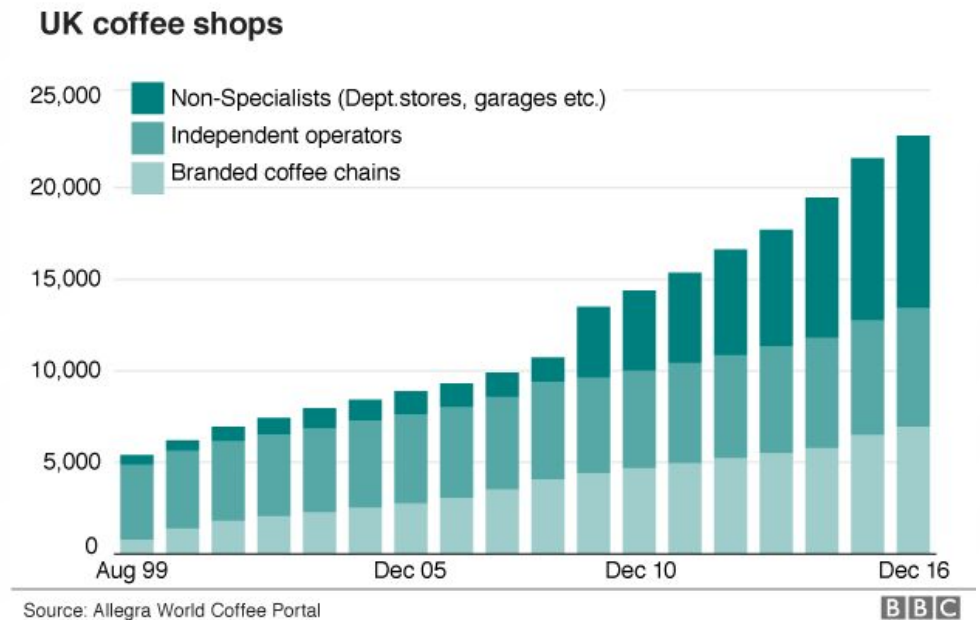# BEST LONDON NEIGHBOURHOOD FOR A COFFEE SHOP

ALBERTO LAPEDRIZA, SEPTEMBER 2019

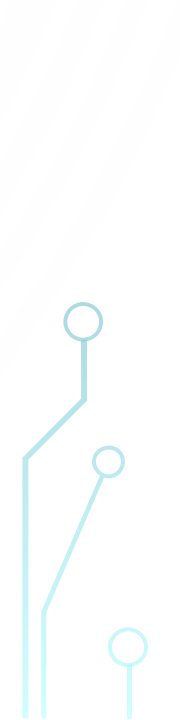*BATTLE OF NEIGHBOURHOODS PRESENTATION*

INTRODUCTION & BUSINESS PROBLEM

- UK's coffee consumption has soared to 95 million cups a day in 2018, up from 70 million in 2008.

- This has translated in a big increase in both chain coffee shops and independent cafés in London.

- Independent and speciality coffee shops are on the rise.

UK coffee shops

- Non-Specialists (Dept.stores, garages etc.)
- Independent operators
- Branded coffee chains

Source: Allegra World Coffee Portal

BBC

AIM AND AUDIENCE

- The **aim** of this project is to find out which neighbourhood in London would be the best to open a new café.

- The **target audience** would be an entrepreneur or group of entrepreneurs that are looking to set up their new independent café in London. This project would help them to find out the less saturated neighbourhood to open their café.

DATA

- Dataset 1:

London neighbourhood and borough data comes for the Wikipedia page "List of areas of London": https://en.wikipedia.org/wiki/List_of_areas_of_London

	Neighbourhood	Borough
0	Abbey Wood	Bexley, Greenwich
1	Acton	Ealing, Hammersmith and Fulham
2	Aldgate	City
3	Aldwych	Westminster
4	Anerley	Bromley

- Dataset 2:

Geographical coordinates of the London neighbourhoods (latitude and longitude) using the Geocoder package.

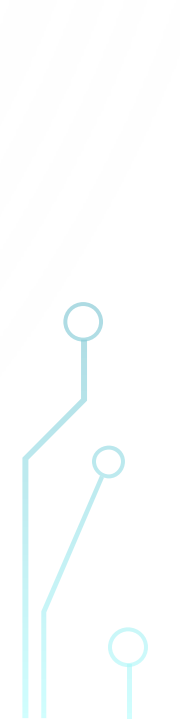|	Neighbourhood	Borough	Latitude	Longitude
0	Abbey Wood	Bexley, Greenwich	51.492450	0.121270
1	Acton	Ealing, Hammersmith and Fulham	51.513240	-0.267460
2	Aldgate	City	51.513308	-0.077762
3	Aldwych	Westminster	51.513307	-0.117092
4	Anerley	Bromley	51.412330	-0.065390

- Dataset 3:

Foursquare API to search the cafés and coffee shops for the geographical location data for each London neighbourhood.

	Neighbourhood	Neighbourhood Latitude	Neighbourhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Abbey Wood	51.492450	0.121270	Bean @ Work	51.491172	0.120649	Coffee Shop
1	Abbey Wood	51.492450	0.121270	Abbey Cafe	51.489754	0.120822	Café
2	Aldgate	51.513308	-0.077762	The Association	51.513733	-0.079132	Coffee Shop
3	Aldgate	51.513308	-0.077762	Kahaila Aldgate	51.514046	-0.077001	Coffee Shop
4	Aldgate	51.513308	-0.077762	Notes Coffee Roaster & Wine Bar	51.514643	-0.080671	Coffee Shop

RESULTS

- We are searching for cafés and coffee shops in 299 neighbourhoods in London.

- The number of cafés and coffee shops obtained using the Foursquare API was 2215.

- The top 10 neighbourhoods with more cafés ranged from Pentonville with 29 to Bedford Park with 22.

- The bottom 10 neighbourhoods with less number of cafés in London all had 1 only.

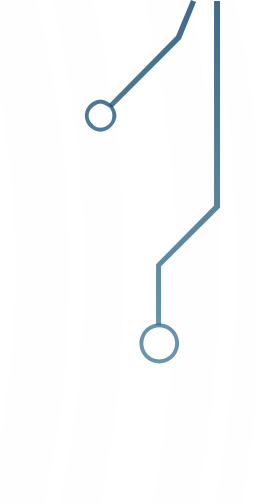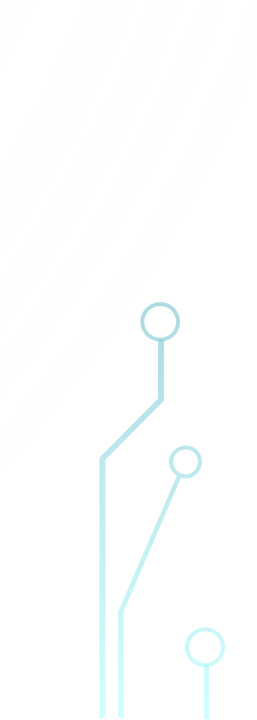|	Neighbourhood	Count
184	Pentonville	29
144	Lisson Grove	26
178	Paddington	26
1	Aldgate	24
177	Oval	23
8	Barbican	23
126	Islington	22
200	Shepherd's Bush	22
22	Bloomsbury	22
13	Bedford Park	22

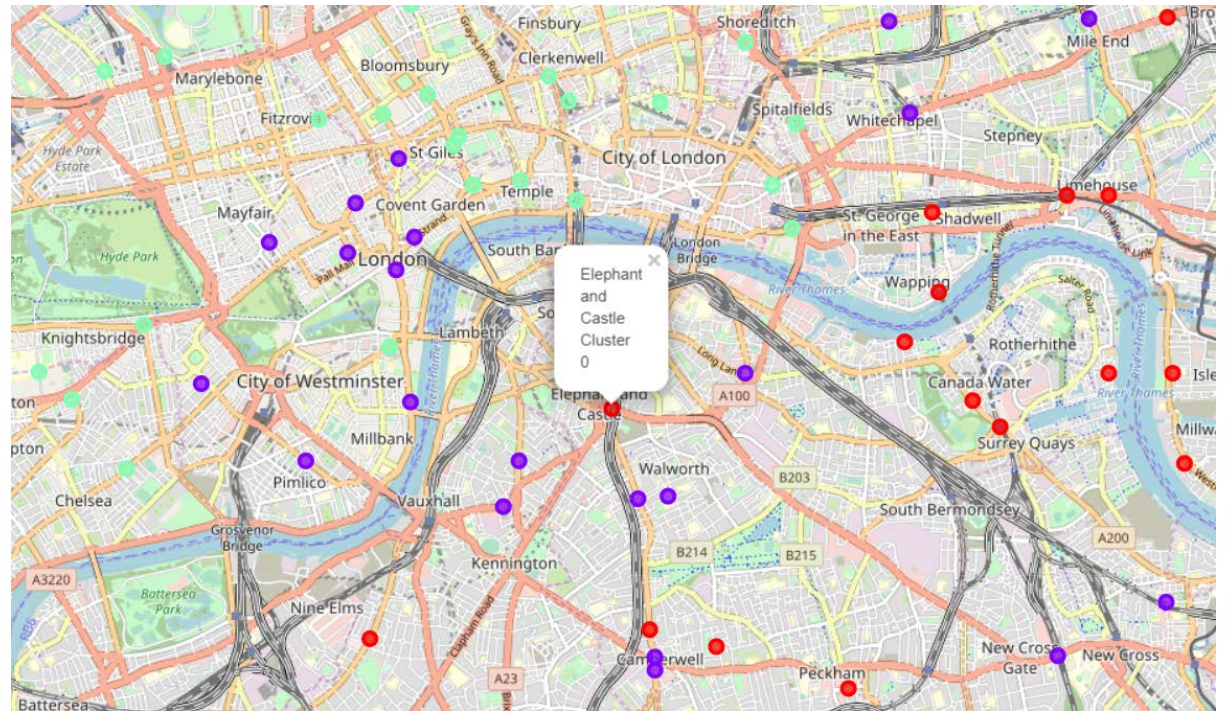|	Neighbourhood	Count
174	Oakleigh Park	1
145	Little Ilford	1
43	Catford	1
103	Hackney Marshes	1
240	Totteridge	1
155	Middle Park	1
66	Dartford	1
234	The Hyde	1
164	Neasden	1
122	Honor Oak	1

<u>Clustering</u>:

- The K-means algorithm grouped the neighbourhoods in 3 clusters:
    - Cluster 0: those neighbourhoods with a minimum number of cafes of 1 and a maximum of 7. These are residential neighbourhoods in the outskirts where people commute to the city centre for work and leisure.
    - Cluster 1: those neighbourhoods with a minimum number of cafes of 8 and a maximum of 15. Closer to central London, and are a mixture of residential, work and leisure areas.
    - Cluster 2: those neighbourhoods with a minimum number of cafes of 16 and a maximum of 29. Part of central London with all the shopping, cultural and leisure centres of the city as well as business centres. These are also the most touristic neighbourhoods.

- Plotted the location of the three clusters on the map and to understand the meaning of each of the clusters:
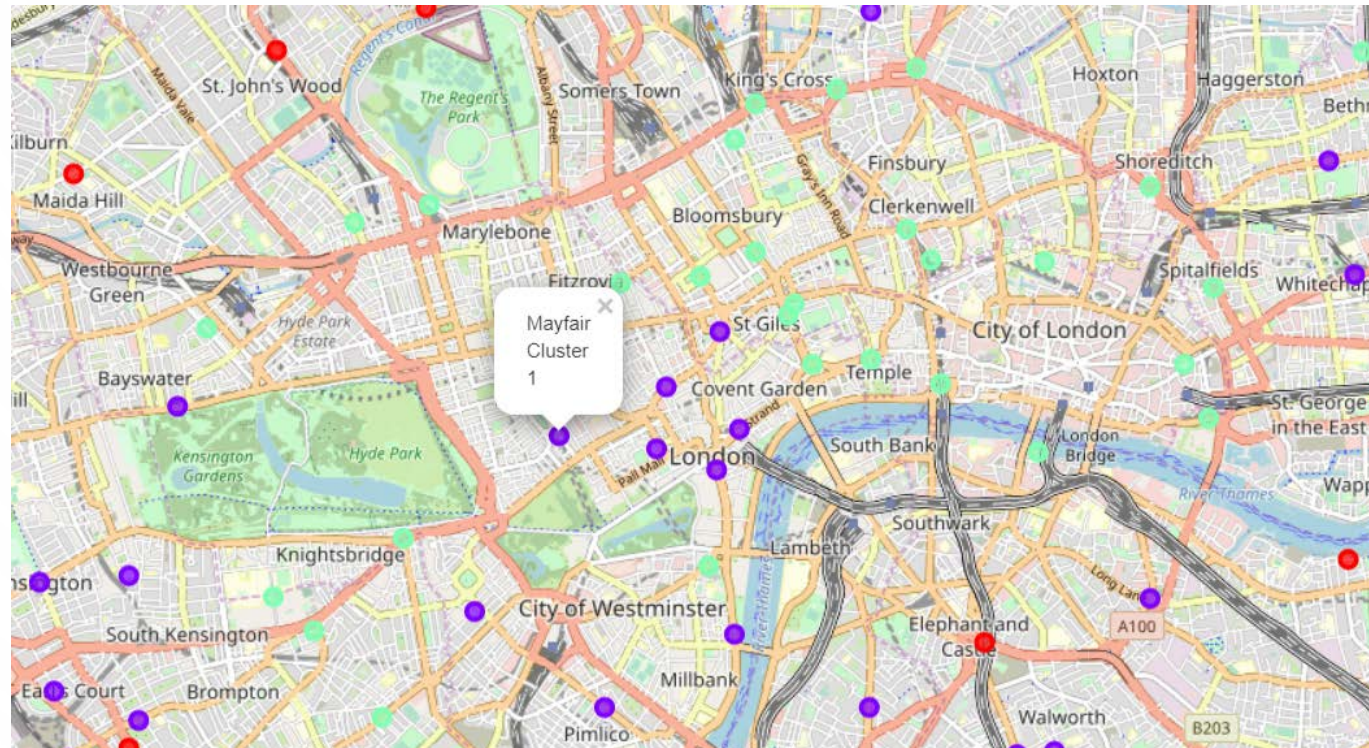
DISCUSSION

- One of the best neighbourhoods is Elephant and Castle:
  - Part of Cluster 0 (low number of cafes)
  - Has 6 cafés.
  - Close to central London and is undergoing urban regeneration with a lot of investment. Up and coming neighbourhood
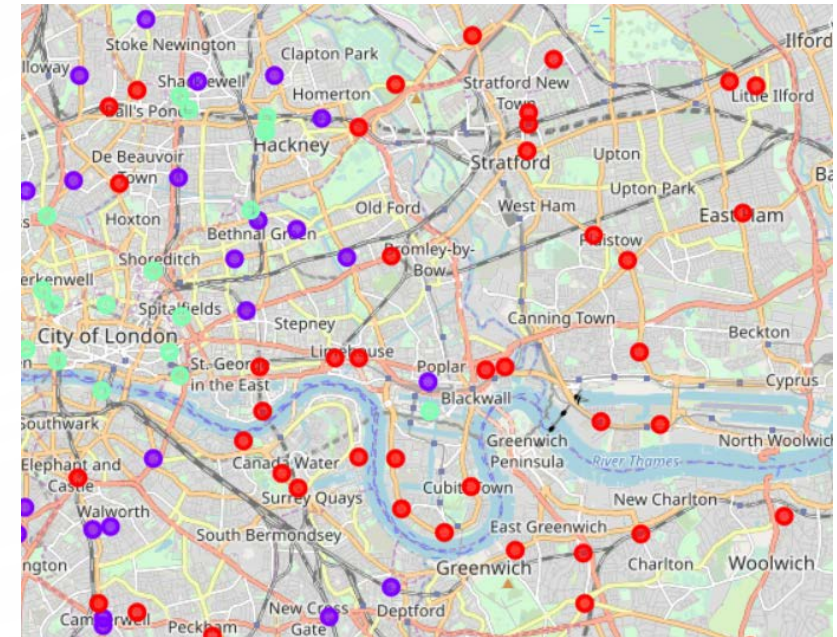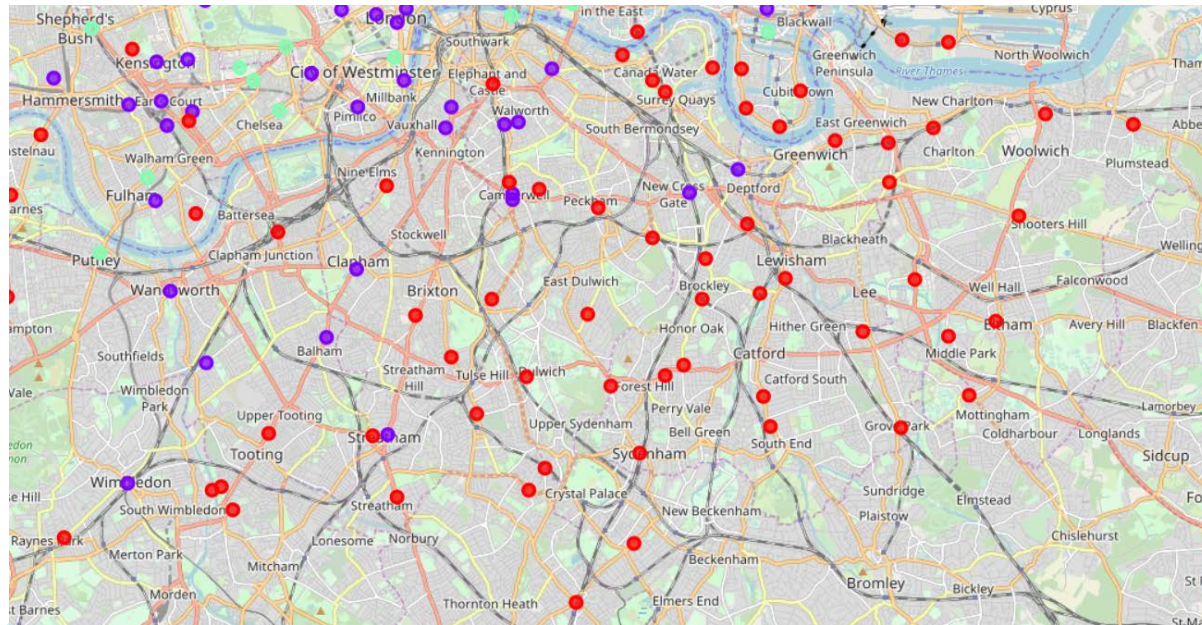
- Another great neighbourhood would be Mayfair:
  - Part of Cluster 1 (medium number of cafés)
  - Has 13 cafés.
  - Famous for high-end restaurants and hotels, and luxury shops. Good location for an upper-end speciality café.

- Two areas with a high number of neighbourhoods belonging to cluster 0:
  - South London.
  - East London.
- These have been traditionally less touristic and have less leisure and work centres, however they are becoming trendier and undergoing significant regeneration. Hence these would be areas with potential.
  - A great example is Stratford (has 4 cafés): suffered great developed for the London 2012 Olympic Games and has become a shopping and leisure destination.

CONCLUSION

- By using data from Wikipedia, Geocoder and Foursquare API, we have clustered London neighbourhoods in low, medium and high number of cafés and coffee shops.

- This allowed us to identify two neighbourhoods with potential for a new cafés (Elephant and Castle and Mayfair) and two general areas (South and East London)

- Additional data such as proximity to parks, tube stations, or major roads, real estate availability, prices, economic power of every neighbourhood etc. needs to be taken into account for final decision.