The Battle of neighborhood-Report

A. Business Problem

City of New York is the most populous and diverse city of the USA an entry point for immigrants in the country and infact rightfully earned the title of 'Melting pot' the city is a hub for financial services, Retail and many other industries, New York is also known for its vibrant art and culture scene, and has inhabitants from almost all parts of the globe, which results into a rich and diverse food and dining scene in the city which covers everything from Chinese, Indian, Mexican, Arabian, Italian, Lebanese, and lots more.

As an Indian immigrant in the city I would like to know what are the best neighborhoods in the city to have Indian food, or if a business wants to open an Indian restaurant which is the best possible neighborhood to consider.

In this analysis we will try to answer following questions

- 1. Best location in New York to have Indian cuisine
- 2. Which areas are potential market for Indian restaurants
- 3. Which is the best neighborhood to stay if you prefer Indian cuisine

B. Data used

For this analysis following data sources will be used

- 1. New York city data from https://cocl.us/new_york_dataset, this dataset contains information about New York city boroughs and neighborhoods with their latitudes and longitudes
- 2. Indian restaurant venue data, this data will be retrieved using foursquare venue API's and the dataset will include venue name, venue ID, category, tips, ratings, likes
- Geospace data- to identify boundaries of neighborhoods and boroughs that will be used to visualize the choropleth maps, the data is sourced from https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm

C Methodology

Step 1: Clustering of neighborhoods of 5 New York boroughs Manhattan, Brooklyn, Queens, Bronx, Staten Island, and assign geographical coordinates to these neighborhoods, this dataset will be used to extract venues data using Foursquare APIs for the respective neighborhood

Step 2: Using Farmers market dataset map the farmers market locations to the neighborhoods across New York

Step 3: Analyze New York city Population, Demographic, and Cuisines

Population analysis

Demographic analysis

Cuisine analysis

Analyze existing restaurants in the Boroughs using Foursquare