

Capstone Project - The Battle of Neighborhoods (Part-1)

Introduction/Business Problem

Problem Statement: Comparing the neighborhoods of the two cities i.e. New York & Toronto and determining whether they are similar or dissimilar?

Toronto is the provincial capital of Ontario and the most populous city in Canada. It is an international centre of business, finance, arts, and culture, and is recognized as one of the most multicultural and cosmopolitan cities in the world, whereas New York (also called New York City, short form NYC) is the biggest city in the United States, located in the state of New York. It is the financial capital of the US since it is home to the nation's stock market, Wall Street, and the One World Trade Center. It is also the home of the United Nations Headquarters.

From above we can understand that how popular both the cities are, so if a person needs to understand that how far both the cities are similar or dissimilar or what kind of diversity or similarity both the cities have then one needs to have a clear idea about its geographical distribution and what all neighborhoods they have and popular venues in them which make them the most popular cities of the world. So let's have a look at the neighborhoods / boroughs of both the cities.

Neighborhoods of Toronto by district:

- Old Toronto
 - Downtown Core (Central Toronto)
 - East Toronto
 - North Toronto
 - West Toronto
- East York
- Etobicoke
- North York
- Scarborough
- York

Neighborhoods of New York City by boroughs:

- The Bronx
- Brooklyn
- Manhattan
- Queens
- Staten Island

Both the cities have quite a huge geographical area i.e. Toronto is widespread across 630 sq.km whereas the New York City has an area of 830sq.km. So exploring each and every neighborhood based on the venues returned by each neighborhoods is quite a heavy task, so to narrow down the result and avoiding the overfitting of the model by removing the noise which can occur if we consider each and every neighborhood. That's why I have focused on the most popular neighborhoods of both the cities i.e. Old Toronto which consists of Central / Downtown Toronto, East Toronto, West Toronto & South Toronto for Toronto, and Manhattan for the New York City which is well renowned and by far the most popular borough in the NYC.