

**The Battle of Neighbourhood
IBM Capstone**

Opening a New Coffee Shop in Toronto

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January 2021



1. Introduction

1.1. Background

As the capital of Ontario and the financial center of Canada, Toronto is a metropolis for leisure, entertainment, economic development and talent exchange. Like New York City in USA and Shanghai in China. With a recorded population of 2,731,571 in 2016, it is the most populous city in Canada and the fourth most populous city in North America.

As we know, coffee is a necessary product of our daily life. We can see people on the streets with a cup of coffee in hand, especially in Downtown. In the stressful and fast-paced work or study pressure, enjoying a cup of coffee become a good way to relieve stress. Coffee Shop is a good place for talking with friends, studying, meeting new friends, reading books or just relax and enjoy the coffee. There are lots of coffee shop in Toronto, Canada. For example, Starbucks, Second Cup, Balzac's, Tim Horton's and so on. Therefore, the most important thing to opening a coffee shop is the location.

1.2. Business Problems

The objective of this project is to find a suitable location to open a Coffee Shop in Toronto, Canada. In order to solve the final objective, we also need to analyse the following information: What is the best location in Toronto for coffee shop? Which area lack of coffee shop? What is the best place to stay if you prefer to get a coffee more comfortable?

1.3. Target Audience

People who want to open a coffee shop, and people who like coffee.

2. Data Section

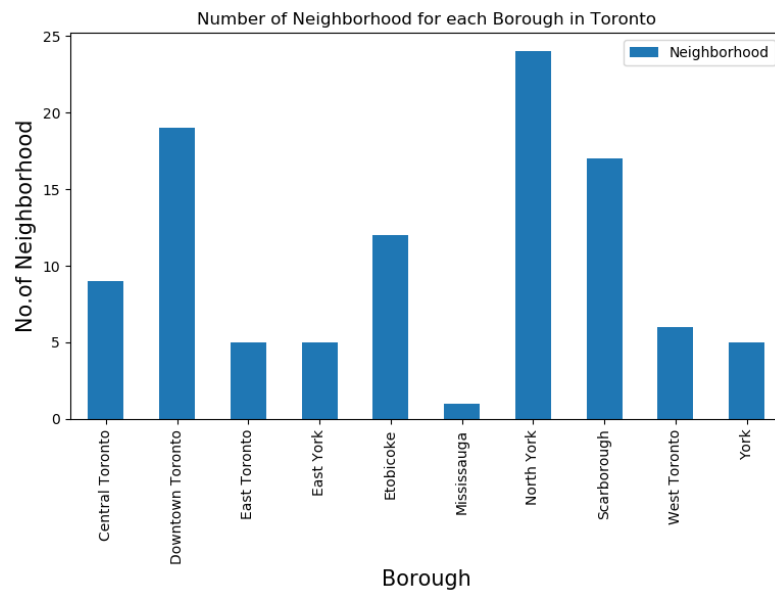
- Starbucks coffee in each neighbourhood of Toronto, Canada
 - ◆ Data source: Foursquare API
 - ◆ Description: We can get all the venues related to coffee shop in each neighbourhood
- List of neighbourhoods in Toronto, Canada
 - ◆ Data source: Wikipedia
 - ◆ Description: We can scrap of Toronto neighbourhood

3. Methodology

- Firstly, web scraping the Toronto data from Wikipedia page

	Postalcode	Borough	Neighborhood
0	M1B	Scarborough	Malvern, Rouge
1	M1C	Scarborough	Rouge Hill, Port Union, Highland Creek
2	M1E	Scarborough	Guildwood, Morningside, West Hill
3	M1G	Scarborough	Woburn
4	M1H	Scarborough	Cedarbrae
5	M1J	Scarborough	Scarborough Village
6	M1K	Scarborough	Kennedy Park, Ionview, East Birchmount Park
7	M1L	Scarborough	Golden Mile, Clairlea, Oakridge
8	M1M	Scarborough	Cliffside, Cliffcrest, Scarborough Village West
9	M1N	Scarborough	Birch Cliff, Cliffside West

- Secondly, extracted the geographical coordinates of each neighborhood and generated maps to visualize the neighborhoods and how they cluster together

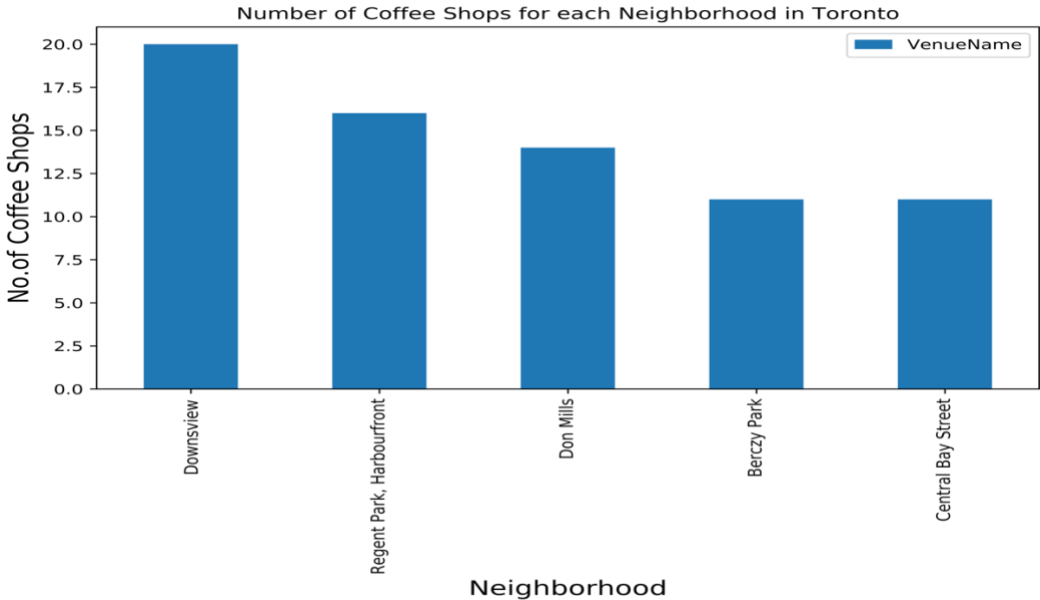
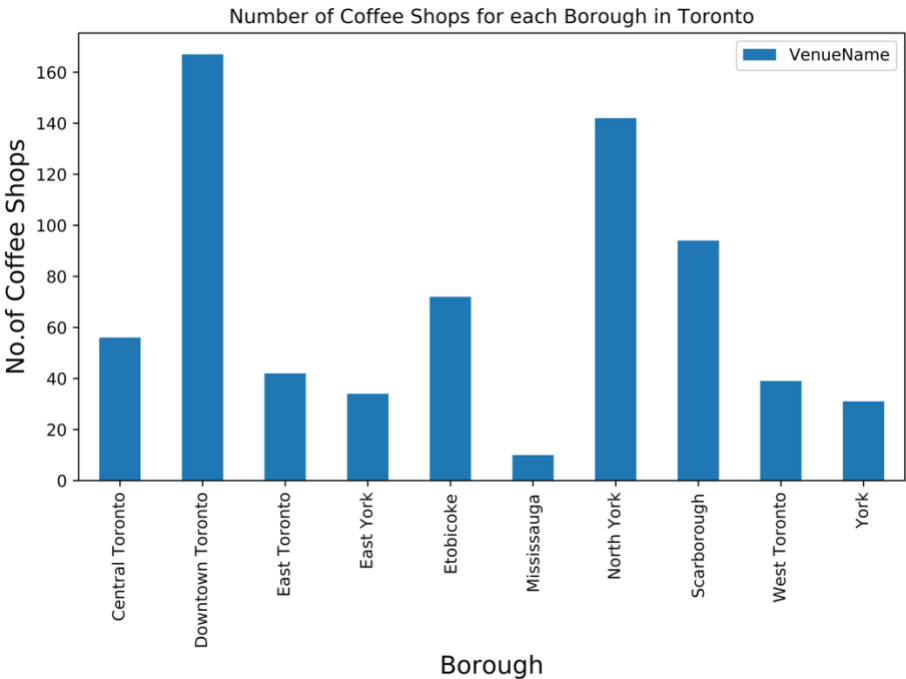




- Thirdly, Obtain the venue data for the neighborhoods from Foursquare API

	Borough	Neighborhood	VenueName	VenueCategory
0	Scarborough	Malvern, Rouge	Shoppers Drug Mart	Pharmacy
1	Scarborough	Malvern, Rouge	Malvern Arena	Skating Rink
2	Scarborough	Malvern, Rouge	Subway	Sandwich Place
3	Scarborough	Malvern, Rouge	Images Salon & Spa	Spa
4	Scarborough	Malvern, Rouge	Lindt Outlet Boutique	Chocolate Shop

- Then find the total numbers of coffee shops in each borough/neighborhood



- Finally, select the best place to open a new coffee shop

4. Conclusions:

Form Above we can see the following:

- Most of the Coffee Shops are concentrated in downtown Toronto, with the number over 160. On the other hand, bar chart shows that Mississauga has the lowest number of Coffee shops.
- This represents a great opportunity and high potential areas to open new coffee shops in Mississauga as there is very little to no competition from existing coffee shops.
- If you want to get coffee more easily, live in Downsview, North York is a good choice.