

BATTLE OF NEIGHBORHOODS

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INTRODUCTION

Backgrounds

1. The booming of health industry & its related businesses in NA
2. Soaring awareness of personal healthcare & healthy lifestyles
3. Growth momentum of cannabis industry

Business problems

1. Cannabis related health products: New York City vs. Toronto
2. Neighborhood layout & popularity
3. Promising locations for starter business

DATA DRIVEN THINKING

Sources:

1. Foursquare API
2. Other web resources: e.g. Wikipedia

FOURSQUARE DEVELOPERS



Processes:

1. Acquisition: GET() queries
2. Cleansing
3. Data uniqueness
4. Normalization/Standardization

DATA DRIVEN THINKING

Data acquisition

Keywords of feature venues of interests

Healthy lifestyles

- Gym
- Vegan
- Sports

Openness to natural herbs

- Nightclub
- Hookah lounges

Location convenience

- Distance to centroid

EXPLORATORY ANALYSIS

Breakdown of venues

Similarities:

Gym, Sporting goods

Differences:

NYC: mostly gym, sports

NYC: flattened layout

Toronto: nightclub & others

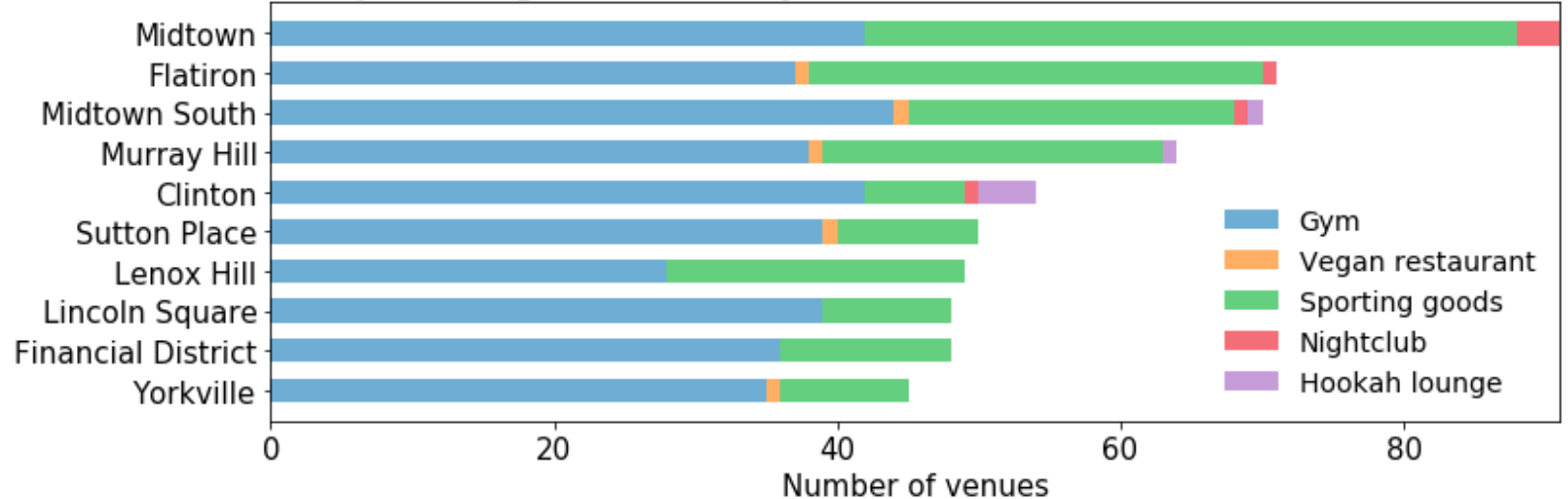
Toronto: more concentrated

Per population:

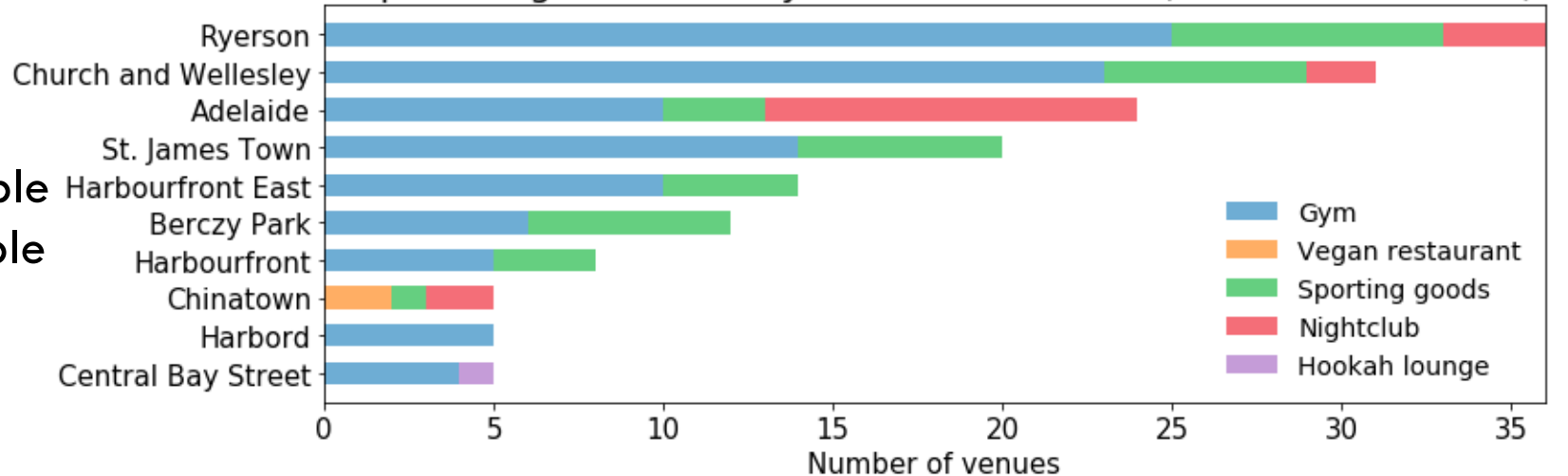
Manhattan: 6.77 per 10,000 people

DT Toronto: 6.48 per 10,000 people

Top 10 neighborhoods by number of venues (Manhattan, NYC)



Top 10 neighborhoods by number of venues (Downtown Toronto)



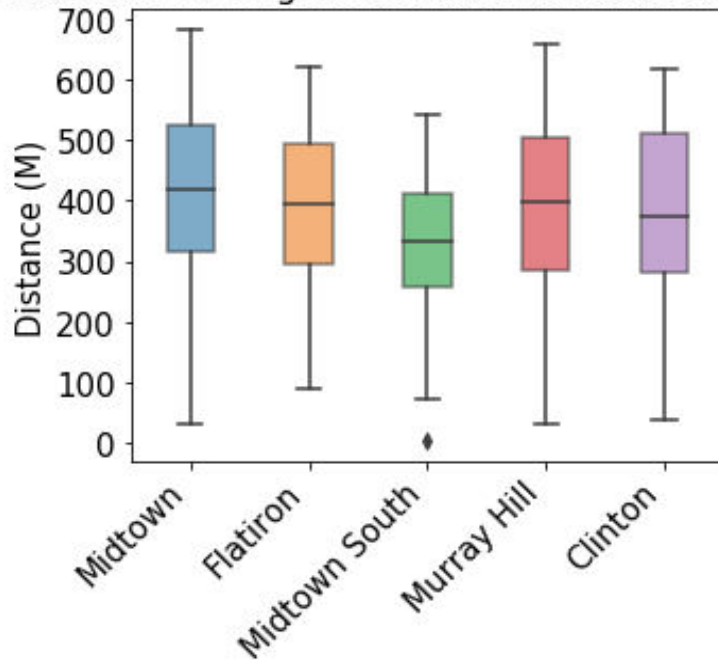
EXPLORATORY ANALYSIS

Location convenience

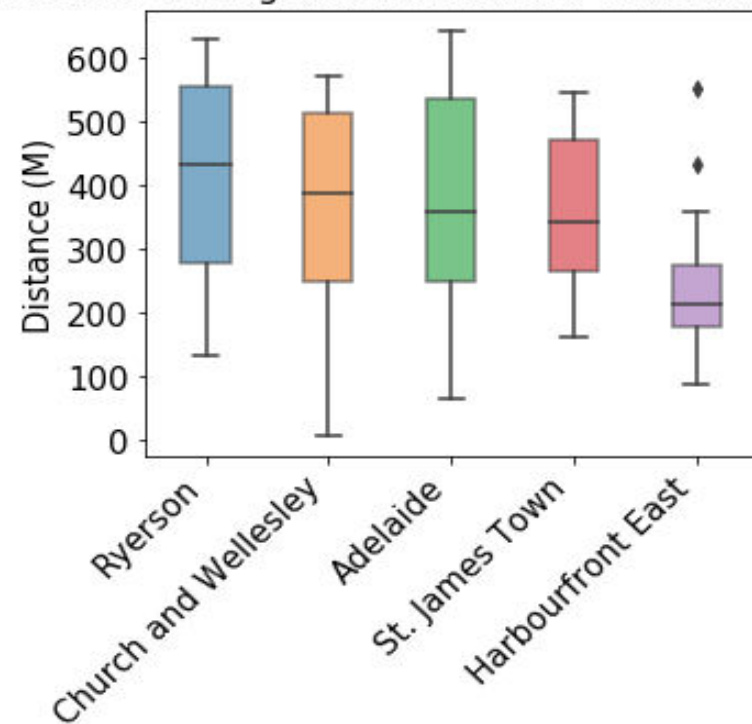
Findings:

top neighborhoods show similar convenience of feature venues

Distance to neighborhood center: Manhattan, NY



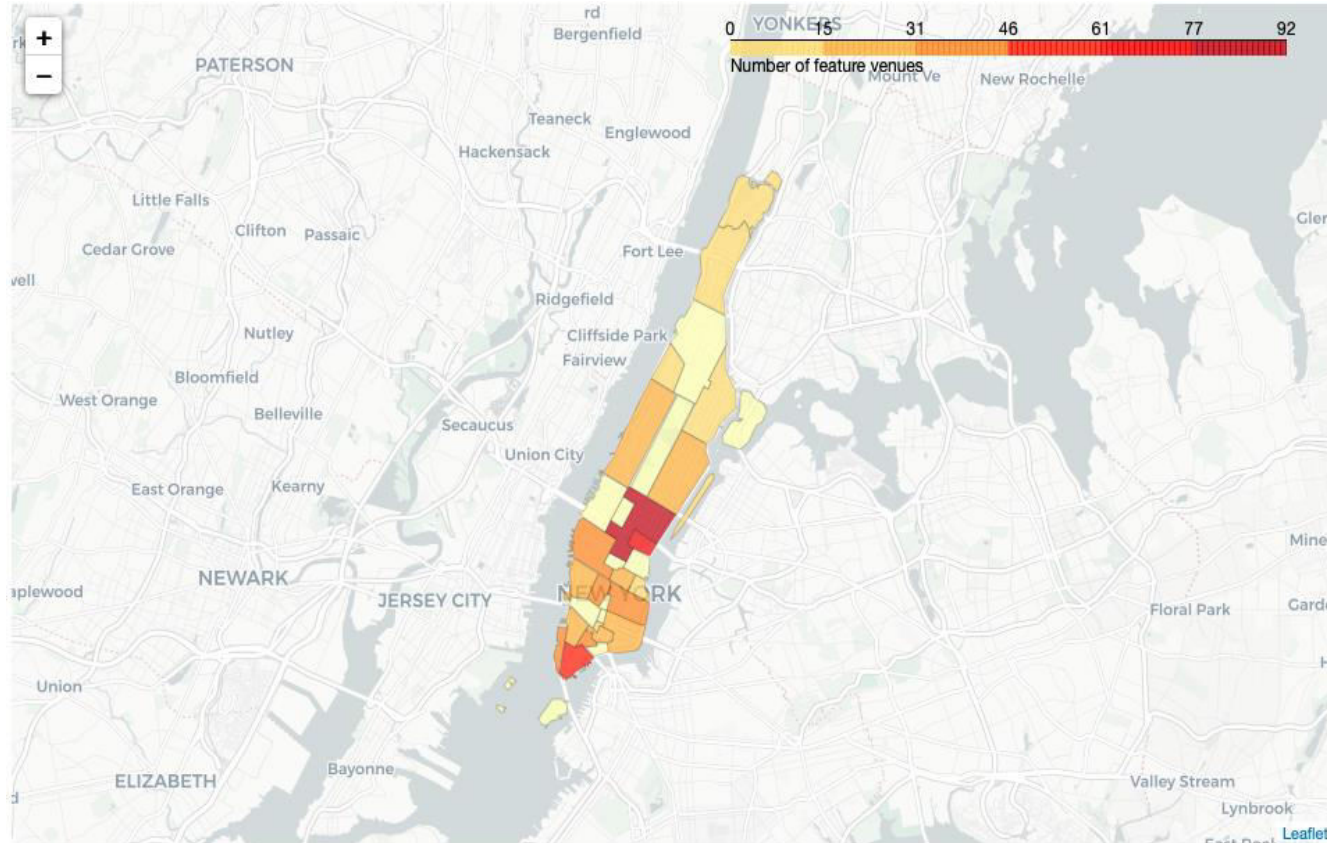
Distance to neighborhood center: Downtown Toronto



EXPLORATORY ANALYSIS

Distribution of venues (Manhattan)

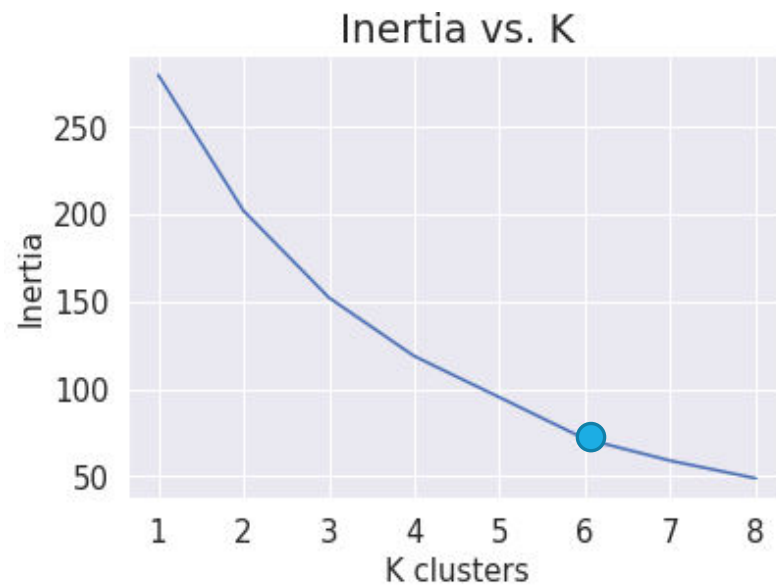
Popular neighborhoods: *Midtown, Flatiron, Midtown South, etc.*



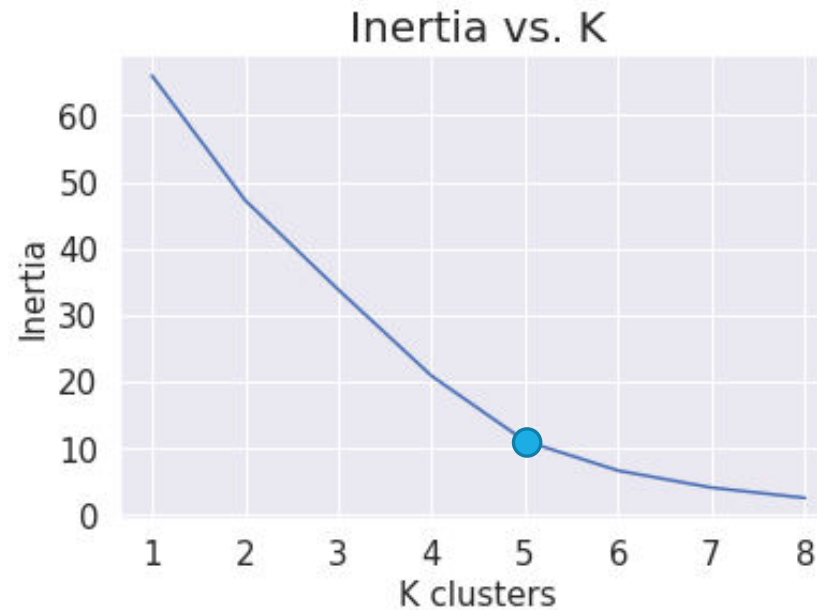
PREDICTIVE MODELING

Clustering model: K-Means

Study of K clusters



Manhattan, NY



Downtown Toronto

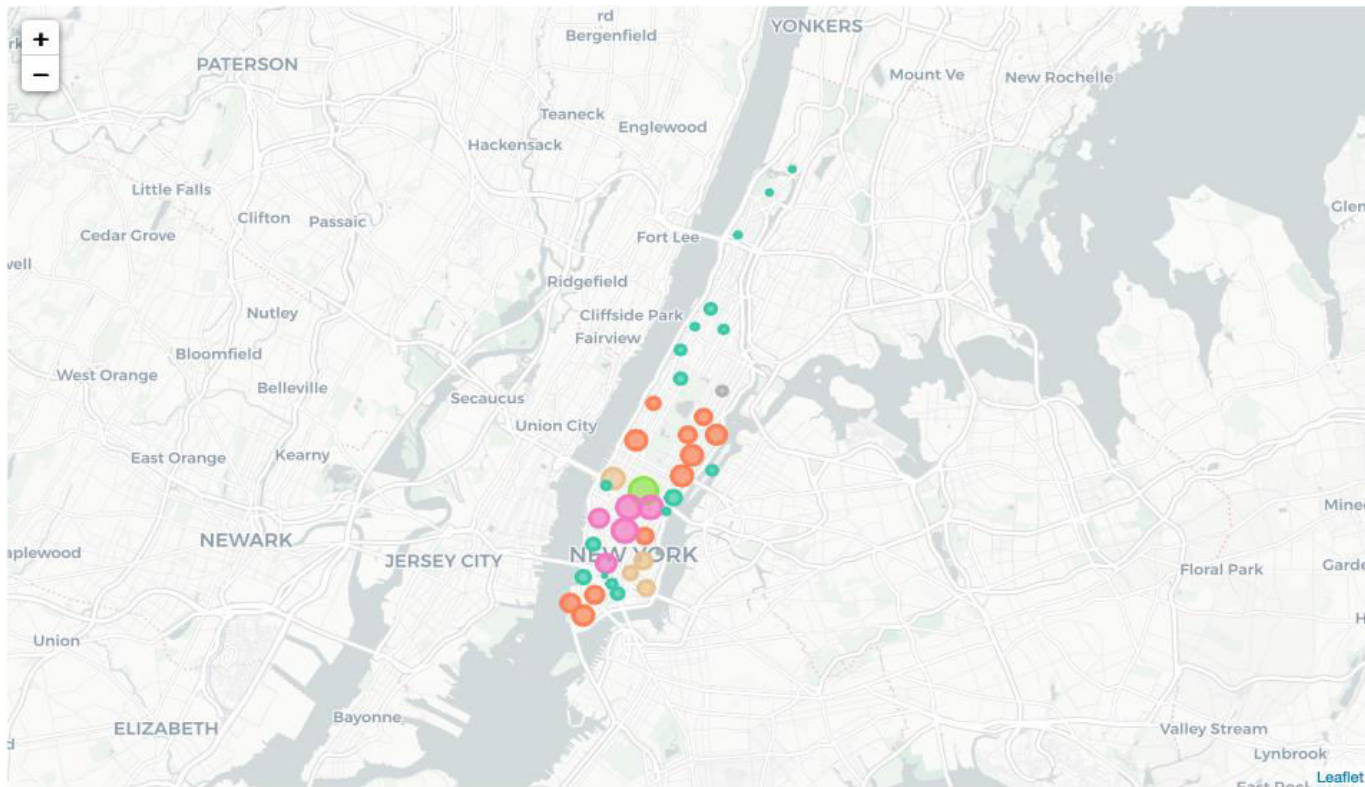
PREDICTIVE MODELING

Results discussion – Best hubs in Manhattan

Tier 1 locations: Midtown, Chelsea, Midtown South, Flatiron

Tier 2 locations: Clinton, East Village, Lower East Side, Noho

Tier 3 locations: Greenwich Village

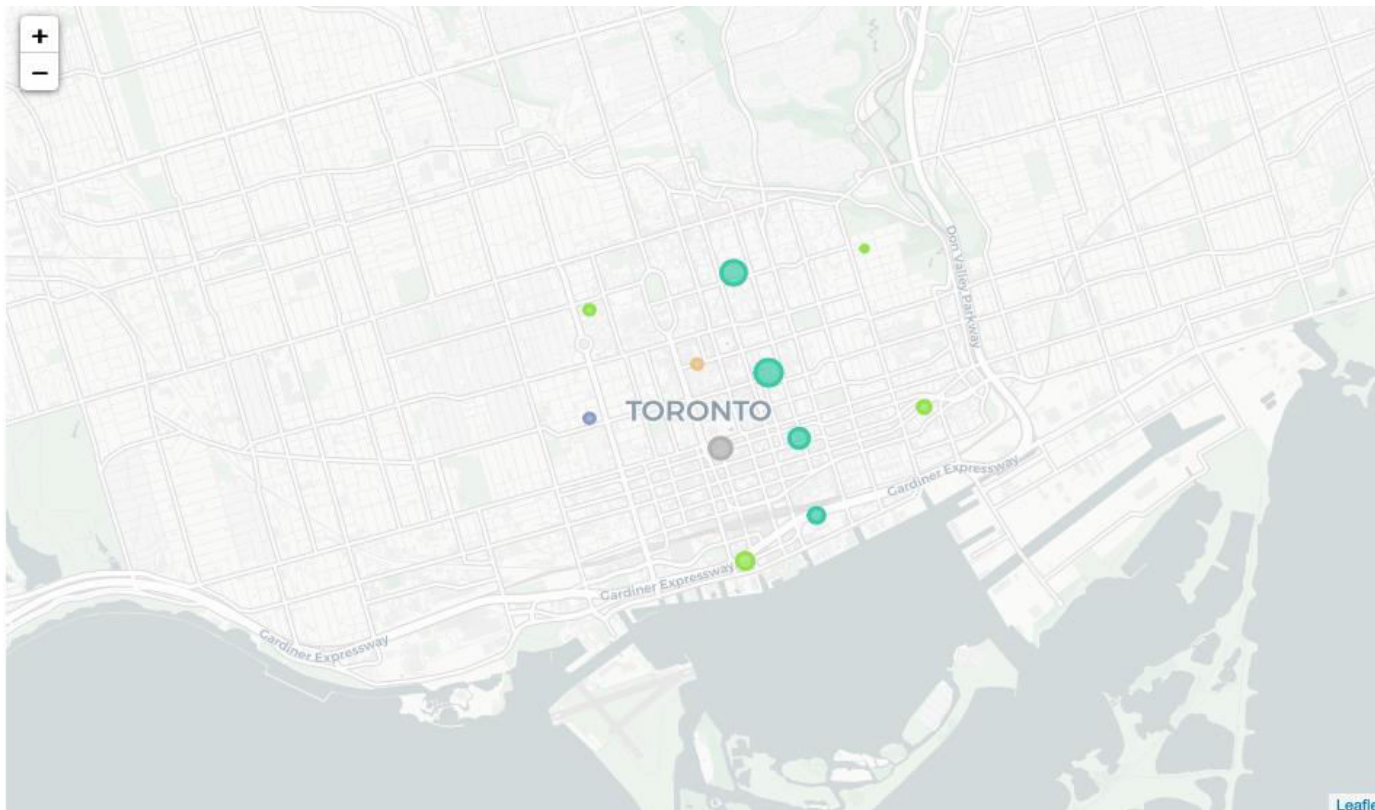


PREDICTIVE MODELING

Results discussion – Best hubs in Downtown Toronto

Tier 1 locations: Ryerson, St. James Town, Berczy Park, Church & Wellesley

Tier 2 locations: Adelaide



CONCLUSIONS

- New York vs. Toronto: similar business opportunities given population differences
- Exploratory analysis: prime locations near Midtown & nearby neighborhoods
- Nightclubs in Adelaide of Toronto & nearby areas
- Clustering of neighborhoods confirms top tier business hubs