THE BATTLES OF NEIGHBORHOODS

Neighborhood of choice for BIM Grocery's first venture in Toronto.

- Toronto city overview for BIM Grocery
- BIM Grocery Strategic Plan and Overview
- BIM Grocery Business Problem
- Choice of the first neighborhood to offer services.
 - The neighborhood should enable easy replication.
 - The neighborhood should have high demand.
 - The neighborhood should have lower competition.
- Success Criteria:
 - Good recommendation of neighborhood that meets above points.
 - It should have capability to enable latest information whenever required.

INTRODUCTION

- Data Requirements for this project:
 - Neighborhood Information (i.e. name, coordinates, populations).
 - Venue information (i.e. name, category, coordinates)
- Data Sources for this project:
 - Wikipedia Pages
 - Foursquare.com
- Data Processing for this project:
 - Data cleaning is required
 - Data needs to be in a structured format

	Neighbourhood	Population	Land Area	Density	Population %	Income	Commuting	2nd Language	2nd Language %	Latitude	Longitude
1	Agincourt	44577	12.45	3580	4.6	25,750	11.1	Cantonese (19.3%)	19.3% Cantonese	43.7854	-79.2785
2	Alderwood	11656	4.94	2360	-4.0	35,239	8.8	Polish (6.2%)	06.2% Polish	43.6017	-79.5452
3	Alexandra Park	4355	0.32	13,609	0.0	19,687	13.8	Cantonese (17.9%)	17.9% Cantonese	43.6508	-79.4043
4	Allenby	2513	0.58	4333	-1.0	245,592	5.2	Russian (1.4%)	01.4% Russian	43.7114	-79.5534
5	Amesbury	17318	3.51	4,934	1.1	27,546	16.4	Spanish (6.1%)	06.1% Spanish	43.7062	-79.4835

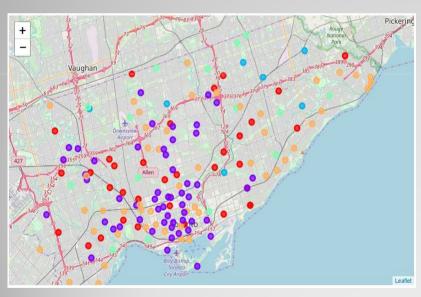
DATA DESCRIPTION

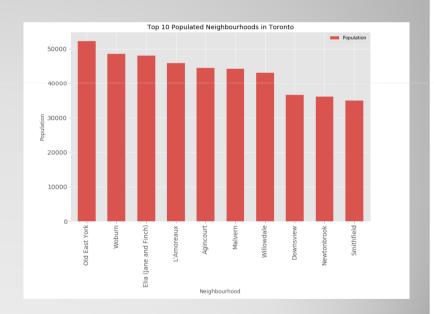
- Data Scrapping Technique
 - To scrap the neighborhood data from Wikipedia
 - To make the data into a structured
- Foursquare.com
 - Retrieving venue information from above API
- K-Means Machine Learning
 - Segment and cluster similar neighborhoods
 - Group them based on most common venues
- Scoring Weightage
 - Population count has 50% weightage
 - Venue (fewer grocery) has another 50% weightage



METHODOLOGY

- Clustering Similar Neighborhoods
 - Grouping based on common venues
- Neighborhood with high population
 - Ranking the neighborhoods based on population count
- Topmost common venue
 - Ranking the neighborhoods based on common venue w/o Grocery





RESULT

Result Review:

- First cluster looks to offer the best business expansion opportunity.
- Forest Hill neighborhood in the first cluster looks to meet the key business criteria whereby it will offer:
 - The highest demand (i.e. high population)
 - The lowest competition (i.e. lower supply).
 - The highest income
- Additional Observation:
 - High number of Russian people.
 - Worthwhile to consider Russian food or related supplies offering in this neighborhood.

DISCUSSION

- Recommendation Summary:
 - Region: First Cluster.
 - Neighborhood: Forest Hill
 - Additional Offering: Russian food or related supplies.
- Additional Note:
 - Re-run of the program is encouraged to get latest information.
 - Updated information is critical to consider as part of business expansion plan.

CONCLUSION