

Coursera Capstone

IBM Applied Data Science Capstone

Opening an Italian Restaurant in Toronto



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Business Problem

The objective of this Capstone project is to analyse and select the best location in the Toronto city to open a new Italian restaurant. Using Data Science methodology and instruments such as Data Analysis and Visualization, this project aims to provide a solution to answer the business question: where in the city of Toronto, should the investor open an Italian Restaurant.



Data

- The list of neighbourhoods in Toronto (via Wikipedia),
- The Geographical location of the neighbourhoods (via Geocoder package)
- The Venue data pertaining to Italian restaurants (via Foursquare).

Methodology

- Collect the data from Wikipedia, clean and process into a dataframe.
- Use FourSquare API to locate all venues. Filter by Italian restaurants. Add to dataframe ratings, tips, and likes by users .
- Sort the data based on ranking.
- Visually the data using map visualization Python libraries

Results

- Downtown Toronto has the highest number of Italian restaurants comparing to the other boroughs,
- West Toronto has the highest average rating for Italian restaurant.
- Neighbourhood with the highest average rating for Italian Restaurants are St. James Town and Cabbagetown.



Discussion Section

- Based on the results of our analysis, West Toronto are the best locations for Italian cuisine in Toronto,
- West Toronto is a more promising place to open a new Italian restaurant.
- Neighbourhood St. James Town or Cabbagetown are the best places to open a new Italian restaurant in West Toronto.



Conclusion

- Answer to business question: where in the city of Toronto should the investor open an Italian Restaurant?
- The findings of this project will help the relevant investor better understand the advantages and disadvantages of different Toronto neighbourhoods/boroughs in terms of opening an Italian restaurant.

