

# A systematic Approach- Creating Mall at Crowded Location

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## Methodology

Parameters	Location Details
Purpose	Study for allocation new mall at fresh location or crowded location
Data	Location coordinates, Rating
Parameter	Latitude, Longitude, Rating
Method	Clustering, facility allocation
Algorithm	K- Mean Clustering
Tools Used	PYTHON Programming, MS Excel, Geocoding API, Jupyter Notebook FourSquare API
Other Ways data collection	Wikipedia
Target	Accessible mall location
Storage	Inside mall location

## Weavers' Data

Step – I	Step – II	Step-II	Step-III	Step -IV
Site selection	Collection collection	Data cleaning in Excel	Data Preparation using Latitude and Longitude	Data Finalization
<ul style="list-style-type: none"> <li>Data parse from Wiki and list of newly added location in Corporation</li> </ul>	<ul style="list-style-type: none"> <li>HTML Parser</li> <li>Govt order list</li> </ul>	<ul style="list-style-type: none"> <li>Spelling Correction</li> <li>Sorting</li> <li>Removed Duplicates</li> <li>Arranged in Structured way</li> </ul>	<ul style="list-style-type: none"> <li>By using python programming, location having similar coordinates are removed</li> </ul>	<ul style="list-style-type: none"> <li>After step –III, We narrow down to 404 area count where handloom weavers are live.</li> </ul>

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### Category:Neighbourhoods in Pune

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#### Subcategories

This category has only the following subcategory.

**P**

- [Peths in Pune \(17 P\)](#)

#### Pages in category "Neighbourhoods in Pune"

The following 58 pages are in this category, out of 58 total. This list may not reflect recent changes ([learn more](#)).

<b>A</b>	<b>H</b>	<ul style="list-style-type: none"> <li><a href="#">Pashan</a></li> <li><a href="#">Peths in Pune</a></li> <li><a href="#">Template:Neighbourhoods of Pune</a></li> <li><a href="#">Pune Camp</a></li> </ul>
<ul style="list-style-type: none"> <li><a href="#">Appa Balwant Chowk</a></li> <li><a href="#">Aundh, Pune</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Hadapsar</a></li> <li><a href="#">Hinjawadi</a></li> </ul>	
<b>B</b>	<b>K</b>	<b>R</b>
<ul style="list-style-type: none"> <li><a href="#">Balewadi</a></li> <li><a href="#">Baner</a></li> <li><a href="#">Bavdhan</a></li> <li><a href="#">Bhavani Peth, Pune</a></li> <li><a href="#">Blue Ridge Town Pune</a></li> <li><a href="#">Budhwar Peth, Pune</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Kalyani Nagar</a></li> <li><a href="#">Kasba Peth, Pune</a></li> <li><a href="#">Kharadi</a></li> <li><a href="#">Koregaon Park</a></li> <li><a href="#">Kothrud</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Rasta Peth, Pune</a></li> <li><a href="#">Raviwar Peth, Pune</a></li> </ul>
	<b>L</b>	<b>S</b>
		<ul style="list-style-type: none"> <li><a href="#">Sadashiv Peth, Pune</a></li> <li><a href="#">Shaniwar Peth, Pune</a></li> <li><a href="#">Shivajinagar, Pune</a></li> </ul>

Wiki data for Pune

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### Category:Neighbourhoods in Pimpri-Chinchwad

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#### Pages in category "Neighbourhoods in Pimpri-Chinchwad"

The following 13 pages are in this category, out of 13 total. This list may not reflect recent changes ([learn more](#)).

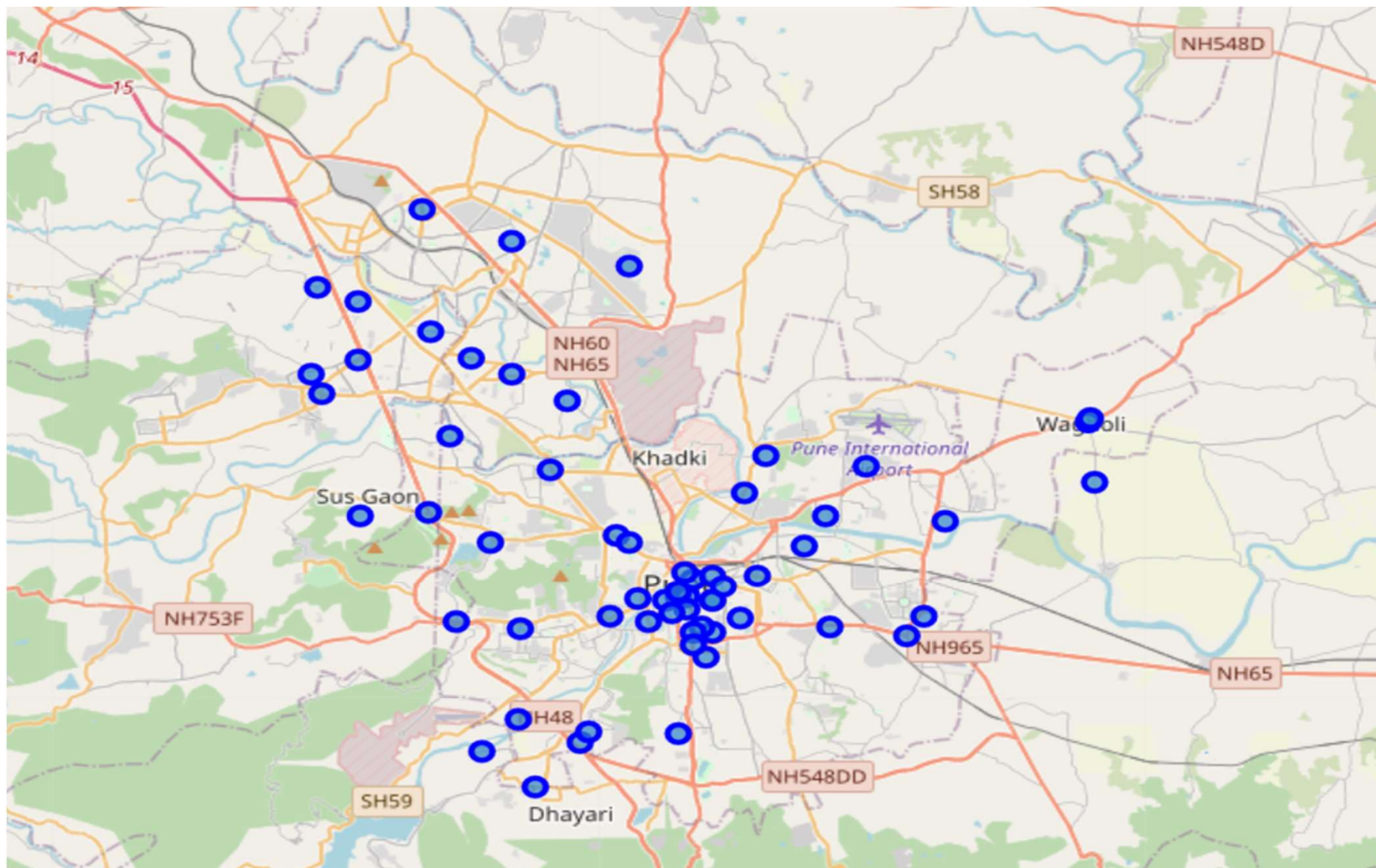
<b>C</b>	<b>N</b>	<b>R</b>
<ul style="list-style-type: none"> <li><a href="#">Chinchwad</a></li> <li><a href="#">Pimpri</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Nigdi</a></li> </ul>	
<b>B</b>	<b>P</b>	<b>S</b>
<ul style="list-style-type: none"> <li><a href="#">Bhosari</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Pimple Gurav</a></li> <li><a href="#">Pimple Saudagar</a></li> <li><a href="#">Punawale</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Rahatani</a></li> <li><a href="#">Sangvi, Pune</a></li> <li><a href="#">Sant Tukaram Nagar</a></li> </ul>
<b>K</b>		<b>T</b>
<ul style="list-style-type: none"> <li><a href="#">Kalewadi</a></li> </ul>		<ul style="list-style-type: none"> <li><a href="#">Tathawade</a></li> <li><a href="#">Thergaon</a></li> </ul>

Categories: [Pimpri-Chinchwad](#) | [Neighbourhoods in Maharashtra](#)

Wiki data for Pimpri-Chinchwad

{1} – weavers' list

## Geographical position of weavers Area on Google Map – Pune / PC Corp



## K- Mean Clustering

- The k-means clustering algorithm is an iterative algorithm that tries to partition the dataset into  $K$  pre-defined distinct non-overlapping subgroups (clusters) where each data point belongs to only one group.

### **The way k-means algorithm works is as follows:**

- Specify number of clusters  $K$ .
- Initialize centroids by first shuffling the dataset and then randomly selecting  $K$  data points for the centroids without replacement.
- Keep iterating until there is no change to the centroids. i.e assignment of data points to clusters isn't changing

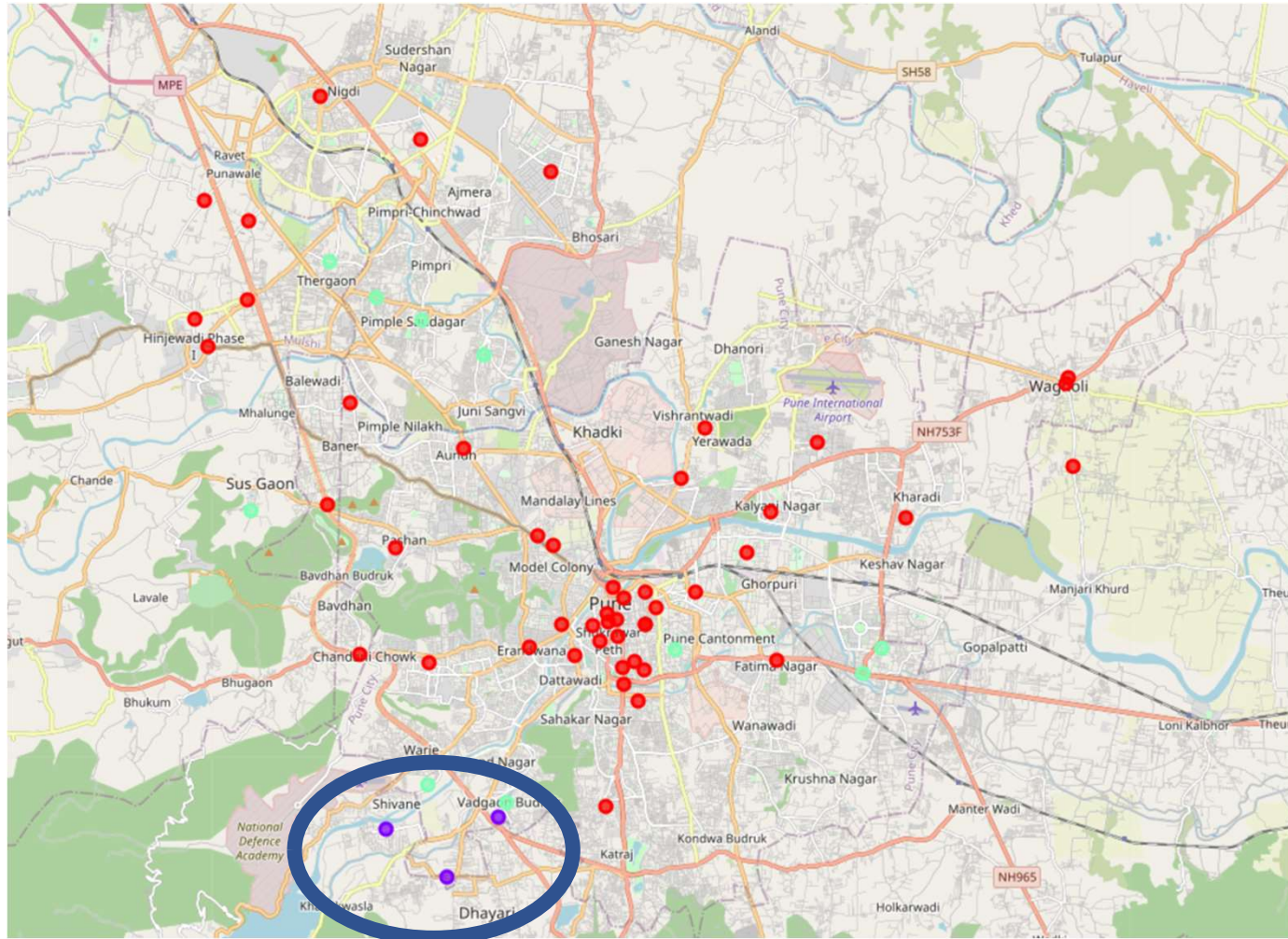
## Target

- Allocate a mall in crowded Location.

- **Find optimum location**
- **Being newly developed area, Multiple opportunity available at pune**
- **Help to Construction team to allocate location area.**
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## Geographical position of weavers Area on Google Map – After Clustering



Purple Color represent New Target location

Thank You 😊