

Problem

In Toronto, there are many people aspiring to become cafe owners. Toronto has many profitable and prime regions for cafes to be situated.

Nevertheless, it is pertinent that based on the target products, cafes establish their outlets in the most viable locations.

A significant percentage of café businesses are unsure of where to start their business in. In fact, a considerable percentage of startups fail within their first few years in Toronto.

Datasets

To help these startup business owners to be better informed about better locations to build their business, we will analyze the data from several areas:

1. Wikipage

https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada: M

Data consists of Postal Code, Borough, Neighborhood in Toronto.

2. `https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBMDeveloperSkillsNetwork-DS0701EN-SkillsNetwork/labs_v1/Geospatial_Coordinates.csv`

Data consists primarily of geospatial information, including PostalCode, Latitude and Longitude.

3. FourSquare API

Data consists of surrounding amenities and shops, such as cafés, bars and hotels.

Methodology

By analyzing these datasets, we can provide reasonable suggestions for locations for cafes to establish their outlets.

We will seek out the neighborhoods with cafes as most common venue, as well as neighborhoods with cafes as second most common venue.

We will analyze by employing machine learning. Locations will be clustered using the renowned K-means clustering algorithm, an unsupervised machine learning algorithm.

Results

The most popular neighborhoods for cafes are:

- Brockton, Parkdale Village, Exhibition Place

- Commerce Court, Victoria Hotel
- First Canadian Place, Underground city
- Garden District, Ryerson
- High Park, The Junction South

The second most popular neighborhoods for cafes are:

- Christie
- Richmond, Adelaide, King
- St. James Town
- Studio District
- The Annex, North Midtown, Yorkville

Discussion

People in Toronto aspiring to become café owners can consider these prime locations for establishing their outlets. This is also helpful for existing café businesses to expand their outlets.

However, there are certainly other factors that may determine the success of choosing the locations to build café outlets. Hence, it is paramount to keep in mind that this is a suggestion that does not fully guarantee success.

Conclusion

Data science is indeed a powerful tool that serve real-world and practical needs. Data is an unbiased resource for people to make use of. In this case, café owners can be more informed with such organized data and relevant results.