**THE BATTLE OF NEIGHBORHOODS**

**SECTION 1-INTRODUCTION**

**BACKGROUND**

In this section, I will define my idea of choosing this project, where I leverage the Four square location data to solve the imagined business opportunity.

There are 100’s and 1000’s of sites on Internet including Foursquare that tells us about places to go, things to see, restaurants to eat but when it comes to finding out all the information about a city, it requires a lot of work.

While choosing an appropriate location to open a restaurant, it’s important to understand what to look out for. The following factors must be considered for choosing just the right spot.

1-Visibility

If the restaurant is located in a side street with a little foot traffic, it’s very difficult to attract customers. To determine visibility, look at foot and car traffic patterns.

2-Crime Rates

Crime rates are unglamorous considerations, but if the restaurant is located in a crime-laden area, are the target customers going to visit? High crime rates can make potential customers uncomfortable, and if they feel they’ll be mugged walking to their cars, it will only drive away business, no matter how legendary it is.

3-Surrounding Business and Competitor Analysis

Research regarding surrounding businesses is a must. Are they doing well? Is the area affluent? Is there enough room for our business? Also, we’ll want to know what types of restaurants do well in the area; however, we don’t want to open a pizzeria if there are four in the area. Areas can only support so many of the same type of restaurant. What will distinguish any new restaurant is excellent service and consistently wonderful food.

4-Accessibility

Some restaurants find success in just-off-the-highway locations, or located near exits for those interstate travellers who need a bite to eat but don’t want the usual fast-food restaurant. We’d have to keep peak times in mind for these kinds of locations, as well as customer demographic.

5-Affordability

Cost is always a bottom-line consideration for any business. If the rent or purchase of the space is more than we’ll earn in each month in profits, that location is not feasible at that time. However, if we know that we’ll generate business from that location, then it can be considered. Although some risks do pay off, we don’t want to be at the point where we’re struggling to cover basic costs.

6-Safety

Once chosen, keep in mind that OSHA reports that slips, trips, and falls are the most common workplace accident, accounting for 15 percent of all accidental deaths, and they are more prevalent in the restaurant industry. It’s important to install slip-resistant flooring, have slip-resistant mats in the kitchen spaces, and provide the workers with highly-rated safe, slip-resistant footwear to help prevent those preventable slips and trips. Slips and trips could cost the company more in fines than renting a space, so make sure to consider all angles of safety when choosing the best space. If the space has its own equipment, make sure that all fryers are safe, ice machines aren’t leaking, and there aren’t any trip hazards in the kitchen.

**BUSINESS PROBLEM**

In this scenario, it is urgent to adopt machine learning tools in order to assist homebuyers in US to make wise and effective decisions. As a result, the business problem we are currently posing is: how could we provide support to homebuyers in USA to purchase a suitable real estate in this uncertain economic and financial scenario?

**PROJECT IDEA**

My idea for the Capstone Project is to show that when driven by venue and location data from Four Square, it is possible to present the cautious and nervous traveller/migrant with a list of attractions to visit supplemented with the graphics showing the chances of opening a successful restaurant in any particular area.

The Approach is as follows:

1. The travellers decide on a city location [in this case Chicago].
2. The Fore Square website is scrapped for the top venues in the city.
3. From this list of top venues the list is augmented with additional geographical data.
4. Using this additional geographical data the top nearby restaurants are selected.
5. A map is presented to the to the traveller showing the selected venues and the number of restaurants already being there in that area.

**Who is this solution targeted at?**

I believe this is a relevant challenge with valid questions for anyone moving to other large city in US, EU or Asia. The same methodology can be applied in accordance to demands as applicable. This case is also applicable for anyone interested in exploring starting or locating a new business in any city. Lastly, it can also serve as a good practical exercise to develop Data Science skills.

There are many data science aspect of this project including:

1. Data Acquisition
2. Data Cleansing
3. Data Analysis
4. Machine Learning
5. Prediction