



# Identifying gaps in the market for coffee shops in Central London

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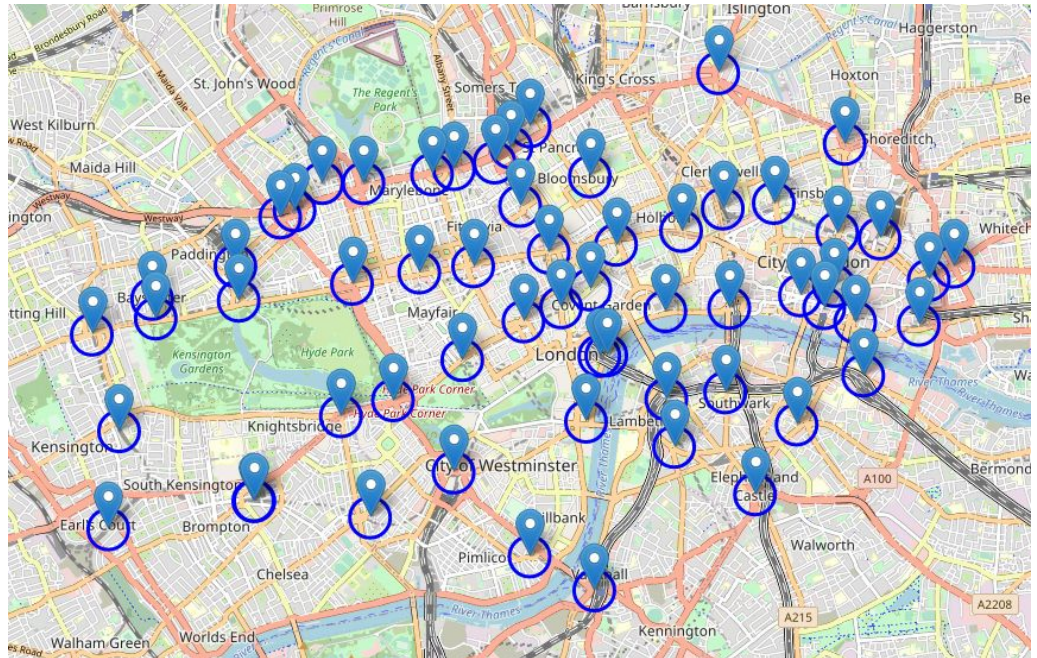


# Introduction

- London Underground (local rail system) has 270 stations
- About 60 stations in central zone (Zone 1)
- Tens of thousands of users use a typical Zone 1 station each day
- There are many coffee shops near most stations
- Where might there be a gap in the market?

# Map of London Underground stations in Zone 1

Circles show 200 metre radius around each station





# How can we identify demand for coffee shops?

- Number of existing coffee shops
- Station usage figures
- Local knowledge of types of users
  - Local residents, tourists, commuters, business visitors, etc.

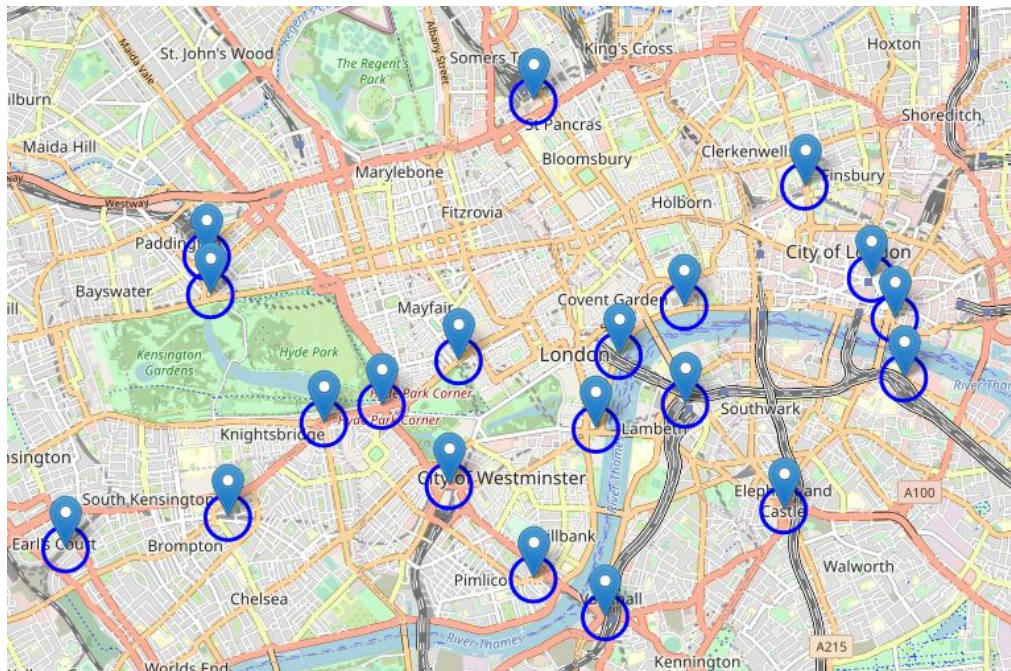


# Methodology

- Obtained Zone 1 station location and usage data
  - Usage data from Wikipedia
  - Location data from OpenStreetMap
- Searched for coffee shops within 200 metres of each station
  - Using Foursquare API
- Identified stations with low density of coffee shops relative to station users (<0.3 per million annual users)
- Geographically clustered these stations

# Stations with low density of coffee shops

(<0.3 coffee shops per million annual users)



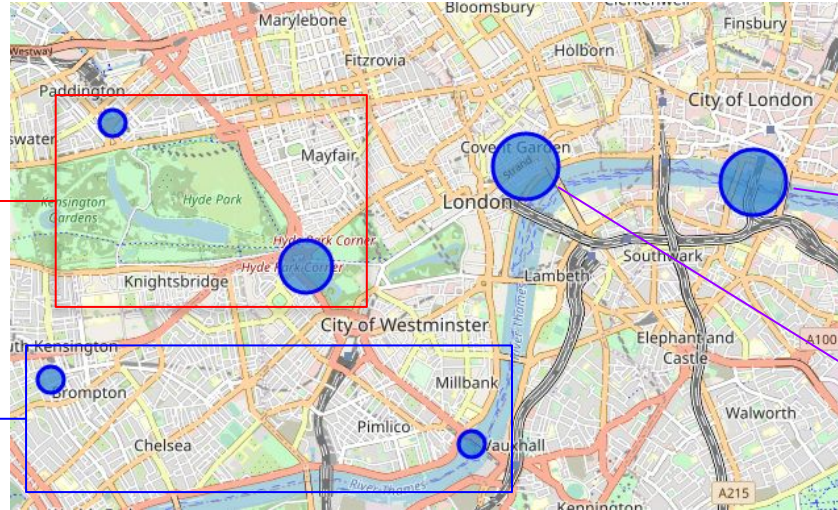


# Clusters of stations with low density of coffee shops

k-means clustering with  $k=6$

Royal parks

Residential areas



Business district

Tourist area



# Conclusions

Three clusters of coffee shops with low density of coffee shops identified:

1. Around the royal parks - *availability of premises may be limited*
2. In mainly residential areas - *local residents may be less inclined to stop at coffee shops*
3. In major tourist/business areas - *lots of visitors - likely to be particularly high demand for coffee shops*

## Recommendation:

Consider looking at Covent Garden (major tourist area) or City of London/London Bridge (major business district) where there will a particularly high number of visitors to the area