

THE RIGHT LOCATION FOR
NEW COFFEE SHOP IN
DOWNTOWN TORONTO

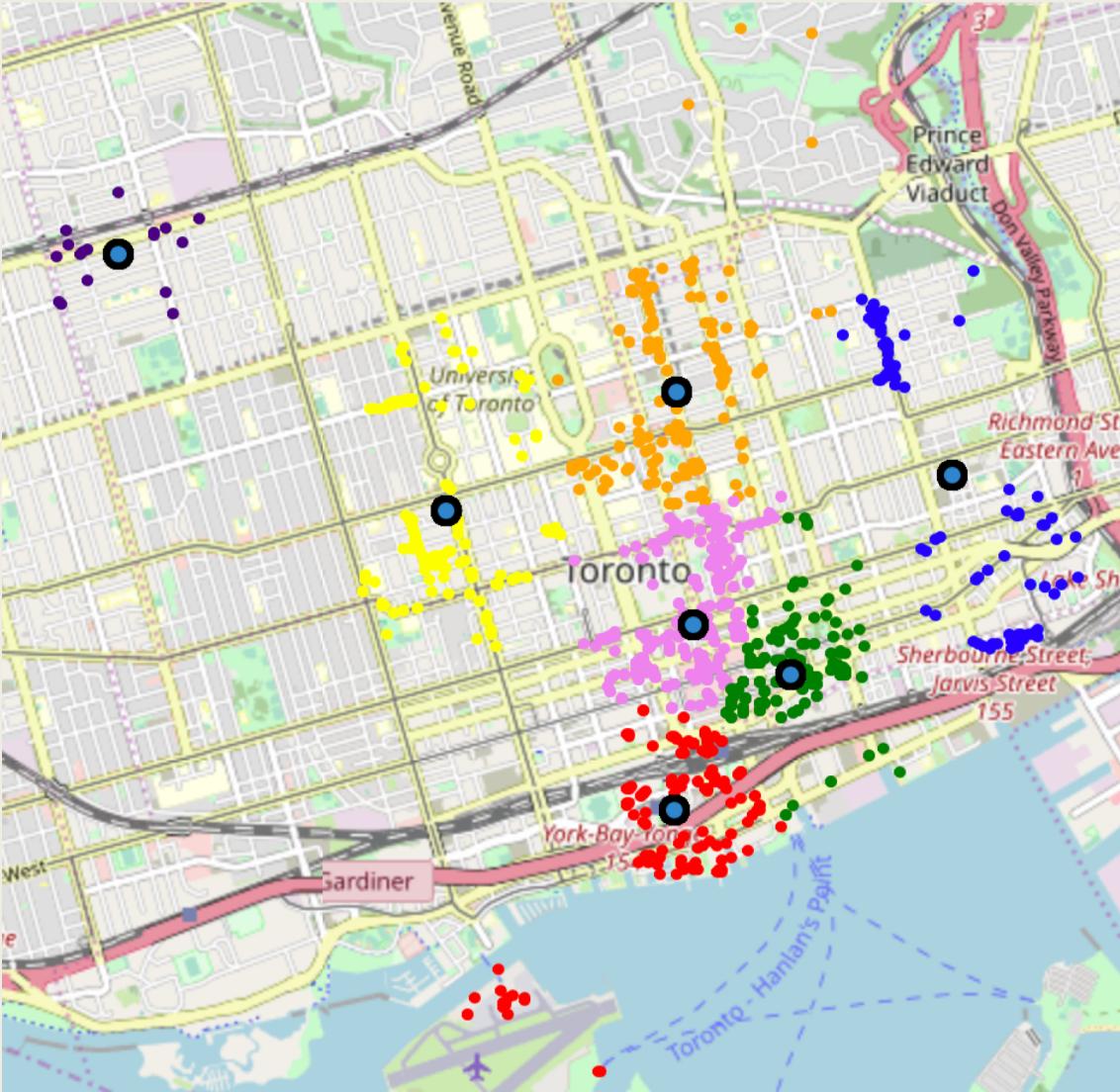
Location is one of the important to success

- A promising chosen location provides the owner with a stable traffic of customers and profits.
- The location should be convenient and visible for target customers.
- The surrounding land use is very important.
- Train station and bus stop can boost passenger traffic in nearby streets.
- The number of competitors is also important. They share the catering market.

Data acquisition and cleaning

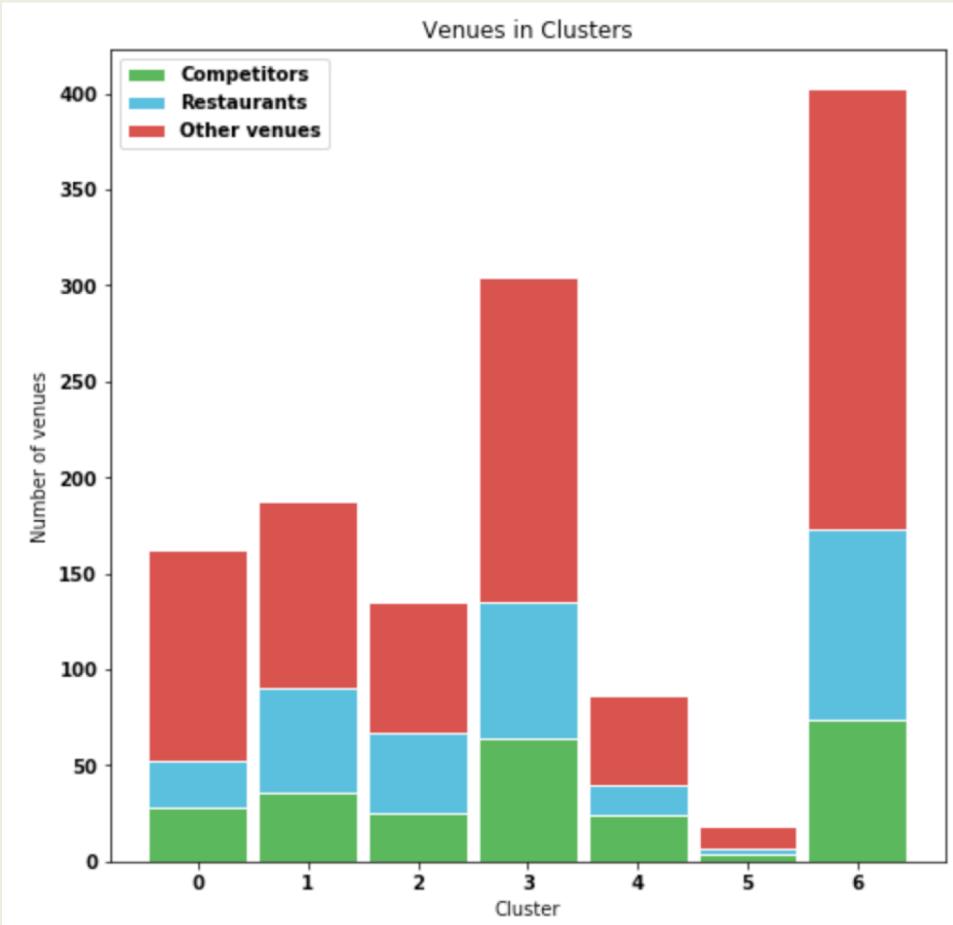
- The postal codes of Canada are obtained from Wikipedia.
- The geographical coordinates of each neighborhood from <http://cocl.us>.
- The categories of venues are obtained from Foursquare.
- Missing information in borough is removed.
- Neighborhoods that exist in the same post code area are combined.
- Not assigned neighborhood columns are filled with its borough.

Clustered venues in Downtown Toronto



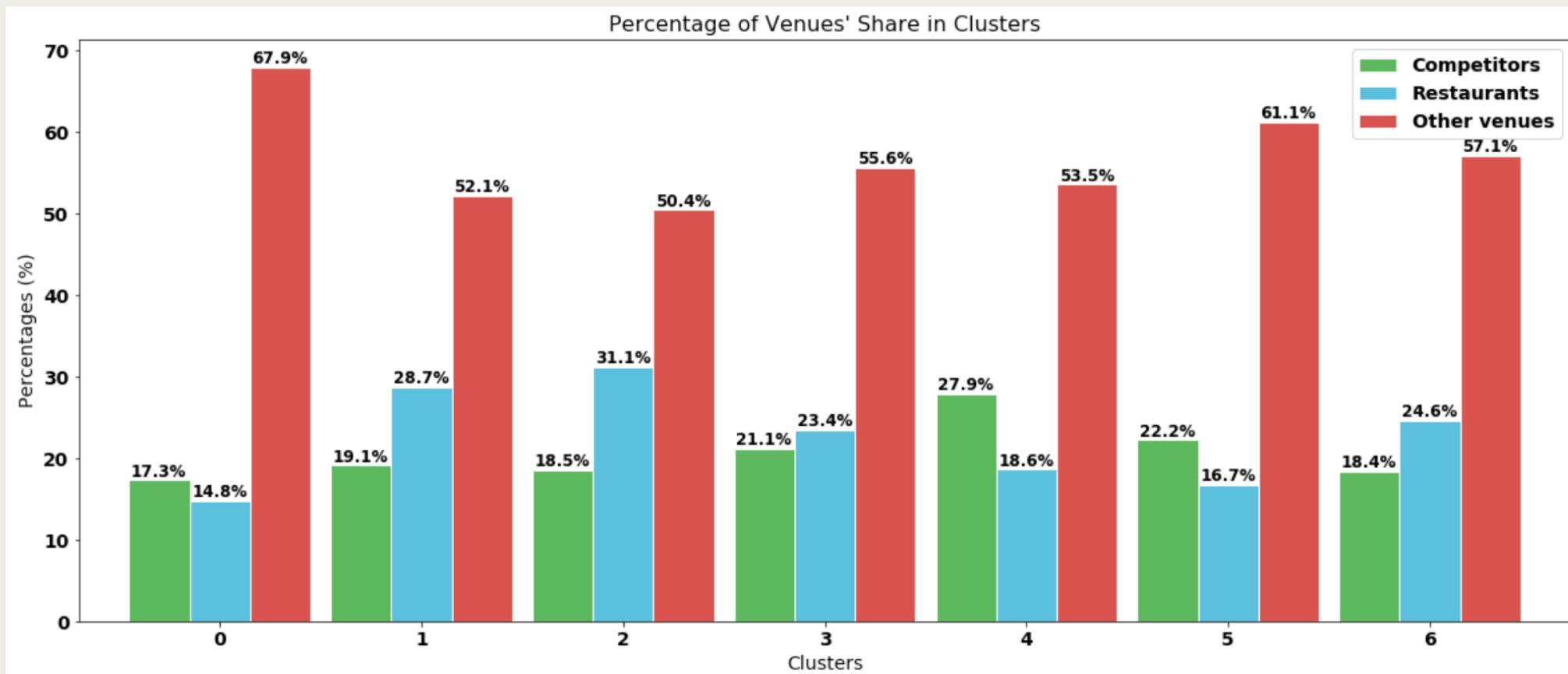
- The borough's area is segmented using a k-Means clustering algorithm.
- The algorithm minimizes the intra-cluster distances and maximizes the inter-cluster distances.
- There are 7 clusters.

Number of venues in clusters

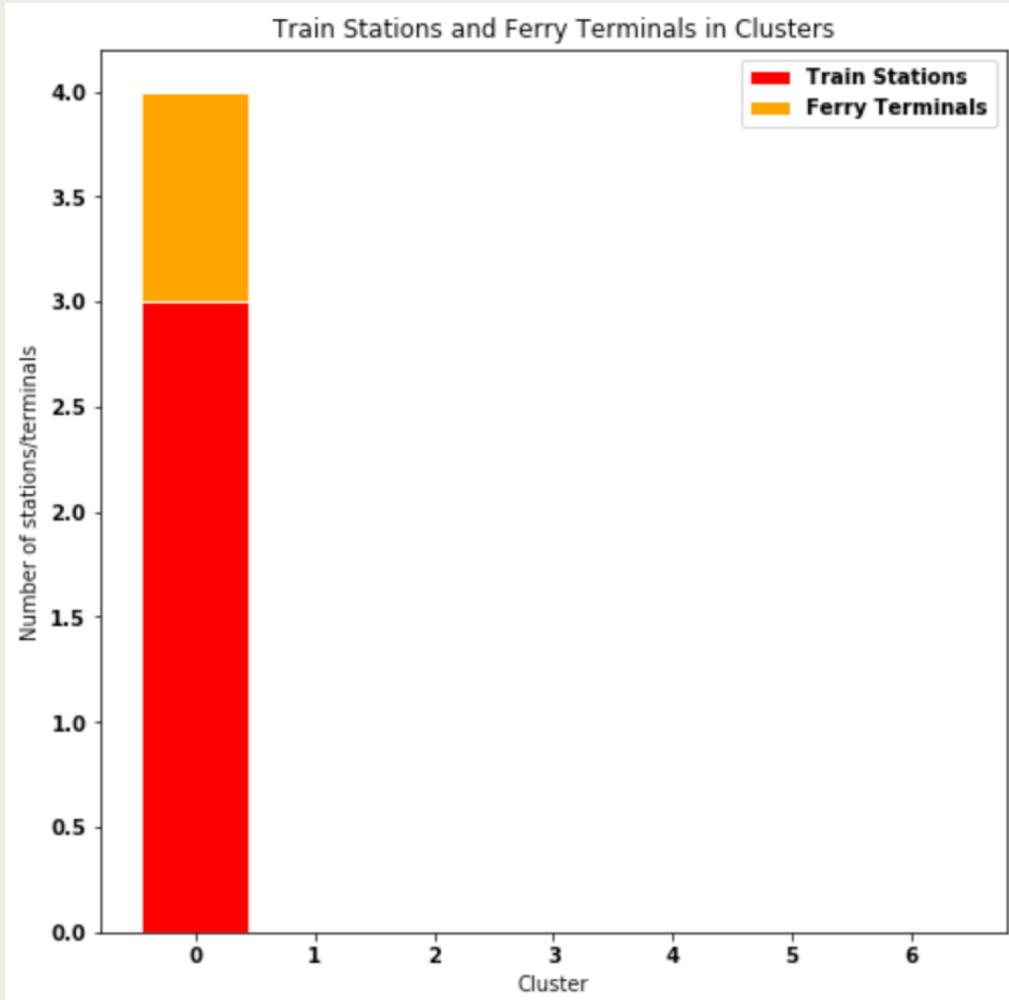


- The Cluster 6 have the greatest number of venues.
- The top 3 of the greatest number of venues are in Cluster 6, Cluster 3 and Cluster 1.

Venues' share in clusters

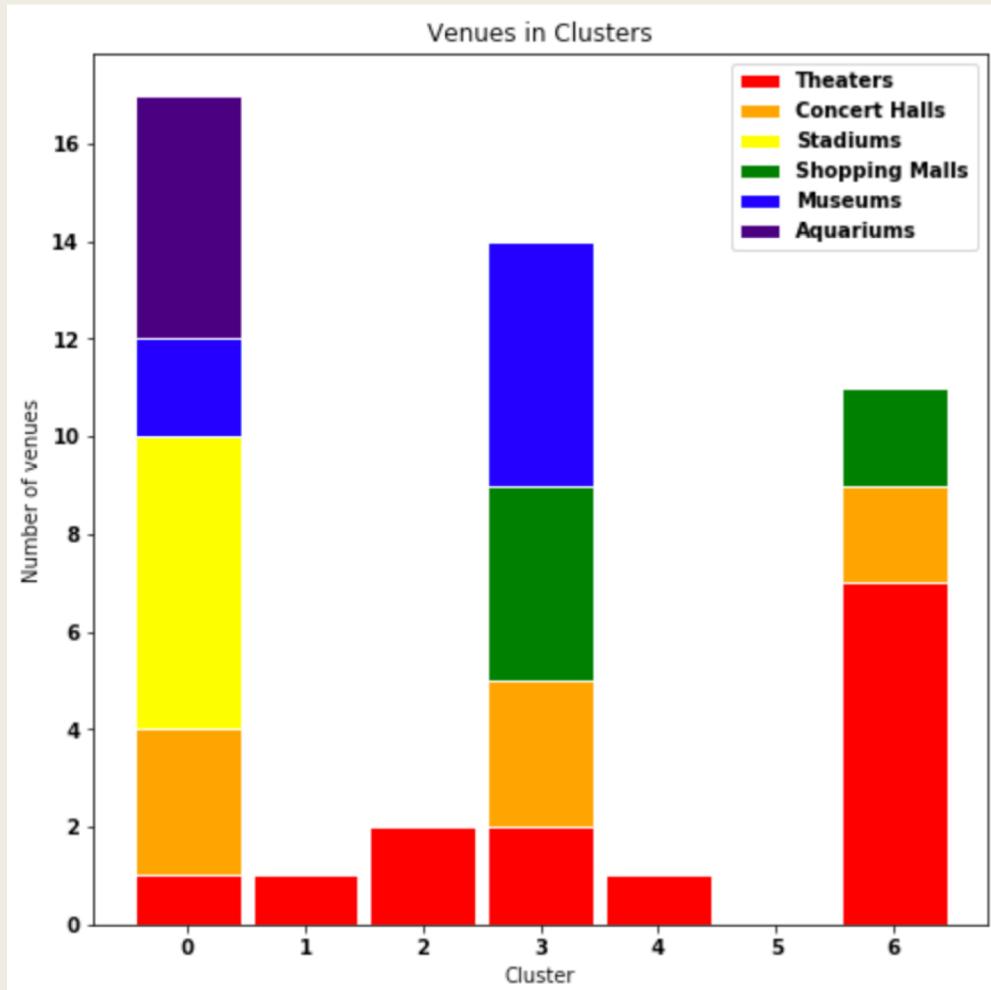


Number of Train Stations and Ferry Terminals



The Cluster 0 has 3 train stations and 2 ferry terminals while the other clusters does not have any train stations and ferry terminals.

Number of Attractions

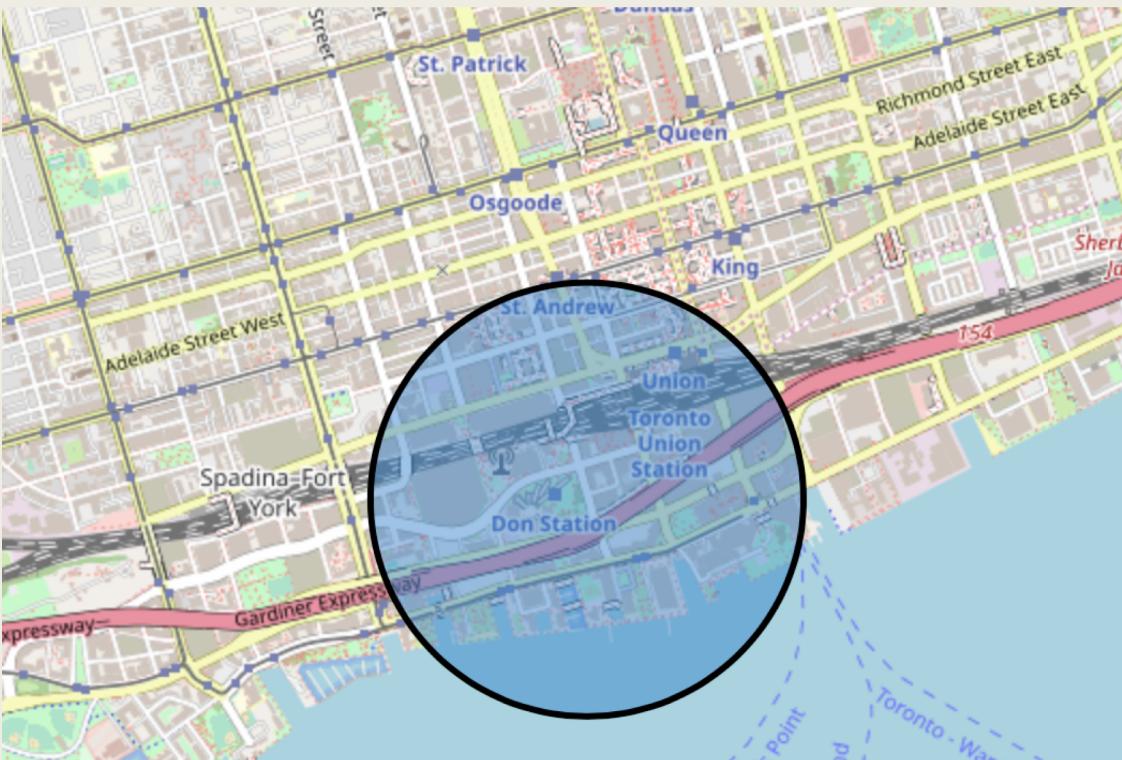


- The top 3 of the greatest number of attractions is Cluster 0, Cluster 3 and Cluster 6.
- The total number of attractions in Cluster 0, Cluster 3 and Cluster 6 are 17, 14 and 11 respectively.

Conclusion

- The Cluster 0 has the lowest percentage of catering venues in the area.
- 3 train stations and a ferry terminal in the Cluster 0 is beneficial to raise people traffic.
- The Cluster 0 has the larger number of attractions.
- A new coffee shop will be suggested to open in the Cluster 0.
- The latitude and longitude of the cluster's center: 43.641395, -79.383690.

The area of Cluster 0



- A circle area with a radius of 700 meters about the cluster's center.
- A new coffee shop will be suggested to open inside the area.