Capstone Project - The Battle of Neighborhoods (Week 1)

Introduction

Problem Background:

The Capital City of the province of Ontario, Toronto is the largest and most populated city in Canada. Toronto is one of the most multicultural cities and serves as a metropolis having significant contribution to the country's economic, financial, and historical development. Diverse and influential the city attracts people from all over that want to experience the city for its skyscrapers, restaurants, college education, and many other reasons.

Its large population and popularity provide opportunity, but this comes at the expense of a saturated market filled with competition. Decisions must me made cautiously, they need to be informed with the current and past information that is available. It needs to answer what, when, and where. This strategic planning helps provide insight, reduce risk, and lets you select a potentially more profitable, prosperous location regardless of the business venture you are pursuing.

Problem Description:

Specifically, I will be investigating the restaurants in the city of Toronto and selecting the best neighborhoods to open a restaurant. Toronto is known for its ethnic and cultural diversity; it's diversity and high population has allowed different food cultures and practice to intertwine and be brought together in the city. Demographically, almost or slightly over half of the population are visible minorities and they are represented in ethnic neighborhoods like Chinatown, Greektown, Koreatown, Little Italy, Little India, Little Portugal, Little Jamaica etc.

Therefore, neighborhood locations are very important in determining where to open a restaurant not just the amount located there and the type. All restaurant types will be included and the number of restaurants in each neighborhood will be investigated.

Data

The dataset I will be using is the Toronto Neighborhood data that we used previously for segmenting and clustering neighborhoods in Toronto in Week 3. The dataset is located on Wikipedia and contains 103 observations and includes 3 variables: Postal Code, Borough, and Neighborhood. It features 103 Neighborhoods that are located across 15 Boroughs.

Additionally, the latitude and longitude coordinates of the neighborhoods are also included using the geospatial data. This dataset will be utilized with the Foursquare API so that venue information can be used and explored within each neighborhood in Toronto. Toronto's diverse culture is evident in its variety of restaurant types like Belgian, Brazilian, Caribbean, Ethiopian, German, Greek, Moroccan, Portuguese, and many more.

Datasets that will be used:

- Toronto Neighborhood Data
    - Source: https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M
- Geospatial Data
    - Source: https://cocl.us/Geospatial_data
- Restaurant Venues in Toronto
    - Source: Foursquare API