# IBM Professional Certificate

## Capstone Project. The Battle of Neighborhoods

**Part 1. Problem Description**

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**Problem Background:**

London is considered to be one of the world's most important [global cities](https://en.wikipedia.org/wiki/Global_city). It is not only one of the largest financial centers but also a city recognized as the global capital for arts and culture, which art venues, museums and galleries are renowned across the world. London exerts a considerable impact upon the arts, commerce, education, entertainment, fashion, finance etc. It is the most-visited city as well as one of the world's most populous cities, which means that a lot of people every year spend a lot of money for various goods and services.

As it is highly developed city so cost of doing business here is also one of the highest. Thus, any new business venture or expansion needs to be analyzed carefully. The insights derived from analysis will give good understanding of the business environment which helps provide the most efficient strategy in development of business as well as minimize possible risks and expenses.

**Problem Description:**

Let’s assume that newly created but very ambitious art dealer company “NNN” is going to open office in London. The field of activity of the company is buying and selling pieces of arts – this is very expensive and highly competitive market. They want to know which place is the best for their new office. So I as a Data Scientist should investigate all boroughs of London in order to make a list of recommendations for them.

An art dealer is a person or company that buys and sells [works of art](https://en.wikipedia.org/wiki/Works_of_art), so I have to consider location of art centers and galleries, artistic workspaces etc. because such facilities provide arts space, visual art gallery space, museum facilities where new artworks exhibit and promote. So the “NNN” company office should be placed closely to such facilities.

Also very important to explore neighborhoods in order to determine how many venues are around including their category, for example: cafes, restaurants, shopping centers, their description and ratings.

**Target audience:**

The work is performed for hypothetical Art Dealer Company “NNN”. But not only art dealers could be interested in this exploration, also potential clients or collectors looking for the new opportunities to buy or sell pieces of art could find it useful. As we see our stakeholders are art dealers, artists and customers, who want to buy or sell any work of art.