Opening a
Mediterranean
restaurant in
New York

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1.Introduction¶

1.1 Background

New York is a overpopulated metropolis with huge diversity. Many people from different countries and culture have emigrated to New York City since the last two centuries. The city has consistently seen people from around the world move to the city. It has been a center for international diplomacy and trade. Additionally, millions of tourists visit this cosmopolitan metropolis looking for its culture, history, restaurants and impressive buildings and constructions. While other states have had immigration surges, none have compared to the diversity and sheer number of immigrants that have made their way to New York. All these facts convert New York in an economic emporium full of opportunities.

1.2 Problem

Since people from all over the world tend to live together and come up here, we can see a great broad of variety in their cultural as in transport, food, clothing, etc. All this has converted New York as a worldwide cultural melting pot, full of opportunities in culture theme business. Opening a restaurant, which offers a worldwide cuisine or representative food of a region or country could represent an important economic opportunity.

Restaurants vary greatly in appearance and offerings, including a wide variety of cuisines and service models ranging from inexpensive fast food restaurants and cafeterias, to mid-priced family restaurants, to high-priced luxury establishments. It depends on the individual and there are so many of them with different cultural and various aspects.

In New York city, there are so many cuisines, which is based on the style of cooking, the ingredients, dishes and techniques. For our problem lets stick with Mediterranean cuisine. Let's assume in this one of the world's most diverse region we want to open a Mediterranean restaurant, so what are all the factors we have to take into account such as follows:

- Market Places
- Competition in particular location
- Aiding places that make people come to restaurants like Gym, Entertaining Public places
- Population
- Neighborhood
- Menu from competitors

Thus our solution needs to be data driven for avoiding or considering low risk criteria and high success rate and thus apply our overall knowledge in the techniques and the tools gained so far in this course.

1.3 Objective

The main interest of the Business to be started as a Mediterranean Cuisine restaurant would be to know about the many criteria that leads to come to a data driven conclusion for selecting the best neighborhood for opening one. But some of the criteria we are gonna be focusing on in our project is as follows:

- Best Neighborhood for opening Restaurant in New York.
- Area which lack Mediterranean Restaurants.

- Places with best Mediterranean Restaurants.
- Areas with Potential Mediterranean Restaurants.

Data

I am going to use the data for the same New York Neighborhood example and the Geo spacial data of boundaries of the Neighborhoods in New York.

Data source: https://cocl.us/new_york_dataset

Geo-spacial data of the New York would be acquired by the following

soure: https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tgmj-j8zm

and visualize using Choropleth maps.

Finally the data going to be collected from the Foursquare API about the restaurants in each neighborhood of New York city that include Mediterranean Restaurants, which will be used for acquiring the information regarding same for all the venues of each neighborhood.

Data source: Foursquare

Methodology

The methodology to follow will be: Acquire the data from the various sources as mentioned below,

Filter the data for the required data acquired from Foursquare which is only about Mediterranean Restaurants.

Acquire the tips and from that get the rating of every restaurant in the neighborhood of New York.

Visualize the findings using Matplot lib and Folium for better understanding.

Run _k_-means to cluster the neighborhood into 8 clusters. Cluster New York Neighborhoods and compare those which cluster together and has the best Mediterranean Cuisine

Discussion

New York is composed of 5 boroughs and 306 neighborhoods. The neighborhoods distribution by borough is the following: Queens 81, Brooklyn 70, Staten Island 63, Bronx 52 and Manhattan 40.

From Foursquare data base we know that there are 64 Mediterranean Restaurants in 4 boroughs.

Mediterranean Restaurants in New York Boroughs. Queens 14, Brooklyn 12, Staten Island 6, Bronx 0, Manhattan 35.

The highest numbers of Mediterranean restaurant are located in Manhattan, which is logic because is the center of New York economic (Office locations). Bronx does not have any Mediterrean Restaurant. Is it an opportunity in Bronx?

New York Cluster was done running k-means method to cluster the neighborhood. We selected 8 clusters as a previous criteria because it was the best way to have separations of cluster based in the best criteria's and least errors.

It looks clearly how Manhattan neighborhoods is dominated by the same type and how getting out of Manhattan you start getting different kind of neighborhoods.

Four areas were identified as good prospect to opening a Mediterranean Restaurant. Two areas in Long Island one in Brooklyn and other one in Queens. The Neighborhoods suggested area: ST. George Gate, Bloomfield and Travis in Long Island. Conney Island in Brooklyn Bellaire and Jamaica Center in Queens.

Conclusion

Based on the Data Analysis and Visualization using Folium and Matplotlib we have rendered various bar charts and two maps from which we can come to a better understanding of the interests we had earlier to be discovered which are specified as follows.

In spite of a population and market data We could proposed that the best Boroughs for opening a Mediterrean Restaurant in New York are: Queens, Brooklyn and State Island. Bronx does not have Mediterrean Restaurants, which could be a great opportunity, however it is important to review this borough security and market to propose it as a potential place to ope a Mediterrenean Restaurant. Queens ranks last in average rating of Mediterrean Restaurants and Manhattan rank first. Places with best Mediterrean Cuisine. Manhattan is the best place to stay if you prefer Mediterrean Restaurants. Areas with Potential. Queens and Brooklyn have potential Mediterrean Resturant Market.

Bronx does not present any cluster neighborhood similar to those one with susscefull Mediterranean Restaurants, Thus We don't recommend open a Mediterranean restaurant in Bronx.

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