Pune City Business Opportunities

An Analysis

Business opportunities in an upcoming city

- Pune has been ranked as the eighth most populous city in <u>India</u>
- estimated population of about 7.2 million as of 2019
- Pune forms the urban core of the eponymous <u>Pune Metropolitan Region</u> (PMR).
- Pune is also known as the "Oxford of the East" due to the presence of several well-known educational institutions
- Research institutes of <u>information technology</u>, education, management and training attract students and professionals from <u>India</u> and overseas

How is the entire city structured with regard to infrastructure, strategic locations, population?

Which are the highly dense & well-developed areas that can be picked up for consideration

Which are the areas in Pune that provide the highest business opportunities? And for what kind of business.

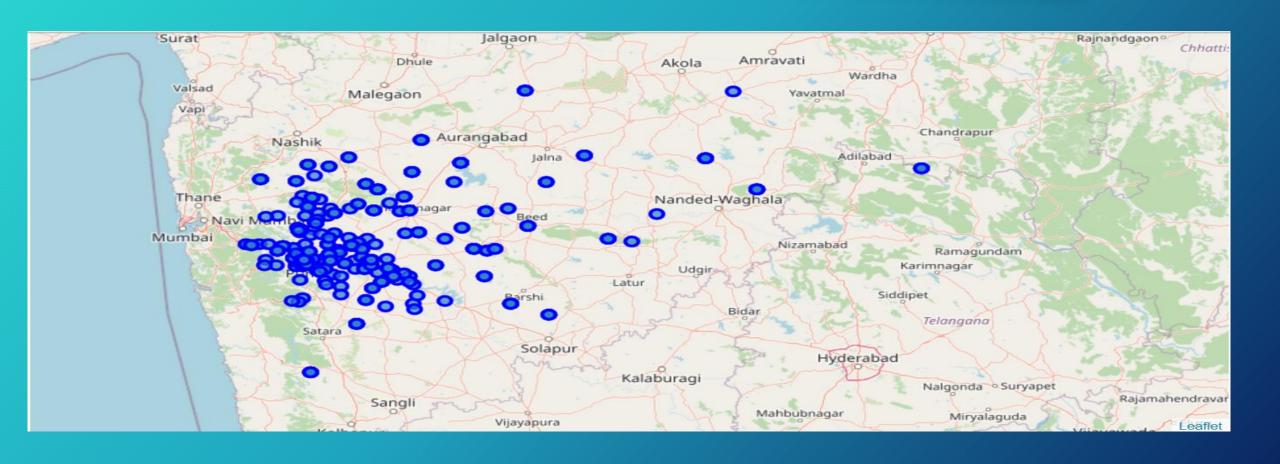
Pune has emerged as a major educational hub in recent decades, with nearly half of the total international students in the country studying in Pune.

Data acquisition & cleaning

Multiple sources were leveraged:

- Opendatasoft API (https://public.opendatasoft.com/explore/?sort=modified&q=pune), Pune city data, along with neighbourhoods was retrieved. Following features were available to form the city map.
- Foursquare's explore API (https://api.foursquare.com/v2/venues) (which gives venues recommendations) was leveraged. With Pune as the center, and a radius of 500 m to scout around
- The dataset came with a set of 791 rows and 13 features spanning out across all locations within Maharashtra (depicted below).
- An initial scan of missing values carried out, and the base data was cleaned up.
- The next strep involved eliminating the unwanted features and renaming columns to meaningful names
- Final dataset contained 110 rows with 9 features

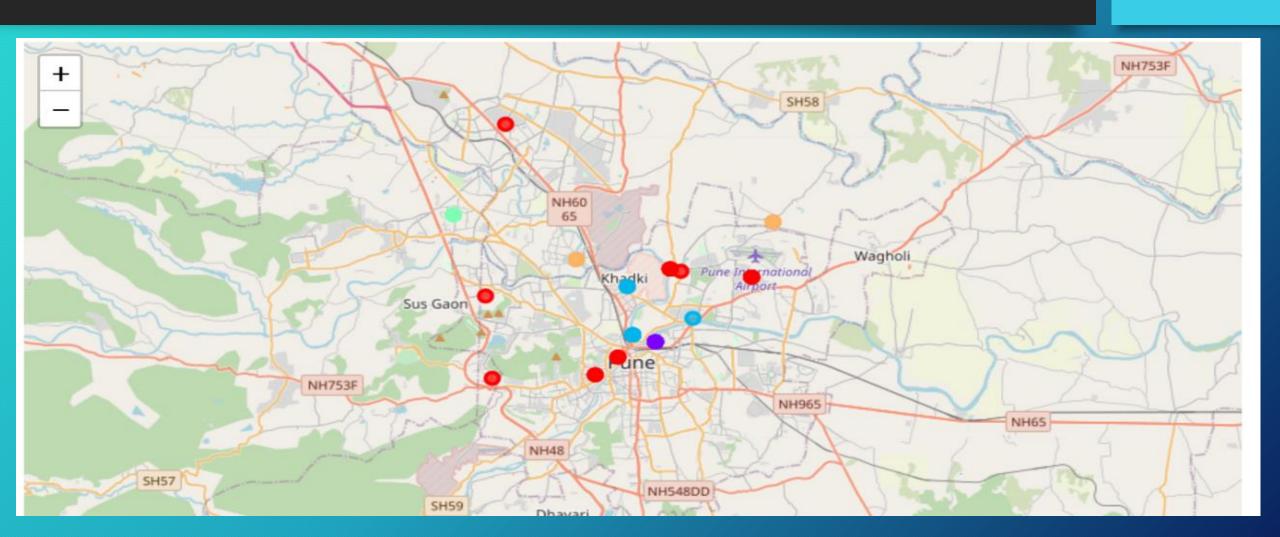
Filtering the dataset to significant areas around the city



Categorizing the dataset to derive a deeper look into businesses

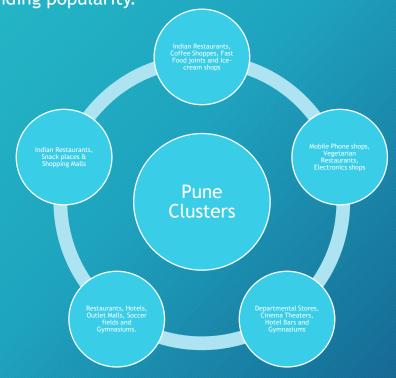
| : | PostalCode | Place | Neighborhoods | 1st Most Common Venue | 2nd Most Common Venue | 3rd Most Common Venue | 4th Most Common Venue | 5th Most Common Venue | 6th Most Common Venue | 7th Most Common Venue | 8th Most Common Venue | 9th Most Common Venue |
|---|------------|-----------------|---------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 0 | 411001 | C D A (O) | Pune City | Intersection | IT Services | Snack Place | Motorcycle Shop | Department Store | Electronics Store | Hotel Bar | Hotel | Gym / Fitness Center |
| 1 | 411001 | Dr.B.A. Chowk | Pune City | Intersection | IT Services | Snack Place | Motorcycle Shop | Department Store | Electronics Store | Hotel Bar | Hotel | Gym / Fitness Center |
| 2 | 411001 | Ghorpuri Bazar | Pune City | Intersection | IT Services | Snack Place | Motorcycle Shop | Department Store | Electronics Store | Hotel Bar | Hotel | Gym / Fitness Center |
| 3 | 411001 | N.W. College | Pune City | Intersection | IT Services | Snack Place | Motorcycle Shop | Department Store | Electronics Store | Hotel Bar | Hotel | Gym / Fitness Center |
| 4 | 411001 | Pune Cantt East | Pune City | Intersection | IT Services | Snack Place | Motorcycle Shop | Department Store | Electronics Store | Hotel Bar | Hotel | Gym / Fitness Center |

Clustering datapoints and reviewing on a map



Conclusion & Future directions

Based on location & clustering by venue/category - we have clustered our 110 locations into 5 different clusters. Each cluster is found to have it's own significance based on the businesses corresponding popularity.



A sizeable chunk of the business in Pune city is controlled by the Food & Beverages industry. Nearly 60% of all the businesses deal with cuisine of various kinds

An obvious and foregone conclusion towards Food & Beverage as a successful industry based on underlying datapoints and subsequent analysis is most certain.

