

The best city to start a business in

Ahmed Gouda

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1. Introduction/Business Problem

I'll decide what is the best city to start a business in between two cities: **City of Toronto and New York City**.

It's important, because what is the matter of starting a business and it'll fail?

This is for anyone who wants to open a restaurant in one of these two cities.

2. Data

I used the **foursquare api**.

I compared the venues in the two cities. The city which has a few restaurants in its top venues, is the best one to open a restaurant in.

I used the **explore** endpoint for doing this comparison.

The endpoint group is **venues**.

3. Methodology

I got the data for the two cities from the **foursquare api** with a 5000m radius to explore the top 100 venues around them, I needed to get the cities geographic coordinates, I used the **geopy** library for this. I used **pandas** to create the dataframes and **folium** to create a map for each city data, it helped a lot to decide which city is the best to open a restaurant in.

The reason why I chose a 5000m radius because there are no restaurants around **City of Toronto** with 500m radius.

I made two requests to the **foursquare api** to get the **json** data for the two cities, and the results were a little messy.

I cleaned and converted the results to two pandas dataframes and these were the results,

New York City:

	name	categories	lat	lng
0	Crown Shy	Coffeeshop	40.71	-74.01
1	Le Coucou	French Restaurant	40.72	-74
2	Kiki's	Greek Restaurant	40.71	-73.99
3	Wayla	Thai Restaurant	40.72	-73.99
4	CAVA	Mediterranean Restaurant	40.72	-74
5	Rubirosa Ristorante	Italian Restaurant	40.72	-74
6	Raku	Udon Restaurant	40.73	-74
7	Carbone	Italian Restaurant	40.73	-74
8	Fish Cheeks	Thai Restaurant	40.73	-73.99
9	Upstate Craft Beer and Oyster Bar	Seafood Restaurant	40.73	-73.99
10	Buvette	French Restaurant	40.73	-74
11	Via Carota	Italian Restaurant	40.73	-74

12	L'Artusi	Italian Restaurant	40.73	-74.01
13	Joseph Leonard	New American Restaurant	40.73	-74
14	Cafe Mogador	Moroccan Restaurant	40.73	-73.98
15	Kura	Japanese Restaurant	40.73	-73.98
16	Taïm	Falafel Restaurant	40.74	-74
17	Mémé Mediterranean	Mediterranean Restaurant	40.74	-74.01
18	Lillo	Italian Restaurant	40.69	-74

City of Toronto:

	name	categories	lat	lng
0	Tutto Pronto	Italian Restaurant	43.73	-79.42
1	Cibo Wine Bar	Italian Restaurant	43.71	-79.4
2	La Vecchia Ristorante	Italian Restaurant	43.71	-79.4

3	Grazie Ristorante	Italian Restaurant	43.71	-79.4
4	Bar Buca	Italian Restaurant	43.71	-79.39
5	Balsamico	Italian Restaurant	43.7	-79.4
6	Little Sister	Indonesian Restaurant	43.7	-79.4
7	Kinton Ramen	Ramen Restaurant	43.71	-79.4
8	RH Courtyard Café	Coffee shop	43.72	-79.46
9	C'est Bon	Chinese Restaurant	43.72	-79.4
10	Sushi Rock Café	Sushi Restaurant	43.71	-79.4
11	Auberge du Pommier	French Restaurant	43.75	-79.41
12	Pukka Restaurant	Indian Restaurant	43.68	-79.43
13	B.GOOD	Fast Food Restaurant	43.71	-79.4
14	Sushi Zuki	Japanese Restaurant	43.69	-79.46
15	Capocaccia Café	Italian Restaurant	43.69	-79.39

16	Vivo Pizza And Pasta	Italian Restaurant	43.73	-79.45
17	DeSotos	Italian Restaurant	43.68	-79.44
18	Kamasutra	Indian Restaurant	43.7	-79.37
19	Kinka Izakaya	Japanese Restaurant	43.76	-79.41
20	Roti Cuisine of India	Indian Restaurant	43.67	-79.41
21	Marcello's Pizzeria	Italian Restaurant	43.68	-79.44

After that I wanted more detail to determine what is the best city, so I counted each type of restaurants around each city. And these are the results,

New York City:

Italian Restaurant	5
French Restaurant	2
Thai Restaurant	2
Mediterranean Restaurant	2
New American Restaurant	1
Coffee shop	1
Greek Restaurant	1
Moroccan Restaurant	1
Falafel Restaurant	1
Udon Restaurant	1
Seafood Restaurant	1
Japanese Restaurant	1

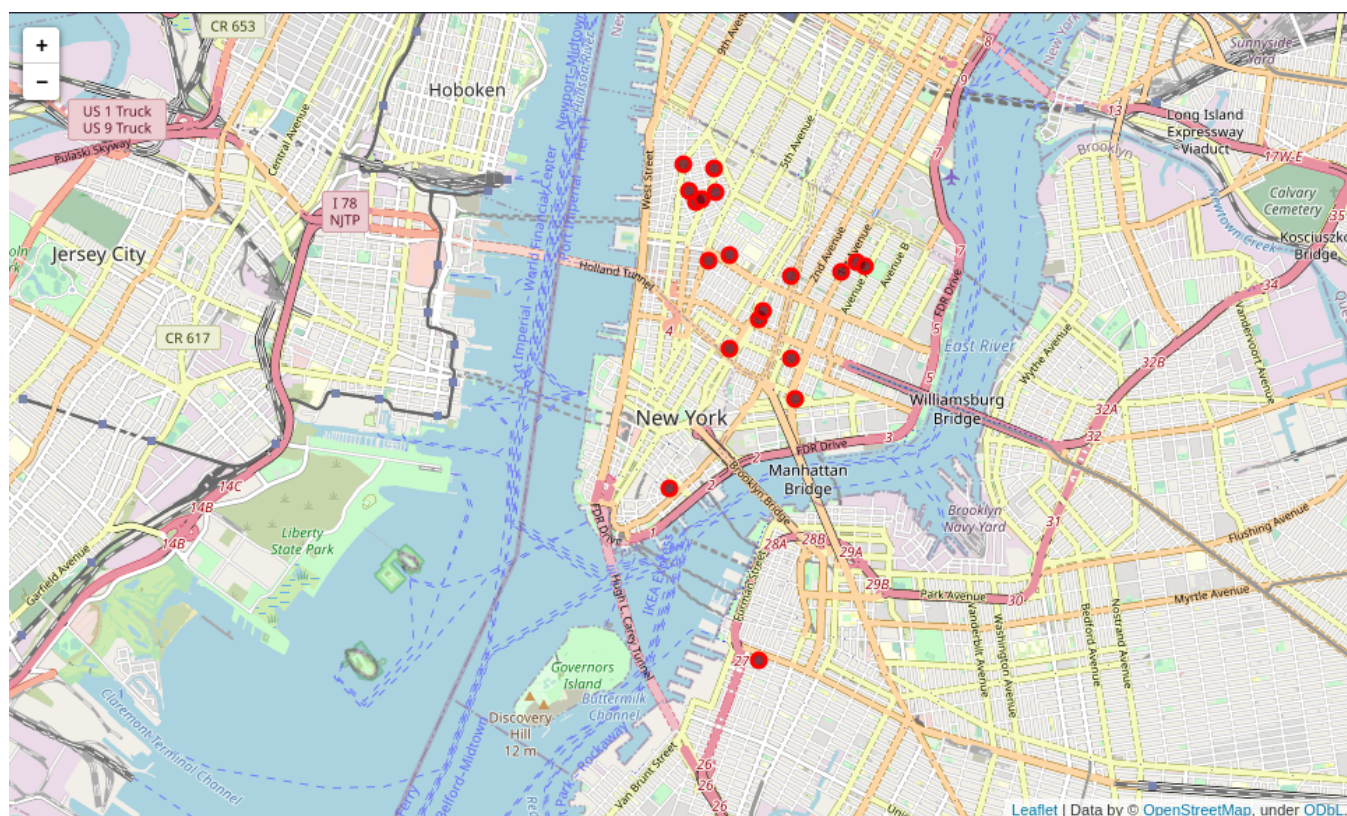
City of Toronto:

Italian Restaurant	10
Indian Restaurant	3

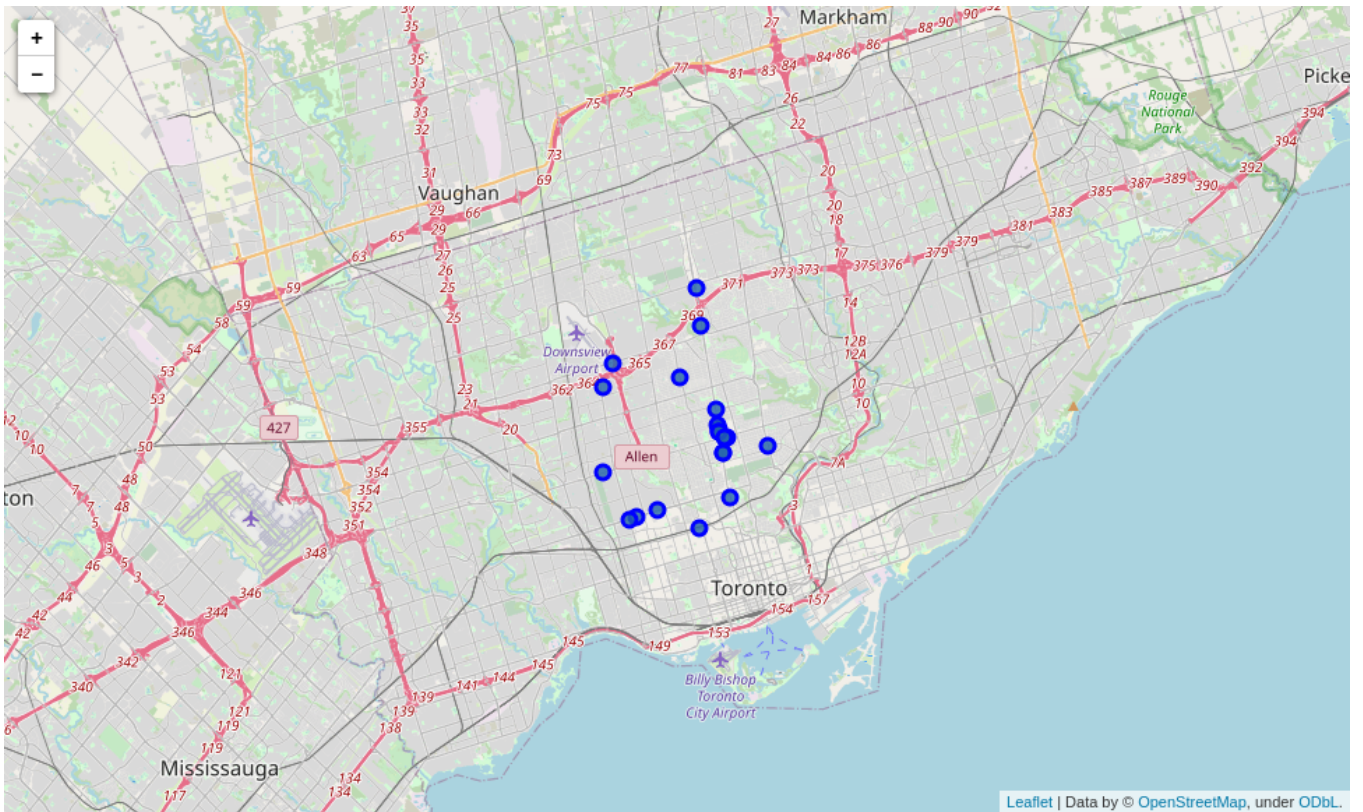
Japanese Restaurant	2
Coffee shop	1
Chinese Restaurant	1
Indonesian Restaurant	1
Fast Food Restaurant	1
Sushi Restaurant	1
Ramen Restaurant	1
French Restaurant	1

I wanted to get more details about the two cities, so I create a map for each one of them. I used folium library to draw the map and geopy to get the geographic coordinates of the two cities. And these were the results,

New York City map:



City of Toronto map:



4. Results

So, to determine what is the best city, I had to look at some dimensions.

- There are no any restaurants around **City of Toronto** with 500m radius but there are 19 restaurants around **New York City** with 500m radius in the top 100 venues.
- There are 22 restaurants around **City of Toronto** with 5000m radius in the top 100 venues.
- There are 10 Italian restaurants around **City of Toronto** but there are 5 ones only in **New York City**.
- There are more different restaurants categories around **New York City** than **City of Toronto**.
- The top 5 restaurants around **City of Toronto** are Italian restaurants.

- There are 3 Indian restaurants in **City of Toronto** but there are no Indian restaurants around **New York City**.

5. Discussion

City of Toronto and **New York City** are big cities, and a lot of people will intend to open a restaurant in one of these two cities, or maybe there is who has a restaurant in one of the two cities and wants to immigrate to the other one, and they are afraid if their business failed in the other city.

They have to know who are their competitors, what do they serve, and where their businesses.

If they want their businesses to success in the city which they will immigrate to, they have to be careful making their choices.

6. Conclusion

If there is anyone who wants to open a restaurant in one of the two cities, they have to notice these things:

- If they will open the restaurant with 500m radius, the best city is **City of Toronto** because there are no restaurants around it with 500m radius in the top 100 venues.
- If they don't care about distance, and they will open it anywhere around the city, they will have to notice these things:
 1. If they will open an Italian or a Japanese Restaurant, the best city is **New York City** because there are less Italian and Japanese restaurants around **New York City** than **City of Toronto** in the top 100 venues.
 2. If they will open an Indian, Chinese, Sushi, Fast Food, Ramen or an Indonesian Restaurant, the best city is **New York City**, because these types of restaurants are less around **New York City** than **City of Toronto** in the top 100 venues.
 3. If they will open a French Restaurant, the best city is **City of Toronto**, because there are less French Restaurants around **City of Toronto** than **New York City** in the top 100 venues.
 4. If they will open a Mediterranean, Thai, Seafood, Falafel, Moroccan, New American, Udon, or Greek Restaurant, the best city is **City of Toronto**, because these type of restaurants are not around **City of Toronto** in the top 100 venues.

5. If they will open a coffee shop, there is no best city in this situation, because there are a coffee shop around each of the two cities in the top 100 venues.
6. If they will open other type of restaurant, it's fine to choose any city they want.

So, They have to decide what they want to do before open a restaurant in one of the two cities