

# Finding the best locations To open a Japanese restaurant in NYC

## Introduction

This final project explores the best location suggestion for a new Japanese restaurant in the city of New York. As New York is the most diverse city in the US and probably in the entire world, and its metropolitan nature, it has huge potential for Japanese cuisine. For millennials, eating healthy and clean is a goal routine in daily life all over the country. Japanese restaurants have become extremely popular, as they offer a healthy alternative to regular American comfort foods. That's why Japanese restaurant can have great potential for success and profit. However, as with any business, opening a new restaurant requires serious considerations and is more complicated than it seems from the first glance. In particular, the location of the restaurant is one of the most important factors that will affect whether it will have success or a failure. So, this project will attempt to answer the question: Where should the investor open a Japanese Restaurant?

## Business Situation

The objective of this project is to 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, among all the boroughs and neighborhoods should the investor open a Japanese Restaurant?

This project will provide investors a brief reference for locations to invest in a Japanese restaurant in the city of New York. Basically, NYC is a great place to get into a food business because of its diverse culture and huge amount of population and tourists. There are many restaurants categories such as Chinese, Indian, French, etc. However, Japanese has become

extremely popular, as worship to Orient culture and it offers a healthy alternative to regular American comfort foods.

## Data

To solve the problem, we will need:

- New York City data containing the neighborhoods and boroughs.
- Latitude and longitude coordinates of those neighborhoods. This is required to plot the map and get the venue data.
- Venue data, particularly data related to restaurants: likes, ratings, tips, etc.

We are going to use this data to perform further analysis of the neighborhoods, and we will be looking at the location distribution, average and highest likes, ratings, and tips received by the restaurants. Web scrapping (open-source dataset), working with API (Foursquare), data cleaning, data wrangling, to map visualization (Folium) will be used for data analysis.

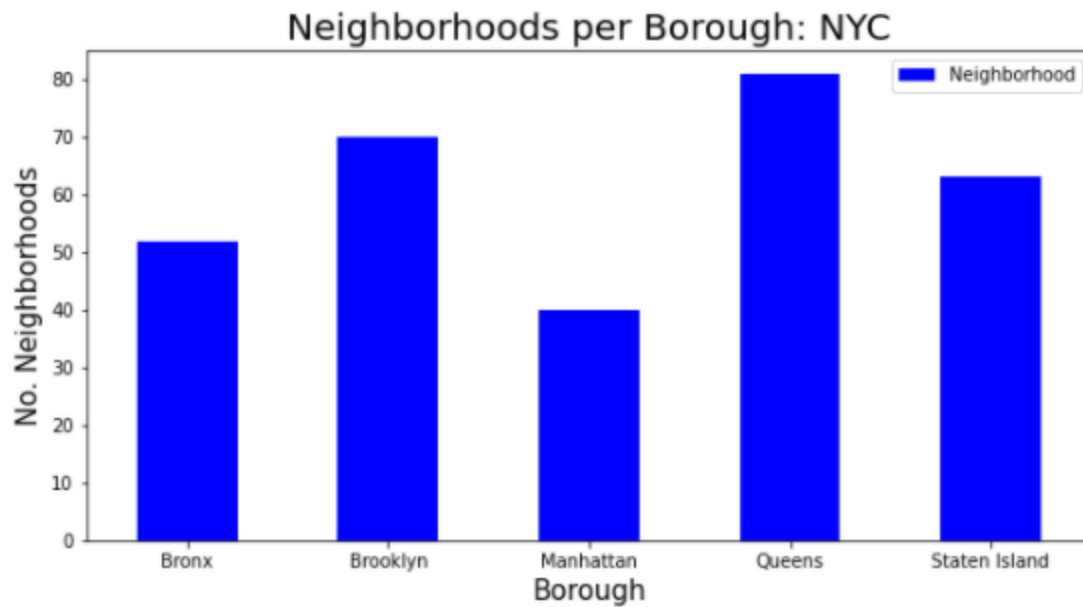
## Methodology

- Data will be collected from [https://cocl.us/new\\_york\\_dataset](https://cocl.us/new_york_dataset).
- Datasets will be cleaned and processed into a dataframe.
- FourSquare will be used to locate all venues and then filtered by Japanese restaurants. Ratings, tips, and likes by users will be counted and added to the dataframe.

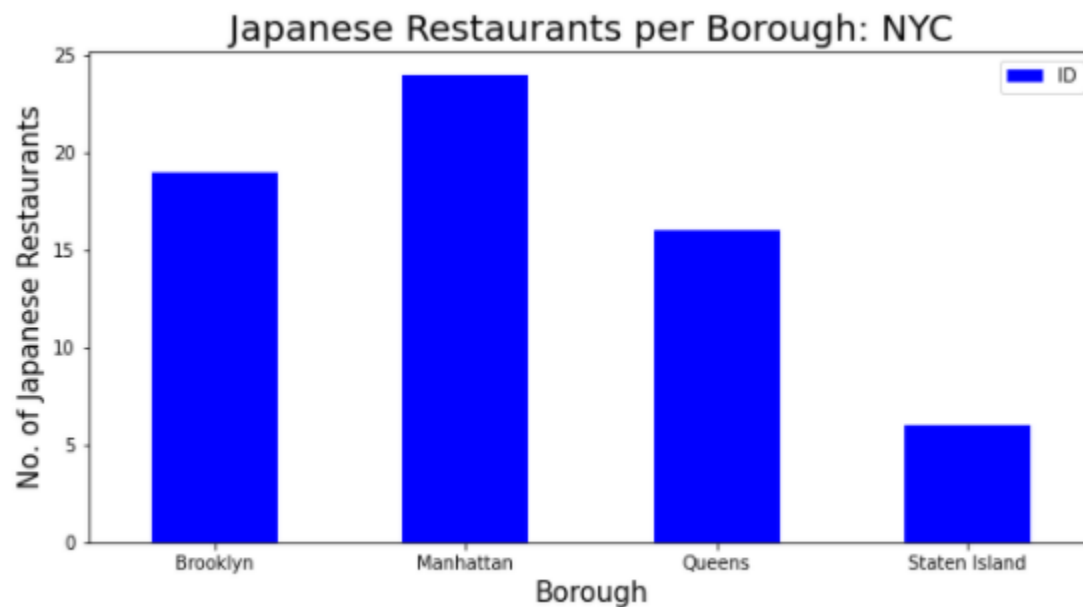
## Results

Some of the results of analysis showed below:

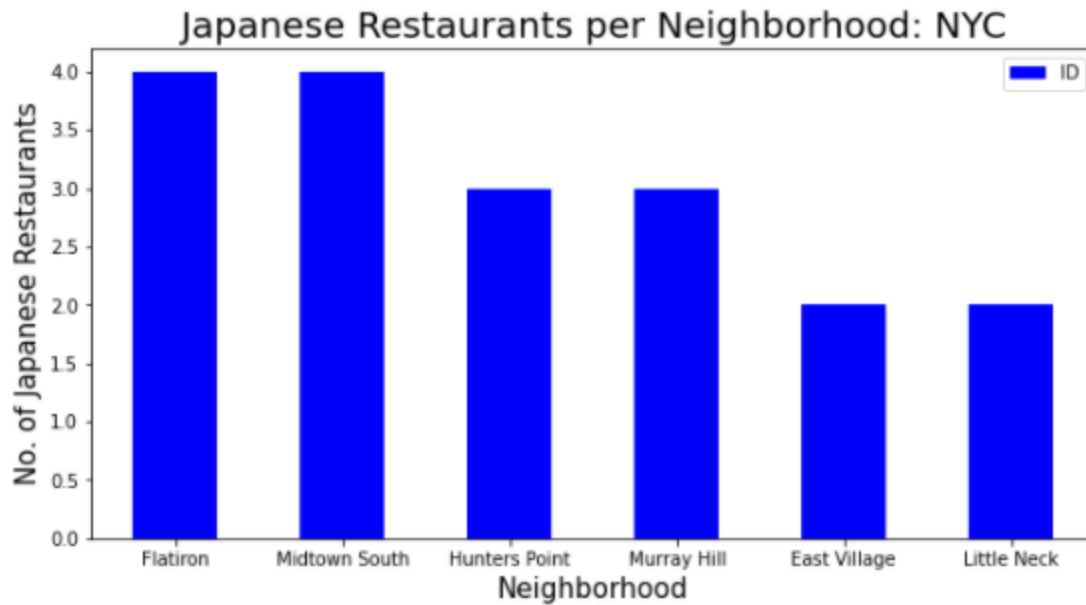
- There're 306 different neighborhoods in NYC
- Queens has the highest number of Neighborhoods:



- Manhattan has the highest number of Japanese restaurants. Brooklyn has a high number as well.



- Flatiron and Midtown South have the highest number of Japanese Restaurants with a total count of  $4+4=8$ .
- They are both in Manhattan.



	Borough	Neighborhood	ID	Name
59	Manhattan	Flatiron	5bd7a5561c675b0039be9acc	HALL
60	Manhattan	Flatiron	4f7b61f6e4b07aaa5d524842	OTOYA 大戸屋 (OTOYA)
61	Manhattan	Flatiron	581a10901df6b32e66ec3a07	Sugarfish
62	Manhattan	Flatiron	55805bb5498e8356d675aa22	Yakiniku Futago

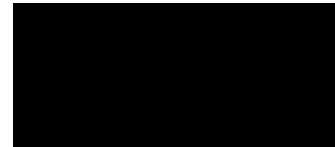
	Borough	Neighborhood	ID	Name
48	Manhattan	Midtown South	51e8ce40498ea1fb0180efb2	Izakaya MEW
49	Manhattan	Midtown South	57ab615d498eef084faa348b	Abiko Curry
50	Manhattan	Midtown South	5d7a9d59a369d40008dfcc1a	Konbini
51	Manhattan	Midtown South	58b8ed467220e661ddf34104	KazuNori: The Original Hand Roll Bar

- Then we get data from 65 existing Japanese restaurants with likes, ratings and tips information. We found the most liked restaurant is located in Flatiron, Manhattan (out of 60 records); the highest-rated one is located in East village, Manhattan (out of 26 records), and most tipped on is located in Chelsea Manhattan (out of 24 records).
- We see consistent results in average ratings. Manhattan, especially East village probably has a good reputation for Japanese restaurants.

Borough	Manhattan	Borough	Manhattan
Neighborhood	Flatiron	Neighborhood	East Village
ID	4f7b61f6e4b07aaa5d524842	ID	5b3805910dd31f002409405a
Name	OOTOYA 大戸屋 (OOTOYA)	Name	Suki Curry
Likes	1221	Likes	56
Rating	9.1	Rating	9.3
Tips	274	Tips	15
Name: 60, dtype: object		Name: 26, dtype: object	

Borough	Manhattan
Neighborhood	Chelsea
ID	454f7cc4f964a520dc3c1fe3
Name	Morimoto
Likes	793
Rating	8.9
Tips	353
Name: 24, dtype: object	

	Neighborhood	Average Rating
10	East Village	9.200000
8	Cobble Hill	9.100000
21	Hunters Point	9.066667
12	Flatiron	8.975000
34	North Side	8.900000
6	Chelsea	8.900000
9	Downtown	8.900000
25	Lindenwood	8.800000
1	Boerum Hill	8.800000
35	Park Slope	8.800000



	Borough	Average Rating
1	Manhattan	8.500000
0	Brooklyn	7.757895
2	Queens	6.312500
3	Staten Island	5.866667

- Lastly, we map neighborhoods with an average rating  $\geq 8.0$  as promising locations.



## Discussion and Conclusions

Based on the results, I would recommend that either Manhattan or Brooklyn could be a good option for opening a new Japanese restaurant in NYC.

Competition wise, Brooklyn fewer existing competitors than Manhattan, and has multiple neighborhoods, so it would have a fairly good number of potential customers. In addition, life cost in Brooklyn seems to be much cheaper in Brooklyn than in Manhattan. To start the restaurant, you probably don't need a ton of overhead capital for a very high-end look.

On the other hand, Manhattan, especially east village, has the best Japanese restaurants, most likes, highest ratings and most tips. So, whenever people want to have authentic Japanese, they're highly likely to check the Manhattan area. Although the overhead capital

might be higher compare to other locations, it's possible to charge a higher price for the menu, plus more tips and high turn-over rates, it can be profitable as well.

To start a business requires a lot more investigation and risk management. This project provides merely basic information regarding the location, population base, and current market analysis as a reference. To answer the question: Manhattan may be the best location for a new Japanese restaurant because of its reputation, customer base and healthy competition.