

# Capstone Project - The Battle of Neighborhoods (Week 4)

IBM Data Science

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## Introduction/Business Problem

The objective of this project is to help the management of Banjul Pizza Ltd. The firm is considering the possibility of opening Pizza restaurants in Toronto Canada. The initial research shows that Toronto is ethnically diverse with people from different background who loves pizza. The management want to find out the best possible place to open their first pizza restaurant. As one of the largest cities in Canada, with immigrant cultures, Toronto is a business-minded city which already have many pizza restaurants. Therefore, the aim is to open the first restaurant in a neighborhood with lesser pizza restaurants thereby a possible lesser competition too.

As a member of the project team and data science professional, I have been tasked to offer solution to the problem of opening the first restaurant in the right place with less potential competition in the city of Toronto.

## Data Sources and discussion

This project will make use of data from sources to offer a data driven solution. Therefore, we will focus on data collection that are relevant to Toronto. For instance, we will need to know all the borough in Toronto with related neighborhoods and post code. We all need to geo location data such as longitude and latitude of each place too. The source below will offer data needed for the analysis:

- Wikipedia - There is a special page on the Wikipedia that has data about borough, neighborhood and postal code of Toronto.
- Toronto Geospace information – Initial review shows that Wikipedia data does not contain information about longitude and latitude. Therefore, we will use downloaded CVS file that already has the geo data for all neighborhoods in Toronto.
- Foursquare location data– Now we data about the surrounding venues near each location. We will use the Foursquare API tool to collect venues that are nearby each geo location.

These three sources will supply us with data that will be transform and explore using relevant data science methodologies.

