Methodology for Airbnb Case Study – Chirag Pandya

Objective:

Airbnb is an online platform using which people can rent their unused accommodations.

During the covid time, Airbnb incurred a huge loss in revenue.

People have now started travelling again and Airbnb is aiming to bring up the business again and e ready to provide services to customers.

Exploratory Data Analysis:

Checked the Duplicate rows in our dataset and no duplicate data was found.

Checked the Null Values in our dataset. Columns like name, host_name, last review and review_per_month have null values.

We've dropped the column name as missing values are less and dropping it won't have significant impact on analysis.

Checked the formatting in our dataset.

Identified and review outliers.

Data Analysis

In this storytelling, we use visual analytics techniques to analyse Airbnb data with the aim of addressing the following questions:

- Which are the most popular Host_ID?
- Preferred room type w.r.t to Neighbourhood Group?
- What are preferred Neighbourhood group on basis of Average pricing, Reviews, Room types?
- Properties on basis of pricing range.
- What are preferred minimum nights stays?
- What are the top popular locations w.r.t to Latitude and Longitude?
- Preferred Neighbourhood group on basis of Availability 365 and prices.
- Maximum number of Property in each Neighbourhood Group and so on...

We've tried to analyse the data using different columns such as price , availability_365 , minimum_nights, neighbourhood, neighbourhood_group, number_of_reviews, host_id , latitude and longitude.

Insights after Data Analysis:

- Most preferred property type is 'home/apt' and 'private room': More than 25,000 people opted to stay in 'Entire home/apt', whereas around 22,000 people opted to stay in private room.

- Host Sonder (id 219517861), has been booked most number of times i.e. 327 and host Blueground is the second popular host.

- Manhattan and Brooklyn are top neighborhood groups and mostly people prefer to book the entire home or private room.

- The average price of listed properties in Manhattan is around 196.9, which is highest among all neighborhoods. And average price for Brooklyn is second highest i.e. 124.4.

- Around 12000 people choose to stay for minimum 1 night in Airbnb property.

- Approx 3700 customers booked Airbnb property for a month.

- Number of reviews for Private room in Brooklyn is maximum and its average price is also less that Entire apartment.

- Availability of Bedford is highest ,and its price is on the lower side. It is a good choice for customers.

Manhattan & Brooklyn are popular choices among people. Most Airbnb properties are in Manhattan followed by Brooklyn.