Opening a New Shopping Mall in Bangalore, India

DIPANKAR ROY

May 2020

Objective

Location of the shopping mall is one of the most important decisions that will determine whether the mall will be a success or a failure

Objective: To analyse and select the best locations in the city of Kuala Lumpur, Malaysia to open a new shopping mall

Business question

In the city of Bangalore, India, if a property developer is looking to open a new shopping mall, where would you recommend that they open it?

Data Required and Sources

Data required
- ◦ List of neighbourhoods in Bangalore, India
- ◦ Latitude and longitude coordinates of the neighbourhoods
- ◦ Venue data, particularly data related to shopping malls

Sources of data
- ◦ Wikipedia page for neighbourhoods (https://en.wikipedia.org/wiki/Category:Neighbourhoods_in_Bangalore)
- ◦ Foursquare API for venue data

Methodology

Web scraping Wikipedia page for neighbourhoods list

Get latitude and longitude coordinates using Geocoder

Use Foursquare API to get venue data

Group data by neighbourhood and taking the mean of the frequency of occurrence of each venue category

Filter venue category by ShoppingMall

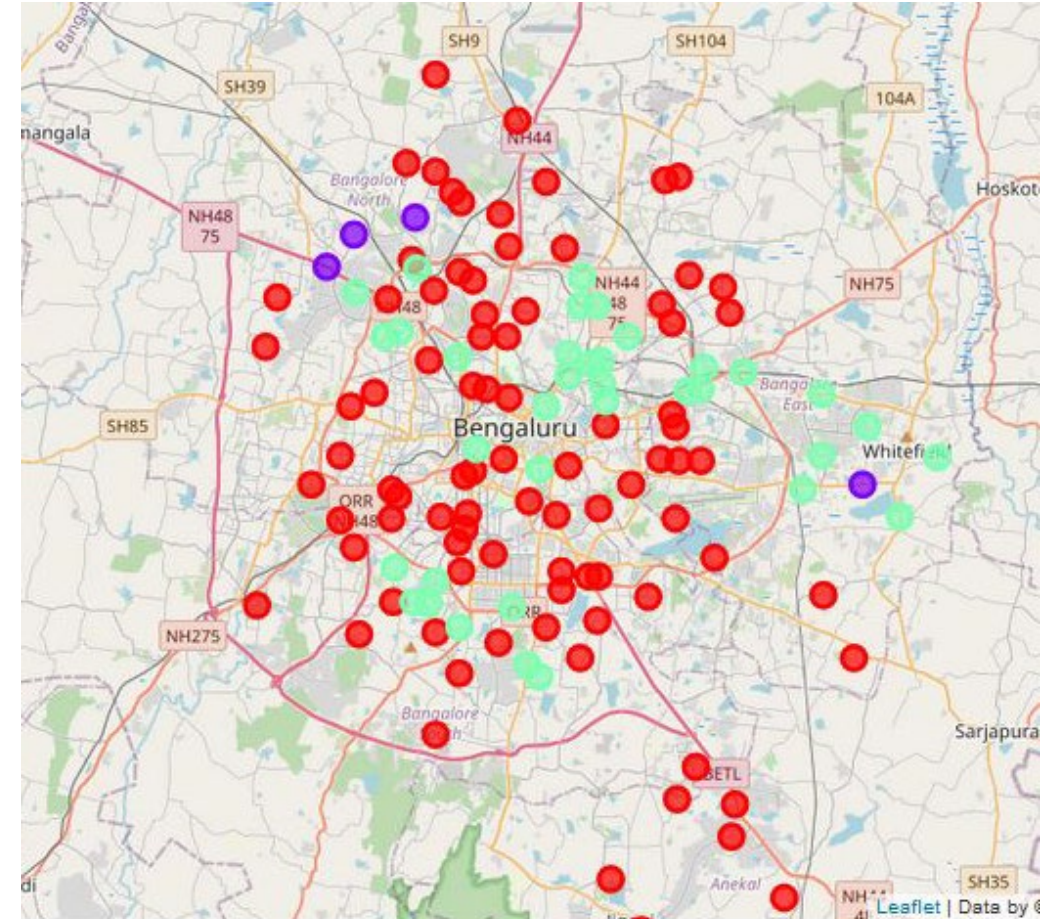Perform clustering on the data by using k-means clustering

Visualize the clusters in a map using Folium

Results

Cluster 0: Neighbourhoods with moderate number of Shopping Malls

Cluster 1: Neighbourhoods with low number to no existence of Shopping Malls

Cluster 2: Neighbourhoods with high concentration of Shopping Malls

Discussion

Most of the shopping malls are concentrated in the central area of the city

Highest number in cluster 2 and moderate number in cluster 0

Cluster 1 has very low number to no shopping mall in the neighbourhoods

Recommendation

Open new shopping malls in neighbourhoods in cluster 1 with little to no competition

Can also open in neighbourhoods in cluster 0 with moderate competition if have unique selling propositions to stand out from the competition

Avoid neighbourhoods in cluster 2, already high concentration of shopping malls and intense competition

Conclusion

Answer to business question: The neighbourhoods in cluster 1 are the most preferred locations to open a new shopping mall

Findings of this project will help the relevant stakeholders to capitalize on the opportunities on high potential locations while avoiding overcrowded areas in their decisions to open a new shopping mall

Thank you