Predicting Similarity between Cities

Problem

- ☐ Multinational Corporations aim to open new branches for increased profit
- ☐ A new branch should be opened in a similar location to the original location

Data Acquisition and Cleaning

- ☐ Dataset on Tokyo obtained from ☐PS website
- Dataset on Toronto obtained from Wikipedia
- ☐ Dataset on London obtained from Doogal Website
- ☐ Dataset on Los Angeles obtained from a LA <u>travel</u> website
- ☐ Some columns were dropped and Latitude and Longitude columns added

Results

- ☐ There are nine cluster groups
 ☐ Each different cluster is given a different color with
 ☐ cluster 0 being red
 - ☐ cluster 0 being red
 - ☐ cluster 1 being purple
 - ☐ cluster 2 being blue
 - ☐ cluster 3 being light blue
 - ☐ cluster 4 being turquoise
 - ☐ cluster 5 being teal
 - ☐ cluster 6 being green
 - ☐ cluster 7 being light orange
 - ☐ cluster 8 being dark orange
- ☐ The different clusters is a visualization of how each area in each city are similar or dissimilar to each other as shown in the next slide



Results

Conclusion

- ☐ Majority of the areas in London and Los Angeles are in cluster 0, and some of the areas in Toronto are in cluster 0
- ☐ This indicates that these locations are similar in terms of the types of venues they share
- ☐ Only one location in Los Angeles is part of the same cluster, cluster 1, as majority of the locations in Tokyo
- ☐ Hence, if a company, with its main branch being in London, wants to open a different branch in a different part of the world
- ☐ More statistically appropriate for the branch to be opened in Toronto and Los Angeles as potentially the company may be targeting the same type of audience, thus maximizing profit.

Future Directions

- ☐ Only the venue categories were taken into account to assess the similarities between areas of different cities
- ☐ Future research for this project may have to include a methodology to investigate similarity or dissimilarity between the cultural background, history, venue categories of each location
- ☐ See if there is an improvement in predicting the optimum location of opening a new branch for a multinational corporation.

References

Shoo, D. (2017, September 26). *Economic Effects of Multinational Corporations*. Retrieved from bizfluent: https://bizfluent.com/info-8444236-economic-effects-multinational-corporations.html