**The Best Place to Open an Airbnb in London**

This report consists of four parts: description of problem, data, methodology, visualization and results. We will discuss about the problem and data in this week's submission.

**Introduction**

A real estate investor would like to buy a property in London, UK and turn it into an airbnb. He would like to find out which neighbourhood is the best place to have an airbnb.

We understand that airbnb is mostly for short term visitors, mostly tourists. What's most important for them is the convenience of the location. The following factors are in the mind of tourists when they are looking for the airbnb, distance to attractions and restaurants, and price. Price per night is also a big concern for the investor.

We will find out the data for the above factors and provide recommendation to the investor.

Here is a map of the London neighborhoods.

Map

Description automatically generated

**Data**

We will be collecting data from following sources:

Collect data of London that contains borough, neighborhoods by scraping Wikipedia.

Data source: Wikipedia

We are going to get longtitude and latitude for each neighborhoods.

We are going to go through each of the neighborhoods to get number of venues in a 0.5km radius.

Data source: foursquare API

Get airbnb listing data of London including ID, address, Neighborhood, price per night, number of guests accomodates.

Data source: http://insideairbnb.com

Calculate price per guest per night, then group data by neighborhood and get average price per guest per night in each neighborhood.

**Methodology**

We explored the Airbnb dataset and calculated the average price per bed per night. We then grouped the data by neighborhood and calculated the average price per bed per night.

We then merged the foursquare data mainly venue numbers with the Airbnb data and sorted the data by average price per bed per night.

**Findings**

The following is the top ten neighborhood in price per bed on Airbnb.

Chart, bar chart

Description automatically generated

Three neighborhoods are over $50 per night, they are Westminister, Kensington and Chelsea and City of London. Barnet, Islington and Camden are in the second tier between $45 to $50.

The following is a chart of top ten neighborhood in terms of average restaurants on Foursquare.

Chart, bar chart

Description automatically generated

Barnet has the most restaurants in all neighborhood, and the rest top ten are not too far from each other, Kensington and Chelsea and City of London are also in the top ten. However, Westminister falls out of top 10.

The following is a chart of number of venues (horizonal), average number of restaurants (size of point), and price per bed (vertical) for the top 10 neighborhood.

We can see from this chart that Barnet, City of London and Kensington and Chelsea are the ones outperformed other neighborhoods in terms of the most important factors, price per bed and restaurants.

Chart, scatter chart

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Conclusion

From our findings, the three areas good for Airbnb are Barnet, Kensington and Chelsea, and City of London.