IBM APPLIED DATA SCIENCE CAPSTONE

Recommendation System on the opportunity to open a Wine Bar in a Neighborhood of Toronto

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1 INTRODUCTION

ABSTRACT IDEA:

A new investor has contacted us looking to open a Wine Bar in Toronto. The investor operates in the field of bar and restaurant and has many successful wine bars in the major cities of Italy, mainly in Milan. The investor wants to expand the wine bar activity in Canada starting from Toronto.

The investor is looking for guidance to understand if Toronto could be a successful location, proving if there is a similarity with Milan, and which is the best neighborhood where to locate the Wine Bar.

BUSINESS PROBLEM:

To prove the similarity between Toronto and Milan, a neighborhood segmenting and clustering analysis will be conducted grouping together neighborhoods in Milan and Toronto. The similarity between neighborhoods is measured by comparing the venues in each neighborhood. The type of venues used in this study includes shop, restaurant, gym, museam ecc. After proving a similarity between the two cities a new segmenting and clustering analysis will be conducted to understand which Neighborhoods of Toronto is similar to the neighborhood of Milan where the wine bar is located. Target Neighborhoods of Toronto are those with a lack of Wine bars and similar to Milan neighborhoods where the successful wine bar is located.

This study uses Foursquare API and other data sources to acquire location data.

TARGET AUDIENCE:

The specific target audience is the "sales department" of the company that is in charge to investigate where to locate new shop around the world.

2 DATA COLLECTION

FOURSQUARE PLACES API:

FOURSQUARE is a social location service that allows users to explore the world around them. Using a free account it is possible to download up to 100 venues for request. THE FOURSQUARE API allows application developers to interact with the Foursquare platform.

The API itself is a RESTful set of addresses to which you can send requests and get responses. The API allows querying places and users, exploring popular places, and checking out reviews and photographs for these places.

https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:
Web site where to scrape postal code of Toronto Canada

https://worldpostalcode.com/italy/lombardia/milano': Web site where to scrape postal code of Milan Italy

geolocator.geocode: API to extract the latitude and longitude of postal code.