# Data Science Project

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# **Exploring Athens neighborhoods - Restaurant**

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# Introduction / Business Problem

#### Introduction

The objectives of the IBM Data science specialisation - Capstone Project are:

- Clearly define a problem or an idea, where Foursquare location data is leveraged to solve or execute
- To remember that data science problems:
  - always target an audience
  - are meant to help a group of stakeholders solve a problem

### **Problem Statement**

"Exploring business idea for a new cafe/restaurant/co-working space in London through Foursquare data" London, where I live, is a business hub.

According to the Global Power City Index (GPCI)\*
London ranks first on its power to attract people,
capital and enterprises from our the world. London
maintained its position for the 8th consecutive year.

Using data science methodology and machine learning techniques like clustering, this project aims to help decision making for property developers to open a new cafe/co-working space.

http://mori-m-foundation.or.jp/english/ius2/gpci2/index.shtml\*

### **Problem Statement**

"Exploring business idea for a new cafe/restaurant/co-working space in London through Foursquare data" During the daytime, specially in the morning and lunch hours, office areas provide huge opportunities for restaurants and coffee shops.

Also, coworking spaces will become a need to provide people with a space to work and at the same time enjoy their coffee and lunch. They don't have to worry about renting an office and they can use our area for meetings, working environments that can provide amenities.

So our case study is to understand which is the best location to open our new cafe/restaurant/co-working space based on Foursquare data.

### Target Audience

"Which audience this project targets?"

- ı. Property developers
- 2. Investors
- 3. People that want to open a new cafe/restaurant/coworking space and understand which areas in London would be ideal for this. This can be also their side business.
- 4. Data scientists that can use our steps for their own projects, if they want to explore neighbourhoods.

## Data

#### Data

- List of neighborhoods in London from Wikipedia:
   https://en.wikipedia.org/wiki/List of areas of London
- Latitude and longitude coordinates of those neighbourhoods. This is required in order to plot the map and also to get the venue data. GeoPy
- Land value data to inform the decision making based on the capital investment required.
- Foursquare data to explore boroughs and its venues, point of interests.

