

1) INTRODUCTION

1.1 Background

The C.O.W.R (Consortium Of Worldwide Restaurateurs) is the most important restaurant consortium in the world.

They nominated NY as the next #1 world spot for restaurants, and are planning to open more of them as soon as possible.

1.2 Problem

But before that, they want to understand in which neighborhoods of NY is more convenient to open more restaurants, or in which neighborhoods there are too many restaurants in order to consider to relocate some of their restaurants to another one.

1.3 Interest

The consortium is mostly interested in **American**, **Italian** and **Chinese** restaurants among the NY area.

2) DATA ACQUISITION AND CLEANING

2.1 Data sources

Datas regarding the NY neighborhood were collected through the link provided in one of the earlier labs (https://cocl.us/new_york_dataset).

Datas regarding the restaurants in NY were collected through the FOURSQUARE API

2.2 Data cleaning

All the datas were combined into one single data frame. All neighborhoods with no italian, american or chinese restaurant were removed from the dataset.

In the end. a data frame containing 196 rows remained. Each row contained one neighborhood , and AT LEAST one restaurant among the three categories.

[12]:	Neighborhood	American Restaurant	Italian Restaurant	Chinese Restaurant
0	Allerton	0	0	2
1	Annadale	2	0	0
2	Arlington	1	0	0
3	Arrochar	0	2	0
4	Astoria	0	2	0
5	Astoria Heights	0	1	1
6	Auburndale	1	1	0
7	Bath Beach	0	2	2
8	Battery Park City	1	3	1
9	Bay Ridge	3	7	2