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Identifying under developed areas for future investment in Jaipur



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EXECUTIVE SUMMARY

As the metro cities started getting congested, there is growing trend of shifting of companies to Tier-1 cities. This opens up a opportunity to real-estate developers and property investors to identify areas in these cities, which are under developed, early before the general public for earning good returns.

With this objective, this study is conducted on, one of the upcoming metro cities, Jaipur to identify the less developed area using data analytics and machine learning algorithms like clustering. Three clusters of ‘Most Developed’, ‘Moderately Developed’ and ‘Under Developed’ areas are formed using K-means clustering.

This project founds 12 such areas in Jaipur which are underdeveloped and could be a potential profitable investment for property developers.

INTRODUCTION

With the rising population of metro cities and increasing commuting times, there is a growing trend of companies shifting their base to Tier 1 cities and in turn resulting in their development. Thus, identifying the less developed areas in these cities could result in handsome profits for real estate developers.

Jaipur is one of those new-aged cities attracting India Inc. towards it. It is projected to record real GDP growth of 8.7% during 2015-2020 and set to emerge as the new A-class metro with a combined household income of ₹80,000 crores by 2021. Therefore, finding the neighborhoods, which are underdeveloped, early could provide good returns to the property investors.

Business Problem

The objective of this study is to find the under developed areas in upcoming metro city Jaipur for investment purpose. Using data science methodology and machine learning techniques like clustering, this study aims to provide solution to answer the following business question: **What are the neighborhoods that are currently under-developed and could be a potential investment opportunity in Jaipur City?**

DATA

Data Required

Following data is needed to solve the business problem:

- List of Neighborhoods in Jaipur. This defines the scope of this study which is confined to the city of Jaipur, capital city of Indian state of Rajasthan.
- Latitude and Longitude Coordinates of those neighborhoods. This is required in order to plot the maps and get the venue data using FourSquare API.
- Categories and Venues data using Foursquare API. These data will be used to cluster the neighborhoods.

Data Sources

Following are the sources of our data:

- Maps of India website (<https://www.mapsofindia.com/pincode/india/rajasthan/jaipur>)
- Geocoder package will be used to get the latitude and longitude coordinates for each neighborhood
- Foursquare Developer Access to Venue and Categories Data (<https://developer.foursquare.com>)