

#### **Business Problem**

Target Population

Those who want to open a restaurant in London

- Key Factors
  - 1. What type of restaurant?
  - 2. At which place?

#### Data Resource

Population distribution

https://en.wikipedia.org/wiki/List of London boroughs

Geospatial information

https://data.london.gov.uk/dataset/statistical-gis-boundary-files-london

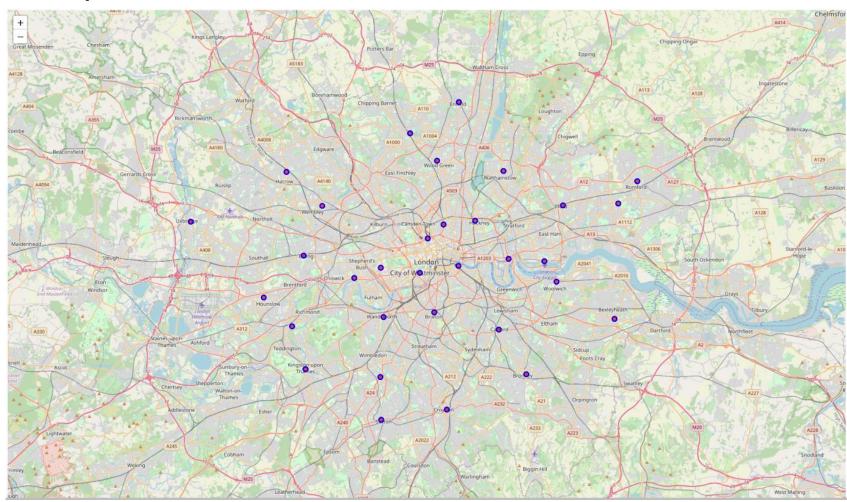
Detailed information about all venues in London

https://foursquare.com/

## Population Distribution

| Boroughs | Population | Boroughs       | Population Boroughs |                  | Population | Boroughs               | Population |
|----------|------------|----------------|---------------------|------------------|------------|------------------------|------------|
| Croydon  | 372,752    | Wandsworth     | 310,516             | 310,516 Haringey |            | Islington              | 215,667    |
| Barnet   | 369,088    | Southwark      | 298,464             | Hounslow         | 262,407    | Merton                 | 203,223    |
| Ealing   | 342,494    | Redbridge      | 288,272             | Hackney          | 257,379    | Sutton                 | 195,914    |
| Enfield  | 320,524    | Hillingdon     | 286,806             | Harrow           | 243,372    | Barking and Dagenham   | 194,352    |
| Newham   | 318,227    | Lewisham       | 286,180             | Havering         | 242,080    | Richmond upon Thames   | 191,365    |
| Bromley  | 317,899    | Tower Hamlets  | 272,890             | Bexley           | 236,687    | Hammersmith and Fulham | 178,685    |
| Brent    | 317,264    | Waltham Forest | 265,797             | Camden           | 229,719    | Kingston upon Thames   | 166,793    |
| Lambeth  | 314,242    | Greenwich      | 264,008             | Westminster      | 226,841    | Kensington and Chelsea | 155,594    |

## Map of London



The headquarter of each borough was marked.

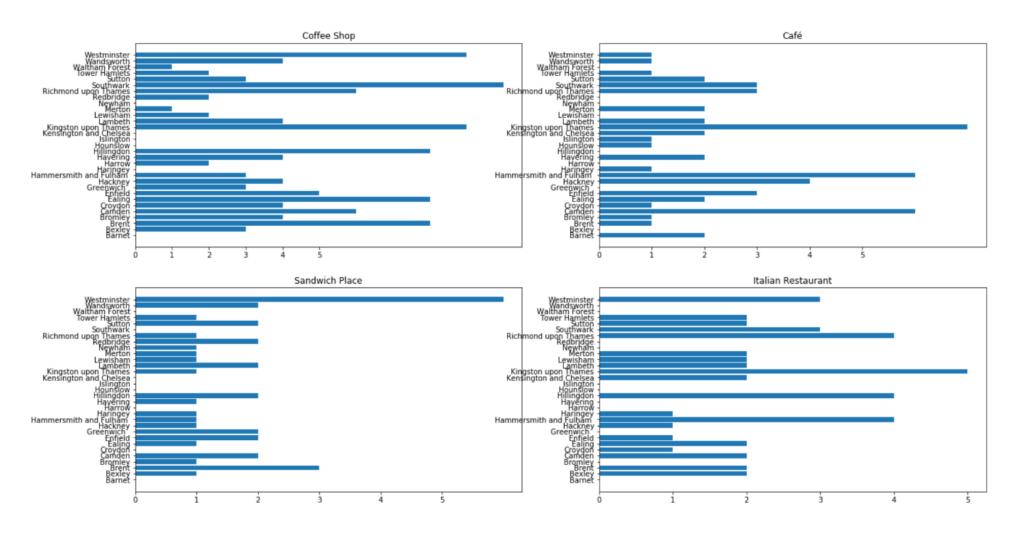
#### All Venues Belonging to Category Food

| Borough     | Borough Lat | Borough Lng | Venue          | Venue Lat | Venue Lng | Category           | Parent Category |
|-------------|-------------|-------------|----------------|-----------|-----------|--------------------|-----------------|
| Barnet      | 51.6252     | -0.1517     | The Atrium     | 51.62473  | -0.151933 | Café               | Food            |
| Barnet      | 51.6252     | -0.1517     | Oakleigh Cafe  | 51.62341  | -0.154899 | Café               | Food            |
| Bexley      | 51.4549     | 0.1505      | Zizzi          | 51.45593  | 0.150555  | Italian Restaurant | Food            |
| Bexley      | 51.4549     | 0.1505      | Bella Italia   | 51.45639  | 0.149855  | Italian Restaurant | Food            |
| Bexley      | 51.4549     | 0.1505      | Greggs         | 51.45625  | 0.145569  | Bakery             | Food            |
|             |             |             |                |           |           |                    |                 |
| Westminster | 51.4973     | -0.1372     | Shot Espresso  | 51.49806  | -0.142393 | Coffee Shop        | Food            |
| Westminster | 51.4973     | -0.1372     | The Curry Room | 51.49829  | -0.143543 | Indian Restaurant  | Food            |
| Westminster | 51.4973     | -0.1372     | Hai Cenato     | 51.49714  | -0.143829 | Italian Restaurant | Food            |
| Westminster | 51.4973     | -0.1372     | Subway         | 51.49332  | -0.139483 | Sandwich Place     | Food            |
| Westminster | 51.4973     | -0.1372     | Pret A Manger  | 51.49284  | -0.138057 | Sandwich Place     | Food            |

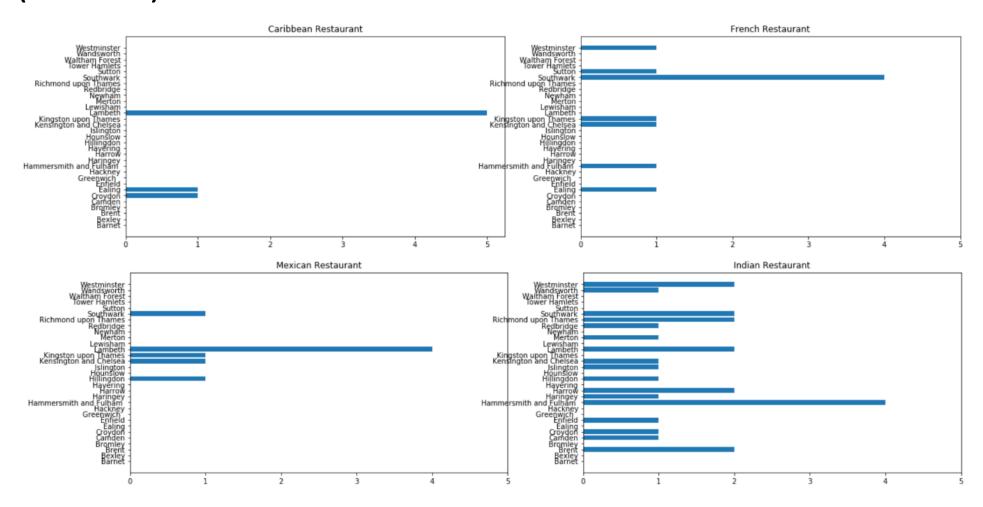
### Top 10 Favourite Types of Restaurants

| Ranking | Restaurant Type      | count | mean     | std      | min | 0.25 | 0.5 | 0.75 | max |
|---------|----------------------|-------|----------|----------|-----|------|-----|------|-----|
| 1       | Coffee Shop          | 31    | 3.774194 | 2.985629 | 0   | 2    | 4   | 5.5  | 10  |
| 2       | Café                 | 31    | 1.741935 | 1.750576 | 0   | 0.5  | 1   | 2    | 6   |
| 3       | Sandwich Place       | 31    | 1.193548 | 1.194972 | 0   | 0.5  | 1   | 2    | 6   |
| 4       | Italian Restaurant   | 31    | 1.516129 | 1.524707 | 0   | 0    | 1   | 2    | 5   |
| 5       | Caribbean Restaurant | 31    | 0.225806 | 0.920495 | 0   | 0    | 0   | 0    | 5   |
| 6       | Mexican Restaurant   | 31    | 0.258065 | 0.773207 | 0   | 0    | 0   | 0    | 4   |
| 7       | French Restaurant    | 31    | 0.322581 | 0.791079 | 0   | 0    | 0   | 0    | 4   |
| 8       | Indian Restaurant    | 31    | 0.870968 | 1.024433 | 0   | 0    | 1   | 1    | 4   |
| 9       | Gastropub            | 31    | 0.193548 | 0.601074 | 0   | 0    | 0   | 0    | 3   |
| 10      | Ice Cream Shop       | 31    | 0.258065 | 0.681554 | 0   | 0    | 0   | 0    | 3   |

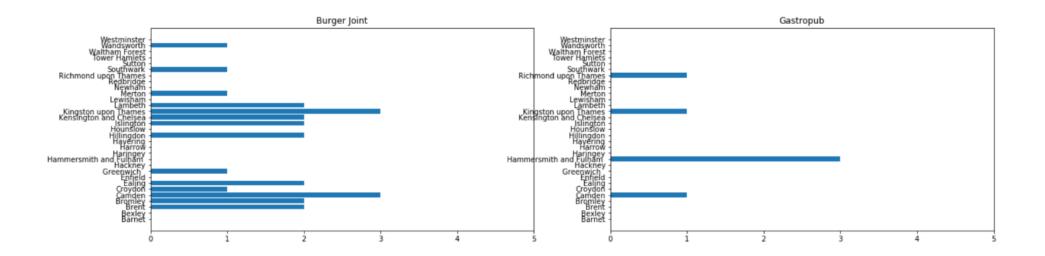
#### Distribution of The Favourite Restaurants



# Distribution of The Favourite Restaurants (cont.)



# Distribution of The Favourite Restaurants (cont.)



#### Conclusion (Recommendation)

- Type of Restaurants
  - 1. Coffee shop or Café
  - 2. Foreign Food

Location

Centre London