

IBM Data Science Capstone Project, The Battle of New York's Boroughs

1. Objective. New York's Boroughs analysis and comparison.

The objective of the project is to compare and establish differences, if they exist, between the five boroughs that form New York, the Bronx, Manhattan, Brooklyn, Queens, and Staten Island, focussing on the distribution and clustering of venues.

Background.

Urban development and the distribution of important city landmarks reveal the history of the city and its social, cultural, and economic development, and from its current composition it's possible to define differences within and between its geographical and political divisions. From its conception as a world capital, the unique composition of New York's boroughs presents interesting insights into multiculturalism and approach to urban development, and potential clues to its future and priorities.

This type of analysis may be helpful to private enterprises if they want to establish the basis for a more specific and complete analysis on the possibilities for new franchises, a new brand, or service. The public sector can also gain insights into the commercial, and cultural distribution of the city, and define long term projects of urban development in function of its priorities and budget constraints.

2. Data.

The data that will be used to analyse New York's boroughs comes from the Spatial Data Repository, that presents the geographical distribution of New York's neighborhoods as well as its political divisions. It will help to establish the base of the geographical distribution of New York, and of the data that will be built on top of it.

The second data set to be used is the venues information provided by Foursquare, presenting the geographical description of the existent venues in New York City. With it, we will be able to define the characteristics of the neighborhoods and boroughs of the city according to the frequency and type of establishment that it presents

3. Data sources.

1. [2014 New York City Neighborhood Names](#). New York Spatial Data Repository.
2. [2010 New York City Boroughs](#). New York Spatial Data Repository.