

# Coursera Capstone Project

IBM Applied Data Science Capstone

Mobile tower services

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## **Introduction**

The world is developing fast. We are now moving from 4g to 5g. Sooner or later the internet speed is going to be a very essential part of our lives. Now, for a company like Jio, Airtel in India, they need to know their users. Users play the most important role in deciding the company's fate. Starting from Jio's 4g revolution, they already came a long way by launching it in India. In competition, other communication towers are being built in order to provide better services to their users.

## **Business Problem**

The objective here can be to find out the suitable areas for putting a tower based on its neighborhoods and localities. The kind of users will help them grow faster. Thus, by providing data regarding the best locations for putting a tower based on the data of previous 4g costumers could be a great move.

## **Target Audience**

The main objective is actually to find the target audience. So let's say that our target audience is going to be the one who have been using Jio's 4g more than any other without any interruption. They are for sure going to use it more than anyone else. Thus determining this is going to be itself a target.

## **Data**

To solve the problem, we will take data:

- List of neighborhoods in the localities like in Bhopal. The scope of this project will be confined within Bhopal, India itself.
- Latitude and Longitude coordinates of those neighborhoods. This is required in order to plot the map.
- We also need data related to previous mobile towers and certain population data as well.

## **Sources of data and methods to extract them**

We can take the data from Wikipedia pages or local websites. The libraries like BeautifulSoup could be used for data extraction. Geopy will be used to locate the coordinates of the location. Foursquare api will be used for finding the neighborhood locations. Will further convert them to dataframes and implement our objective.