BATTLE OF NEIGHBORHOODS OF TORONTO

Jan 9, 2017

Business Problem

- Toronto is the largest city of Canada and most ethnically diverse city.

- There is lot of research required to start restaurant business.

- The most important problem is to identify the location to start the restaurant.

- In an ethnically diverse city like Toronto, this is even harder to narrow down the location to start the restaurant.
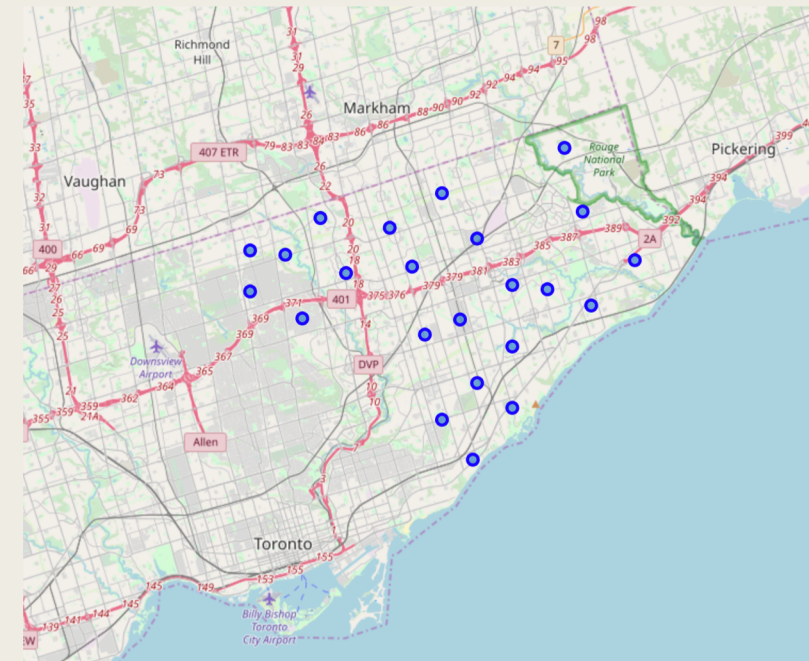
Data

- All neighbourhoods in the city of Toronto.
  https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

- Demographics information of Toronto neighbourhoods.
  https://www.toronto.ca/ext/open_data/catalog/data_set_files/2016_neighbourhood_profiles.csv

- Postal Code information for each neighbourhood. http://cocl.us/Geospatial_data

- Nearby venues in each neighbourhood. https://foursquare.com/developers/apps

Solution Approach

■ Collect all the neighbourhoods in Toronto.

■ Make use of the demographics information and identify top 50 neighbourhoods having high Indian and Sri Lankan population.

■ Explore nearby venues for these neighbourhoods to identify the restaurants currently available currently.

■ Segment them in to 3 groups based on the most frequent restaurant type available now.

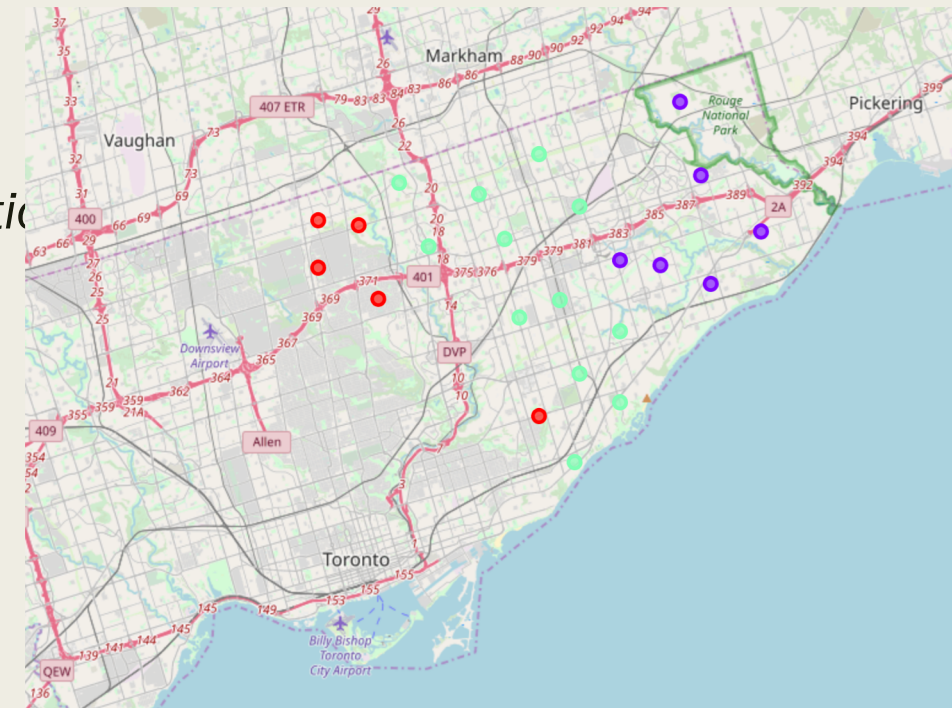■ Infer the result and suggest the recommendations.

Methodology

- Data collected and cleansed from the data sources and made ready for the data analysis.

- Top 50 neighborhoods with high Indian and Sri Lankan population as shown in the map were analyzed for their nearby venues.

- Foursquare APIs were used to extract the venues and

processed to identify top 10 restaurant categories.

- Neighborhoods along with their top 10 types of currently

available restaurants were clustered using k-means

machine learning algorithm.

Results and Recommendations

■ 3 clusters were formed

– *Moderate Indian and Sri Lankan population with no Indian Restaurants.*

– *High Indian and Sri Lankan population with highly common Indian restaurants.*

– *Moderate to high Indian and Sri Lankan populati* with moderately common Indian restaurants.

■ Above cluster details provide different competitiveness and customer base availability that a User can choose to start their Indian restaurant.

Thanks!