

MANHATTAN
VS.
DOWNTOWN TORONTO

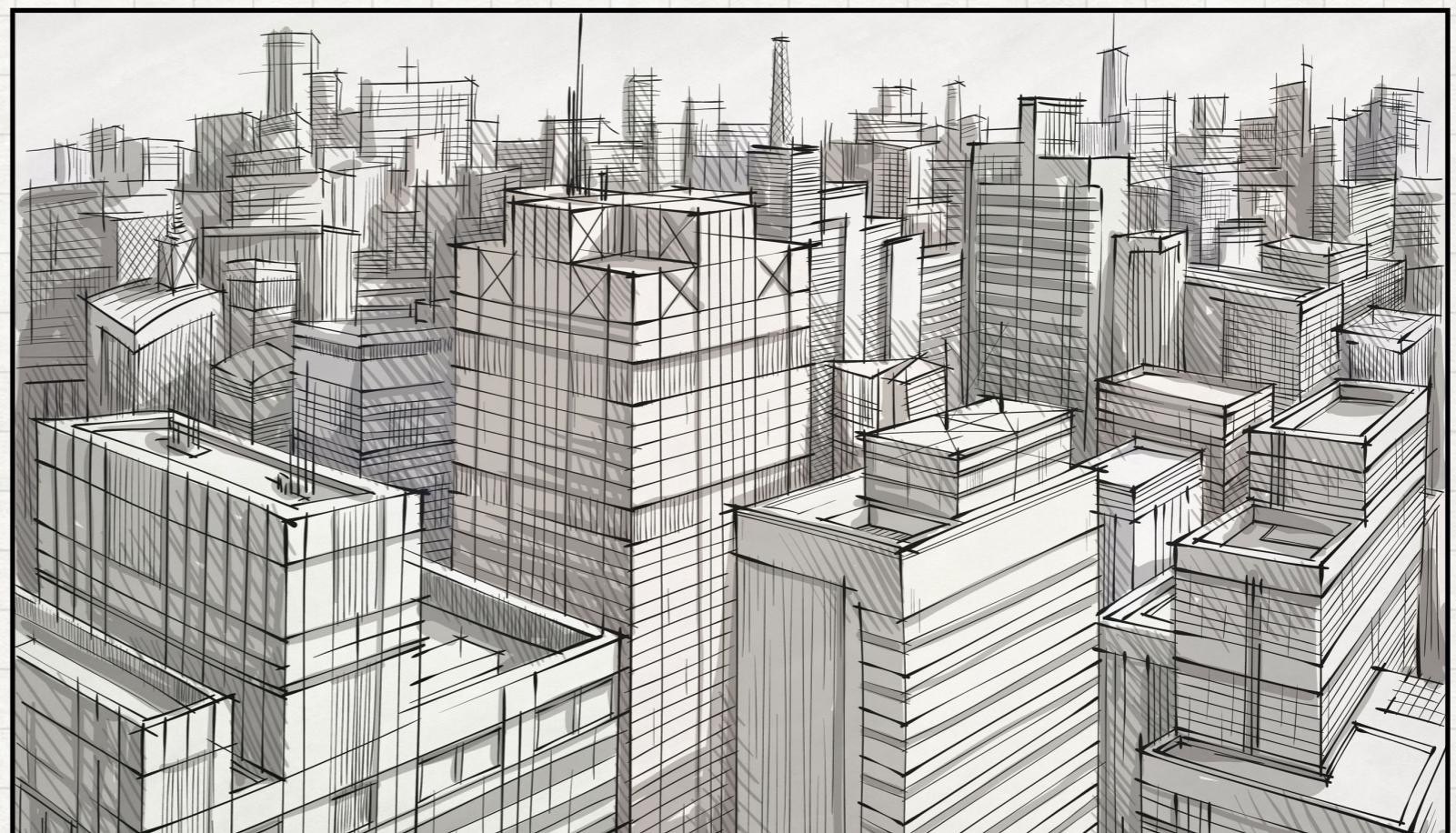
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GOAL:

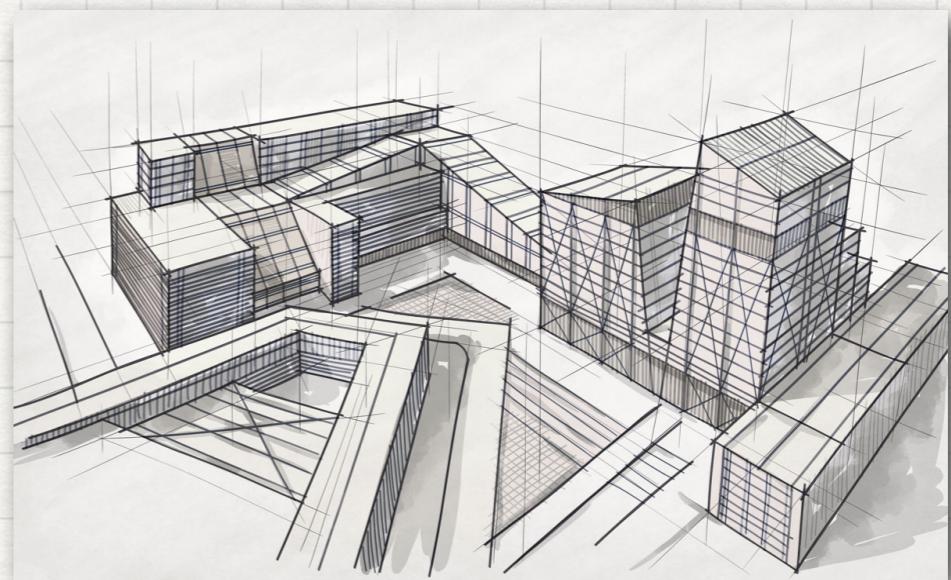
- One of our customers consults us about a decision he is going to make. He took two job offers from New York and Toronto. He is going to live in downtown areas of these cities. He wants us to compare the neighbourhoods in downtown Toronto and Manhattan.

APPROACH:

1. WE DOWNLOAD THE DATA FROM FOURSQUARE API.
2. WE STRUCTURE THE DATA AND PREPROCESS IT.
3. WE USE K-MEANS CLUSTERING ALGORITHM.
4. FOR BEST K, WE USE ELBOW METHOD.
5. WE USE BAR CHARTS TO UNDERSTAND THE COMMON VENUES IN CLUSTERS.



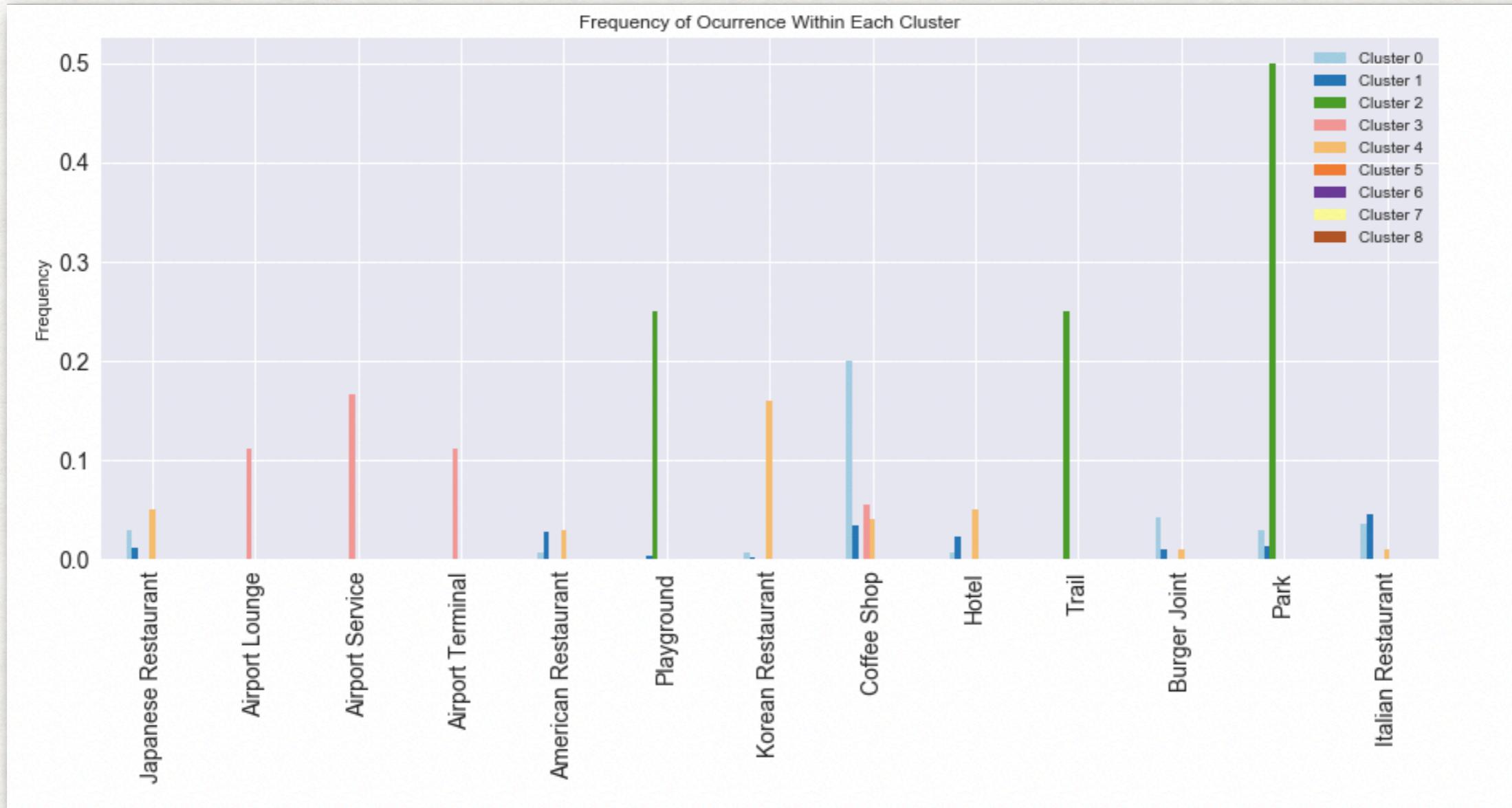
RESULTS:



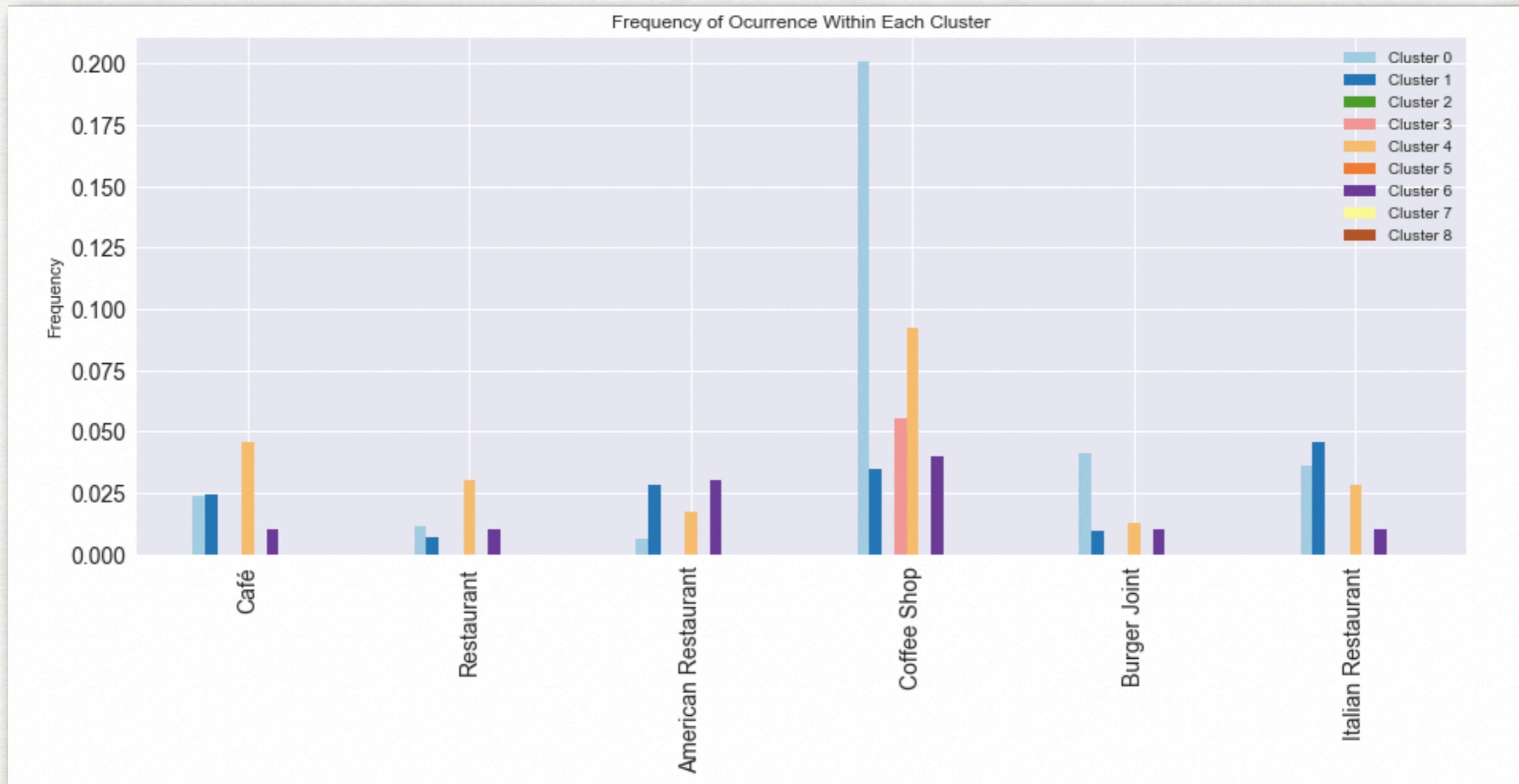
CLUSTERS IN MAPS



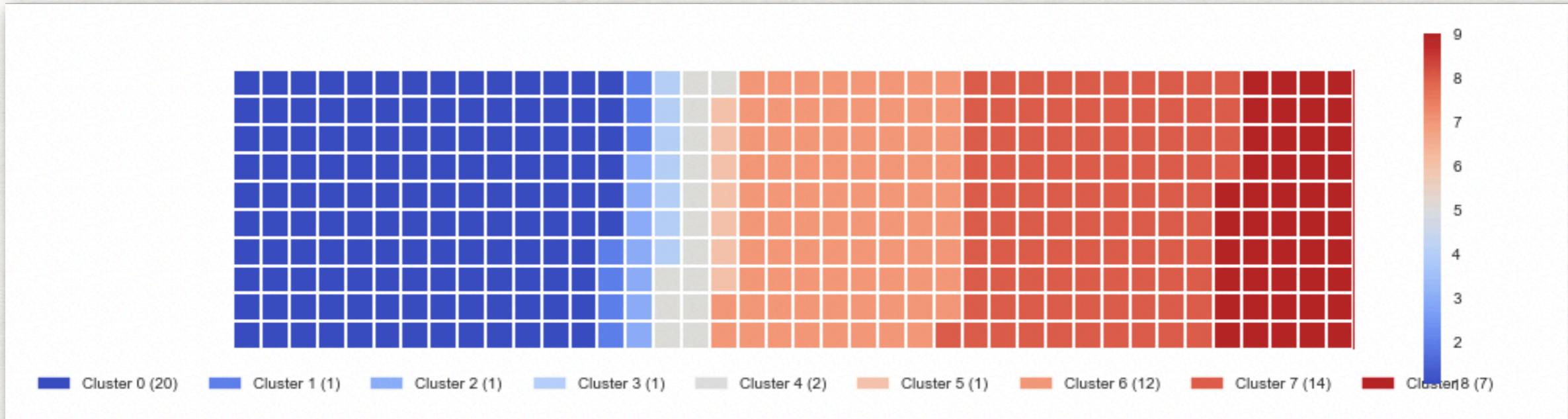
BAR CHART 1:



BAR CHART 2:



THERE ARE 4 MAJOR CLUSTERS AND 5 MINOR CLUSTER.



CONCLUSION:

- Cluster 0, 4 and 6 have neighbourhoods containing many coffee shops, different type of restaurants. They are locating in the heart of the cities. They have vibrant neighbourhoods.
- Cluster 2 is dominant in therms of parks and playgrounds.
- Cluster 3 has a neighbourhood with airport service.