



Capstone Project

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Agenda



Introduction



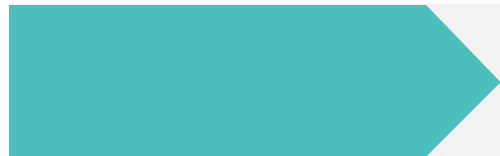
Data



Methodology and Analysis



Results and Discussion



Conclusion

Introduction

Background: A new Chinese immigrant will move to Canada soon and he plans to open a new restaurant as his main business. Basically, the following three questions should be answered.

- **City**
- **Type of restaurant**
- **Location**

Data Source

1

Foursquare

Location data
Venue info



3

GIC, IRCC

Immigrant info
International students info



2

Wikipedia

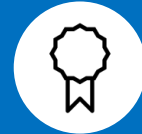
Coordinate info



4

NUMBEO

Living expense



Methodology

1

Location data inspection

2

Statistics of venues

3

Hypothesis based inference

4

K-Means clustering



	Number of venues returned
Toronto	100
Montreal	100
Ottawa	44

	No.1	No.2	No.3	No.4	No.5
Toronto	Vegetarian	Chinese	Mexican	Vietnamese	Caribbean
Montreal	French	Chinese	Vietnamese	Sandwich	Asian
Ottawa	Vietnamese	Chinese	Pizza	Korean	Asian



- Montreal and Toronto have a relatively larger Chinatown than Ottawa.
- Toronto ranks the first in terms of the average living expense in Canada, while Ottawa and Montreal ranks 21st and 23rd, respectively.
- Besides Chinese restaurant, French restaurant, Vietnamese restaurants are also quite popular.

Discussion

The **recommendation** for the new immigrant is:

- Consider Montreal as the city to open the restaurant
- Chinese food is a good choice, while Vietnamese and other Asian food seem to be feasible as well
- Besides Chinatown, two more neighborhoods, “Quartier des spectacles” and “Red-Light District, Montreal” can be the alternative place in the future (suppose the restaurant is still a Chinese or Asian food restaurant)

Discussion

The **limitations** of this study includes:

- Only three large cities are considered and compared. Actually, there are other popular cities among new immigrants
- Some assumptions are made in this analysis such as using the venue numbers to represent the size and popularity of a region
- More aspects like the living expense should be taken into consideration.

Conclusion

In this report, a preliminary study about three cities: Toronto, Ottawa and Montreal was conducted. **Chinatown** acted as the main position of interest. The neighborhoods in Montreal was explored and clustered using **K-Means clustering** method. Venues in each neighborhoods were displayed and sorted by its popularity.

Finally, a **recommendation** was proposed in terms of the city, restaurant type and location and the **limitation** of the study was stated.

Reference

[1] "Citizenship and Immigration Canada, Facts and Figure".Cic.gc.ca.

Citizenship and Immigration Canada. 2017.

[2] <https://cbie.ca/media/facts-and-figures/>

[3] https://www.numbeo.com/cost-of-living/country_result.jsp?country=Canada