

# IBM Capstone project

## Starting a restaurant in Toronto



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# 1. Introduction / Business Problem

My client company wants to start a restaurant business and is trying to decide which area in Toronto could be a right spot to do that. An area should have the biggest potentiality in developing restaurant business. Location should help company to reach as wide customers auditory as possible to make business profitable. As company does not possess a knowledge of Toronto districts and neighborhoods, it decided to hire a business consultant company which provides various consultant services for companies which want to establish new business in Toronto area. A consultant company utilizing Data Science methods is going to cluster Toronto city area and provide recommendations where is the best place to start a restaurant business.

As there are a lot of restaurants in Toronto already, we will take into consideration every district's population and its density too. We are very interested in districts located in Toronto Downtown as tourists can generate additional revenues too.

## 2. Data

Three types of data are required for this project:

1. Names and coordinates of the neighborhoods of Toronto
2. Population and density information about every neighborhood areas

### 2.1 Names and coordinates of the neighborhoods of Toronto

A list of the names of the different neighborhoods of Toronto was scraped from Wikipedia ([https://en.wikipedia.org/wiki/List\\_of\\_postal\\_codes\\_of\\_Canada:\\_M](https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M)).

### 2.2 Population and density information about every neighborhood areas

The Foursquare API was used to retrieve information about the most popular spots in Toronto. The popular spots returned depends on the highest foot traffic at the time when the call is made. We may get different popular venues at different times of the day. Therefore, the API call should be made at different times, during lunch, dinner rush hour etc.