#### Battle of the Neighborhoods

#### Part I. Introduction / Problem

In recent reports, Toronto, Canada has been named the fastest growing cities in Canada and outpacing even the fastest growing cities in the United States. Among the reasons for this is massive growth in international migration in both permanent and temporary residents thanks to Canada's welcoming immigration policies. Due to this multicultural explosion in growth, Toronto has become a booming area providing lots of business opportunities for those looking to open new businesses.

Noticing the massive growth in the city, my barista wanted advice on opening a new coffee shop in the city and is interested in opening a location either in the University of Toronto or York University area. He believes that these are hotspots for demand and is interested in some advice. Unfortunately, he has no idea where to start.

#### Part 2. Data

We will be analyzing data for the City of Toronto for this project.

1. In order to segment Toronto's neighborhoods and boroughs, we had to obtain data from Wikipedia located <a href="https://example.com/here">here</a>. This will allow us to match neighborhoods, postcodes, and GPS coordinates with venues we discover on Foursquare. Below is some data scraped from the Wikipedia page.

65	M5R	Central Toronto	The Annex, North Midtown, Yorkville
66	M5S	Downtown Toronto	Harbord, University of Toronto
67	M5T	Downtown Toronto	Chinatown, Grange Park, Kensington Market
68	M5V	Downtown Toronto	CN Tower, Bathurst Quay, Island airport, Harbo
69	M5W	Downtown Toronto	Stn A PO Boxes 25 The Esplanade
70	M5X	Downtown Toronto	First Canadian Place, Underground city
71	M6A	North York	Lawrence Heights, Lawrence Manor
72	M6B	North York	Glencairn
73	M6C	York	Humewood-Cedarvale
74	M6E	York	Caledonia-Fairbanks
75	M6G	Downtown Toronto	Christie

2. We will also utilize the Foursquare API to get information on venues within a one mile radius of the University areas. Below is some of the data that we will utilize for the project.

	name	categories	lat	Ing
0	Crimson Teas	Tea Room	43.658230	-79.398111
1	Voodoo Child	Café	43.656958	-79.405460
2	Café Pamenar	Café	43.656678	-79.402822
3	Little Pebbles	Coffee Shop	43.654883	-79.400264
4	Manic Coffee	Café	43.656684	-79.407032

Part 3. Methodology

### 1. Exploratory Data Analysis

In order to begin solving our problem, we wanted to explore the areas surrounding both the University of Toronto and York University areas. We wanted to get a feel for the two areas by first looking for some of the most popular venues around the areas and the types of venues they are. Below is a sampling of the exploratory analysis conducted for the University of Toronto area.

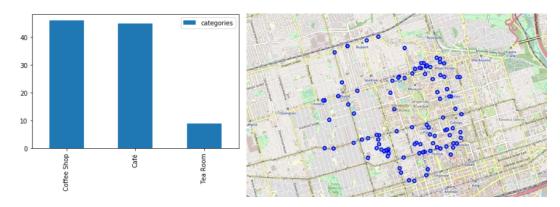
# **University of Toronto**



## 2. Local Competitor Analysis

Next, we wanted to figure out what local competitors are around the area. If there are lots of competitors, it may not be a good idea to open a coffee shop as this will drive down prices and reduce profitability. Below is a sampling of what we discovered.

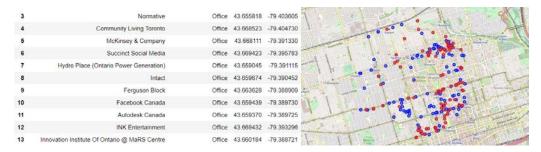
## **University of Toronto**



# 3. Local Demand Analysis

In order to have a successful coffee shop, you must have customers. University areas are good because there's always that massive stream of students looking for caffeine to keep themselves up through long nights of studying. However, during the summer months when school's out of session, it's important to have a steady stream of local customers as well to prevent going out of business. A sample of the data utilized is below.

# **University of Toronto**



# Part 4. Discussion / Conclusion

Based on the data, I believe the University of Toronto area would be a better starting point for the barista's new coffee business. While the University of Toronto area has a lot more competition, there's a good spot around the Kensington Market area that has lots of office space, but relatively few coffee shops. While York University has the benefit of less competition, the area is sparse with significantly fewer office spaces and customers.

One interesting observation from this study is that it appears the surrounding area around University of Toronto may be more health conscious or have a higher population of religious vegetarians. According to data provided by Foursquare, the area around the school has no less than six vegan/vegetarian restaurants which is interesting for those interested in venturing into the restaurant business.

Another observation is that coffee aficionados may want to visit Downtown Toronto. That's a lot of coffee shops!