IBM Applied Data Science Capstone
Week 4 : Business Research

Definition of main term
A sommelier is a formally trained and knowledgeable wine professional, normally working in high end restaurants. They specialize in all aspects of wine service and additionally wine and food pairing. The role of the wine steward in fine dining nowadays is specialized and informed than that of a "wine waiter" [1].

Research problem
A sommelier want to set up a consultancy and training academy in Toronto. They want to know the best/optimal location to set up. The location must be highly visible to the target market which consists of restaurants (mostly high-end) and hospitality employees who may opt to get a formal training and certification with an accredited institute.

Rationale
This research will aid the entrepreneur in deciding the optimal location to set up their facility and be visible, thus ensuring profitability.

Target audience
The restaurants will benefit from the status of being associated with a recognized sommelier while staff such as waiters and waitresses will benefit in the form of promotions and higher salaries by having a skill in a niche. The youth who are still exploring their career options are also a target. The sommelier niche is not that popular and so a new facility in a city like Toronto may have a positive impact in the recruitment of more 'wine experts'.

Data collection
Naturally, location data of the restaurants in Toronto will be vital to this study. There is a need to study the distribution of restaurants (and hotels) in the city so as to pick the best location. The practice should ideally be located in the 'sweet spot' with a good population of outlets and customer traffic. A location with expensive and high-end outlets will be even better. But that is a study for another time. Basically, the dataset(s) will constitute of the longitude and latitude coordinates of Toronto neighbourhoods and physical locations of the restaurants. Wikipedia will be scrapped for the location data. Geocoder will be used to parse the longitude and latitude coordinates. Foursquare will be used to find the locations and type of restaurants in the areas of interest. Clustering show us the distributions of the food outlets among the neighbourhoods.

Further research

A feasibility study consisting of the costs of setting up (rent, initial staff numbers and salary expectations) and financial projections will have to be performed in order to ultimately decide if the venture will succeed. A market survey will have to be carried out targeting the restaurants and their employees as well as the city inhabitants. This will answer the question: Is a sommelier consultancy needed in Toronto? A further study can use hotel location.

References

1. https://en.wikipedia.org/wiki/Sommelier