Final Report---Investment of new restaurant in Toronto

1. Introduction

Canada is one of the world's top immigration destinations, with over 250,000 new immigrants arriving in Canada every year to take advantage of the country's strong economy and progressive immigration system. Canada Immigration benefits include having access to a safe and clean environment, a well-developed public transport system, healthcare, education, and good working conditions. Meanwhile, immigrants are a necessary component to achieve economic growth and keep taxpayer-funded systems such as pensions and health care stable and balanced.

As the immigration growing, more immigrants and local residents have desired to establish business or investment in Canada. Since the market is highly competitive in the highly developed city like Toronto, any new business venture or expansion need to be carefully analysed. And the insight derived from analysis will give a comprehensive understanding of the business environment, which helps for strategical targeting the market.

2. Business Problem

Toronto is a famous city for its diversity culture attracting global immigrants. To start a restaurant or food catering business, the targeted customers and suppliers are crucial to success for the marketing strategy. Moreover, the types of cuisines for the potential customers are also influenced by the immigrant history.

This report will first review the immigrant history to Canada, thus exploring the potential popular cuisines based on the immigrant's background. Then provide the new investor a comprehensive understanding of the current state of restaurant market in Toronto. And deliver guidance on where to locate the restaurant using the information obtained through the Foursquare API, along with the traffic information, in order to decide an appropriate location. Additionally, with accessibility of 'tips' and 'rating' of each restaurant by Foursquare API, the further improvement advice could be addressed to enhance the success of the new restaurant investment for the investor.

3. Data Collection

The data used in this report from multiple sources:

1) Canada immigration history, which includes the dataset of number of immigrants in the last decades and original countries of immigrants.

   https://s3-api.us-geo.objectstorage.softlayer.net/cf-courses-data/CognitiveClass/DV0101EN/labs/Data_Files/Canada.xlsx

2) List of postal codes of Canada, and the areas with postal codes beginning with M are located within the city of Toronto in the province of Ontario.

https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

3) Geographical coordinates with latitude and longitude of each postal code

http://cocl.us/Geospatial_data

4) Foursquare API, which is a social location service that allows users to explore the details of a venue. In this report, Foursquare API is used to build up the datasets of the restaurants within the specified areas, along with the restaurants ratings in order to evaluate the popularity.
5) Information of 8 peak hours' vehicle and pedestrian volume

https://www.toronto.ca/ext/open_data/catalog/data_set_files/8hrVeh&PedVolume_6-Mar-2018.xlsx

In this study, investigation is conducted based on above dataset. This report will help a new investor to have a comprehensive understanding of the current state of restaurant market in Toronto, as well as future market outlook.

Firstly, by analysing the Canada immigration history, the potential popular cuisines based on the immigrant's background will be found. Secondly, the current most popular restaurants with their locations would be discovered by using Foursquare API and Geographical coordinates in Toronto. Then locations of the most popular restaurants would be visualized in the Toronto map. Moreover, the restaurants will be divided into several clusters according to their ratings, in order to easily figure out which areas have more potential for a new restaurant. Or the areas with less competitive restaurants would therefore be selected. Finally, by comparing the traffic flow of visitors, the best locations for starting a new restaurant business would be proposed in this report.