

# **Choosing the Best Restaurant Location in New York City**

Applied Data Science Capstone

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## **INTRODUCTION**

### **Background**

New York City is the most populous city in the United States and the New York metropolitan area is one of the most populous in the world. More than 800 languages are spoken in New York City, making it the most linguistically diverse city in the world. 4 in 10 households speak a language other than English. These make New York City an attractive location for restaurants because higher population and population density means higher foot traffic for business establishments and diversity means more people will be more open-minded when they are introduced to new things. However, foot traffic and diversity should not be just the factors to consider when choosing a location.

Finding a good restaurant location is harder than some people think. While a busy street may look like a perfect location for a restaurant, it may not be always the case. Food and service are important to the success of a restaurant, but the location is just as crucial. Some other factors to consider include the following: (1) parking, (2) accessibility, (3) number of competitors, and (4) crime rates among others. While these factors do not ultimately determine a restaurant's success, knowing these is a better starting point than not knowing them at all.

### **Problem Statement**

A new market entrant is looking for opportunities to expand their restaurant business in New York City. They would like to try establishing a new brand of restaurant that is not yet in their portfolio. The company is looking to have answers to the following questions.

1. Which neighborhood(s) is/are the best location(s) to build a new restaurant considering the following factors:
  - a. Historical crime rate
  - b. Availability of parking spaces
  - c. Number of competitors
2. What cuisine dominates in each of the neighborhoods?
3. Knowing these things, what cuisine could be introduced to the location?

## **Target Audience**

To answer these questions, the company reached out to our team. The company's objective is to locate the best neighborhood to build a new restaurant in. The company also expects to understand the rationale behind the recommendations.

## **DATA REQUIREMENTS**

For this study, we will be using the following data sets:

1. Location data
  - a. Source: Foursquare API
  - b. The data will be primarily used to obtain the number of restaurants by type and parking spaces in every neighborhood.
2. Five-year Historical Crime Data of New York City (2015-2019)
  - a. Source: <https://data.cityofnewyork.us/Public-Safety/NYC-crime/qb7u-rbmr>
  - b. This data will be used to obtain the number of crimes recorded for every neighborhood in New York City. Since this data only is categorized per borough, further data processing will be needed to determine the neighborhood in which the coordinates given belong to.