Ideal location for ATMs

Using Neighborhood analysis

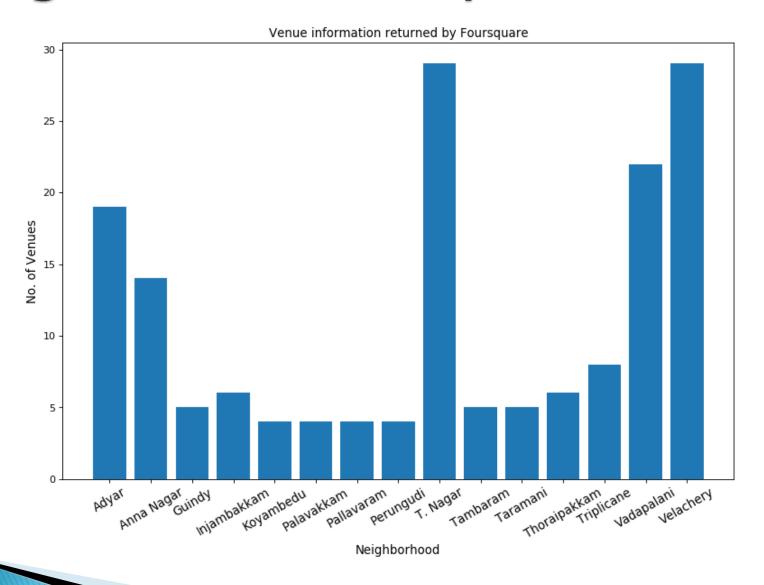
Business Problem

- Location for an ATM machine should be strategically selected.
- Need to analyze the location to understand venues present.
- Foot traffic and presence of diverse set of venues is looked after.
- Target audience is a Bank which needs to offer ATM service to its customers.

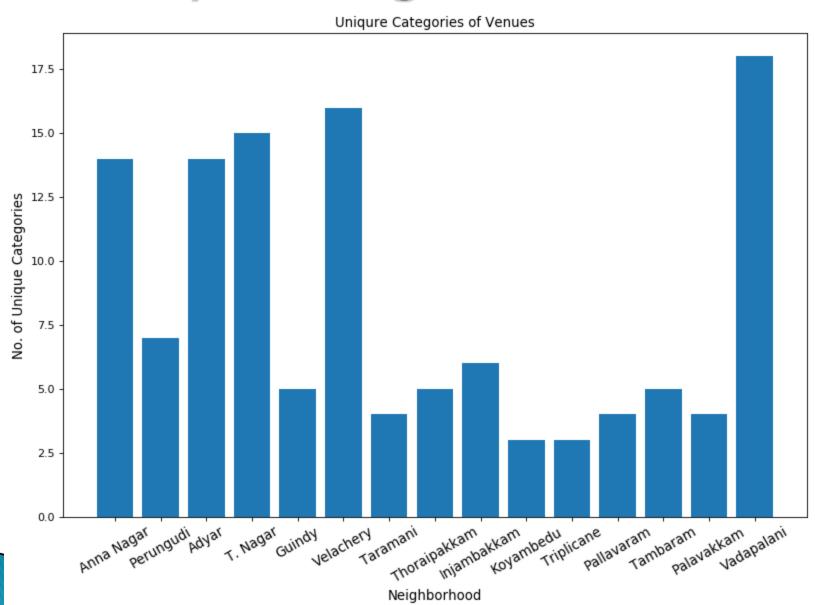
Data

- Neighborhood data is available as a csv file with location details.
- Foursquare is the location data provider.
- Using Foursquare, we gather information of each neighborhood for analysis.

Neighborhood Analysis

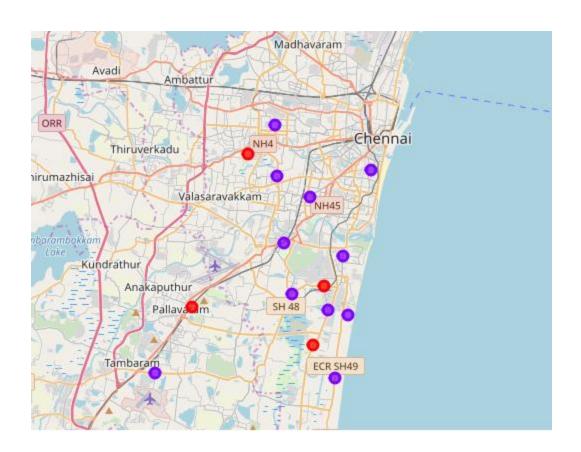


Diversity of Neighborhoods



Clustering of Neighborhoods

Once we obtain information on various venues and categories in a neighborhood, we used Machine Learning technique, Clustering, to identify similar neighborhoods to make our analysis easier. Clustering is a non-supervised machine learning algorithm that groups similar items into same set of clusters.



Conclusions and Future Directions

- A geo-demographic study of the location was conducted to select a spot for an off-site ATM kiosk.
- First cluster has less diverse neighborhoods in terms of variety of categories present.
- From second cluster, Anna Nagar, Adyar, T.Nagar, Vadapalani and Velachery have more diverse set of venues and therefore will experience high foot traffic compared to other neighborhoods under analysis.
- Second cluster neighborhoods are better locations to consider.
- While the primary criterion is potential footfall, other factors such as rent, adequate power supply, connectivity, availability of parking space for customers' vehicles, security risk profile of the location and nearest cash feeder branch should be taken into account.