## Coursera Applied Data Science Capstone Project

The Battle of Neighborhood

Author: Anoop Kohale, IBM

## Introduction/Business Problem

Market analysis is an important part of any business startup. The success or failure depends on the location where the business is opened. In big cities like New York, there is lot of competition to attract customers with your offerings. However, selection a perfect neighbourhood is often difficult and require lot of work.

Opening any business in any neighborhood requires carefully analyzing number of aspects of the business for it to become successful. There are number of factors influencing the decision, viz. will there be enough customers to buy my offerings, is there any competition around that can take away by revenue, etc. To success the businessman must carefully study these factors and come up with the strategy or plan of operating the business in the neighborhood.

Fortunately, Advanced data analysis and machine learning will help taking this decision with the information available in abundance around the internet. Foursquare is such an information provider. Foursquare provides data about the interesting venues around any neighborhood. We can utilize the machine learning algorithms and find out the clustering of specific business in the neighborhood. This will empower us with the understanding of demographics and we can then take better decision that will result in making the business a success.

The main beneficiary of this project will be any entrepreneur who wishes to open a business in big city like New York. The project will try to find a suitable neighbourhood to open a business. For example, someone wants to open a bakery and is looking for a suitable neighbourhood, this project will give an insight on to the venues in a neighbourhood and then can decide whether

opening a bakery there will be a suitable option. E.g. if there are other bakeries in the neighbourhood it may not be a suitable option.