Story Telling Case Study : Airbnb, NYC

By Mayur Jangale

Targeting :
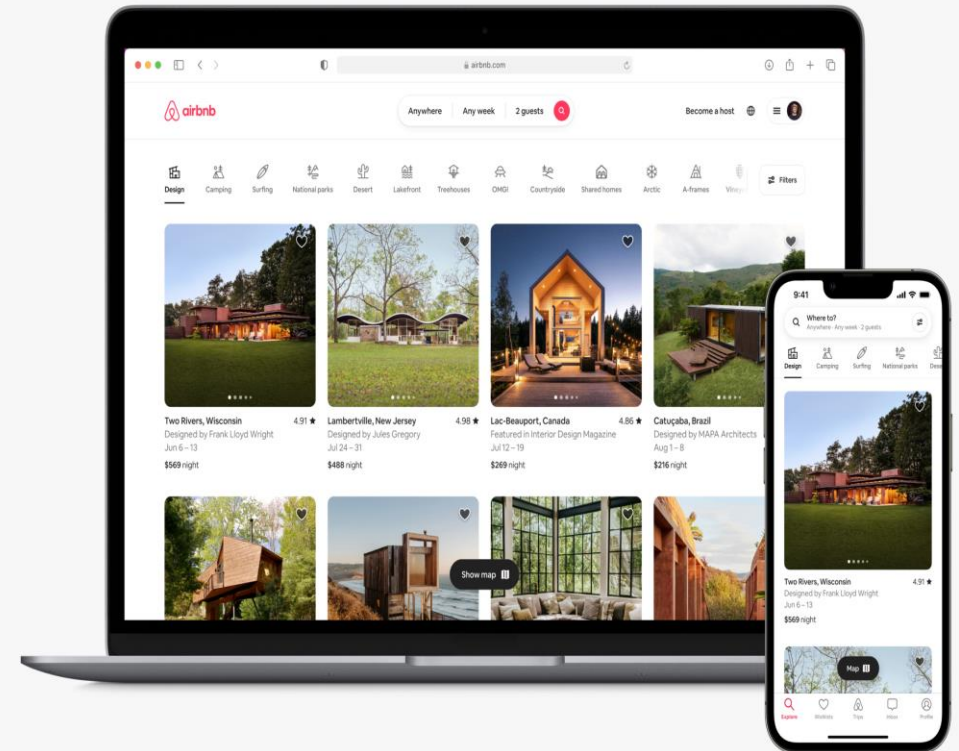
1. Data Analysis Managers

2. Lead Data Analyst

upGrad

IIIt-b
ज्ञानमुत्तमम्

International
Institute of Information
Technology Bangalore

AGENDA

- Objective
- Background
- Key Findings
- Recommendations
- Appendix
  - Data Attributes
  - Data Methodology
  - Data Assumptions

OBJECTIVE

Improve our understanding of our customers

Gain a better understanding of the market

Prepare various departments for post-pandemic changes by providing recommendations

BACKGROUND

In recent months, revenues have declined significantly due to the pandemic

There is an increase in travel

The restrictions are being lifted

NEIGHBOURHOOD WISE BUISNESS DISTRIBUTION

❖ In New York, private rooms are the most popular, with an average of 25 reviews per listing

❖ With the exception of Manhattan, all areas averaged 7.3 reviews per listing in shared rooms

❖ A Manhattan home/apt has 35% fewer reviews per listing than the average of 27.7
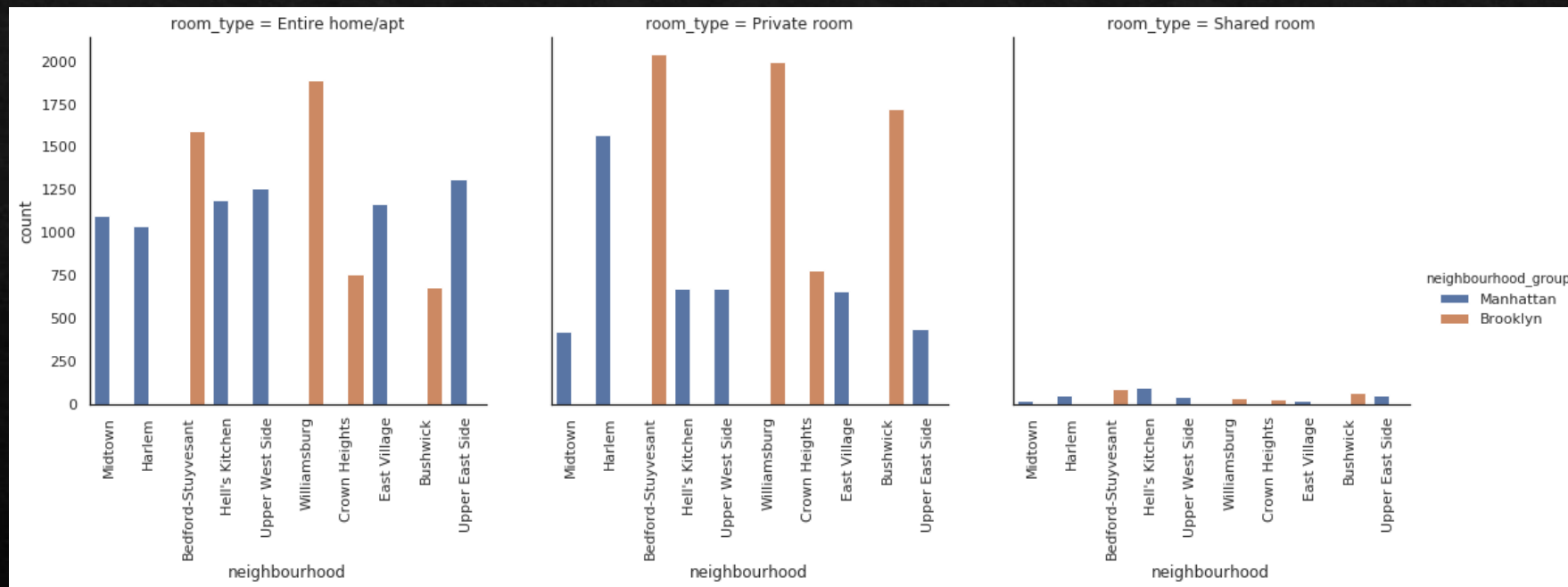
PRICING IN PREFERED LOCAITONS

◇ Entire home/apt price is ~100%> private rooms except Brooklyn and Staten Island with ~150%.

◇ Private rooms' price is ~10% > shared rooms except Brooklyn and Manhattan with ~40%.

◇ Manhattan is costliest overall and the cheapest are:

   ◇ Entire apt: Bronx

   ◇ Private room: Staten Islands

   ◇ Shared room: Brooklyn

Density and distribution of prices for each neighberhood_group
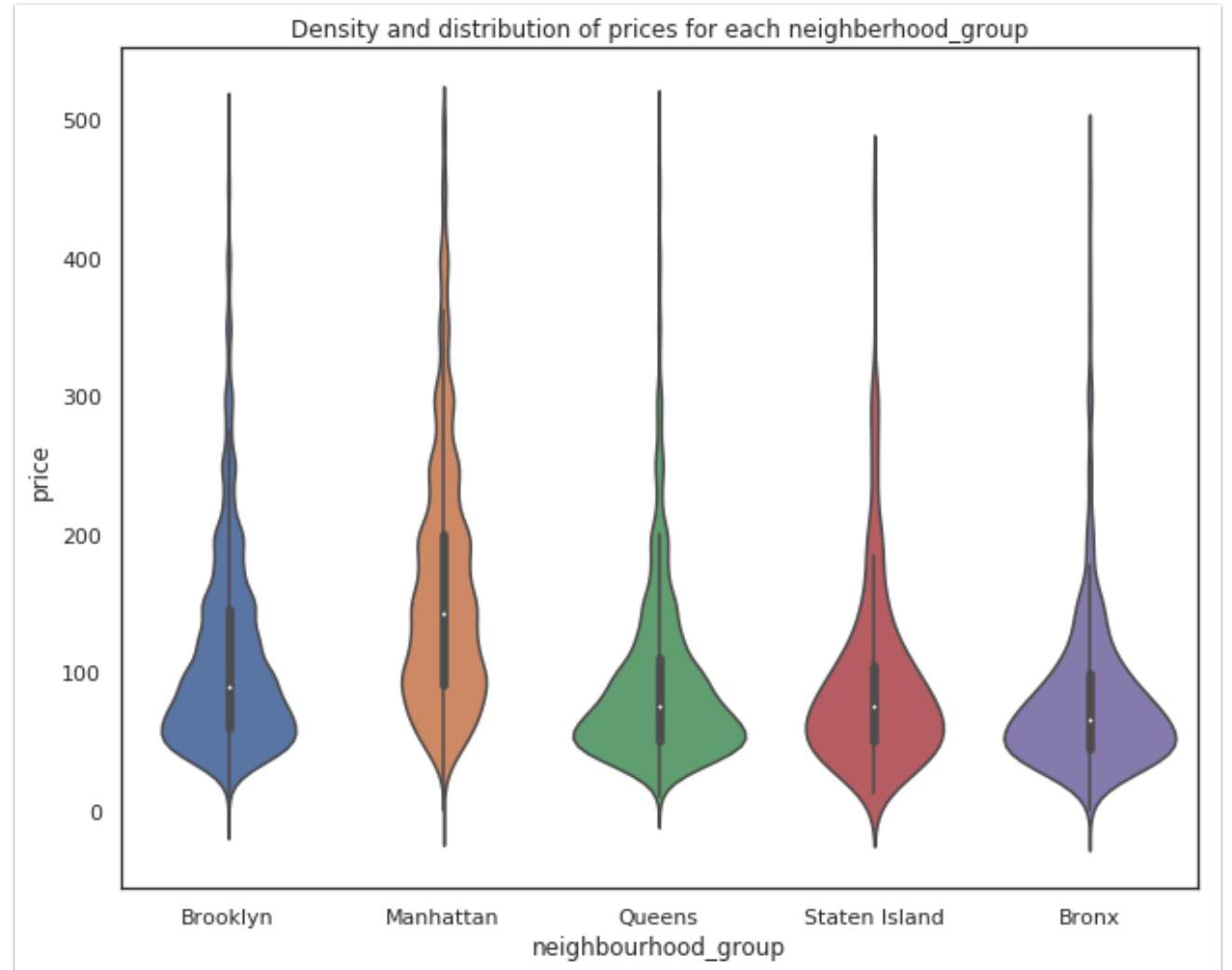
RECOMMENDATIONS

◈ Private rooms and entire apartments are acquired, especially in Staten Islands since it is popular.

◈ The prices of entire apartments in Manhattan is reduced by at least 15% and the price of private rooms in Queens is increased by at least 10%.

◈ Listings most popular have minimum number of nights requirement from 1-5 days and 30 days which should be showcased the most ordering them by properties which are available for most number of days to least.

APPENDIX: DATA ATTRIBUTES

◈ Here is a snapshot of the data:

  ◈ Hosting list information like host name, neighborhood, latitude and longitude.

  ◈ Customer preference information like number of reviews and number of reviews per month.

APPENDIX : DATA METHODOLOGY

- Google collabulary is used to analyze, visualize and get insights from data

- Since outliers existed in price field, so there is use of median of price instead of mean for analysis purposes.

APPENDIX: DATA ASSUMPTIONS

- ◈ Reviews are used per Listing as the popularity measure to gain information on customer preferences.

- ◈ Null values assumed to have no material impact on analysis.

- ◈ The number of reviews assumed to be a base measure to find customer preferences

Thank You