Capstone Project - The Battle of Neighborhoods

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Houssam AlRachid

Introduction

Choosing the right location for your restaurant is critical to your success. It is easy to be impulsive and end the search altogether. However, establishing roots for your restaurant is not something that should be taken lightly. There are many factors to consider that can make all the difference in your ultimate success. Your restaurant's location affects the success of your business and the speed at which your investments are paid back. An astutely chosen location provides you with a stable traffic of customers and high profits.

An investor is looking to open a new restaurant in New York City (NYC), but he is not sure about the best location for his new venue. NYC is the most populous city in the United States. With an estimated 2018 population of 8,398,748 distributed over a land area of about 302.6 square miles, New York is also the most densely populated major city in the United States. Located at the southern tip of the state of New York, the city is the center of the New York metropolitan area, the largest metropolitan area in the world by urban landmass and one of the world's most populous megacities. A global power city, New York City has been described as the cultural,financial and media capital of the world.

Therefore it is very natural that the city contains a large number of restaurants, making the market highly competitive. Thus, opening a new restaurant needs to be analysed carefully.

In this project, we will do data analysis to find an optimal location to open a new restaurant.In this project, we will try to find an optimal location for a restaurant. Specifically, this report will be targeted to stakeholders interested in opening an italian restaurant in NYC. This project would interest investors who want to open a new italian restaurant in NYC.

Data

Based on our problem comprehension, several factors will influence our decision:

1. Number of existing restaurants in each neighborhood of NYC;
2. Number of existing italian restaurants in each neighborhood of NYC;
3. Distance between italian restaurants in each neighborhood of NYC;
4. Distance of neighborhood from city center

The necessary data needed will be needed are:

1. NYC has a total of 5 boroughs and 306 neighbourhoods. We will essentially need a dataset that contains all the boroughs and neighbourhoods that exist in each borough along with their latitude and longitude.

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

2. Information on venues in the neighborhoods of NYC

    Source: Fousquare API;

3. Italian restaurants in each neighborhood of NYC.

    Source: Fousquare API.