## 1. A description of the problem and a discussion of the background.

## 1.1 Problem Background

Mr. Nilesh live on the Pune City of Maharashtra in India. He is chemist and his medical shop running very well, mainly because of location of shop, all the great amenities and other types of venues that exist in the neighbourhood, such as many hospitals and clinics are near, the area is upscale of residency, the transportation, the area parks, grad schools and so on. Now he wants to open another medical shop on the other side of the city with great profit prospects. However, he afraid and have lot of questions in his mind.

Is shop run well at new place?

Is neighbourhood of new place exactly the same as current neighbourhood? How can I find place with same neighbourhood?

The location of your business can be an important factor in its success. When choosing a location, carefully assess the right environment for your business.

When starting out, you'll need to decide where you'll conduct business. Unless you're a completely home-based business, this will require buying or leasing a business premises. Each business has different requirements and it's important to consider your business needs and priorities when deciding on the type and location for your business premises. For example, a location may be ideal for your business because:

- Your suppliers or distributors are nearby
- It's a known centre for the products or services you are providing
- Many of the people who work or live in the area are your business' target audience
- Businesses in the area complement yours (for example, a children's clothing shop could benefit from a childcare centre or toy shop nearby)
- The costs of buying or leasing in the area are affordable and meet the needs of your business
- It's a growing business hub with many opportunities in the near future.

Location analysts can be involved in many areas of business operations. The job may include site research, marketing, market intelligence, property planning and research, retail, facilities, operations, planning and acquisitions. Many private companies use location analysts to decide on new store locations and other business decisions. Employment also exists in the public sector, frequently in local government.

For the above scenario Mr. Nilesh hire a Location analyst for find the location for his business which is same as current neighbourhood.

Location analyst know that, the two things to look for when choosing a pharmacy location. Neither has any relationship to the other, but both must be considered. They are:

- 1. Adjacent to an upscale residential area
- 2. Next to a chain store pharmacy

If both of these characteristics are not simultaneously available, then always go with the first: being in or near an upscale neighbourhood. An alternate approach is to be on or close to a highway that connects high-income families to your store.

To find out location based on above characteristic in Pune city is very difficult and time consuming but we have the data of all location with venues then appalling appropriate analysis techniques we can show which are the places that full fill the criteria.

## 1.2 Problem Statement

Research question is how can efficiently find places in city in minimum time span that have same characteristics.

Can K-means clustering be utilized to localize similar type neighbourhood venues? There is a need of a neighbourhood venues location approach that considers the flexibility, capacity and quantifying the attributes. This approach gives an opportunity of using real numbers from the database website in determining the best location for a new business facility.