THE BATTLE OF NEIGHBORHOODS

Gaper Company

Introduction

- New York city review for Gaper Company

- Optimum location for new restaurant business

- **Business problem:**
  - Choice of first neighborhood to start restaurant business
  - Easy to replicate
  - Low competition
  - High demand
  - Choice of menu

- **Success criteria:**
  - Best neighborhood which meets above criteria

New York – 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 targeting the market in order to:
  - This will help in reduction of risk
  - The return on investment will be reasonable

Factors to study to decide on restaurant location

- New York population
- New York demographics
- Are there any farmers markets, wholesale markets, etc. to maintain ingredients quality and cost?
- Are there any venues with high floating population?
- Who are the competitors in that location?
- Cuisin served / menu competitors
- Segmentation of the borough
- Untapped markets
- Saturated markets
- …

Data description

- **Data 1:** Neighborhood has a total of 5 boroughs and 306 neighborhoods. In order to segment the neighborhoods and explore them, we will need a dataset that contains the 5 boroughs and the neighborhoods that exist in each borough as well as the latitud and longitude coordinates of each neighborhood.

- This dataset exists for free on the web. Link to the dataset is:

    - https://geo.nyu.edu/catalog/nyu_2451_34572

	Borough	Neighborhood	Latitude	Longitude
0	Bronx	Wakefield	40.894705	-73.847201
1	Bronx	Co-op City	40.874294	-73.829939
2	Bronx	Eastchester	40.887556	-73.827806
3	Bronx	Fieldston	40.895437	-73.905643
4	Bronx	Riverdale	40.890834	-73.912585

Data description

- **Data 2:** Farmers markets data
  - https://data.cityofnewyork.us/dataset/DOHMH-Farmers-Markets-and-Food-Boxes/8vwk-6iz2
  - *A farmers market is often defined as a public site used by two or more local or regional producers for the direct sale of farm products to consumers.*

Data description

- **Data 3:** Data from Wikipedia pages as given below
  - New York population
  - New York demographics
  - Cuisine of New York city

  - https://en.wikipedia.org/wiki/New_York_City
  - https://en.wikipedia.org/wiki/Economy_of_New_York_City
  - https://en.wikipedia.org/wiki/Portal:New_York_City
  - https://en.wikipedia.org/wiki/Cuisine_of_New_York_City

Data description

- ■ Data from foursquare.com
  - – New York city geographical coordinates data will be utilized as input for the Foursquare API, that will be leveraged to provision venues information for each neighborhood.
  - – The below is image of the Foursquare API data

	Neighborhood	NeighborhoodLatitude	NeighborhoodLongitude	Venue	VenueLatitude	VenueLongitude	VenueCategory
0	Wakefield	40.894705	-73.847201	Lollipops Gelato	40.894123	-73.845892	Dessert Shop
1	Wakefield	40.894705	-73.847201	Ripe Kitchen & Bar	40.898152	-73.838875	Caribbean Restaurant
2	Wakefield	40.894705	-73.847201	Jackie's West Indian Bakery	40.889283	-73.843310	Caribbean Restaurant
3	Wakefield	40.894705	-73.847201	Ali's Roti Shop	40.894036	-73.856935	Caribbean Restaurant
4	Wakefield	40.894705	-73.847201	Rite Aid	40.896521	-73.844680	Pharmacy

Analytic approach

- New York city has a total of 5 boroughs and 306 neighborhoods

- Part 1: Clustering of Manhattan and Brooklyn

- Part 2: Clustering of Bronx, Queens and Staten Island

Discussion

- Scope to explore cuisines of various countires in Bronx, Queens and Staten Island

- In Manhattan and Brooklyn restaurants, cuisines of many countries are part of their menu. Risk can be taken with great menu on board. It also shows people love and explore cuisines of various countries

- Scope to increase farmers markets in Bronx, Queens and Staten Island
  - *Region – Cluster 0*
  - *Neighborhood – Staten Island – Tod Hill, Port Ivory, Bloomfield*

Conclusion

- Analysis performed on limited data

- Re-run program with updated information

- Brooklyn and Manhattan has high concentration of restaurant business. Very competitive market

- Bronx, Queens and Staten Island also has good number of restaurants but not as many as required. So this can be explored

- As per the neighborhood or restaurant type mentioned like Indian Restaurant, analysis can be checked. A venue with lowest risk and competition can be identified