INVESTMENT DECISION IN CANADA

Problem: A group of investors wants to invest in Canada. They already have many businesses around the world. Because of that diversification they do not have any preference when investing as a result of their risk profile. Therefore, they need to know which kind of businesses are the most popular in Canada and in which neighborhoods are concentrated the greater number of those type of business.

Data Sources

- There are three sources of data, as follow:
- Neighborhood data will be extracted from this Wikipedia website:
 - "https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M"
- Latitude and longitude data are extracted from the csv file provided by coursera course
- Venues from each neighborhood were extracted from Foursquare database

Methodology

Neighborhood and coordinate data were merged to get the dataframe need to perform the analysis, then venues data was extracted from foursquares database. After this different analysis were perform to solve the problem, such as which are the top 10 venues most common in each neighborhood and which are the most popular along all neighborhoods.

Results

It is clear that coffee shops are the most common venue along all neigborhoods, not just is the first most popular venue in 20 neighborhoods but the second one as well in over 10 of them.

1 st most common venue		2 nd most common venue						
Coffee Shop	20	Coffee Shop	12					
Park	16	Café	5					
Café	8	Women's Store	5					
Pizza Place	4	Convenience Store	4					
Grocery Store	3	Pizza Place	4					
Smoke Shop	2	Pub	4					
Baseball Field	2	Breakfast Spot	2					
Bakery	2	Skating Rink	2					
Fast Food Restaurant	2	Sandwich Place	2					
Bar	2	Bakery	2					
Clothing Store	2	Grocery Store	2					
Indian Restaurant	2	Yoga Studio	2					
Skating Rink	2	Japanese Restaurant	2					
Golf Course	1	Clothing Store	2					

This is a comprehensive list of the top 10 most common venues per neighborhood in Canada.

	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	Agincourt	Latin American Restaurant	Skating Rink	Lounge	Breakfast Spot	College Cafeteria	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center
1	Alderwood, Long Branch	Pizza Place	Skating Rink	Gym	Pub	Athletics & Sports	Sandwich Place	Coffee Shop	Distribution Center	Dog Run	Discount Store
2	Bathurst Manor, Wilson Heights, Downsview North	Bank	Coffee Shop	Pizza Place	Supermarket	Ice Cream Shop	Sushi Restaurant	Restaurant	Deli / Bodega	Convenience Store	Intersection
3	Bayview Village	Chinese Restaurant	Café	Bank	Japanese Restaurant	Women's Store	Dessert Shop	Dim Sum Restaurant	Diner	Discount Store	Distribution Center
4	Bedford Park, Lawrence Manor East	Sandwich Place	Coffee Shop	Italian Restaurant	Juice Bar	Butcher	Comfort Food Restaurant	Liquor Store	American Restaurant	Sushi Restaurant	Greek Restaurant
5	Berczy Park	Coffee Shop	Bakery	Beer Bar	Cocktail Bar	Seafood Restaurant	Cheese Shop	Café	Farmers Market	Restaurant	Japanese Restaurant
6	Birch Cliff, Cliffside West	Skating Rink	General Entertainment	Café	College Stadium	Diner	Deli / Bodega	Department Store	Dessert Shop	Dim Sum Restaurant	Distribution Center
7	Brockton, Parkdale Village, Exhibition Place	Café	Breakfast Spot	Coffee Shop	Climbing Gym	Bar	Music Venue	Intersection	Italian Restaurant	Convenience Store	Restaurant
8	Business reply mail Processing Centre, South C	Yoga Studio	Auto Workshop	Garden Center	Garden	Gym / Fitness Center	Fast Food Restaurant	Farmers Market	Light Rail Station	Comic Shop	Pizza Place
9	CN Tower, King and Spadina, Railway Lands, Har	Airport Service	Airport Lounge	Airport Terminal	Bar	Plane	Boutique	Airport	Airport Food Court	Boat or Ferry	Coffee Shop
10	Caledonia- Fairbanks	Park	Pool	Women's Store	College Gym	Curling Ice	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center
11	Canada Post Gateway Processing Centre	Coffee Shop	Hotel	Middle Eastern Restaurant	Burrito Place	Gas Station	Gym	American Restaurant	Sandwich Place	Mediterranean Restaurant	Fried Chicken Joint
12	Cedarbrae	Bakery	Bank	Gas Station	Athletics & Sports	Caribbean Restaurant	Hakka Restaurant	Fried Chicken Joint	Thai Restaurant	Dessert Shop	Deli / Bodega
13	Central Bay Street	Coffee Shop	Bubble Tea Shop	Café	Italian Restaurant	Yoga Studio	Middle Eastern Restaurant	Salad Place	Ramen Restaurant	Portuguese Restaurant	Burger Joint
14	Christie	Grocery Store	Café	Park	Baby Store	Italian Restaurant	Restaurant	Candy Store	Athletics & Sports	Diner	Nightclub
15	Church and Wellesley	Coffee Shop	Gay Bar	Restaurant	Yoga Studio	Men's Store	Japanese Restaurant	Ramen Restaurant	Beer Bar	Hotel	Distribution Center
16	Clarks Corners, Tam O'Shanter, Sullivan	Fast Food Restaurant	Pizza Place	Noodle House	Fried Chicken Joint	Italian Restaurant	Rental Car Location	Bank	Convenience Store	Thai Restaurant	Chinese Restaurant
17	Cliffside, Cliffcrest, Scarborough Village West	American Restaurant	Motel	Discount Store	Deli / Bodega	Department Store	Dessert Shop	Dim Sum Restaurant	Diner	Women's Store	Curling Ice

18	Commerce Court, Victoria Hotel	Coffee Shop	Café	Hotel	Restaurant	Gym	Seafood Restaurant	Beer Bar	Deli / Bodega	American Restaurant	Japanese Restaurant
19	Davisville	Dessert Shop	Sandwich Place	Sushi Restaurant	Coffee Shop	Italian Restaurant	Café	Pizza Place	Gym	Pharmacy	Seafood Restaurant
20	Davisville North	Park	Gym / Fitness Center	Breakfast Spot	Sandwich Place	Department Store	Hotel	Food & Drink Shop	Pizza Place	Comfort Food Restaurant	Dance Studio
21	Del Ray, Mount Dennis, Keelsdale and Silverthorn	Skating Rink	Discount Store	Sandwich Place	Bar	Convenience Store	Dance Studio	Drugstore	Donut Shop	Doner Restaurant	Dog Run
22	Don Mills	Gym	Japanese Restaurant	Beer Store	Coffee Shop	Restaurant	Asian Restaurant	Café	Chinese Restaurant	Bike Shop	Italian Restaurant
23	Dorset Park, Wexford Heights, Scarborough Town	Indian Restaurant	Light Rail Station	Pet Store	Chinese Restaurant	Furniture / Home Store	Vietnamese Restaurant	Dog Run	Distribution Center	Discount Store	Cupcake Shop
24	Downsview	Park	Grocery Store	Gym / Fitness Center	Baseball Field	Hotel	Food Truck	Athletics & Sports	Playground	Business Service	Home Service
25	Dufferin, Dovercourt Village	Bakery	Pharmacy	Park	Pet Store	Middle Eastern Restaurant	Café	Brewery	Bar	Bank	Supermarket
26	East Toronto, Broadview North (Old East York)	Park	Convenience Store	Cupcake Shop	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner
27	Eringate, Bloordale Gardens, Old Burnhamthorpe	Coffee Shop	Convenience Store	Beer Store	Liquor Store	Pharmacy	Pizza Place	Café	Department Store	Dessert Shop	Dim Sum Restaurant
28	Fairview, Henry Farm, Oriole	Clothing Store	Coffee Shop	Fast Food Restaurant	Bank	Shoe Store	Juice Bar	Restaurant	Salon / Barbershop	Burger Joint	Burrito Place
29	First Canadian Place, Underground city	Café	Coffee Shop	Restaurant	Seafood Restaurant	Concert Hall	Hotel	Deli / Bodega	Beer Bar	Gym	Japanese Restaurant
30	Forest Hill North & West, Forest Hill Road Park	Park	Jewelry Store	Sushi Restaurant	Trail	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Cupcake Shop	Diner
31	Garden District, Ryerson	Coffee Shop	Clothing Store	Café	Middle Eastern Restaurant	Bookstore	Theater	Ramen Restaurant	Fast Food Restaurant	Burrito Place	Seafood Restaurant
32	Glencairn	Sushi Restaurant	Pub	Metro Station	Asian Restaurant	Japanese Restaurant	Pizza Place	Dessert Shop	Dance Studio	Deli / Bodega	Department Store
33	Golden Mile, Clairlea, Oakridge	Bus Line	Bakery	Park	Intersection	Soccer Field	Ice Cream Shop	Department Store	Dessert Shop	Dim Sum Restaurant	Diner
34	Guildwood, Morningside, West Hill	Intersection	Moving Target	Mexican Restaurant	Bank	Medical Center	Rental Car Location	Restaurant	Breakfast Spot	Electronics Store	Diner
35	Harbourfront East, Union Station, Toronto Islands	Coffee Shop	Aquarium	Hotel	Café	Plaza	Park	Brewery	New American Restaurant	Bubble Tea Shop	Pizza Place

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36	High Park, The Junction South	Bar	Mexican Restaurant	Café	Thai Restaurant	Speakeasy	Bookstore	Restaurant	Cajun / Creole Restaurant	Music Venue	Park
37	Hillcrest Village	Golf Course	Mediterranean Restaurant	Athletics & Sports	Dog Run	Pool	Dance Studio	Deli / Bodega	Department Store	Dessert Shop	Dim Sum Restaurant
38	Humber Summit	Home Service	Pizza Place	Women's Store	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner
39	Humberlea, Emery	Baseball Field	Women's Store	Electronics Store	Dumpling Restaurant	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store
40	Humewood- Cedarvale	Field	Trail	Tennis Court	Hockey Arena	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Donut Shop	Curling Ice
41	India Bazaar, The Beaches West	Movie Theater	Fish & Chips Shop	Brewery	Board Shop	Liquor Store	Italian Restaurant	Intersection	Restaurant	Burrito Place	Ice Cream Shop
42	Kennedy Park, Ionview, East Birchmount Park	Discount Store	Chinese Restaurant	Hobby Shop	Department Store	Bus Station	Coffee Shop	Doner Restaurant	Dog Run	Distribution Center	Dance Studio
43	Kensington Market, Chinatown, Grange Park	Vegetarian / Vegan Restaurant	Coffee Shop	Café	Mexican Restaurant	Dumpling Restaurant	Burger Joint	Bar	Dessert Shop	Vietnamese Restaurant	Farmers Market
44	Kingsview Village, St. Phillips, Martin Grove	Park	Pizza Place	Sandwich Place	Bus Line	Cupcake Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner
45	Lawrence Manor, Lawrence Heights	Clothing Store	Accessories Store	Furniture / Home Store	Vietnamese Restaurant	Coffee Shop	Boutique	Event Space	Women's Store	Discount Store	Department Store
46	Lawrence Park	Park	Dim Sum Restaurant	Swim School	Bus Line	Curling Ice	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center
47	Leaside	Coffee Shop	Sporting Goods Shop	Burger Joint	Bank	Sandwich Place	Furniture / Home Store	Shopping Mall	Smoothie Shop	Sports Bar	Liquor Store
48	Little Portugal, Trinity	Bar	Coffee Shop	Vietnamese Restaurant	Men's Store	Asian Restaurant	Restaurant	Café	Yoga Studio	Record Shop	Dog Run
49	Malvern, Rouge	Fast Food Restaurant	Women's Store	Curling Ice	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner
50	Milliken, Agincourt North, Steeles East, L'Amo	Park	Sculpture Garden	Playground	Cuban Restaurant	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner	Dim Sum Restaurant
51	Mimico NW, The Queensway West, South of Bloor,	Supplement Shop	Discount Store	Fast Food Restaurant	Burger Joint	Hardware Store	Convenience Store	Bakery	Gym	Grocery Store	Sandwich Place
52	Moore Park, Summerhill East	Park	Tennis Court	Trail	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner	Cuban Restaurant	Dim Sum Restaurant
53	New Toronto, Mimico South, Humber Bay Shores	Coffee Shop	American Restaurant	Café	Restaurant	Fast Food Restaurant	Fried Chicken Joint	Bakery	Pharmacy	Pizza Place	Gym
54	North Park, Maple Leaf Park, Upwood Park	Park	Deli / Bodega	Bakery	Basketball Court	Trail	Construction & Landscaping	Diner	Department Store	Dessert Shop	Dim Sum Restaurant
55	North Toronto West, Lawrence Park	Coffee Shop	Clothing Store	Yoga Studio	Chinese Restaurant	Shoe Store	Salon / Barbershop	Restaurant	Spa	Sporting Goods Shop	Fast Food Restaurant
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56	Northwest, West Humber - Clairville	Rental Car Location	Drugstore	Garden Center	Cupcake Shop	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner
57	Northwood Park, York University	Furniture / Home Store	Coffee Shop	Bar	Falafel Restaurant	Massage Studio	Miscellaneous Shop	Caribbean Restaurant	Dim Sum Restaurant	Deli / Bodega	Department Store
58	Old Mill South, King's Mill Park, Sunnylea, Hu	Baseball Field	Women's Store	Electronics Store	Dumpling Restaurant	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store
59	Parkdale, Roncesvalles	Gift Shop	Breakfast Spot	Eastern European Restaurant	Restaurant	Dessert Shop	Bar	Cuban Restaurant	Italian Restaurant	Dog Run	Movie Theater
60	Parkview Hill, Woodbine Gardens	Pizza Place	Intersection	Bank	Gastropub	Breakfast Spot	Gym / Fitness Center	Pharmacy	Athletics & Sports	Women's Store	Deli / Bodega
61	Parkwoods	Park	Construction & Landscaping	Food & Drink Shop	Curling Ice	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store
62	Queen's Park, Ontario Provincial Government	Coffee Shop	Yoga Studio	Portuguese Restaurant	Bar	Hobby Shop	Beer Bar	Smoothie Shop	Sandwich Place	Distribution Center	Diner
63	Regent Park, Harbourfront	Coffee Shop	Park	Café	Bakery	Breakfast Spot	Pub	Theater	Yoga Studio	Farmers Market	Spa
64	Richmond, Adelaide, King	Coffee Shop	Café	Steakhouse	Concert Hall	American Restaurant	Restaurant	New American Restaurant	Jazz Club	Seafood Restaurant	Salon / Barbershop
65	Rosedale	Park	Playground	Trail	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner	Cuban Restaurant	Donut Shop
66	Roselawn	Garden	Health & Beauty Service	Diner	Dance Studio	Deli / Bodega	Department Store	Dessert Shop	Dim Sum Restaurant	Women's Store	Cupcake Shop
67	Rouge Hill, Port Union, Highland Creek	Construction & Landscaping	Bar	Women's Store	Dance Studio	Dumpling Restaurant	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center
68	Runnymede, Swansea	Pizza Place	Café	Sushi Restaurant	Pub	Italian Restaurant	Coffee Shop	Dessert Shop	Butcher	Latin American Restaurant	Bakery
69	Runnymede, The Junction North	Convenience Store	Grocery Store	Caribbean Restaurant	Breakfast Spot	Women's Store	Department Store	Dessert Shop	Dim Sum Restaurant	Diner	Distribution Center
70	Scarborough Village	Smoke Shop	Playground	Cupcake Shop	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner
71	South Steeles, Silverstone, Humbergate, Jamest	Grocery Store	Fried Chicken Joint	Beer Store	Pharmacy	Pizza Place	Fast Food Restaurant	Sandwich Place	Women's Store	Dance Studio	Deli / Bodega
72	St. James Town	Café	Gastropub	Coffee Shop	Cocktail Bar	Beer Bar	Hotel	Seafood Restaurant	Restaurant	Farmers Market	Park
73	St. James Town, Cabbagetown	Coffee Shop	Pub	Chinese Restaurant	Park	Pet Store	Pizza Place	Bakery	Café	Italian Restaurant	Restaurant
74	Steeles West, L'Amoreaux West	Grocery Store	Fast Food Restaurant	Gym Pool	Breakfast Spot	Coffee Shop	Sandwich Place	Indian Restaurant	Gym	Thrift / Vintage Store	Bank
75	Stn A PO Boxes	Café	Creperie	Beer Bar	Italian Restaurant	Japanese Restaurant	Restaurant	Pub	Farmers Market	Cheese Shop	Seafood Restaurant
76	Studio District	Café	Coffee Shop	Gastropub	Bakery	Brewery	American Restaurant	Comfort Food Restaurant	Seafood Restaurant	Bookstore	Sandwich Place
77	Summerhill West, Rathnelly, South Hill, Forest	Coffee Shop	Pub	Fried Chicken Joint	Sushi Restaurant	Vietnamese Restaurant	Light Rail Station	Liquor Store	Bank	American Restaurant	Sports Bar
78	The Annex, North Midtown, Yorkville	Café	Sandwich Place	Coffee Shop	Pizza Place	History Museum	BBQ Joint	Middle Eastern Restaurant	Indian Restaurant	Burger Joint	Pharmacy

79	The Beaches	Coffee Shop	Pub	Health Food Store	Trail	Dim Sum Restaurant	Dance Studio	Deli / Bodega	Department Store	Dessert Shop	Diner
80	The Danforth West, Riverdale	Greek Restaurant	Coffee Shop	Italian Restaurant	Ice Cream Shop	Restaurant	Furniture / Home Store	Yoga Studio	Bakery	Caribbean Restaurant	Café
81	The Kingsway, Montgomery Road, Old Mill North	River	Women's Store	Curling Ice	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner
82	Thorncliffe Park	Indian Restaurant	Yoga Studio	Gym	Bank	Fast Food Restaurant	Supermarket	Discount Store	Middle Eastern Restaurant	Restaurant	Pizza Place
83	Toronto Dominion Centre, Design Exchange	Café	Coffee Shop	Restaurant	Seafood Restaurant	Hotel	Beer Bar	Japanese Restaurant	Gastropub	Train Station	Bakery
84	University of Toronto, Harbord	Café	Japanese Restaurant	Bar	Bookstore	Sandwich Place	Bakery	Chinese Restaurant	Noodle House	Pub	Sushi Restaurant
85	Victoria Village	Coffee Shop	Pizza Place	Portuguese Restaurant	Intersection	Hockey Arena	Dog Run	Distribution Center	Discount Store	Diner	Cupcake Shop
86	Westmount	Pizza Place	Coffee Shop	Intersection	Discount Store	Middle Eastern Restaurant	Chinese Restaurant	Sandwich Place	Dance Studio	Deli / Bodega	Department Store
87	Weston	Park	Jewelry Store	Eastern European Restaurant	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner
88	Wexford, Maryvale	Smoke Shop	Middle Eastern Restaurant	Sandwich Place	Breakfast Spot	Bakery	Auto Garage	Vietnamese Restaurant	Comfort Food Restaurant	Comic Shop	Donut Shop
89	Willowdale, Newtonbrook	Park	Cupcake Shop	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner	Dim Sum Restaurant
90	Willowdale, Willowdale East	Ramen Restaurant	Coffee Shop	Sandwich Place	Japanese Restaurant	Café	Restaurant	Pizza Place	Movie Theater	Pet Store	Hotel
91	Willowdale, Willowdale West	Coffee Shop	Bank	Grocery Store	Pharmacy	Pizza Place	Butcher	Dim Sum Restaurant	Dance Studio	Deli / Bodega	Department Store
92	Woburn	Coffee Shop	Convenience Store	Korean Restaurant	Women's Store	Department Store	Dessert Shop	Dim Sum Restaurant	Diner	Discount Store	Dog Run
93	Woodbine Heights	Park	Curling Ice	Athletics & Sports	Skating Rink	Beer Store	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Diner
94	York Mills West	Park	Convenience Store	Cupcake Shop	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner
95	York Mills, Silver Hills	Cafeteria	Women's Store	Cupcake Shop	Drugstore	Donut Shop	Doner Restaurant	Dog Run	Distribution Center	Discount Store	Diner

Observations & Recommendations

The analysis suggest that coffee shops are the most common business along all neighborhoods in Canada. With an aggressive marketing campaign, it is possible to enter to the coffee market, compete and gain a reasonable proportion of the market, starting in those neighborhoods were that kind of business is the most popular.

Further analysis can provide the best option within the neighborhoods where coffee shops are popular.

Conclusion

This analysis helps to solve the investment decision problem about in which business and neighborhoods is convenient to invest. Also, this analysis left some questions for further analysis, because the list of potential neighborhoods where investing is a good option is large (20), so it could be appropriate to analyze with additional information and get a short list for the best options.