

# COURSERA CAPSTONE FINAL ASSIGNMENT

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## 1. INTRODUCTION

### 1.1 Background

In the last 20 years, the coffee shops have spread in most metropolitan areas globally, spawning multiple coffee chains as well as a new “Café Culture”. This has gone hand in hand with changes in consumer preferences both in terms of consumption of coffee (over tea or other drink) and how it is consumed (take-away vs. sit-down). In business centres, cafés have emerged as places where business meetings take place. After the advent of wireless internet, cafes’ have become increasingly flexible office space as well as study hall for students. While it remains to be seen if pandemic will have a long-lasting effect in our relationship with cafes, it is nevertheless interesting to explore how this social phenomenon compare globally, across different cities and cultures.

### 1.1 Idea

As prevalent as the spread of coffee houses may be, there are significant differences in terms of intensity in city centres which may be driven by culture, climate and focus such as being a financial or tourism centre. As a first point of interest, I would like to collect sufficient data to see if the intensity of coffee houses in city centres can be used as a predictor of economic activity or a cultural group. This can in turn used for a future project to predict up-and-coming regional centres if historical location data can be gathered. A secondary interest is the chain vs. independent breakdown as well as prevalence of specific chain brands.

### 1.2 Audience and Stakeholders

I think this data would be useful for entrepreneurs who are considering opening cafes, restaurants or other competing venues as it would allow them 1) to identify a new developing areas, 2) avoid overserved centres, 3) to understand competition and the character of the area. By the same token, this data would also be useful for chain coffee shop managers who are looking to optimise their locations.

## 2. DATA

### 2.1 Data description and acquisition

I will be utilising FourSquare to extract the current list of coffee houses for major city centres across the globe. To do this, I will define a meaningful radius for a city centre and generate a list of coffee houses. I will use this data to determine the number of coffee houses in each centre.

I expect to make some adjustments to make cities more comparable. This can be an adjustment of population density or number of tourists the city attracts. This information is freely available at several different internet sites including Wikipedia [here](#). As there can be several factors they may impact the number of cafes in a city, I will need to make some assumptions to simplify my analysis. As an example, the density of population often differs in city centres vs. suburbs. The density also changes significantly throughout the day as people commute between home and work.

After adjustments, I will try to identify a theme or trend across cities. I can do this either visually by plotting them across different variables or I can try to utilise clustering. I will need to assess this later as I become familiar with the data.