Providing Context to the Neighbourhoods of Toronto

S Potter

Purpose

○ Migration into Canada, and specifically Toronto, is a major driver of population growth in the area

○ For relocating people, deciding on a neighbourhood to live is a stressful and difficult decisions, especially where they desire specific facilities in the area

○ Having the ability to see a single data source (and visualisation) of facilities in any given area would alleviate these stressors

Data Acquisition and Cleansing

- Suburb, neighbourhood and postcode information sourced from Wikipedia via the Beautiful Soup web scrapping function

- Coordinates of each suburb sourced from Google via the geocoder function

- Venue details sourced from Foursquare via the in-built API

	Postal Code	Borough	Neighbourhood	Latitude	Longitude
0	M5A	Downtown Toronto	Regent Park, Harbourfront	43.654260	-79.360636
1	M7A	Downtown Toronto	Queen's Park, Ontario Provincial Government	43.662301	-79.389494
2	M5B	Downtown Toronto	Garden District, Ryerson	43.657162	-79.378937
3	M5C	Downtown Toronto	St. James Town	43.651494	-79.375418
4	M5E	Downtown Toronto	Berczy Park	43.644771	-79.373306

Dataset - Neighbourhoods

	name	categories	lat	lng
0	Roselle Desserts	Bakery	43.653447	-79.362017
1	Tandem Coffee	Coffee Shop	43.653559	-79.361809
2	Impact Kitchen	Restaurant	43.656369	-79.356980
3	The Distillery Historic District	Historic Site	43.650244	-79.359323
4	Cooper Koo Family YMCA	Distribution Center	43.653249	-79.358008

Dataset - Venues

	Neighbourhood	Neighbourhood Latitude	Neighbourhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Regent Park, Harbourfront	43.65426	-79.360636	Roselle Desserts	43.653447	-79.362017	Bakery
1	Regent Park, Harbourfront	43.65426	-79.360636	Tandem Coffee	43.653559	-79.361809	Coffee Shop
2	Regent Park, Harbourfront	43.65426	-79.360636	Cooper Koo Family YMCA	43.653249	-79.358008	Distribution Center
3	Regent Park, Harbourfront	43.65426	-79.360636	Body Blitz Spa East	43.654735	-79.359874	Spa
4	Regent Park, Harbourfront	43.65426	-79.360636	Impact Kitchen	43.656369	-79.356980	Restaurant

Final Dataset - Aggregated

	Neighbourhood	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
0	Berczy Park	Coffee Shop	Cocktail Bar	Bakery	Cheese Shop	Farmers Market	Restaurant	Seafood Restaurant	Pharmacy	Beer Bar
1	CN Tower, King and Spadina, Railway Lands, Har...	Airport Service	Airport Lounge	Airport Terminal	Plane	Rental Car Location	Airport	Airport Food Court	Sculpture Garden	Boat or Ferry
2	Central Bay Street	Coffee Shop	Sandwich Place	Café	Italian Restaurant	Salad Place	Burger Joint	Thai Restaurant	Bubble Tea Shop	Poke Place
3	Christie	Grocery Store	Café	Park	Nightclub	Coffee Shop	Restaurant	Italian Restaurant	Athletics & Sports	Baby Store
4	Church and Wellesley	Coffee Shop	Sushi Restaurant	Japanese Restaurant	Restaurant	Gay Bar	Yoga Studio	Café	Pub	Hotel

Output - Tabular

Visualised Output for Consumers

- Picture displayed shows different venue categories in the Downtown neighbourhood

- Gives consumers an ability to understand the location of venues that provide value to their lifestyles

- Enables consumers to compare neighbourhoods based on prevalence of certain types of venues