

# **The Battle of Neighborhoods –Coimbatore**

Applied Data Science Capstone by IBM on Coursera

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## **1. INTRODUCTION: BUSINESS PROBLEM**

This project deals with the major venue categories in the neighborhoods of **Coimbatore, The Manchester of South India**. This project would specifically help business personal plan to start new Restaurants in Coimbatore, Tamil Nadu, India.

The **Foursquare API** is used to access the venues in the neighborhoods. Since, it returns less venues in the neighborhoods. Then they are clustered based on their venues using Data Science Techniques. Here the **k-means clustering algorithm** is used to achieve the task. The optimal number of clusters can be obtained using silhouette score metrics.

**Folium visualization library** can be used to visualize the clusters superimposed on the map of Coimbatore city. These clusters can be analyzed to help small scale business owners select a suitable location for their need such as Hotels, Shopping Malls, Restaurants or even specifically Indian restaurants or Coffee shops.

The major Target Audience would be small-scale business owners and stake holders planning to start their business at a location in Coimbatore. This project would help them find the optimal location to open a restaurant in the surroundings that has less number or no restaurants.