



Where to open my Tea Room?

IBM Data Science Professional Certificate - Capstone Project

The Battle of Neighborhoods



Where to open my Tea Room?

Which countries prefer **tea to coffee**?

What is the ratio of **tea rooms to coffeeshops** in the central area of their capitals?

Can we produce a **preference metric** per country?

Geospatial data from:

- Foursquare API (queries for venues)
- Wikipedia (table for countries)
- Wikipedia (table for tea consumption)
- Blog (table for coffee consumption)



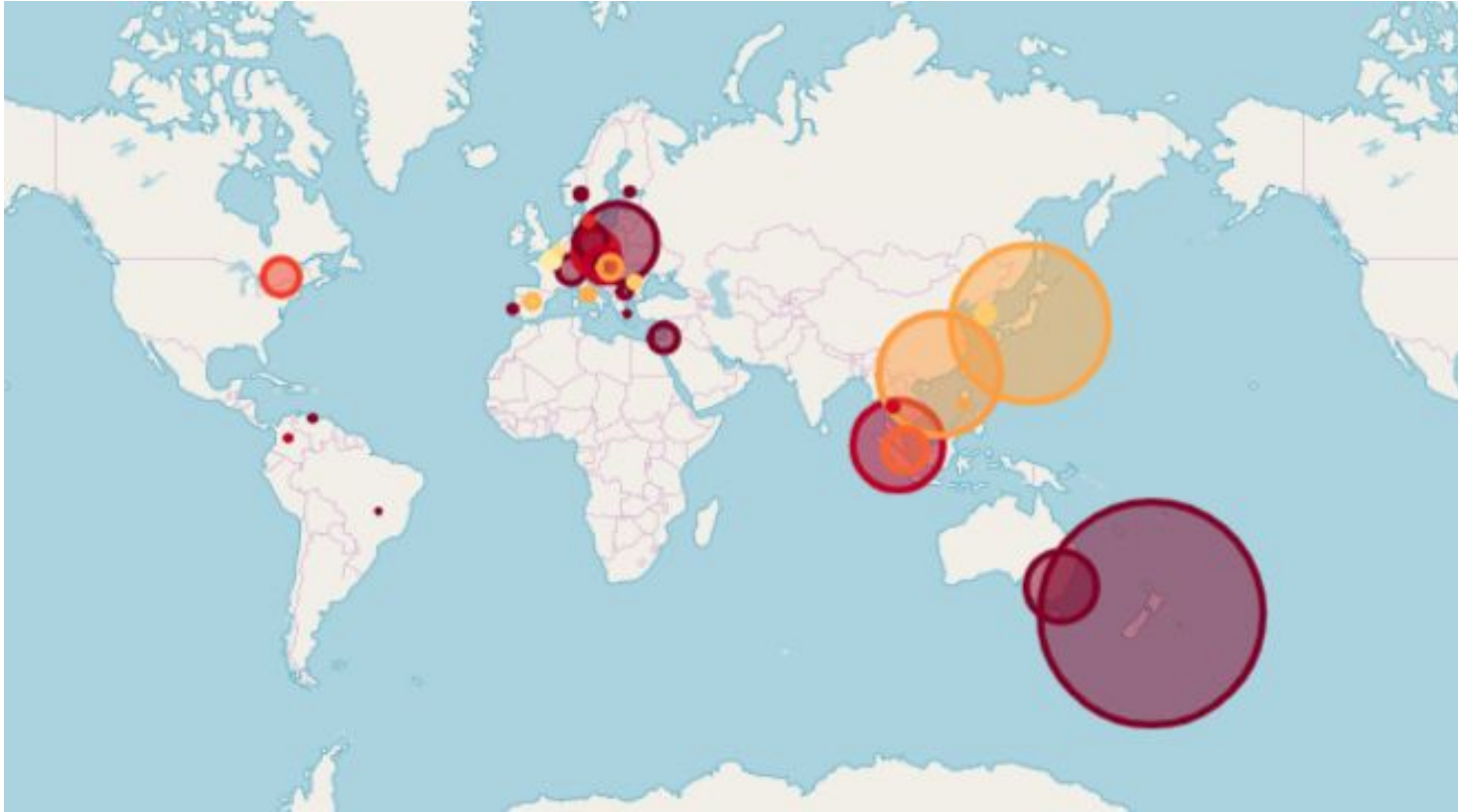
Methodology

1. Load libraries and import data to dataframes
2. Query Foursquare for venues in area with descriptions containing “coffee” & “tea”
3. Restrict venue categories to “Coffeeshop” & “Tea Room” and calculate ratio
4. Calculate ratio of annual per capita coffee and tea consumption per country
5. Divide ratios to produce preference metric

Capital	Ratio Coffee v Tea Shops	Ratio Coffee v Tea Consumption	Preference Metric (Shops/Consumption) ▲
New Zealand, Wellington	10.000	1.092	9.153
Israel, Tel Aviv	81.000	9.000	9.000
Australia, Canberra	22.500	3.466	6.490
Poland, Warsaw	13.000	3.100	4.193
Malaysia, Kuala Lumpur	8.750	2.708	3.230
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Colombia, Bogotá	8.750	77.777	0.112
Philippines, Manila	4.250	44.444	0.095
France, Paris	1.268	16.000	0.079
Brazil, Brasilia	17.000	266.666	0.063
Belgium, Brussels	2.280	37.692	0.060

Map visualization

Larger radius: greater tea consumption
Purple color: lower tea room availability
Best location: larger purple circles





Conclusion

Preferred Countries: New Zealand, Israel, Australia, Poland, Malaysia, etc.

Machine Learning algorithms return no useful insights or clusters due to lack of data and available attributes

Some hypotheses used:

- API returns unbiased representative ratio of coffee and tea shops
- consumption values per country are considered unchanged throughout the last few years
- there is an inverse correlation between coffee and tea consumption worldwide
- capitals adequately represent the national urban trends.

Thank you