Choosing a location to open a coffee shop in Toronto

Contents

1. Business problem

- Opening a coffee shop in Toronto, Canada is feasible?

- Which neighbourhood in Toronto will be chosen?

- Which specific area should be chosen?

Source: https://www.google.co.uk/maps/@43.7332605,-79.4595689,11.25z

2. Available data

- Toronto neighbourhood data:

https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

- Foursquare location data

3. Methodology

- If coffee shop is on the list of the top most common venues for at least one neighbourhood, opening a coffee shop in Toronto seems to be feasible.
- If coffee shop is the top most common venues for several neighbourhoods, we need to find out which neighbourhood can be the best one.
- A simple model can be built by taking into account with the frequency of café, which is an alternative. The critical value is a deduction between frequency of coffee shop and frequency of café. A neighbourhood with highest critical value is chosen.
- A criteria for choosing a location in the chosen neighbourhood can be is an area where there are as many as venues relating coffee

4. Results (1)

Table 1: 5 neighbourhoods showing the 10 most common venues

No	Neighborhood	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	Berczy Park	Coffee Shop	Cocktail Bar	Café	Cheese Shop	Seafood Restaurant	Bakery	Restaurant	Beer Bar	Lounge	Liquor Store
1	Brockton, Parkdale Village, Exhibition Place	Café	Coffee Shop	Breakfast Spot	Bakery	Performing Arts Venue	Pet Store	Convenience Store	Climbing Gym	Restaurant	Burrito Place
2	Business reply mail Processing Centre, South C...	Park	Auto Workshop	Comic Shop	Pizza Place	Butcher	Restaurant	Burrito Place	Brewery	Light Rail Station	Skate Park
3	CN Tower, King and Spadina, Railway Lands, Har...	Airport Service	Airport Lounge	Airport Terminal	Coffee Shop	Harbor / Marina	Plane	Rental Car Location	Sculpture Garden	Boutique	Boat or Ferry
4	Central Bay Street	Coffee Shop	Sandwich Place	Japanese Restaurant	Italian Restaurant	Café	Department Store	Thai Restaurant	Bubble Tea Shop	Burger Joint	Bar

4. Results (2)

Table 2: 13 potential neighbourhoods with the critical value of frequency

Neighborhood	Café	Coffee Shop	critical_value
Queen's Park, Ontario Provincial Government	0.027778	0.222222222	0.19444444
Regent Park, Harbourfront	0.043478	0.173913043	0.130434783
Central Bay Street	0.045455	0.166666667	0.121212121
Harbourfront East, Union Station, Toronto Islands	0.04	0.13	0.09
Church and Wellesley	0.013158	0.078947368	0.065789474
Stn A PO Boxes	0.041237	0.103092784	0.06185567
Richmond, Adelaide, King	0.053191	0.106382979	0.05319489
Berczy Park	0.034483	0.086206897	0.05172438
Commerce Court, Victoria Hotel	0.07	0.12	0.05
Toronto Dominion Centre, Design Exchange	0.07	0.1	0.03
St. James Town, Cabbagetown	0.046512	0.069767442	0.023255814
First Canadian Place, Underground city	0.08	0.1	0.02
St. James Town	0.064103	0.064102564	0

4. Results (3)

Table 3: All coffee shops with their location in the neighbourhood

Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
Queen's Park, Ontario Provincial Government	43.6623	-79.3895	Neo Coffee Bar	43.66014	-79.3859	Coffee Shop
Queen's Park, Ontario Provincial Government	43.6623	-79.3895	Coffee Public	43.66076	-79.3862	Coffee Shop
Queen's Park, Ontario Provincial Government	43.6623	-79.3895	Starbucks	43.6582	-79.389	Coffee Shop
Queen's Park, Ontario Provincial Government	43.6623	-79.3895	Tim Hortons	43.66104	-79.3938	Coffee Shop
Queen's Park, Ontario Provincial Government	43.6623	-79.3895	Starbucks	43.66089	-79.3937	Coffee Shop
Queen's Park, Ontario Provincial Government	43.6623	-79.3895	Tim Hortons	43.65941	-79.3912	Coffee Shop
Queen's Park, Ontario Provincial Government	43.6623	-79.3895	Tim Hortons	43.65818	-79.3907	Coffee Shop
Queen's Park, Ontario Provincial Government	43.6623	-79.3895	Tim Hortons	43.65891	-79.3887	Coffee Shop

4. Results (4)

Table 4: Number of venues relating for 8 coffee shops

Neighborhood	Venue	Venue Latitude	Venue Longitude	Venue Category	Number of venues relating coffee
Queen's Park, Ontario Provincial Government	Neo Coffee Bar	43.66014	-79.3859	Coffee Shop	8
Queen's Park, Ontario Provincial Government	Coffee Public	43.66076	-79.3862	Coffee Shop	7
Queen's Park, Ontario Provincial Government	Starbucks	43.6582	-79.389	Coffee Shop	2
Queen's Park, Ontario Provincial Government	Tim Hortons	43.66104	-79.3938	Coffee Shop	1
Queen's Park, Ontario Provincial Government	Starbucks	43.66089	-79.3937	Coffee Shop	2
Queen's Park, Ontario Provincial Government	Tim Hortons	43.65941	-79.3912	Coffee Shop	1
Queen's Park, Ontario Provincial Government	Tim Hortons	43.65818	-79.3907	Coffee Shop	1
Queen's Park, Ontario Provincial Government	Tim Hortons	43.65891	-79.3887	Coffee Shop	1

5. Discussion

- Opening a coffee shop in Toronto appears to be feasible as there are 13 neighbourhoods where coffee shop is the 1st most common venues
- The neighbourhood of Queen's Park, Ontario Provincial Government has the highest critical value, which prove the frequency of coffee shop is really great whilst the frequency of café is quite small.
- There are 8 main coffee shops in the neighbourhood of Queen's Park, Ontario Provincial Government. Of these, the area nearby Neo Coffee Bar has highest number of venues relating coffee.

6. Conclusion

- Opening a new coffee shop in Toronto will be considered by businessmen.
- The methodology to identify a potential location for opening the new coffee can be acceptable by using the available data on internet and the Foursquare location data. The model to obtain the maximum chance for attractiveness of new coffee shop is very simple, however it can be feasible based on the available data.
- The results appear to sensible and show that the area nearby Neo Coffee Bar is recommended to open the new coffee shop.

Thank you for listening

Q &A