

IBM Data Science Professional Certificate: Capstone Project

Introduction

The City of New York, New York is one of the most cultural, compact, and diverse regions of the entire United States. New York is a “hot-spot” for finance, entrepreneurship, along with visual and performing arts. This major city has created a highly competitive culinary market. New players looking to open bars, restaurants, etc. should conduct sufficient geospatial research prior to making any legal commitments.

Farm Fresh Foods, a Farm-to-Table restaurant concept is seeking to build their first location somewhere within New York. It is understood that Farm Fresh Foods is looking to find an ideal location for their flagship restaurant. In order to investigate the Farm Fresh Food locations, the following information has been gathered and presented. This document will provide an introductory-level understanding of New York demographics and population, along with basic market research regarding cuisine preferences.

Business Problem

Farm Fresh Foods must identify a suitable location to place their new restaurant concept. To adequately research the market, several data sources must be extracted, cleansed, transformed, and then analyzed to gain geospatial insight. Recommendations can then be provided to management regarding placement of the restaurant.

The following criteria must be explored:

- “Cuisine-Deserts”: What cuisines are oversaturated / undersaturated in New York City
- Low Competition Areas / Areas where existing, similar restaurants are underperforming
- What menu options are New Yorkers looking for?

Required Data

For this assignment, the following data sources are required:

- [New York Neighborhoods](#)
 - List of five boroughs and 306 neighborhoods.
- “Scraped” Wikipedia Websites
 - [New York Population](#)
 - [New York City Demographics](#)
 - [Cuisine of New York city](#)
- Foursquare API Data
 - Pre-existing venue information for each neighborhood
 - Exploratory purposes of New York neighborhoods
- [DOHMH](#)
 - Data set related to Local Farmers Market