

INTRODUCTION

- New York city review for the ABC 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 the above criteria

NEW YORK CITY - FACTS

- Most populated city in the United States
- It is diverse and is the financial capital of USA
- It is multicultural
- Provides lot of business opportunities
- Business friendly environment
- Attracted many different players into the market
- Global hub of business and commerce.
- The city is a major centre for banking and finance, retailing, world trade, transportation, tourism, real estate, new media, traditional media, advertising etc in the United States.

NEW YORK CITY - 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 Reduce business risk.
 - The Return on Investment will also be reasonable.

NEW YORK CITY - CUISINE

- The City of New York is famous for its excellent cuisine. It's food culture includes an array of international cuisines influenced by the city's immigrant history.
- Central and Eastern European immigrants, especially Jewish immigrants bagels, cheesecake, hot dogs and delicatessens
- Italian immigrants New York-style pizza and Italian cuisine
- Jewish immigrants and Irish immigrants pastrami and corned cakes
- Chinese and other Asian restaurants, sandwich joints, trattorias, diners, and coffeehouses are ubiquitous throughout the city
- Mobile food vendors Some 4,000 licensed by the city
- Middle Eastern foods such as falafel and kebabs examples of modern New York street food
- The city is home to "nearly one thousand of the finest and most diverse haute cuisine restaurants in the world", according to Michelin.
- So it is evident that to survive in such competitive market it is very important to strategically plan

FACTORS INVOLVED IN DECIDING THE RESTAURANT LOCATION

- New York Population •
- New York City Demographics
- Are there any Farmers Markets, Wholesale markets etc nearby so that the ingredients can be purchased fresh to maintain quality and cost?
- Are there any venues like Gyms, Entertainment zones, Parks etc nearby where floating population is high etc
- Who are the competitors in that location?
- Cuisine served / Menu of the competitors
- Segmentation of the Borough
- Untapped markets
- Saturated markets etc The list can go on...

DATA PREPARATION

Dataset 1 : Neighborhood has a total of 5
 boroughs and 306 neighborhoods.

In order to segment the neighborhoods and explore them, we will essentially need a dataset that contains the 5 boroughs and the neighborhoods that exist in each borough as well as the latitude 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_3457

	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

Let's make sure that the dataset has all 5 boroughs and 306 neighborhoods.

ANALYTICS APPROACH

• New York city neighbourhood 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. •Only restaurant data is filtered from foursquare.com venues data and utilized for this project.

RESULT PART 1 - Brooklyn and Manhattan

Segmentation and Clustering Neighborhoods:

- Cluster 0 : The Total and Total Sum of cluster 0 has smallest value. It shows that the market is not saturated.
- Cluster 1: The Total and Total Sum is very high. Lot of competition. Saturated neighborhoods.

RESULT PART 2 - Bronks, Queens and Staten Island

Segmentation and Clustering Neighborhoods:

- Cluster 0: The Total and Total Sum of cluster 0 has smallest value. It shows that the market is not saturated. There are untapped markets.
- Cluster 1: The Total and Total Sum is very high. Lot of competition. Saturated neighborhoods.

DISCUSSION

- Scope to explore cuisines of various countries 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 neighbourhood or restaurant type mentioned like Indian Restaurant, analysis can be checked. A venue with lowest risk and competition can be identified