**Applied Data Science Capstone**

**Assignment: Capstone Project - The Battle of Neighborhoods**

**Final Report**

Saibal Chakraborty, December 2019

# Opportunity Statement

A vendor wants to open a new plant nursery in New York city area. He is exploring which place it would be appropriate to open, where vacant land is available to take it on lease.

# Description

Plant nurseries are generally far from the residential area because they need more space and in the city space rent cost is very high. Moreover, there are restriction on the movements of heavy vehicle in the city limit area.

Our Vendor is looking for small place to rent and he wants to open boutique plant nursery, which will not have labs/R&D center attached but only selling counter. He is looking of plots on rent and he will be building small green house and a selling counter.

His Purpose to open in city limit has a reason, he is looking for upskill area in residential location,

1. Neighborhood people can easily locate them.
2. Neighborhood people can spend more time
3. They can visit frequently.

To address the first requirement, we look for locations that are relatively underserved, i.e. have a lower number of existing plant nurseries. We also factor in economic data, like the median household income levels, as we can expect that a more affluent population creates better business conditions for a indoor landscaping and outdoor plantscaping.

# Data

The primary source for this analysis is the Foursquare API on Wikipedia and cityofnewyork.com

We will use the Wikipedia data to identify burrows of New York city and subsequently cityofnewyork.us to find vacant land for lease.

The following section describes sources and data in more detail.

## Data sources

Foursquare:

* Wikipedia data on burrows.

Vacant land Information:

* We use cityofnewyork.us to extract vacant land on lease
* Source: <https://data.cityofnewyork.us/Housing-Development/Vacant-Publicly-Owned-Land/c8vj-e9jc>

## Data cleaning

This section will be completed as part of week 2 assignment.

# Methodology

To be completed.

# Results

To be completed.

# Discussion

To be completed.

Discuss any observations you noted and any recommendations you can make based on the results.

# Conclusion

To be completed.