

The Battle of Neighborhoods

Business problem

Glo-vate is a Global Business

Continuously considering new prospects internationally. Lately, the company desires to invest in a Restaurant Industry.

Interested in Manhattan, New York or Downtown, Toronto

Wants to compare the neighborhoods of the places and determine how parallel or different they are

Data description

Data will be fetched and explored of Manhattan, New York and Downtown, Toronto from Foursquare API.

Focused on restaurants, coffee shops and entertainment venues.

Neighborhood Segmentation and Clustering will be applied.

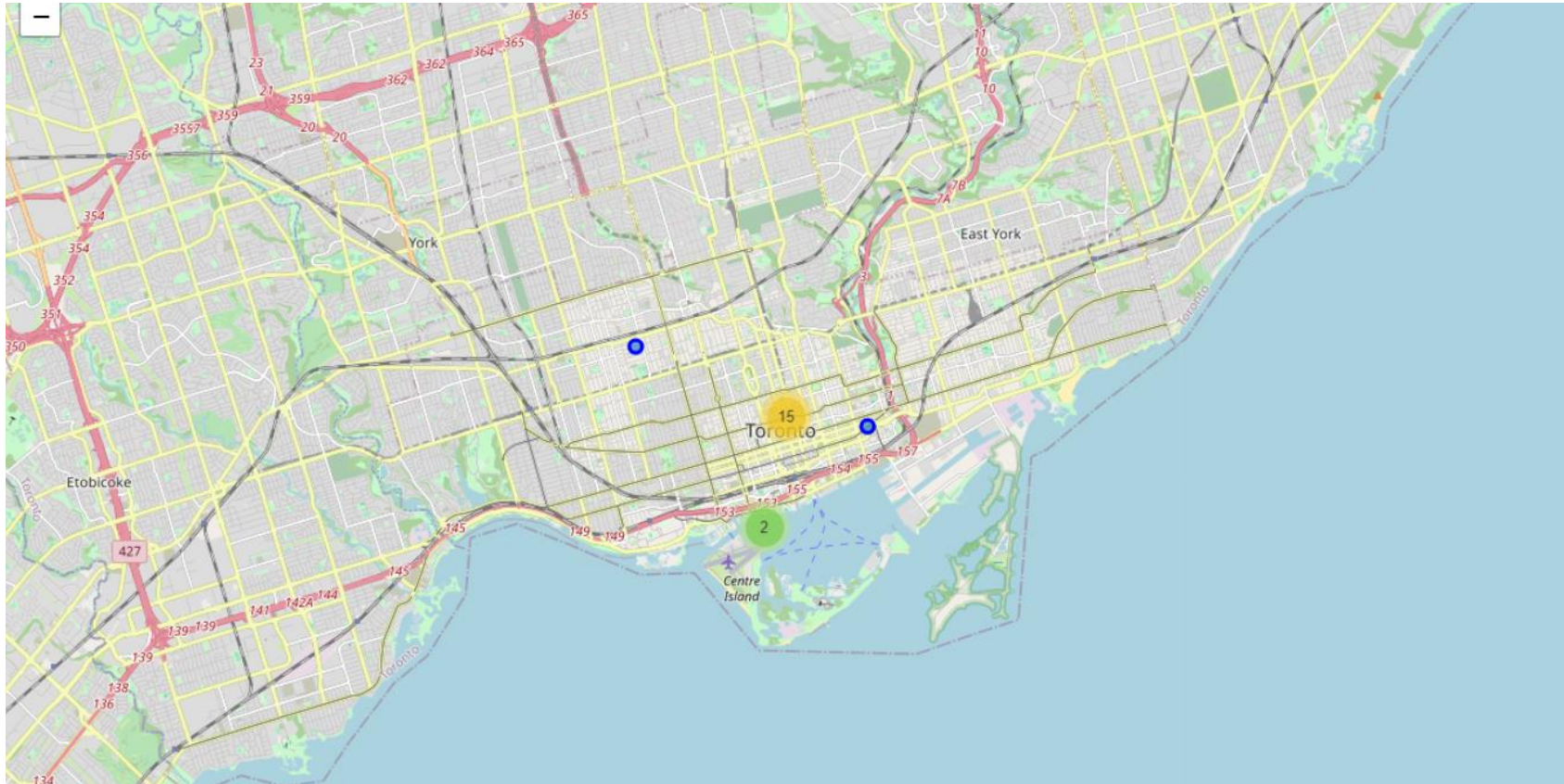
Which city is the better place for Glo-vate to invest in

Most Common Venues in both Cities

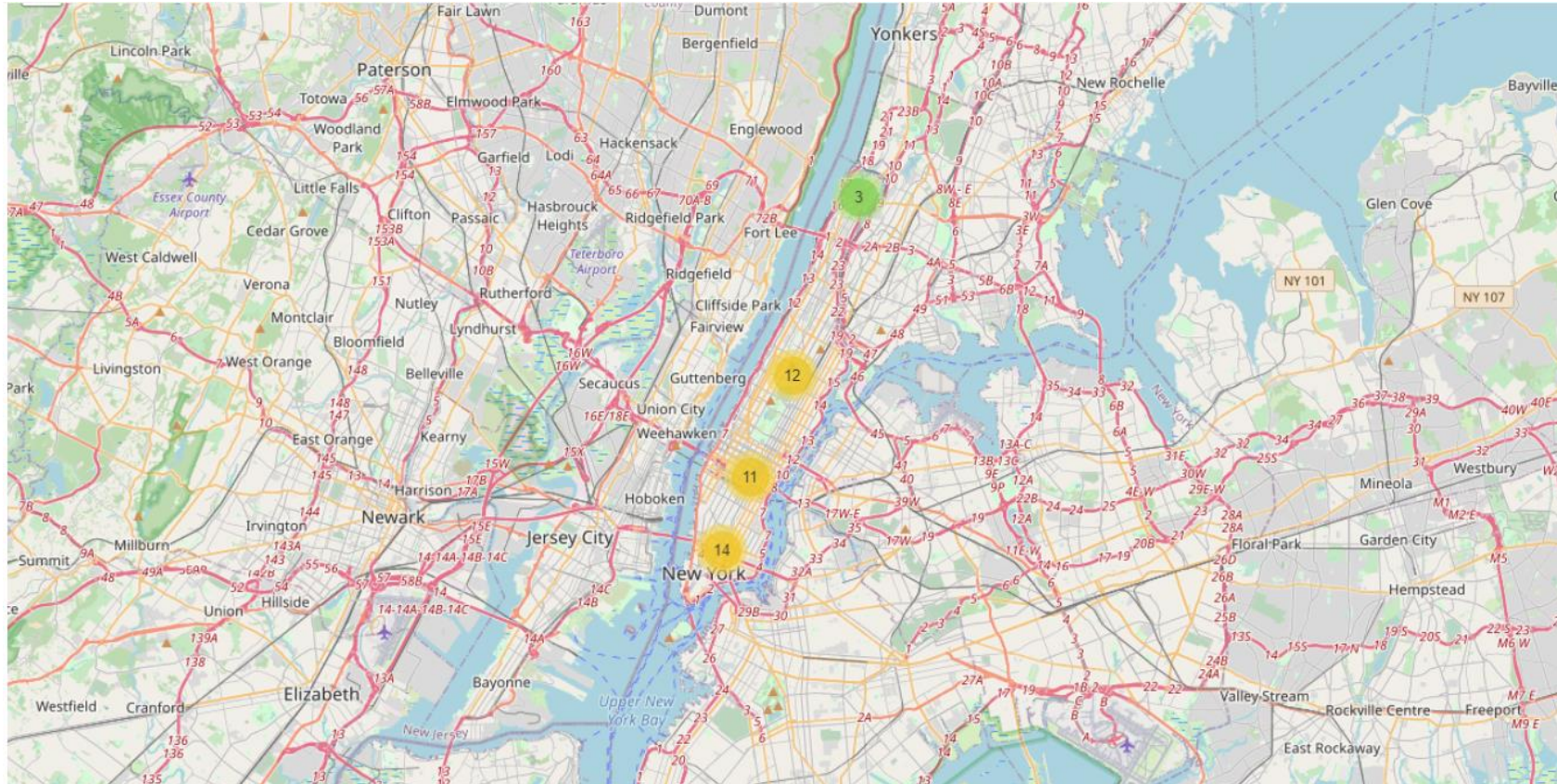
	Borough	Neighborhood	Latitude	Longitude	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Manhattan	Marble Hill	40.876551	-73.910660	0	Coffee Shop	Yoga Studio	Gym	Diner	Donut Shop	Seafood Restaurant	Pizza Place	Tennis Stadium	Pharmacy	Gym / Fitness Center
1	Manhattan	Chinatown	40.715618	-73.994279	1	Spa	Bakery	Cocktail Bar	Sandwich Place	English Restaurant	Museum	Tea Room	Greek Restaurant	Pizza Place	Hotel
2	Manhattan	Washington Heights	40.851903	-73.936900	1	Café	Italian Restaurant	Park	Market	Bakery	Restaurant	Coffee Shop	Deli / Bodega	Burger Joint	Dog Run
3	Manhattan	Inwood	40.867684	-73.921210	1	Pet Store	Park	Bistro	Farmers Market	Bakery	Diner	Mexican Restaurant	Deli / Bodega	Wine Bar	Wine Shop
4	Manhattan	Hamilton Heights	40.823604	-73.949688	0	Yoga Studio	Cocktail Bar	Café	Mexican Restaurant	Pizza Place	Caribbean Restaurant	Italian Restaurant	Wine Bar	Arts & Crafts Store	English Restaurant

	Postal Code	Borough	Neighborhood	Latitude	Longitude	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
2	M5A	Downtown Toronto	Regent Park, Harbourfront	43.654260	-79.360636	0	Breakfast Spot	Gym / Fitness Center	Bakery	Restaurant	Spa	Coffee Shop	Distribution Center	Park	Historic Site	Food Truck
4	M7A	Downtown Toronto	Queen's Park, Ontario Provincial Government	43.662301	-79.389494	0	Coffee Shop	Mexican Restaurant	Park	Creperie	Arts & Crafts Store	Italian Restaurant	Sushi Restaurant	Beer Bar	Distribution Center	Concert Hall
9	M5B	Downtown Toronto	Garden District, Ryerson	43.657162	-79.378937	3	Café	Tea Room	Music Venue	Plaza	Burrito Place	Comic Shop	Clothing Store	Thai Restaurant	Theater	Fountain
15	M5C	Downtown Toronto	St. James Town	43.651494	-79.375418	2	Coffee Shop	Gym	Gastropub	Restaurant	Japanese Restaurant	Food Truck	Cosmetics Shop	Creperie	Middle Eastern Restaurant	Dance Studio
20	M5E	Downtown Toronto	Berczy Park	43.644771	-79.373306	0	Cocktail Bar	Farmers Market	Park	Concert Hall	Restaurant	Museum	Coffee Shop	Liquor Store	Fountain	Vegetarian / Vegan Restaurant

Map of Downtown, Toronto Clusters



Map of Manhattan, New York Clusters



Methodology

Processed data that includes Downtown, Toronto & New York, Manhattan

Python folium library to visualize geographic details.

The Foursquare API is used to utilize and explore the neighborhoods and segment them.

The LIMIT parameter is set to 20,

One Hot Encoding, is used in order to group data

K-means algorithm is used to cluster the neighborhoods.

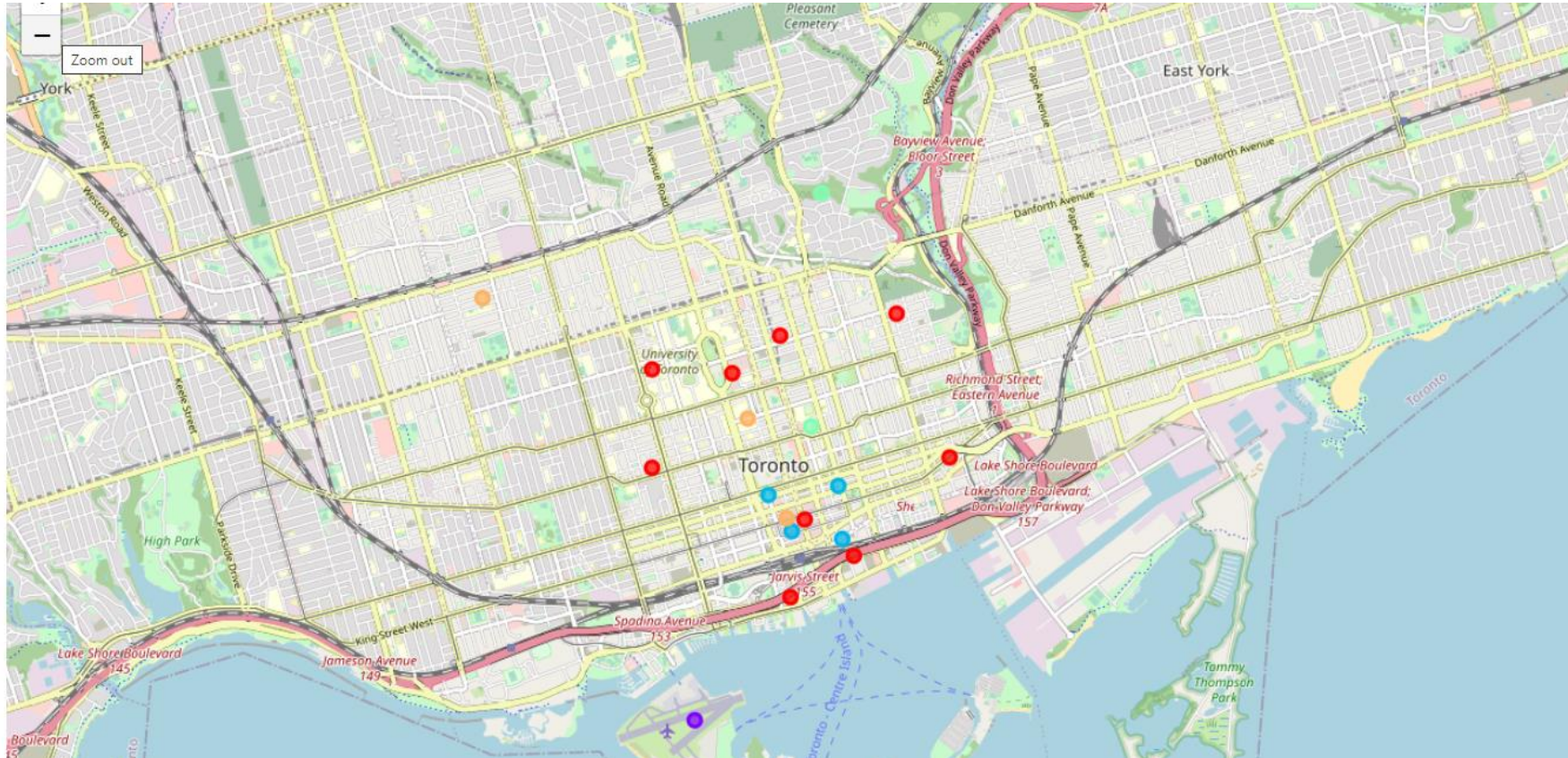
k_cluster value of 5 was used to divided the neighborhoods into 5 different clusters

Discussion

Find out which city should Glo-vate invest in

Manhattan, New York or Downtown, Toronto, Canada.

We analyze the clusters and see similar venues in both cities.



Results & Conclusion

Manhattan, New York has more varied restaurants and entertainment venues than Downtown Toronto, Canada.

More than likely the area will attract more walk-ins and prospects.

The more diverse restaurants and cafes are in neighborhoods, the more individuals are exposed to different types of food, entertainment and cultures.

With the information presented, it would be recommended that Glo-vate invest in their Restaurant in Mahattan, New York.