

SHOE STORE

Finding the best location

January 14, 2020

IBM Coursera Capstone Project
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Problem

Find the best location in Europe for “TP Collection” first shop abroad.

Part I – select the city

Part II - define the most suitable location in this city

Key search principles

- Market demand
- Target group purchasing power
- Brand positioning at the shoe market

Target groups for “TP Collection” shoes:

- Young people 25-35 with income above medium
- Foreign tourists

Location preference

- high concentration of existing shoe shops



Metrics to use

City selection

- City GDP
- City population
- High percentage of people aged 25-35
- Number of tourists visiting the city
- Doing business ranking.

Location selection:

- Total number of shoe shops in the same area.
- Concentration of different kind of venues preferred by young professional like: trending café, fashion restaurants, art-galleries
- University campuses
- Tourist attractions



Data

Data source used for city selection

Datasets from Eurostat

- **met_10r_3gdp.xls** - Gross domestic product (GDP) at current market prices by metropolitan regions.
- **urb_cpop1.xls** - Population aged 25 – 35 cities and greater cities
- **urb_cpop1 total.xls** - City population total
- **Urb_ctour.xls** - Total nights spent in tourist accommodation establishments per city

Dataset from the World Bank

- **Rankings.xlsx** - A flagship publication measuring the economy's ease of doing business score

Foursquare - The Places API offers real-time access to Foursquare's global database of rich venue data and user content for over 105MM places available across 190 countries and 50 territories.



Methodology

Estimate purchasing power of population aged 25-35 per each European city.

	City	YP	GDP	gdp_25_35
0	London	0.167697	763494.39	128035.988704
1	Paris	0.168856	683962.00	115491.037555
2	München	0.183968	178945.00	32920.082141
3	Madrid	0.126769	211782.00	26847.300079
4	Milano	0.108083	200116.42	21629.169594



Estimate purchasing power of tourists per each European city.

	City	Tourists
1	Madrid	1.000000
4	London	0.729684
0	München	0.707566
2	Paris	0.658051
3	Milano	0.553120

Economy's ease of doing Business

	City	Starting a Business
0	London	0.856
1	Paris	0.704
2	Madrid	0.224
3	Milano	0.216
4	München	0.000

Final rank among Top 5 cities

Weight coefficients:

- Purchasing power of population 25-35yo - 0.7
- Tourists ranking - 0.15
- Doing Business – 0.15

$$\text{Rank} = 0.7 * \text{gdp_25_35} + 0.15 * \text{Tourists} + 0.15 * \text{Doing Business}$$



	City	Starting a Business	gdp_25_35	Tourists	Rank
0	London	0.856	1.000000	0.729684	1.000000
1	Paris	0.704	0.902020	0.658051	0.884600
2	Madrid	0.224	0.209686	1.000000	0.437167
3	Milano	0.216	0.168930	0.553120	0.296832
4	München	0.000	0.257116	0.707566	0.333630

The overall ranking leader is London.

Location selection in London:

Metrics

- Total number of shoe shops in the same area.
- Concentration of different kind of venues preferred by young professional like: trending café, fashion restaurants, art-galleries
- University campuses
- Tourist attractions



Foursquare search for venues through London's boroughs

- Shoe store
- Art gallery
- College and University
- Café
- Vegetarian Vegan Restaurant
- Travel and Transport



	Location	Borough	Lat	Lng	Shoe store	Art gallery	College and University	Cafe	Vegetarian Vegan Restaurant	Travel and Transport
0	Fitzrovia	Camden	51.518529819132	-0.13784759302216	50.0	50.0	49.0	50.0	17.0	42.0
1	Soho	Westminster	51.517585379522	-0.13500343088978	50.0	50.0	49.0	50.0	21.0	42.0
2	Mayfair	Westminster	51.508826777815	-0.14977175677031	48.0	49.0	23.0	50.0	2.0	43.0
3	St James's	Westminster	51.508598701761	-0.1353704316591	48.0	47.0	33.0	50.0	15.0	39.0
4	Covent Garden	Westminster	51.512009617972	-0.12370182518566	47.0	46.0	43.0	50.0	8.0	47.0
5	Marylebone (also St Marylebone)	Westminster	51.517813528559	-0.1494075869483	47.0	49.0	45.0	50.0	6.0	34.0
6	Holborn	Camden	51.517355462669	-0.1205994650938	41.0	38.0	50.0	50.0	10.0	40.0
7	St Giles	Camden	51.517355462669	-0.1205994650938	41.0	38.0	50.0	50.0	10.0	40.0
8	Aldwych	Westminster	51.512815974418	-0.11790391775668	40.0	33.0	50.0	49.0	4.0	42.0
9	Shepherd's Bush	Hammersmith and Fulham	51.503649663134	-0.22202608436881	32.0	0.0	17.0	29.0	3.0	39.0
10	Kilburn	Westminster	51.508866317731	-0.1645314330013	30.0	16.0	15.0	40.0	0.0	31.0

Final rank among London boroughs

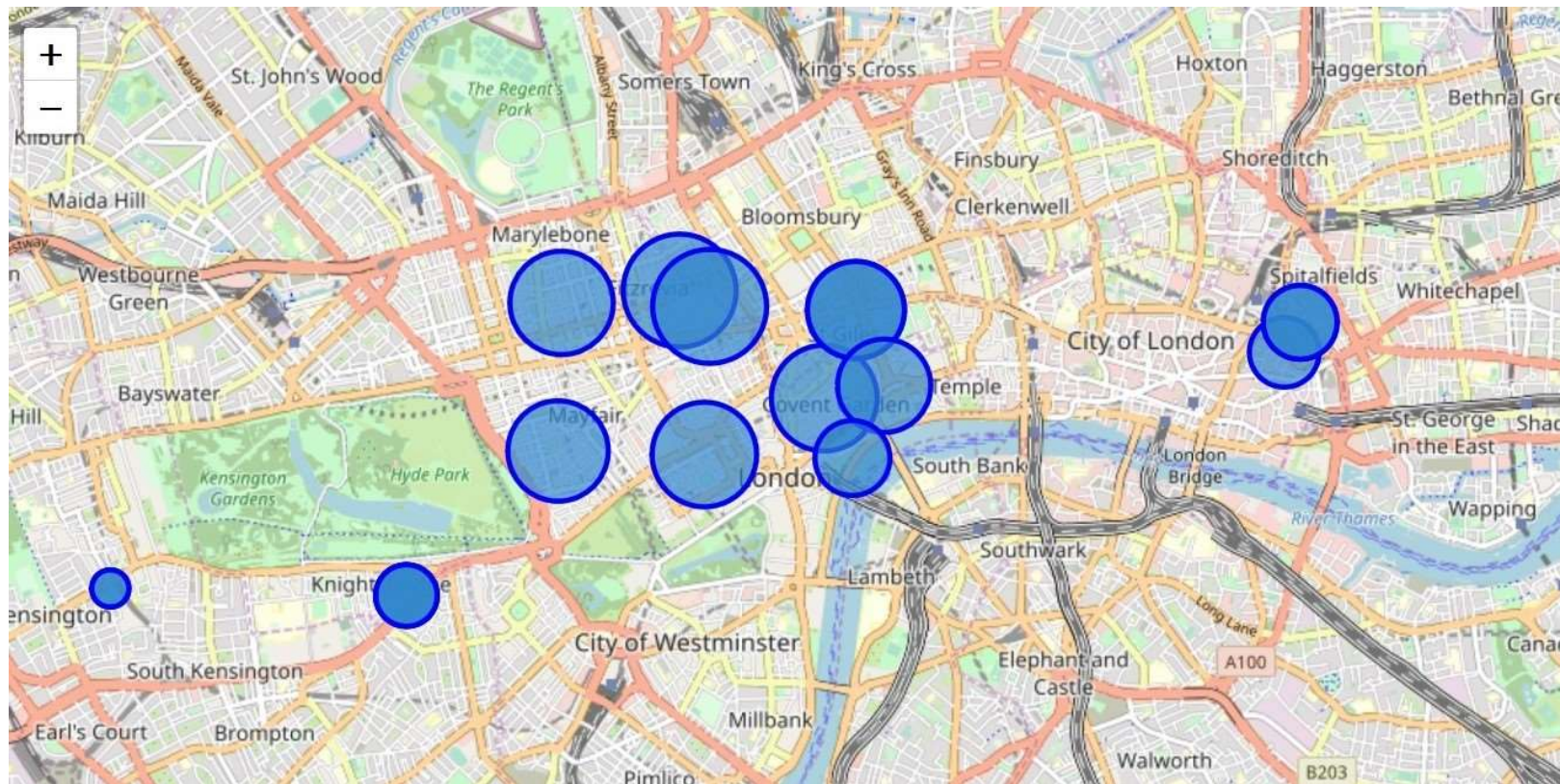
Weight coefficients: Shoe store – 0.50, all others metrics – 0.10

Rank = 0.5* Shoe store + 0.15* Art gallery + 0.10* College and University + 0.10* Café + 0.10* Vegetarian Vegan Restaurant + 0.10* Travel and Transport



Location	Borough	Lat	Lng	Shoe store	Art gallery	College and University	Cafe	Vegetarian Vegan Restaurant	Travel and Transport	Rating
Soho	Westminster	51.517585379522	-0.13500343088978	50.0	50.0	49.0	50.0	21.0	42.0	46.2
Fitzrovia	Camden	51.518529819132	-0.13784759302216	50.0	50.0	49.0	50.0	17.0	42.0	45.8
Covent Garden	Westminster	51.512009617972	-0.12370182518566	47.0	46.0	43.0	50.0	8.0	47.0	42.9
St James's	Westminster	51.508598701761	-0.1353704316591	48.0	47.0	33.0	50.0	15.0	39.0	42.4
Marylebone (also St Marylebone)	Westminster	51.517813528559	-0.1494075869483	47.0	49.0	45.0	50.0	6.0	34.0	41.9
Mayfair	Westminster	51.508826777815	-0.14977175677031	48.0	49.0	23.0	50.0	2.0	43.0	40.7
Holborn	Camden	51.517355462669	-0.1205994650938	41.0	38.0	50.0	50.0	10.0	40.0	39.3
St Giles	Camden	51.517355462669	-0.1205994650938	41.0	38.0	50.0	50.0	10.0	40.0	39.3
Aldwych	Westminster	51.512815974418	-0.11790391775668	40.0	33.0	50.0	49.0	4.0	42.0	37.8
Charing Cross	Westminster	51.508368858456	-0.12096929668046	25.0	43.0	39.0	48.0	3.0	46.0	30.4
Spitalfields	Tower Hamlets	51.516655105759	-0.077388723932787	20.0	36.0	47.0	50.0	18.0	49.0	30.0
Whitechapel	Tower Hamlets	51.516655105759	-0.077388723932787	20.0	36.0	47.0	50.0	18.0	49.0	30.0

Map of London with superimposed top locations



So, the best locations are Soho, Fitzrovia and Covent Graden.

Conclusion

Finding the best location to open the shoe shop is a complex task and generally it consist of two parts:

- a) a matter of fashion, i.e. will the people in that location would like this kind of shoes?
- b) does the population have enough purchasing power to buy them?

This project was focused on the second part, based on publicly available data.

The first part is even more interesting, but it must rely on customized research dedicated to brand “TP Collection”.

