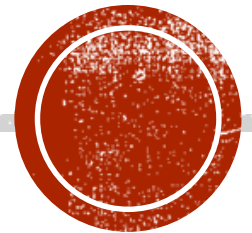# INTRODUCTION

- Toronto city overview for Christos' Greek Grocery

- Christos' Greek Grocery Strategic Plan and Overview

- Christos' Greek 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.

DATA DESCRIPTION

- • 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

METHODOLOGY

- • Data Scrapping Technique
  - To scrap the neighborhood data from Wikipedia
  - To make the data into a structured format

- • 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

RESULT

- • 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

DISCUSSION

- • Result Review:
  - First cluster looks to offer the best business expansion opportunity.
  - Humbermede neighborhood in the first cluster looks to meet the key business criteria whereby it will offer the highest demand (i.e. high population) and lowest competition (i.e. lower supply).

- • Additional Observation:
  - High number of Punjabi people.
  - Worthwhile to consider Punjabi food or related supplies offering in this neighborhood.

CONCLUSION

- • Recommendation Summary:
  - Region: First Cluster.
  - Neighborhood: Humbermede
  - Additional Offering: Punjabi 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.