Capstone Project – Battle of the Neighborhoods

Introduction

Under current pandemic, people are staying at home and working at home, they cannot hang out with dear friends or dine in for any special occasions. It is a difficult time not only for them, but also for restaurants. Some of people have become superb chief that they could make various cuisines, treat themselves well at each meal and save money. Others are relying on delivery apps to get food delivery to their house to save them from cooking.

Business Problem

This project will analyze as a delivery food application company, between New York City, US and Toronto, Canada, which city should they start the business first to get more people use the application to order food from various restaurants across the city. This project will get insights on which neighborhood has more diverse restaurants, which means more options for their customers, and higher living standards and quality of life, which means these people are most likely going to have the same standard of food tasting as before and does not mind to pay extra delivery fees during this time. This project will explore the similarities and differences between certain neighborhoods in the two cities, and then determine which neighborhood could generate more values for the business.

Target Audience

Stakeholders from Delivery Love to You LLC.

Data

Data will be captured from Wikipedia pages for location dataset which consists of postal code, name, latitude, and longitude information, diversity of cuisines which shows the cuisine/ restaurant options in one neighborhood, economy to show the ability of purchasing and make assumption on average spend on meals, population and density to show the potential number of customers for each neighborhood in New York City, US and Toronto, Canada.

Population and Density:

New York City, US: https://en.wikipedia.org/wiki/New_York_City

Toronto, Canada: https://en.wikipedia.org/wiki/Demographics_of_Toronto

Location:

New York City, US: https://en.wikipedia.org/wiki/Neighborhoods_in_New_York_City

Toronto, Canada: https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

Economy:

New York City, US: https://en.wikipedia.org/wiki/Economy_of_New_York_City

Toronto, Canada: https://en.wikipedia.org/wiki/Economy_of_Toronto

Diversity of cuisines:

New York City, US: https://en.wikipedia.org/wiki/Cuisine_of_New_York_City

Toronto, Canada: https://en.wikipedia.org/wiki/Cuisine_in_Toronto

This project will also use Foursquare API search feature to collect neighborhood venue data. Python packages and visualizations will also be used to better present the insights to stakeholders.

Methodology

Analytics Approach

New York City has a total of 5 boroughs and 306 neighborhoods, and Toronto has X numbers boroughs and X numbers neighborhoods. The first part of the project is to analyze the data, and find out the most feasible neighborhood in both cities to build network with restaurants and lunch the application. The second part of the project will compare two cities, and find the similarities and differences, and find the better to start the business.

Exploratory Data Analysis

Result

Discussion

Conclusion