PREDICTING THE BEST LOCATION FOR BUSINESS FACILITY

By: Akshdeep Kaler

Business Problem

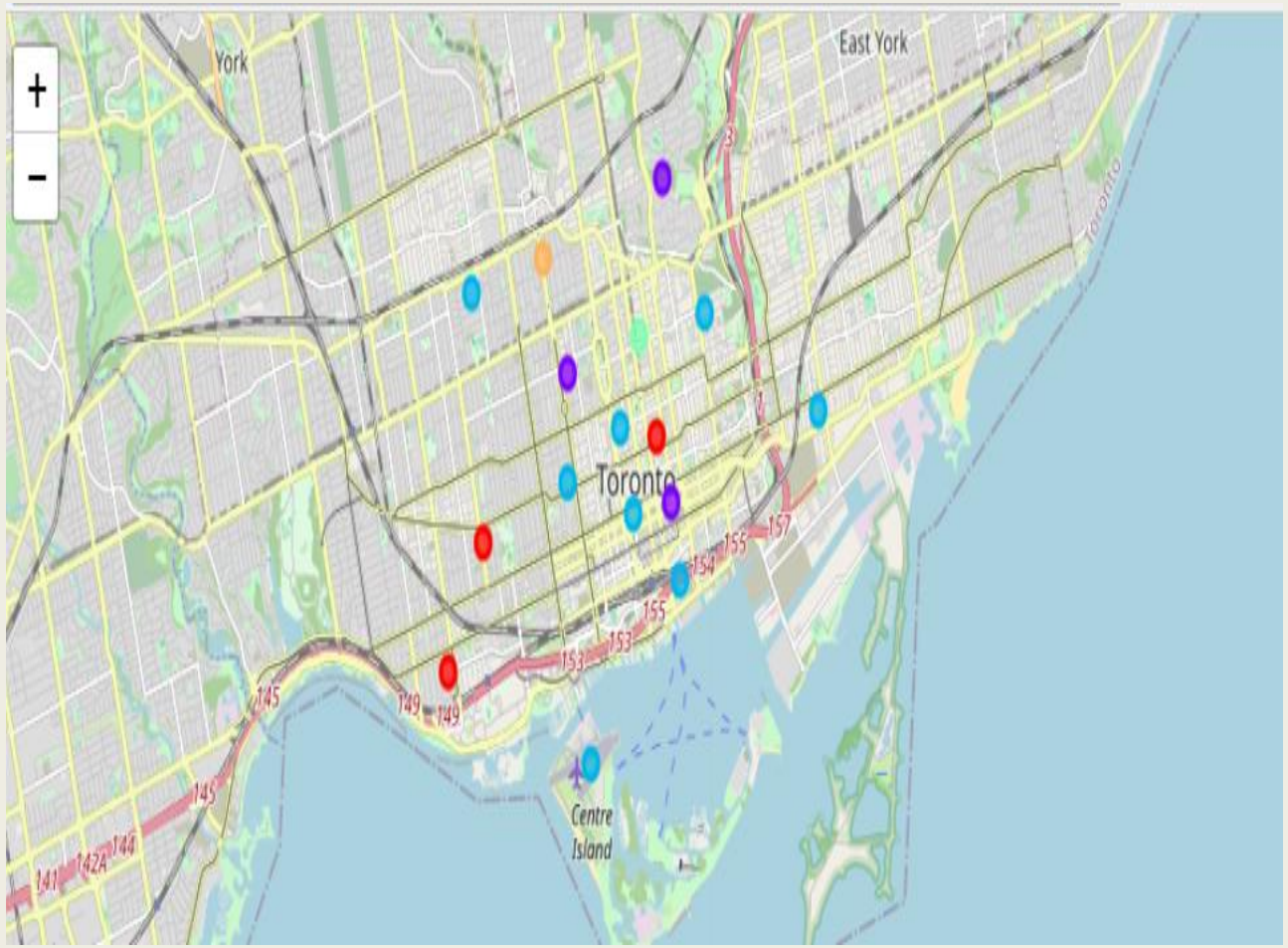
- A multi-national company wants to set up the manufacturing facility for Restaurant Equipment and Supply in the neighborhood of Toronto.
- To meet their requirements, they gave the data scientist a task to find the neighborhood with diverse restaurant types.

Data Acquisition and Cleaning

- Neighborhood data of city of Toronto is downloaded from Wikipedia.
- Foursquare API is used to get the location of restaurants according to Postal Codes of the neighborhoods.
- One hot encoding is applied on the data and top ten restaurants near to the location is extracted.

Predicting Model

- For prediction the better location I used K-Means Clustering.
- K-Means clustering to divide the Postal Codes and Neighborhood with similar characteristics into clusters.



Conclusions

Every cluster presents the specific characteristics of its own. According to requirement of diverse restaurants type, Cluster 3 is very much suitable.

Postal Code	M5V
Borough	Downtown Toronto
Neighbourhood	CN Tower, King and Spadina, Railway Lands, Har...
Latitude	43.6289
Longitude	-79.3944
Cluster Labels	2
1st Most Common Venue	Wine Bar
2nd Most Common Venue	Restaurant
3rd Most Common Venue	Bar
4th Most Common Venue	Indian Restaurant
5th Most Common Venue	Thai Restaurant
6th Most Common Venue	Noodle House
7th Most Common Venue	Nightclub
8th Most Common Venue	New American Restaurant
9th Most Common Venue	Korean Restaurant
10th Most Common Venue	Vietnamese Restaurant

Name: 12, dtype: object