Toronto Public Libraries

Ensuring Their Success by Identifying Nearby Businesses That Influence People to Visit Neighborhood Libraries

By: Alexander Martinez Date: March 18, 2019

Introduction

- Libraries as Economic and Social Centers
- Libraries as so called "3rd Places
- Identify Establishments that would be conducive for libraries to be Economic and Social centers

Problem

- Some libraries Have Little foot traffic
- Low Ratings or No Ratings At All
- Poor library have an impact to the economic and social well being of the community

Interest

- Library Sucess = Community Success
- Library Sucess = Business Success
- Library Sucess = Social Success

FourSquare - Data Source

- Library Name
- Library Rating
- Library Geographical Location
- Top Venues
- Venues Category

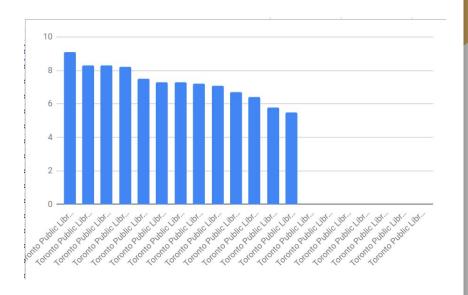
Methodology

- Data would be pulled from FourSquare
- Library names, ID, geo locations, ratings will be filtered
- Top Venues would be retrieved based on library locations
- K-mean Clustering / Charts to analyze data

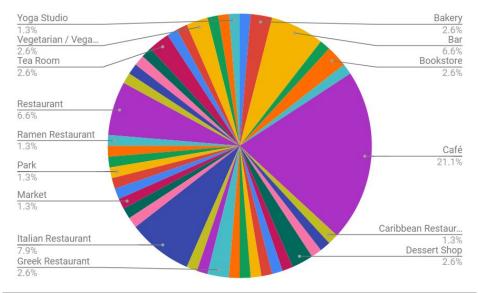
Results

Library Ratings:

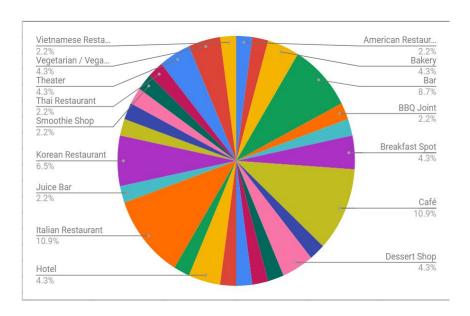
30% of the libraries have no ratings. This may be indicative of lack of interest from people going into these libraries.



- Pie chart showing category distribution for rated libraries
- Cafe / Coffee Shops, restaurant,
 Italian restaurants have the
 biggest share



This is the pie chart for non-rated libraries. The top venues are also similar to those libraries with rating.



K-mean Clustering

Running K-means Clustering among the libraries showed similarities with libraries that are rated and non-rated.



Conclusion

The results of the study indicate that the venues near the libraries do not extensively contribute to their foot traffic. What would encourage foot traffic to libraries would then be other factors. It can be proximity to schools, transportation stations, or government institutions but that would be for another study.