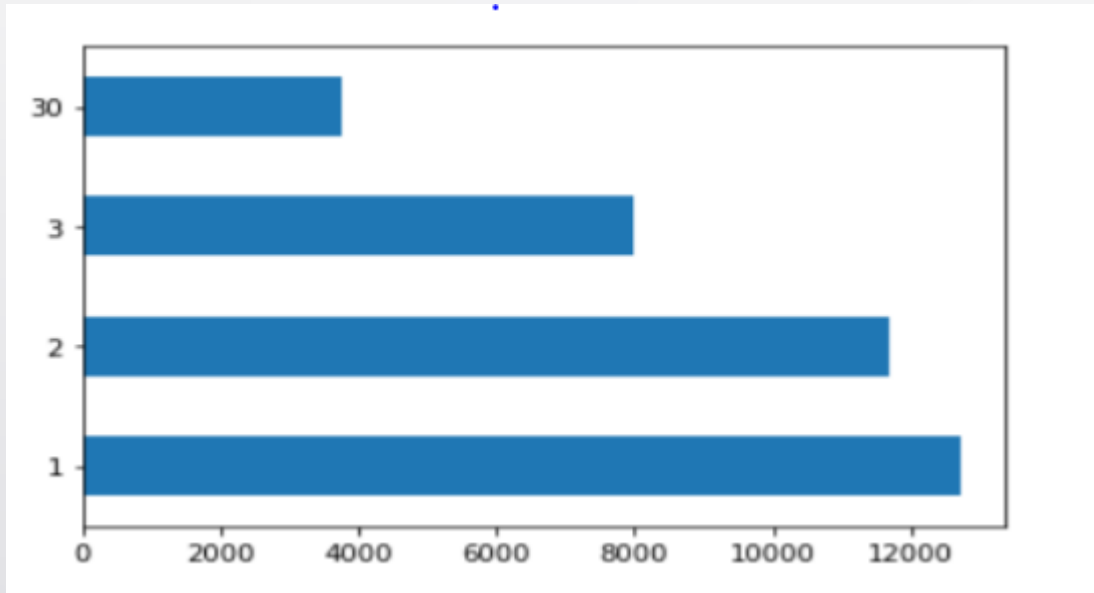
Top 5 Neighborhoods

Population Preference
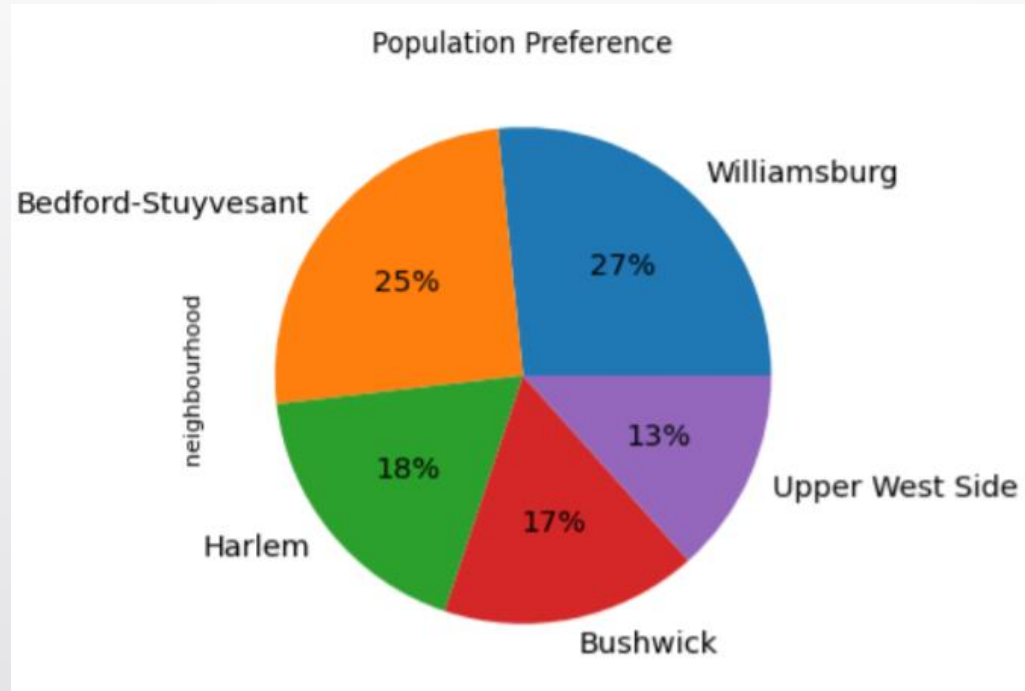
o It is clearly observed that Williamsburg is the most popular neighborhood amongst Airbnb customers

o Followed by Bedford-Stuyvesant with 25% of customers preferring this neighborhood

o The pie chart clearly depicts the top 5 neighborhood in New York City

How many Nights do customers prefer to stay for?

o The Vertical column measures the no. of nights

o Horizontal column measures the no. of customers

o It is clear that around 12,000 customers prefer staying for 1 night, and is the most popular option

The Average price for Airbnb Services

```
data.price.describe()

count      48895.000000
mean         152.720687
std          240.154170
min            0.000000
25%           69.000000
50%          106.000000
75%          175.000000
max        10000.000000
Name: price, dtype: float64
```

o   From the illustration given we can observe that the average price for an Airbnb is $152.72
o   The Standard deviation is 240.15, which means the prices vary significantly
o   The maximum price for a stay is $10,000

Recommendations

As observed the leaders at Airbnb must:
o Increase share of Entire home/ apt and Private rooms available
o Target Manhattan city and Brooklyn as they are most popular among customers
o Focus on the top neighborhoods for stays

APPENDIX :DATA METHODOLOGY

o For better understanding we have the attached the methodology document for your reference
o We have explained the rationale behind the steps taken for the data preparation and analysis
o Methodology document: C:\Users\User\Desktop\Methodology- Cassia, Pieyush.pdf