# Study on Similarity or Dissimilarity of New York City and Toronto Neighborhoods

REPORT BY JONATHAN

#### Background and Stakeholders

- 1. New York City and Toronto as prior cities in North America
- 2. Business Expansion from New York City to Toronto
- 3. Potential tourists attracted by New York City and Toronto

### Data Acquisition and Cleaning

1. Foursquare Location Database (Version 20180605)

2. Training Data

Observations: Neighborhoods

Features: Percentage Mixture of popular venture categories

3. 143 rows and 399 features

# Clustering Model

- 1. Dissimilarity than Similarity
- 2. Diversified Neighborhood in Toronto

Clusters	Neighborhood Numbers	Percentages
0	2	2%
1	90	87%
2	9	9%
3	1	1%
4	1	1%
Total	103	100%

Table 1. Clusters of Toronto Neighborhoods

Clusters	Neighborhood Numbers	Percentages
0	0	0%
1	40	100%
2	0	0%
3	0	0%
4	0	0%
Total	40	100%

Table 2. Clusters of New York City Neighborhoods

# Clustering Model

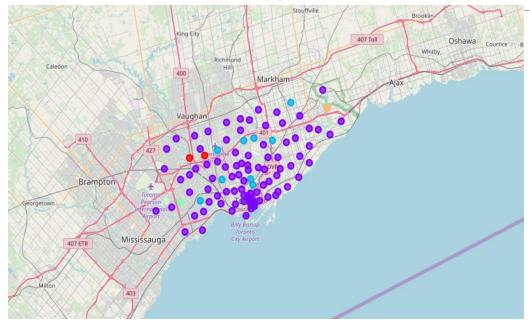


Figure 1. Clustering of Toronto Neighborhoods

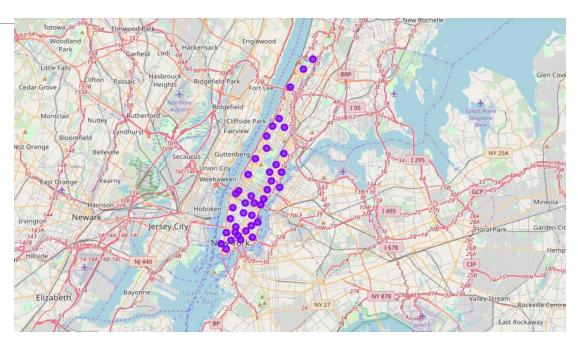


Figure 2. Clustering of New York City Neighborhoods

#### Conclusion and Recommendation

- 1. Different Operation for Business in Toronto
- 2. Potential future difficulties