



PREDICTING A NEIGHBORHOOD TO OPEN A ‘SPECIALTY’ STORE

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Capstone/ Foursquare

DECIDING A NEIGHBORHOOD TO OPEN A STORE

- ❑ Not an easy decision to choose the location of a new store
- ❑ E.g To open a specialty store which would specialize in stocking Indian spices besides other commodities and artifacts (mainly Indian theme)
- ❑ This can be easily extended to Japanese store, Chinese store, Korean store, German store etc based on the same concept
- ❑ Criteria for deciding the neighbourhood: where there is a high proportion of Indian restaurants
- ❑ Rationale: The people who come to eat in these restaurants are likely to be Indian food lovers of all nationalities and many of them may be interested in sourcing the Indian spices and additionally other Indian items

DATA TO BE USED TO SOLVE THE PROBLEM

- ❑ Neighbourhood, postal codes of a sample of Toronto neighborhoods
- ❑ Geographical co-ordinates (latitude, longitudes) of the neighborhoods
- ❑ Use co-ordinates, Fourquare to fetch data on nearby venues for the neighborhoods
- ❑ The frequency/ mean of the occurrence of the Indian Restaurant in each neighborhood

METHODOLOGY AND DATA ANALYSIS

List of sample postal codes of Toronto available in Wikipedia -

https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M_.

Scrape the data using BeautifulSoup and perform cleanup operations to transform into a useable dataframe

Get geographical coordinates of each postal code was available as a csv file at: http://cocl.us/Geospatial_data

Use coordinates to get data using FourSquare on nearby venues for the neighbourhoods

The frequency/ mean of the occurrence of the Indian Restaurant in each neighbourhood to be sorted in descending order

RESULTS AFTER DATA SCIENCE ANALYSIS

Neighborhood	Mean frequency of Indian Restaurant (sorted)
Dorset Park, Scarborough Town Centre, Wexford Heights	0.285714
Woburn	0.250000
Thorncliffe Park	0.125000
Bedford Park, Lawrence Manor East	0.045455
The Annex, North Midtown, Yorkville	0.038462
Davisville	0.028571
Central Bay Street	0.023810
The Danforth West, Riverdale	0.022727
Cabbagetown, St. James Town	0.021739
Church and Wellesley	0.011111
Adelaide, King, Richmond	0.010000
Harbourfront East, Toronto Islands, Union Station	0.010000

*Top 2 have concentration
of more than 25%*

CONCLUSION

I would focus and narrow down on the top two neighborhoods:

- ☐ Dorset Park, Scarborough Town Centre, Wexford Heights
- ☐ Woburn

Both of them have a mean frequency of more than 25% and are good candidates to open an Indian Store. Now I can start browsing these two neighborhoods and look at other criteria like available commercial space, competition, transportation etc