

The Battle of the Neighborhoods

Capstone Project - The Battle of Neighborhoods

Opening African Restaurant in New York City

Introduction/Business Problem

A African family is planning to setup African restaurant New York City. They have asked me with the responsibility of identifying the availability and spread of African restaurants in New York City, and also identifying the response of people for African restaurants to advise on the good strategy which is the best borough to open the restaurant.

It is important to note that the demographics of New York City is one that is particularly and ethnically diverse, culturally rich. As one of the largest cities in the United States, it stands out on the strength of what it offers residents and visitors alike. With almost 20 million people in its metropolitan statistical area and approximately 23 million in its combined statistical area, it is one of the world's most populous megacities.

New York's non-white population was 36,620 in 1890.[113] New York City was a prime destination in the early twentieth century for African Americans during the Great Migration from the American South, and by 1916, New York City had become home to the largest urban African diaspora in North America

New York City is composed of five boroughs, each of which is a county of the State of New York. The five boroughs—Brooklyn, Queens, Manhattan, the Bronx, and Staten Island—were consolidated into a single city in 1898.[15] The city and its metropolitan area constitute the premier gateway for legal immigration to the United States. As many as 800 languages are spoken in New York,[16] making it the most linguistically diverse city in the world. New York is home to more than 3.2 million residents born outside the United States,[17] the largest foreign-born population of any city in the world as of 2016.[18][19] As of 2019, the New York metropolitan area is estimated to produce a gross metropolitan product (GMP) of \$2.0 trillion. If the New York metropolitan area were a sovereign state, it would have the eighth-largest economy in the world. New York is home to the highest number of billionaires of any city in the world

New York City is also densely populated which as a result, it earned the term "melting pot" - coined to describe the densely populated immigrant neighborhoods on the Lower East Side. As many as 800 languages are spoken in New York, making it the most linguistically diverse city in the world. English remains the most widely spoken language, although there are areas in the outer boroughs in which up to 25% of people speak English as an alternate language, and/or have limited or no English language fluency. English is least spoken in neighborhoods such as Flushing, Sunset Park, and Corona.

It is no brainer that with its diverse culture, comes the yearning for diverse food items and culinary tastes. There are many restaurants in New York City, belonging to different categories of ethnicities not limited to African, Chinese, French, Indian, etc. In addition to the task I

mentioned earlier, my goal on this project is to highlight and visualize the neighborhoods and boroughs in New York City where you can find African restaurants and the go-to-market strategy for entering the restaurant market for my client.

Data section :

Here is an overview of all the data points for this project:

A dataset of New York City containing the list Boroughs, Neighborhoods along with their latitude and longitude. Data source : https://cocl.us/new_york_dataset

Description : This data set contains the required information. And we will use this data set to explore various neighborhoods of new york city.

A dataset leveraging Foursquare API of African restaurants across the various neighborhood of NYC. Data source : Foursquare API Description : This API would provide an up-to-date information on all the restaurants in each neighborhood. A further drill down of the dataset will then provide the venues for African restaurants spread across the various neighbourhoods.

GeoSpace data Data source : <https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm>

Description : This will provide the functionality needed to visualize the New york Borough boundaries with the aid of a Choropleth map

The Methodology

- Collect the new york city data from https://cocl.us/new_york_dataset
- Using FourSquare API, find all venues for each neighborhood.
- Now Filter out all venues that are African restaurants.
- Finding rating , tips and like count for each African Restaurants using Foursquare API.
- Sort out the data using the ratings for each restaurant.
- Visualize the ranking of neighborhoods using folium library.

Results :

From this analysis, out of the 306 neighborhoods in New York City, there are 12 African restaurants that are range across the city. The result is unpredictable considering the large number of Africans living in New York City. Restaurants in Crown heights have the highest number of ratings. While Manhattan takes the lead for the Boroughs. This result is solely based on the data pulled from the Foursquare API.

Observations:

We could observe that, Manhattan has the highest number of African restaurants and then followed by Bronx and Brooklyn. This makes it just 3 out of the 5 Boroughs housing African restaurants.

Conclusion :

The opportunity exists to set up an African restaurant. The market for African cuisine is available but the supply seems to be below the demand. We could say that the competition is not much. Thus, I can conclude that opening a African restaurant is a good idea that I will suggest to the client.