Coursera Capstone Project

Analyzing potential public working spaces in New York

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Introduction

As a consequence of the current pandemic, millions of people are facing the challenges of working from home. Many large companies like Google and Apple have extended their work from home policy to the end of the year, while others are considering extending their policy permanently. And while working from home has worked for certain employees, "to jump to the immediate conclusion that we should now reinvent workplace strategies overnight and leave a swath of our colleagues at home indefinitely" (Tim Oldman, Leesman) may not be the right approach.

Business problem
For this project I'm interested in exploring alternate public work spaces for employees outside of their home, mainly coffee shops. I have chosen coffee shops since they exist in abundance and can easily be used as a temporary 'work' or 'meet' space by any individual. This is of course, assuming things alleviate and individuals are able to go outside in a safe manner. The project will focus on neighborhoods in Manhattan, New York City.

Stakeholders
The stakeholders for this project would be individuals or employees looking for alternate spaces, other than their homes, that can support their ability to work in a comfortable and optimal manner. The second would be developers looking to invest and open hybrid coffee/work space in new neighborhoods.

Data

Data Description:

- **Neighborhood Data**, including neighborhood names in Manhattan as well as latitude and longitude coordinates.
    - Source: "2014 New York City Neighborhood Names" (https://geo.nyu.edu/catalog/nyu_2451_34572). Point file published by the NYC Department of City Planning in 2014.
- **Venue data**, including names, addresses, neighborhoods, venue description (in this case 'coffee shop'), reviews and rating. We'll be scrubbing the reviews* to make sure the coffee shops are optimal to work in, using keywords such as 'wifi', 'work', 'laptops' and so forth. We'll also be using the rating to determine highly rated coffee shops.
    - Source: Foursquare API
    - *Unfortunately, with the personal account on Foursquare developer, I only have access to two photos and two tips (reviews). Since we don't have access to the complete database, searching using keywords will not be completely accurate. For the purposes of this project, we'll use the data that is available and hope that some initial findings will help us get the support of stakeholders to then purchase access to the rest of the database.*