

Predicting the right location to open a restaurant

28th March, 2020

1. Introduction

1.1 Background

Any new business always needs to be planned in terms of its location. This will require analysis of the population residing in that area, their income. Planning will also include the list of competitors already into business in the same locality.

1.2 Problem

This study helps people to plan to open a new restaurant in Toronto at the right location by providing data about the income and population of each neighborhood. Also, take into consideration the data of the competitors who are already present in that region.

2. Data acquisition and cleaning

2.1 Data sources

To provide necessary information, combine Toronto's 2016 Census data that contains Population, Average income per Neighborhood with Foursquare API to collect competitors on the same neighborhoods.

Toronto's 2016 Census data is publicly available at this website: <https://www.toronto.ca/city-government/data-research-maps/open-data/open-data-catalogue/#8c732154-5012-9afe-d0cd-ba3ffc813d5a>

Toronto Neighborhoods' shapefile is publicly available at this website: <https://www.toronto.ca/city-government/data->

research-maps/open-data/open-data-catalogue/#a45bd45a-ed8-730e-1abc-93105b2c439f

Before we get the data and start exploring it, let's download all the dependencies that we will need.

3. Methodology

The methodology used for this report includes, a few different maps that could help a new business investor to decide the best neighborhood to open a restaurant in Toronto based on the income, population and available competitors in the locality. This is made practically possible using:

- 2016 Census information combined with choropleth maps to visually display the wealthier and more populational neighborhoods
- Foursquare data to display the current restaurants in each region

4. Results

On comparing the two maps, notice that the majority of the restaurants grouped are on main streets and on the south of the city. This contradicts the fact that some of the wealthiest neighborhoods are up to the north of the city.

Thus, it can be understood that the areas with a dense population don't reflect on the number of restaurants.

5. Discussion

It was expected to get clusters of restaurants around the areas with dense population. The final result did not meet the expectations but were quite useful in terms of further decision to be made.

6. Conclusion

This report is for people who plan to open a restaurant in Toronto and that his primary analysis depends on comparing the neighborhoods profiles and current offers. However, this may not cover all variables such as access to public transportation or even the restaurants profiles. Thus, it shall not be used as a single decision making tool.