## 1. Introduction/Problems

My Korean immigrant client requested the market survey for the positions of Korean restaurants in New York City.

The questions below can be included in

- how many Asian restaurants
- what kind of Asian restaurants; ratio of each ethnicity restaurants
- which borough/neighborhood
- severe competition on restaurant business

There are already many competitions among Asian restaurants including Korean restaurants, however, New York City is very diverse, having young professionals and tourists who are no fear to try and have very open minded personalities, so that there are still rooms for a new restaurant. Also thanks to K-POP, there are increasing demands of Korean culture.

The approach of the project is to know the neighborhood and cluster of different restaurants in Manhattan, New York City to make better decision of opening a new restaurant.

## 2. Data

Data to be used to tackle the problem; Using the coordinates data Foursquare API can generate the venues for each neighborhood in New York City.

- 5 boroughs and the neighborhoods with the latitude and longitude coordinates are available in
  - o dataset: <a href="https://geo.nyu.edu/catalog/nyu/2451/34572">https://geo.nyu.edu/catalog/nyu/2451/34572</a>
- Restaurant information extracted using Foursquare API conjunction with neighborhoods' coordinates above