BATTLE OF NEIGHBORHOODS

XYZ COMPANY LIMITED

INTRODUCTION

- London for review for xyz company.

- Optimum location for new Asian restaurant business.

- BUSSINESS PROBLEM:
  - Choice of neighbourhood to start restaurant business.
  - Easy to replicate
  - Low competition
  - High demand
  - Choice of menu

  SUCCESS CRITERIA :

  Best neighbourhood to meet above criteria.

LONDON FACTS

- Most Populous city in the uk.

- It is diverse and national capital of the UK.

- It is multicultural

- Provides a lot of business opportunities

- Global hub for business

LONDON BUSINESS ENVIRONMENT

- Market is highly competitive

- Highly developed city so cost of doing business is also one of the highest.

- New business venture or expansion needs to be analysed carefully .

- One should strategically target the market in order to-
  - This will help in reduction of risk
  - The return on investment will be reasonable.

LONDON CITY – CUISINE

- The City of London is famous for its excellent cuisine.

- English cuisine encompasses the cooking styles, traditions and recipes associated with England. It has distinctive attributes of its own, but also shares much with wider British cuisine, partly through the importation of ingredients and ideas from the Americas, China, and India during the time of the British Empire and as a result of post-war immigration.

- Fish and chips shops are famous and trendy in London,.

FACTOR TO STUDY TO DECIDE ON RESTAURANT LOCATION

- London population

- London demographics

- Who are the competitors in that location?

- Cuisine served/menu of the competitors.

- Segmentation of the borough

- Untapped markets.

DATA

- **Dataset 1**

- For data I have used wikipedia and foursqaure. Links used are: https://en.wikipedia.org/wiki/List_of_areas_of_London https://en.wikipedia.org/wiki/Demography_of_London Scrapping of data is shown in the " Battle of neighborhood" notebook.

- **Dataset 2**

- In obtaining the location data of the locations, the Geocoder package is used with the arcgis_geocoder to obtain the latitude and longitude of the needed locations. These will help to create a new dataframe that will be used subsequently for London areas.

- The Foursquare API will be used to obtain the London Area venues for the geographical location data . These will be used to explore the neighbourhoods of London acordingly.

METHODOLOGY

- Single Neighbourhood — An initial exploration of a single Neighbourhood within the London area was done to examine the Foursquare workability. The Newham Borough postcode SE13 and Location - Beckton is used for this.

- Multiple Neighbourhoods — Now let's explore (Multiple) Neighborhoods in the East London area. To do this, the function getNearbyVenues is used and it's created to repeat the same process for all neighborhoods.

CLUSTERING AND MAP VISUALISING

- Clustering

- For this section, the neighbourhoods in South East London will be clustered based on the processed data obtained above.

- Map Visualization — Using the geopy library, the latitude and longitude values of London is obtained.

- The folium library is used for coordinates.

ANALYSING EACH NEIGHBOURHOOD

- ***Analysing Each Neighbourhood —*** In this section, the objective is to check and explore the venues in each neighbourhood.

CLUSTERING

- Clustering of Neighbourhoods — We create the grouped clustering for the neighbourhood as shown below:

- se_grouped_clustering = se_grouped.drop('Neighbourhood', 1)

- And then create clusters of the neighbourhood using the k-means to cluster the neighbourhood into 5 clusters (this was decided after checking the Elbow Method and Silhouette Coefficients)

RESULTS

- The following are the highlights of the 5 clusters above:

- 1. Pub,Cafe, Coffee Shops are popular in east London.

- 2. As for restaurants, the Indian,Italian Restaurants and turkish restaurants are very popular in the east London area.

- 3. With the above areas being the most condensed area of Asians in the London , it is surprising to see how in the top 10 venues, you can barely see Asian restaurants in the top 5 venues.

- 4. Although, the Clusters have variations, a very visible presence is the predominance of Hotels and coffee shop.

DISCUSSION AND CONCLUSION

- Canary Warf, Bethnal green and Blackwall are viable options for an asian restaurant. They have a large Asian population but very few Asian restaurants.

- In conclusion, this project would have had better results if there were more data in terms of crime data within the area, traffic access and allowance of more venues exploration with the Foursquare (limited venues for free calls).

- Also, getting the ratings and feedback of the current restaurants within the clusters would have helped in providing more insight into the best location.