

# *WORLD CAPITALS: HOW DIFFERENT ARE WE?*

Data Science Capstone Project - presentation

# Introduction

What can World Capitals teach us about ourselves?

The idea is to get data on most of the World's Capitals, namely coordinates, population and venues and then create some clusters and try to find out how different we really are around the World.

# Data

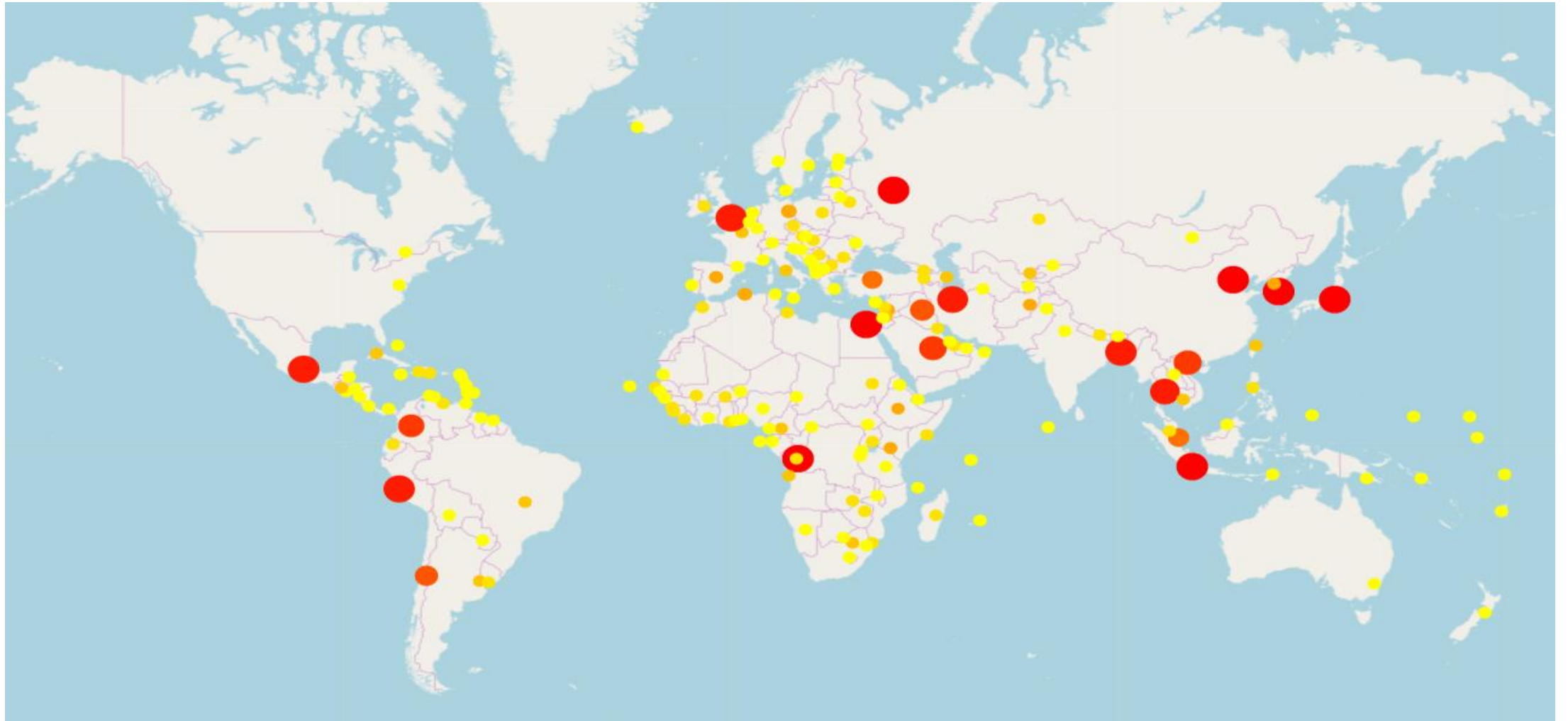
<https://simplemaps.com/data/world-cities>

[https://en.wikipedia.org/wiki/List\\_of\\_national\\_capitals\\_by\\_population](https://en.wikipedia.org/wiki/List_of_national_capitals_by_population)

From those links we got:

- City name (Capital)
- lat, lng (the GPS coordinates)
- Country
- Population

# World Capitals

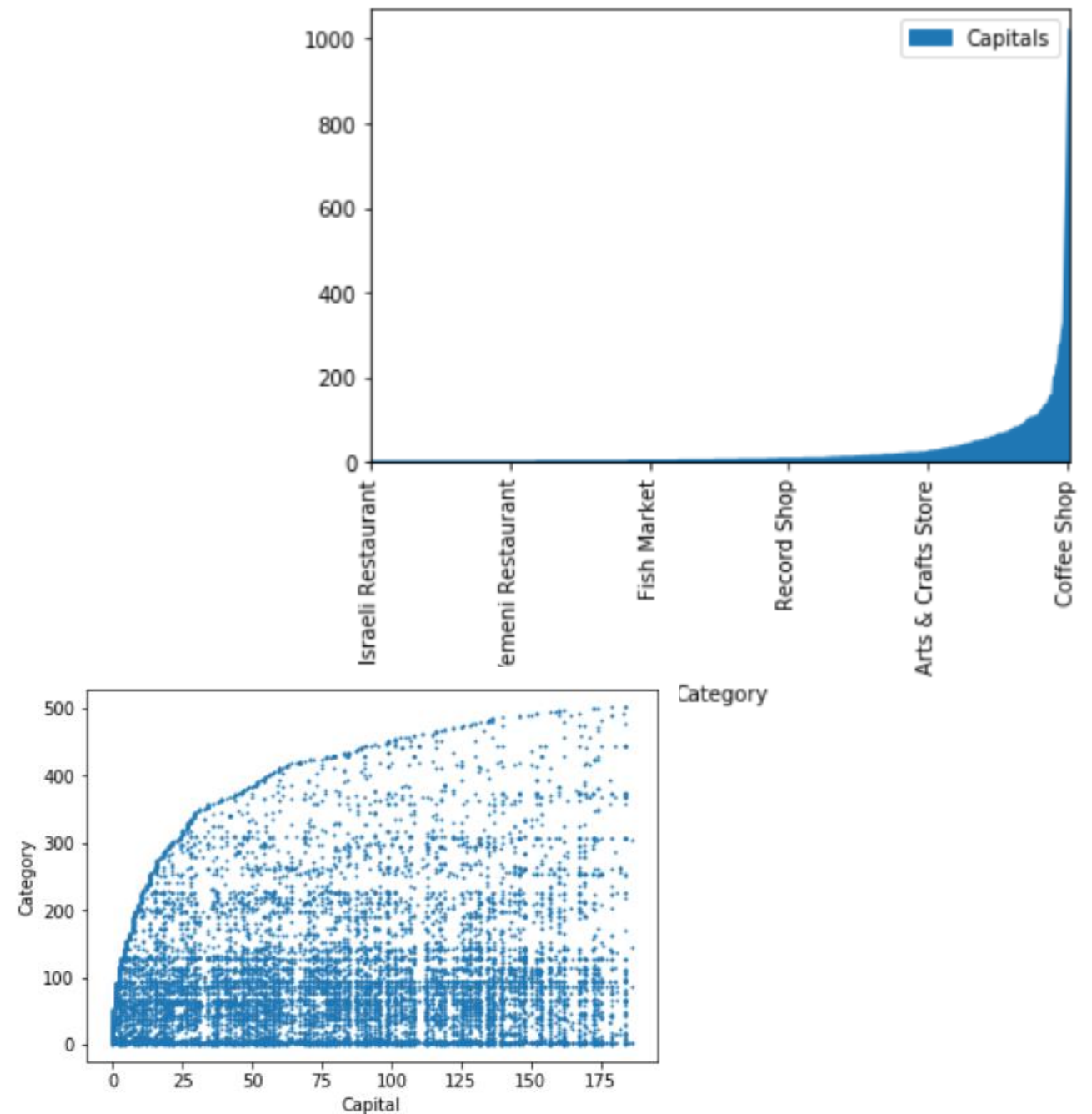
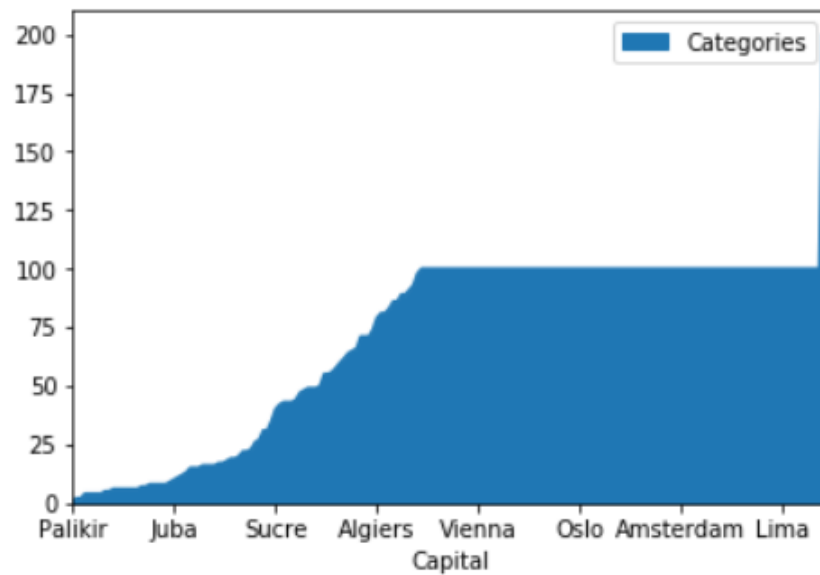


# Venues

	Capital	Venue	lat	lng	Category
3387	Caracas	Kabuki Sushi + Salads La Campiña	10.497430	-66.873549	Sushi Restaurant
13222	Philipsburg	Beau Beau's Restaurant	18.052367	-63.015744	Caribbean Restaurant
7308	Yerevan	History Museum of Armenia   Հայաստանի Պատմության...	40.178449	44.513588	History Museum
4072	Santo Domingo	Don Nestor Parrillada	18.477242	-69.883639	Steakhouse
11373	Windhoek	Craft Cafe	-22.572002	17.083820	Café
7808	Dublin	Mad Egg	53.333668	-6.264568	Fried Chicken Joint
732	Moscow	Клуб Алексея Козлова	55.757724	37.633843	Music Venue
6211	San Salvador	i-shi cha	13.678636	-89.238081	Bubble Tea Shop
7917	Amsterdam	Generator Amsterdam	52.360802	4.918966	Hostel
12466	Luxembourg	Chemin de la Corniche	49.610389	6.134496	Trail
8414	Kingston	Shipme (Exec Direct Aviation)	17.997328	-76.787991	Shipping Store
7143	Helsinki	Kaffecentralen	60.167580	24.932526	Coffee Shop
4738	Beirut	Kampai (كامپاي)	33.899152	35.500536	Japanese Restaurant
9459	Ashgabat	Köpetdag Club	37.929570	58.412445	Nightclub
8627	Managua	Ruta Maya	12.148480	-86.286591	Food
843	Paris	Papacionu	48.874792	2.342917	Corsican Restaurant
225	Dhaka	Baburchi Restaurant	23.740544	90.375109	Restaurant
10024	Manama	Fraser Suites Diplomatic Area	26.242840	50.589755	Hotel
12780	Andorra la Vella	Tequilando	42.541667	1.518174	Mexican Restaurant
4316	Accra	Kwame Nkrumah Memorial Park	5.544634	-0.203227	Park

# Methodology

## High level analysis



# Clustering

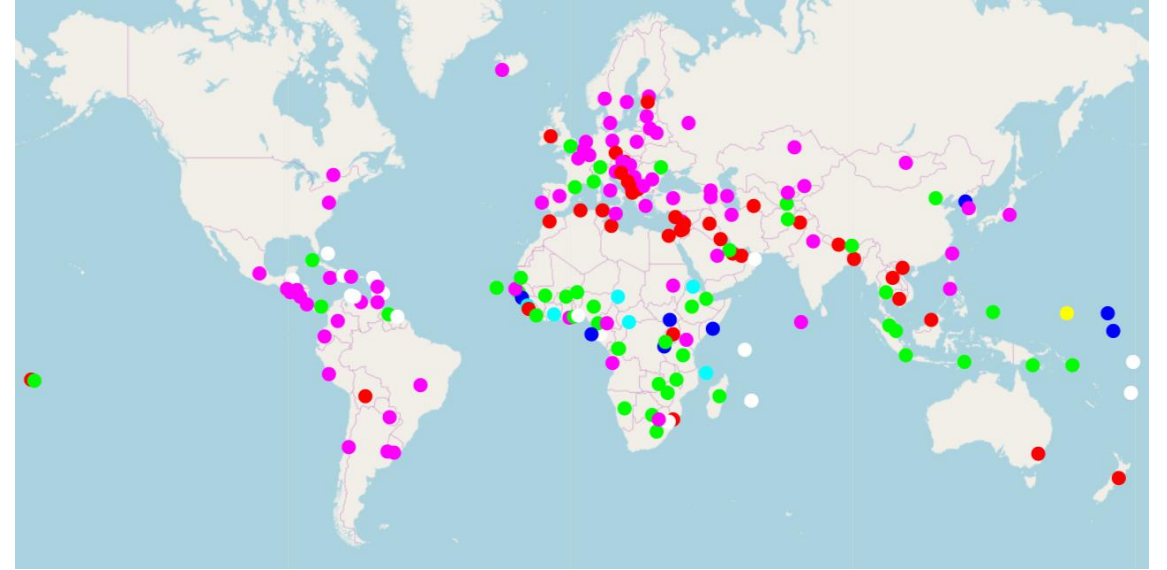
4 clusters



Cluster	1st Most Common Category	2nd Most Common Category	3rd Most Common Category	4th Most Common Category	5th Most Common Category	6th Most Common Category	7th Most Common Category	8th Most Common Category	9th Most Common Category	10th Most Common Category
0	Café	Hotel	Coffee Shop	Restaurant	Bar	Bakery	Park	Italian Restaurant	Pizza Place	Plaza
1	Hotel	Beach	Café	Bar	Plaza	Hotel Bar	Airport	French Restaurant	Brewery	National Park
2	Dive Shop	Zoo	Fish & Chips Shop	Empanada Restaurant	English Restaurant	Ethiopian Restaurant	Event Space	Exhibit	Fabric Shop	Falafel Restaurant
3	Hotel	Café	Restaurant	Shopping Mall	Coffee Shop	Italian Restaurant	Pizza Place	French Restaurant	Resort	Airport

# Clustering

7 clusters

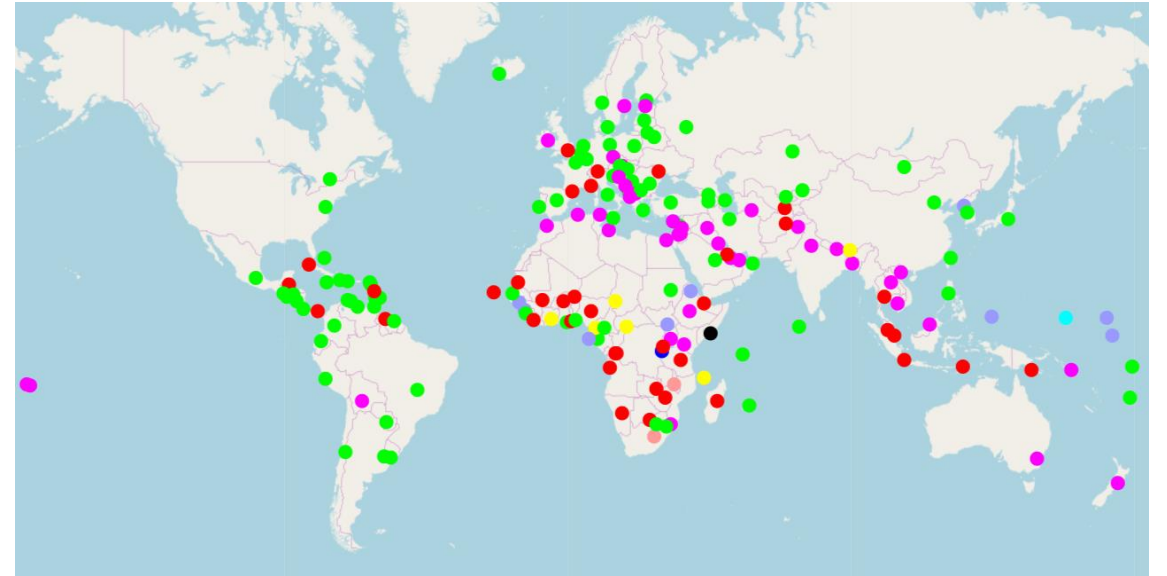


Cluster	1st Most Common Category	2nd Most Common Category	3rd Most Common Category	4th Most Common Category	5th Most Common Category	6th Most Common Category	7th Most Common Category	8th Most Common Category	9th Most Common Category	10th Most Common Category
0	Café	Hotel	Coffee Shop	Restaurant	Italian Restaurant	Bakery	Bar	Pizza Place	Park	Burger Joint
1	Hotel	Café	Restaurant	Shopping Mall	Coffee Shop	Italian Restaurant	Pizza Place	Fast Food Restaurant	French Restaurant	Grocery Store
2	Hotel	Beach	Bar	Hotel Bar	Plaza	Café	Restaurant	Noodle House	Motel	Shopping Mall
3	Dive Shop	Zoo	Fish & Chips Shop	Empanada Restaurant	English Restaurant	Ethiopian Restaurant	Event Space	Exhibit	Fabric Shop	Falafel Restaurant
4	Hotel	Coffee Shop	Café	Restaurant	Park	Bar	Bakery	Plaza	Italian Restaurant	Pizza Place
5	Hotel	Resort	Airport	African Restaurant	French Restaurant	Hotel Pool	Movie Theater	Lake	Museum	Electronics Store
6	Hotel	Fast Food Restaurant	Chinese Restaurant	Beach	Shopping Mall	Restaurant	Bar	Caribbean Restaurant	Resort	Seafood Restaurant



# Clustering

10 clusters



Cluster	1st Most Common Category	2nd Most Common Category	3rd Most Common Category	4th Most Common Category	5th Most Common Category	6th Most Common Category	7th Most Common Category	8th Most Common Category	9th Most Common Category	10th Most Common Category
0	Hotel	Restaurant	Café	Shopping Mall	Pizza Place	Coffee Shop	Italian Restaurant	Fast Food Restaurant	Grocery Store	Bar
1	Hotel	Coffee Shop	Café	Restaurant	Bar	Park	Bakery	Italian Restaurant	Plaza	Ice Cream Shop
2	Hotel	Zoo	Eastern European Restaurant	Electronics Store	Empanada Restaurant	English Restaurant	Ethiopian Restaurant	Event Space	Exhibit	Fabric Shop
3	Hotel	Resort	Airport	French Restaurant	African Restaurant	Hotel Pool	Café	Museum	Lake	Irish Pub
4	Café	Hotel	Coffee Shop	Restaurant	Italian Restaurant	Bar	Pizza Place	Bakery	Park	Plaza
5	Dive Shop	Zoo	Fish & Chips Shop	Empanada Restaurant	English Restaurant	Ethiopian Restaurant	Event Space	Exhibit	Fabric Shop	Falafel Restaurant
6	Harbor / Marina	Hotel	River	Clothing Store	Nature Preserve	Fabric Shop	Fast Food Restaurant	Farmers Market	Farm	Falafel Restaurant
7	Beach	Hotel	Zoo	Egyptian Restaurant	Empanada Restaurant	English Restaurant	Ethiopian Restaurant	Event Space	Exhibit	Fabric Shop
8	Hotel	Café	Bar	Plaza	Hotel Bar	National Park	Brewery	Restaurant	Movie Theater	Noodle House
9	Shopping Mall	Hotel	Restaurant	Border Crossing	Gas Station	Café	Supermarket	Pub	Hotel Bar	Indian Restaurant

# Conclusion

So, did the World Capitals teach us something about ourselves?

Although there are some associations that should be taken into account, the comparison of the World Capitals shows that venues are not that different around the World, and that it is probably in the different cultural experiences that one should bet when considering a similar business to those included in the analysis.