

Capstone Project

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1. Objective

To collect local venue data and analysis to recommend new restaurant openings.

2. Problem and Background

Let's say I work for a business consulting firm to help clients find the best place to open a new restaurant in a specific city. Our professional services include providing the enterprise with appropriate data on local venues and competitors. These insights will help clients successfully grow their business in their target markets.

One of the challenges is to collect accurate and detailed local restaurant data in the city. The project will import restaurant and category data, process and analysis to recommend the best expansion locations.

3. Data source and description

Three sets of data are required in the project:

- Client Information

- Neighborhood Data

- Local Venue Data

Client information is detailed business information such as the restaurant name and the type of food they serve. In this project, I assume that there is a Chinese fast-food chain "Dragon Express", which operates more than 100 branches in New York and is looking for opportunities to expand westward.

It chose Seattle, Washington as their landing point and found our company as their wise location selector. Restaurant category will be one of the most important factors in our analysis and recommendation process.

Neighborhood data is a dataset containing Seattle neighborhoods. It was obtained from Foursquare, which lists the names of neighborhoods in Seattle and their latitude and longitude coordinates. A specific neighborhood in this dataset will be selected as the ideal new branch location for Dragon Express.

Local venue data describes all restaurants in each neighborhood. The dataset will also be retrieved from Foursquare, a dataset that stores each neighborhood and its category. The recommendation is then implemented by analysing the quantity and quality of competitors