Comparing the cities of Mumbai and Delhi

1) Introduction:

Mumbai and Delhi are the two most important metro cities in India. There has been a war for supremacy in terms of quality of life, jobs, education, entertainment and recreational facilities that these cities have to offer to its residents. This project attempts to analyze the neighborhoods in each of these two cities and tries to understand what is popular in them and what they have to offer to someone who is contemplating to make a choice on seeking a life in either of the metro cities.

The business problem in this study assumes that people who would be interested in this study are those who would like to create a projection of potential life and activities in these metro city neighborhoods if the subject moves to live in one of them. The decision to choose one over the other would depend on popular venues in the neighborhoods in each of these metro cities.

2) Data:

For this study, we needed data about neighborhoods in each of these metro cities. The data published by the government on postal codes for all India would serve us well for this study. We will specifically download the CSV provided under https://data.gov.in/resources/all-india-pincode-directory-contact-details-along-latitude-and-longitude.

3) Methodology:

I used the Foursquare API to find the top venues in each of the neighbourhoods of Mumbai and Delhi. This will help us understand the nature of life Mumbai and Delhi neighborhoods have to offe so that they can be compared. After finding most common venues for each of the neighborhoods, I used the K Means clustering to cluster the neighborhoods of Delhi and Mumbai and plotted all the neighborhoods of Mumbai and Delhi on a map showing their clusters using folium. The statistical analysis

and the clustering algorithm used helps us to compare and contrast the neighborhoods of Mumbai and Delhi and what these neighborhoods have to offer to the people.

4) Findings & Conclusion:

Given our cluster information for both Mumbai and Delhi, we see that Mumbai and its neighbourhoods are a great place for a foodie. There are a lot of restaurants, cafes, bars, etc in Mumbai neighbourhoods. Also due to the proximity of Mumbai to the seashore, Mumbai neighborhoods offer for harbors, seafood, boat, and ferry rides. On the other hand, we see how dissimilar life in Delhi neighbourhoods would be compared to Mumbai neighbourhoods. Delhi neighborhoods are good for those who like Arts and Crafts, Museums, Water Parks and Pizza places. There is very less in terms of foreign cuisine restaurants in Delhi.

Another important aspect the study reveals is that the categories of venues Mumbai offers are far too many compared to Delhi. This means that Delhi becomes restrictive in terms of variety and convenience.