## **Coursera Capstone**

IBM Applied Data Science Capstone Project on

# Opening an Ethical Japanese Restaurant in New York

By: Bipin Bohara

February 2021

### **Business Problem**

The objective of this Capstone project is to analyze and select the best locations in the city of New York to open a new Japanese restaurant.

Using Data Science methodology and instruments such as Data Analysis and Visualization, this project aims to provide solutions to answer the business question: Where in the city of New York, should the investor open a Japanese Restaurant?

## **Data**

#### Data required

- ➤ List of borough and neighborhoods of New York
- > Latitude and longitude coordinates of those neighborhoods
- Venue data, particularly data related to restaurants

#### Sources of data

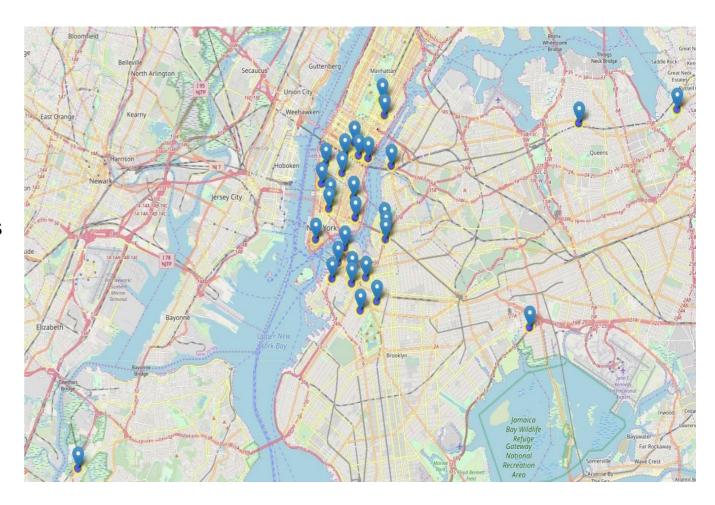
- > Open source dataset of New York: <a href="https://cocl.us/new\_york\_dataset">https://cocl.us/new\_york\_dataset</a>
- Geocoder package for latitude and longitude coordinates
- > Foursquare API for venue data

## Methodology

- Collect the data from <a href="https://cocl.us/new york dataset">https://cocl.us/new york dataset</a>. Cleane and process the data into a dataframe.
- Using FourSquare, locate all venues and then filter by Japanese restaurants. Ratings, tips, and likes by users will be counted and added to the dataframe.
- Sort the data based on rankings.
- Visually assess the data be will be using graphing from Python libraries.

#### Results

- Manhattan has the highest number of Japanese restaurants comparing to the other boroughs.
- Manhattan has the highest average rating for Japanese Restaurants.
- Two neighborhoods with the highest average rating for Japanese Restaurants are Cobble Hill and North Side (both located in Brooklyn).



## **Discussion Section**

- ➤ Based on the results of our analysis, Manhattan and Brooklyn are the best locations for Japanese cuisine in NYC.
- ➤ Brooklyn is a more promising place to open a new Japanese restaurant.
- ➤ Neighborhoods Cobble Hill or in North Side are the best place in Brooklyn to open a new Japanese restaurant.



#### Conclusion

- Answer to business question: Where in the city of New York, should the investor open a Japanese Restaurant?
- Best rated Japanese Restaurant in NYC isOOTOYA Restaurant in Manhattan.
- The findings of this project may be used in real life to better understand the advantages and disadvantages of different New York neighborhoods/boroughs in terms of opening a Japanese restaurant.

## **Thank You**