1. Data Description:

To consider the objective stated, we can list the below data sources used for the analysis.

1.1. Bangalore Neighborhood Data:

The following page was scraped to pull out the necessary information: http://www.geonames.org/export/zip/
The information obtained had to be cleansed and necessary data such as 'Pin Code', 'Neighborhood','State','District','Borough','Latitude','Longitude' of India was transformed into a pandas' data frame for further analysis. For this particular, Business Problem, the necessary data of 'Bangalore' – Borough was extracted.

```
[3]: df_bangalore= df[df['Borough'].str.contains("Bangalore")].reset_index(drop=True)
     df_bangalore
```

[3]:

	Pin Code	Neighborhood	State	District	Borough	Latitude	Longitude
0	560001	Bangalore G.P.O.	Karnataka	Bangalore	Bangalore North	12.9914	77.5944
1	560001	Legislators Home	Karnataka	Bangalore	Bangalore North	12.9914	77.5944
2	560001	Mahatma Gandhi Road	Karnataka	Bangalore	Bangalore North	12.9914	77.5944
3	560001	Vidhana Soudha	Karnataka	Bangalore	Bangalore North	12.9914	77.5944
4	560001	Rajbhavan (Bangalore)	Karnataka	Bangalore	Bangalore North	12.9914	77.5944
...	...	...	...	...	...	...	...
253	560110	Ullalu Upanagar	Karnataka	Bangalore	Bangalore	13.1791	77.0942
254	562130	Tavarekere (Bangalore)	Karnataka	Bangalore	Bangaloresouth	13.9288	77.0614
255	562157	Bettahalsur	Karnataka	Bangalore	Bangalore North	13.1438	77.6169
256	562162	Madanayakanahalli	Karnataka	Bangalore	Bangalore North	17.8647	77.8229
257	562162	Dasanapura	Karnataka	Bangalore	Bangalore North	17.8647	77.8229

258 rows × 7 columns

1.2. Using Foursquare Location Data:

Foursquare data is very comprehensive and it powers location data for Apple, Uber etc. The Foursquare API is to retrieve information about the popular spots in Bangalore. The popular spots returned depends on the highest foot traffic and thus it depends on the time when the call is made. So we may get different popular venues depending upon different time of the day. The call returns a JSON file and we need to turn that into a data-frame.

	name	categories	lat	lng
0	Ujwal Bar & Restaurant	Indian Restaurant	12.992280	77.594473
1	Millers 46	Steakhouse	12.991666	77.594207
2	Alliance Française	Concert Hall	12.991232	77.596723
3	Infinitea	Tea Room	12.987157	77.594835
4	Imperial Restaurant	Indian Restaurant	12.991150	77.593837

We will then leverage this data in order to determine which locality is the most appropriate in order to locate the similar neighborhoods.