IBM Data Science Capstone Project

Picking a suitable location for a new restaurant in Western Singapore

01. Introduction

A restaurant is a business that prepares and serves food and drinks to customers. Meals are generally served and eaten on the premises, but many restaurants also offer take-out and food delivery services. Restaurants vary greatly in appearance and offerings, including a wide variety of cuisines and service models ranging from inexpensive fast-food restaurants and cafeterias, to mid-priced family restaurants, to high-priced luxury establishments.

Restaurants can be also considered as places where people can get together, have discussions, while eating food. So, restaurants play a major role in the society, and it greatly affects the lifestyle of people.

1.1 The problem and background of the study

In the project I have focused on a business scenario where the owner of a high-end restaurant chain is deciding to open a new restaurant in the Western Region of Singapore since he is not having a restaurant in Singapore. But he is uncertain about the city which he will choose to open the restaurant. The intention of the study is to find an optimal location in the western region for his restaurant.

1.2 Audience

Here we are assuming a random business owner to whom we are addressing this report, but in the real world this restaurant owner can be treated as a person who is interested in opening a restaurant in the western region of Singapore, thus this analysis could be useful for a group of restaurant owners.

02. Data

To perform the analysis, the following data will be used.

- 1. List of cities in Singapore.
- 2. Geo-coordinates of each city in Singapore
- 3. Top venues in the cities in western region.

The list of cities along with their coordinates has been obtained from the web site, https://simplemaps.com/data/sg-cities

Top venues have been obtained with the help of Foursquare API.