



# Finding the best location

- London is the capital of England and is home to many potential customers
- Within London, the area with the highest footfall and thus the most potential customers is Central London
- By analysing the venues around each postcode district in Central London, we can find the one that is most suited to opening a restaurant

### The Criteria

01

#### **Demand**

If a district already contains restaurants, then we know that there is a demand which we can meet

03

#### **Attractions**

A district with tourist attractions such as a museum or garden will pull in a lot of people who will want to eat.

Hotels will also provide customers looking for food nearby so a restaurant will do well in areas containing them

#### Location

Restaurants that are in WC or EC postcode districts will have higher footfall and therefore more customers

02

#### Competition

Although we want proof that a restaurant will be popular in a district, if there is one restaurant that is very popular (top two venue) then it will be difficult to compete with them, so we should avoid that area

04

## Data Methodology

#### **Data Cleaning**

The csv was converted into a pandas dataframe, and all postcodes that were not EC or WC were dropped as well as those that were not in use and other columns containing unnecessary information

#### **K Means Clustering**

To break the data into more manageable chunks and to group similar postcodes together, K means clustering was used. This gave us 5 clusters of similar postcodes. These could be mapped with folium to view the grouping



#### **Data Gathering**

The raw data consisting of a csv file containing postcodes, postcode districts, latitude and longitude as well as other information (found at <a href="https://www.doogal.co.uk/london\_postcodes.php">https://www.doogal.co.uk/london\_postcodes.php</a>) was uploaded to IBM Watson Studio

#### **FourSquare**

Using the FourSquare API,
the top ten venues in a
radius around each postcode
could be found. The
information was extracted
and merged with the
postcode dataframe,
matching each postcode with
its top venues

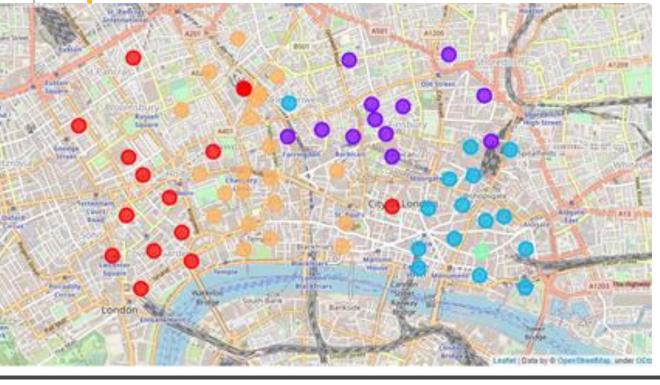
#### **Analysis**

Looking through these clusters we could pick out the postcodes with the aspects we were looking for, finding the best in each cluster. Finally, we could compare the best against each other to find the overall best postcode district

# The Results

Here we have an extract of the table containing the top ten venues for each district as well as the cluster map produced from this table

	Postcode District	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	ı
0	EC1A	Pub	Coffee Shop	Italian Restaurant	French Restaurant	Sandwich Place	Bar	Pizza Place	Gym / Fitness Center	Hotel	(
1	EC1M	Pub	Coffee Shop	Food Truck	Hotel	Gym / Fitness Center	Café	French Restaurant	Italian Restaurant	Wii	March
2	EC1N	Pub	Coffee Shop	Sandwich Place	Hotel	Italian Restaurant	Food Truck	Cocktail Bar	Wine Bar	Su: Re	
3	EC1P	Pub	Coffee Shop	Garden	Pizza Place	Cocktail Bar	Sandwich Place	Vietnamese Restaurant	Indian Restaurant	Fo	1000
4	EC1R	Pub	Coffee Shop	Café	Bar	Food Truck	Pizza Place	Vietnamese Restaurant	Middle Eastern Restaurant	Gy Fitt Ce	CA SIGNATURE AN
5	EC1V	Coffee Shop	Pub	Italian Restaurant	Café	Bar	Sandwich Place	Vietnamese Restaurant	Cocktail Bar	Gy Fiti Ce	Below Town
6	EC1Y	Coffee Shop	Gym / Fitness Center	Food Truck	Italian Restaurant	Pub	Café	Bar	Concert Hall	Tui Re	THE PROPERTY.
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10th Most Common

Café

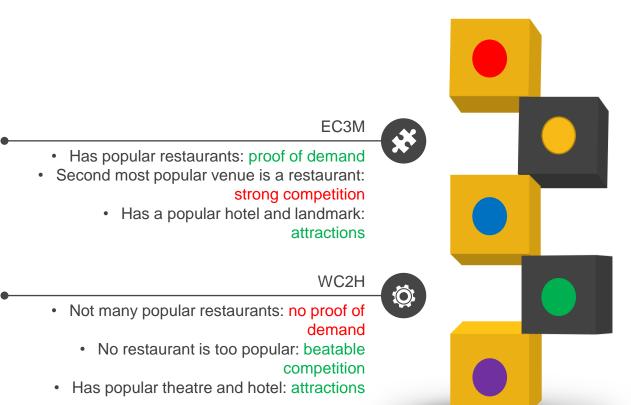
### The Results

Using our criteria we could find the best district from each cluster:

- EC4Y (red)
- o EC3N (blue)
- WC2H (green)
- EC3M (yellow)
- EC2Y (purple)



### The Final Districts





- · Has popular restaurants: proof of demand
- No restaurant is too popular: beatable competition
- Has popular hotel and history museum: attractions



#### EC3N

- · Has popular restaurants: proof of demand
- No restaurant is too popular: beatable competition
- Has popular hotel and museum: attractions



#### EC2Y

- · Has popular restaurants: proof of demand
- No restaurant is too popular: beatable competition
- Has popular art gallery, concert hall and museum: attractions

### The Best Three Districts



EC4Y

Already popular restaurants:

- Italian
- · General.



EC3N

Already popular restaurants:

- French
- Pizza



EC2Y

Already popular restaurants:

- Italian
- Turkish

#### **Final Discussion**

Each of these three districts would be an excellent place to open a restaurant. They all fit all our criteria and so there is little to distinguish them from one another. Therefore, we can say that these are the top three postcode districts in which to open a restaurant in Central London

The only factor that would make one location more appealing than the other would be the type of cuisine. As these areas have popular restaurants, it would be a good idea to open a restaurant with a different cuisine to those already existing



# Thank you