Coursera Capstone

Applied Data Science Capstone (IBM)

Opening a New Restaurant in Delhi, India

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Chapter 1: Introduction

Not only in weekend but also in weekdays many of us prefer to eat from any restaurant because of tasty and variety of foods. But every time we can't able to find good restaurant for any party, family meet, friend meet or normal taste change. This happens because many places has lot of restaurant and many has none. So where there is lot of restaurants, we have lot of option to choose. Now if anyone wants to open his/her restaurant in Delhi, he/she should know about the diversity of the restaurant in different places. And if he/she knows the details they can easily open his/her restaurant successfully. But many of them fails to become successful because of lack of knowledge. So this is a project which helps to those person who wants to open their restaurant in Delhi and become them successful. It is a project where I have separated some areas based on the density of restaurants and choose some area where anyone can run their restaurant successfully without any competition or less competition.

Chapter 2: Business Problem

To start a successful restaurant we have to face some problems which are:

- High competition
- Market Demand
- Area population density
- Area economic condition
- Area location
- Quality foods and services
- Good maintenance

We can’t solve all the problem easily but this project can help to solve the major problem among the above mentioned which is none other than “High competition”. It occurs due to high concentration of restaurant in a place.

Chapter 3: Proposed solution

Here we are trying to find some areas which has less or no competition between the restaurants. Because a newly opened restaurant needs some time to grow and successful. We have clustered the areas of Delhi where there are high to no restaurant, so that anyone can easily understand where to open a restaurant and where to not. The final solution with proper analysis is given in the final report.

Chapter 4: Data and its uses

To solve this problem we need the following data:

- List of neighbourhoods in Delhi
- Latitude and longitude coordinates of those neighbourhood
- Venue data, particularly for restaurant

- The list of neighbourhoods in Delhi data is taken by scrapping this Wikipedia page - https://en.wikipedia.org/wiki/Category:Neighbourhoods_in_Delhi.
- The Latitude and longitude coordinates of those neighbourhood are taken with the help of python package Geocoder.
- The venue data of those neighbourhoods are taken by Foursquare API.