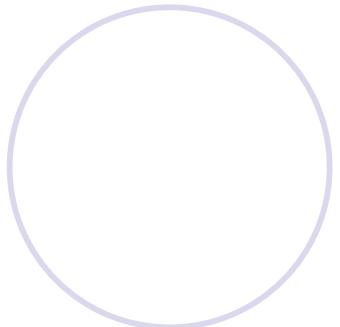
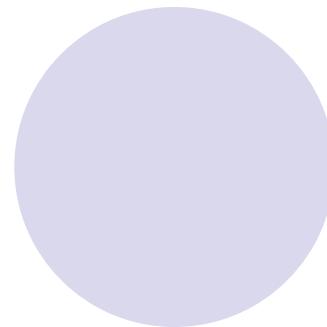
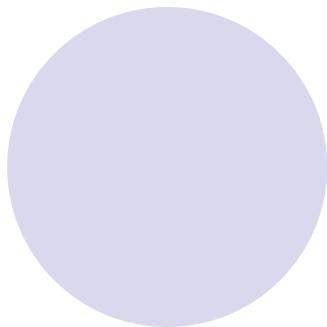


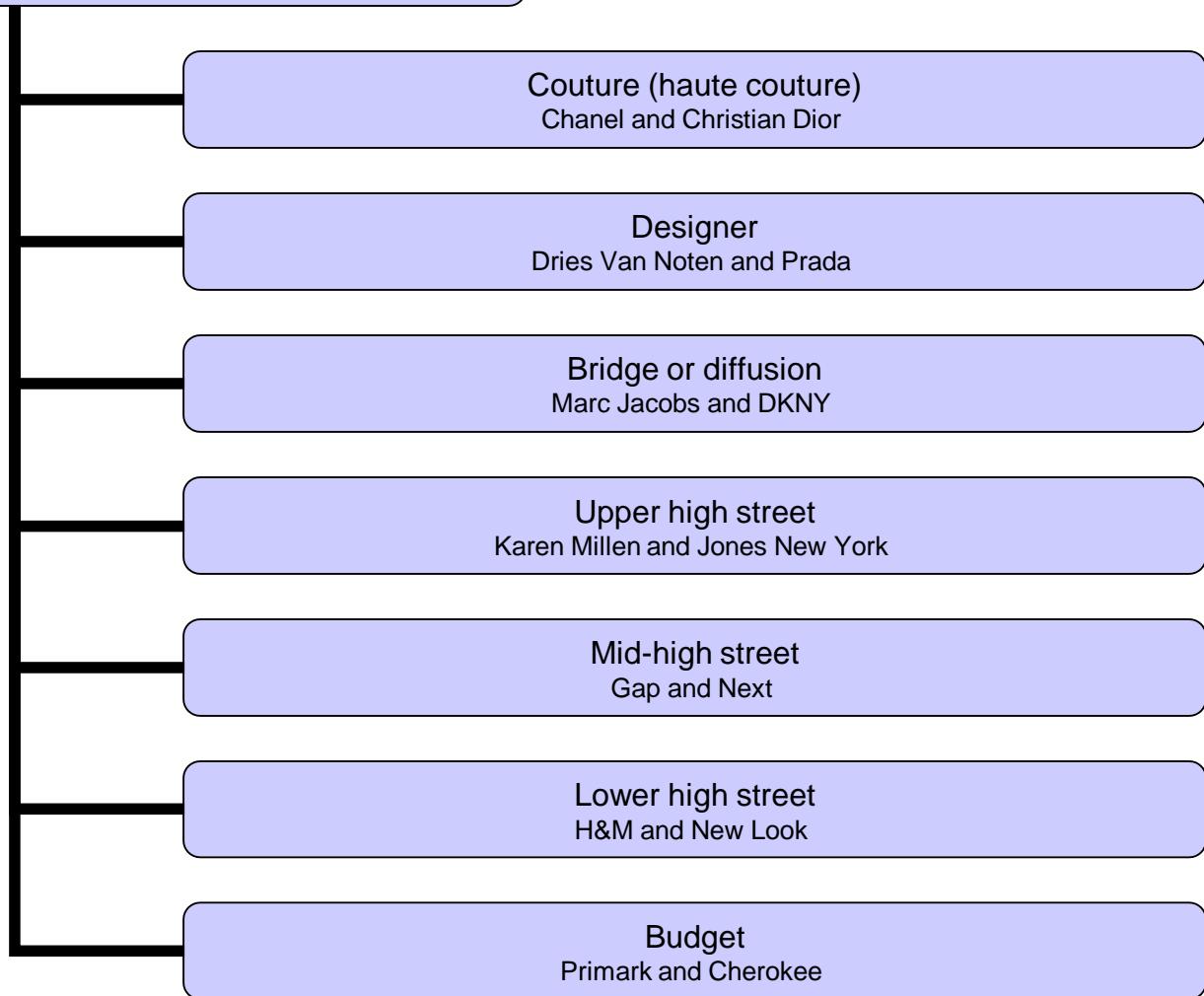
**Recommended location for  
opening a fashion store in Paris**



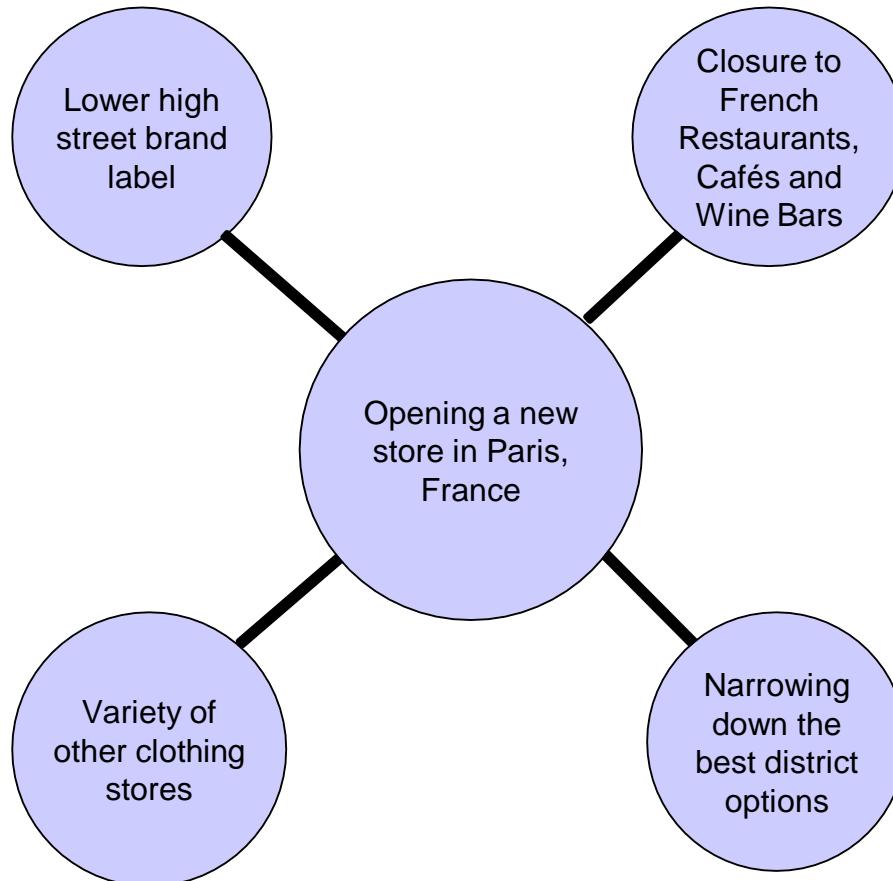
**Presentation**

# Introduction

## Hierarchical model of the fashion industry



# Business Problem



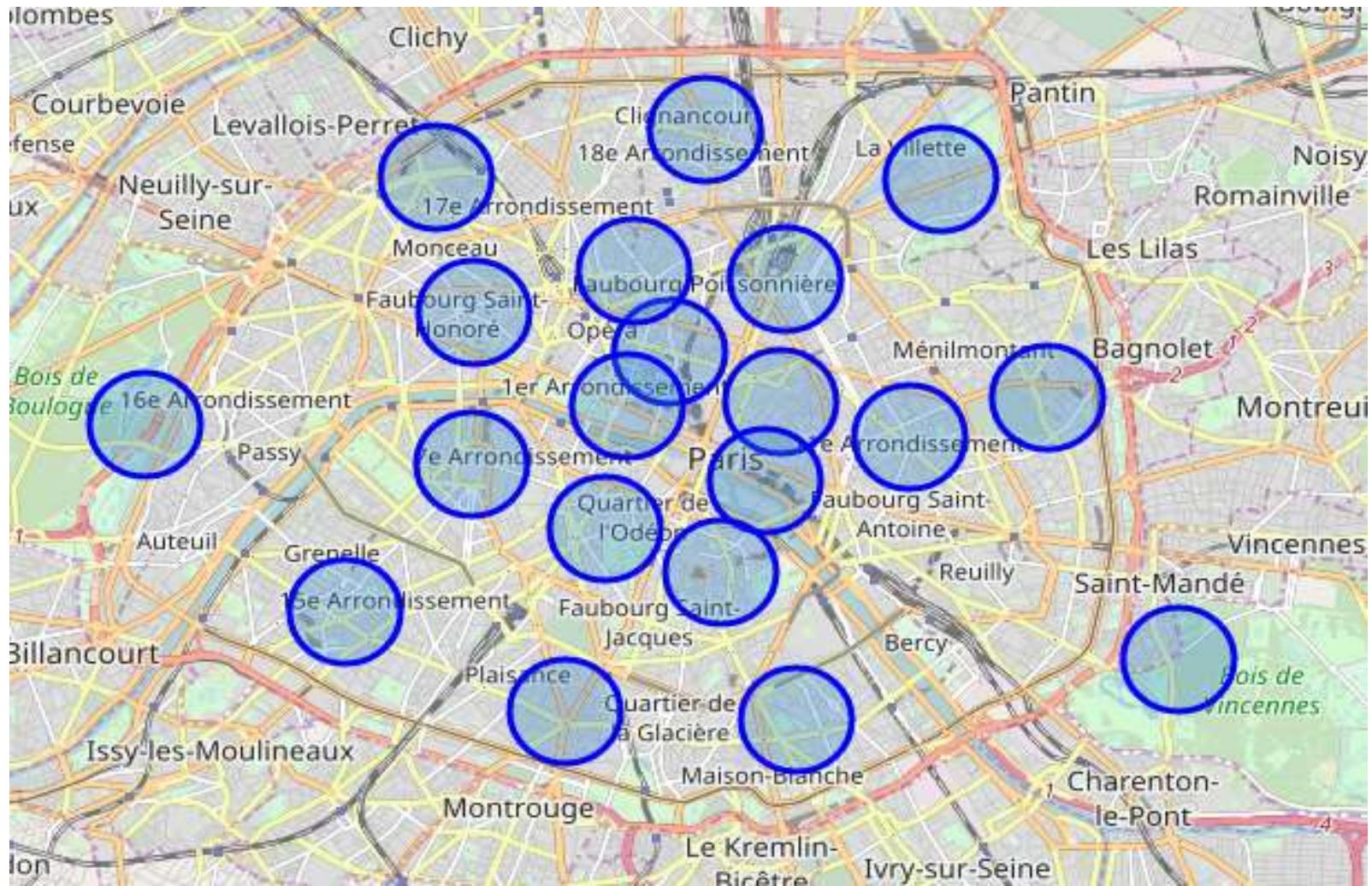
# Data

CAR		NAME	NSQAR	CAR.1	CARINSEE	LAR	NSQCO	SURFACE	PERIMETRE	Geometry_X	Geometry_Y
0	3	Temple	750000003	3	3	3eme Ardt	750001537	1170882828	4519264	48.862872	2.360001
1	19	Buttes-Chaumont	750000019	19	19	19eme Ardt	750001537	6792651129	11253182	48.887076	2.384821
2	14	Observatoire	750000014	14	14	14eme Ardt	750001537	5614877309	10317483	48.829245	2.326542
3	10	Entrepot	750000010	10	10	10eme Ardt	750001537	2891739442	6739375	48.876130	2.360728
4	12	Reuilly	750000012	12	12	12eme Ardt	750001537	16314782637	24089666	48.834974	2.421325
5	16	Passy	750000016	16	16	16eme Ardt	750001537	16372542129	17416110	48.860392	2.261971
6	11	Popincourt	750000011	11	11	11eme Ardt	750001537	3665441552	8282012	48.859059	2.380058
7	2	Bourse	750000002	2	2	2eme Ardt	750001537	991153745	4554104	48.868279	2.342803
8	4	Hotel-de-Ville	750000004	4	4	4eme Ardt	750001537	1600585632	5420908	48.854341	2.357630
9	17	Batignolles-Monceau	750000017	17	17	17eme Ardt	750001537	5668834504	10775580	48.887327	2.306777
10	18	Buttes-Montmartre	750000018	18	18	18eme Ardt	750001537	5996051308	9916464	48.892569	2.348161
11	1	Louvre	750000001	1	1	1er Ardt	750001537	1824612860	6054937	48.862563	2.336443
12	5	Pantheon	750000005	5	5	5eme Ardt	750001537	2539374623	6239195	48.844443	2.350715
13	7	Palais-Bourbon	750000007	7	7	7eme Ardt	750001537	4090057185	8099425	48.856174	2.312188
14	20	Menilmontant	750000020	20	20	20eme Ardt	750001537	5983446037	10704940	48.863461	2.401188
15	8	elysee	750000008	8	8	8eme Ardt	750001537	3880036397	7880533	48.872721	2.312554
16	9	Opera	750000009	9	9	9eme Ardt	750001537	2178303275	6471588	48.877164	2.337458
17	13	Gobelins	750000013	13	13	13eme Ardt	750001537	7149311091	11546547	48.828388	2.362272
18	15	Vaugirard	750000015	15	15	15eme Ardt	750001537	8494994081	13678798	48.840085	2.292826
19	6	Luxembourg	750000006	6	6	6eme Ardt	750001537	2153095586	6483687	48.849130	2.332898

# Cleaned Data

Arrondissement_Num	Neighborhood	French_Name	Latitude	Longitude
0	3	Temple	48.862872	2.360001
1	19	Buttes-Chaumont	48.887076	2.384821
2	14	Observatoire	48.829245	2.326542
3	10	Entrepot	48.876130	2.360728
4	12	Reuilly	48.834974	2.421325
5	16	Passy	48.860392	2.261971
6	11	Popincourt	48.859059	2.380058
7	2	Bourse	48.868279	2.342803
8	4	Hotel-de-Ville	48.854341	2.357630
9	17	Batignolles-Monceau	48.887327	2.306777
10	18	Buttes-Montmartre	48.892569	2.348161
11	1	Louvre	48.862563	2.336443
12	5	Panthéon	48.844443	2.350715
13	7	Palais-Bourbon	48.856174	2.312188
14	20	Menilmontant	48.863461	2.401188
15	8	Elysée	48.872721	2.312554
16	9	Opéra	48.877164	2.337458
17	13	Gobelins	48.828388	2.362272
18	15	Vaugirard	48.840085	2.292826
19	6	Luxembourg	48.849130	2.332898

# Map of Paris with the location of the neighborhoods



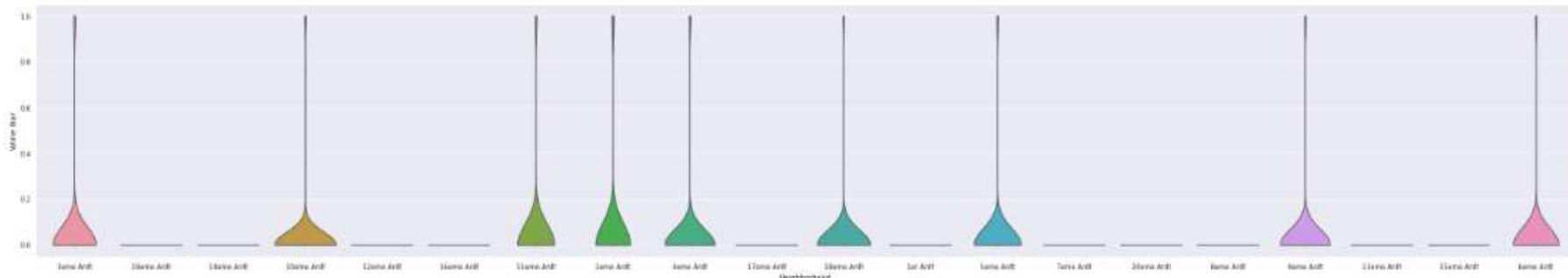
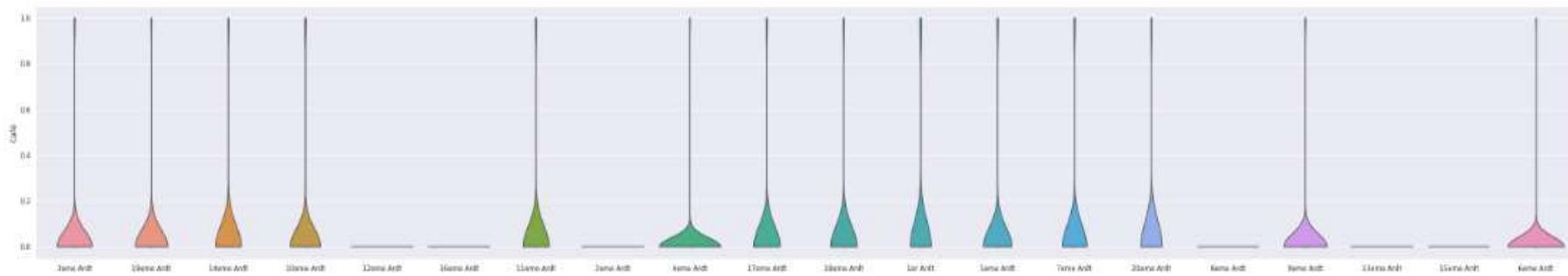
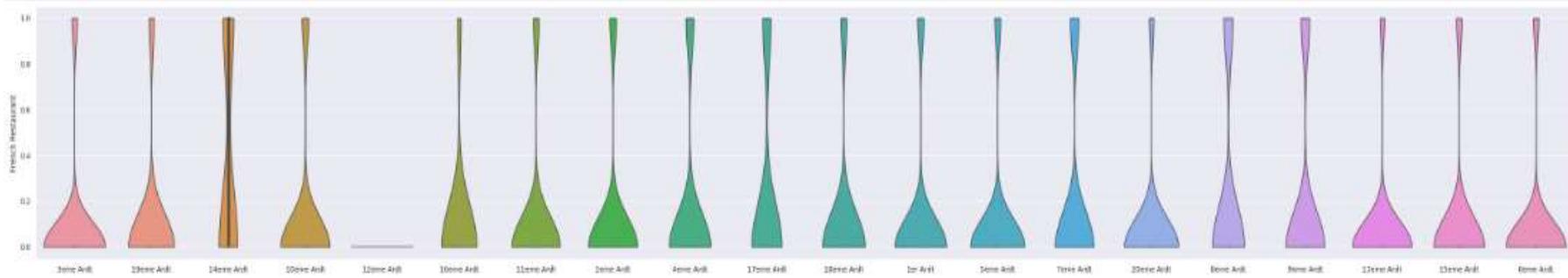
# Top 100 venues of the neighborhood 3eme Ardt

	name	categories	lat	lng
0	Mimmozza	Sandwich Place	48.863910	2.360591
1	Marché des Enfants Rouges	Farmers Market	48.862806	2.361996
2	Square du Temple	Park	48.864475	2.360816
3	Chez Alain Miam Miam	Sandwich Place	48.862369	2.361950
4	Chez Alain Miam Miam	Sandwich Place	48.862781	2.362064
5	Hôtel Jules & Jim	Hotel	48.863496	2.357395
6	Fromagerie Jouannault	Cheese Shop	48.862947	2.362530
7	Les Enfants Rouges	Wine Bar	48.863013	2.361260
8	Gramme	Restaurant	48.863121	2.360375
9	Strada Café	Café	48.862224	2.357379
10	Bontemps	Dessert Shop	48.863956	2.360725
11	Paris New York	Burger Joint	48.863843	2.362661
12	SoMa	Japanese Restaurant	48.861511	2.362146
13	Les Enfants Du Marché	French Restaurant	48.862746	2.361950
14	Traiteur Marocain	Moroccan Restaurant	48.862923	2.361933
15	Hank Burger	Burger Joint	48.861340	2.358304
16	The Broken Arm	Boutique	48.864653	2.361433
17	Café Charlot	Bistro	48.862940	2.362580
18	Biglove Caffè	Italian Restaurant	48.862063	2.363557
19	Little Red Door	Speakeasy	48.863703	2.363514

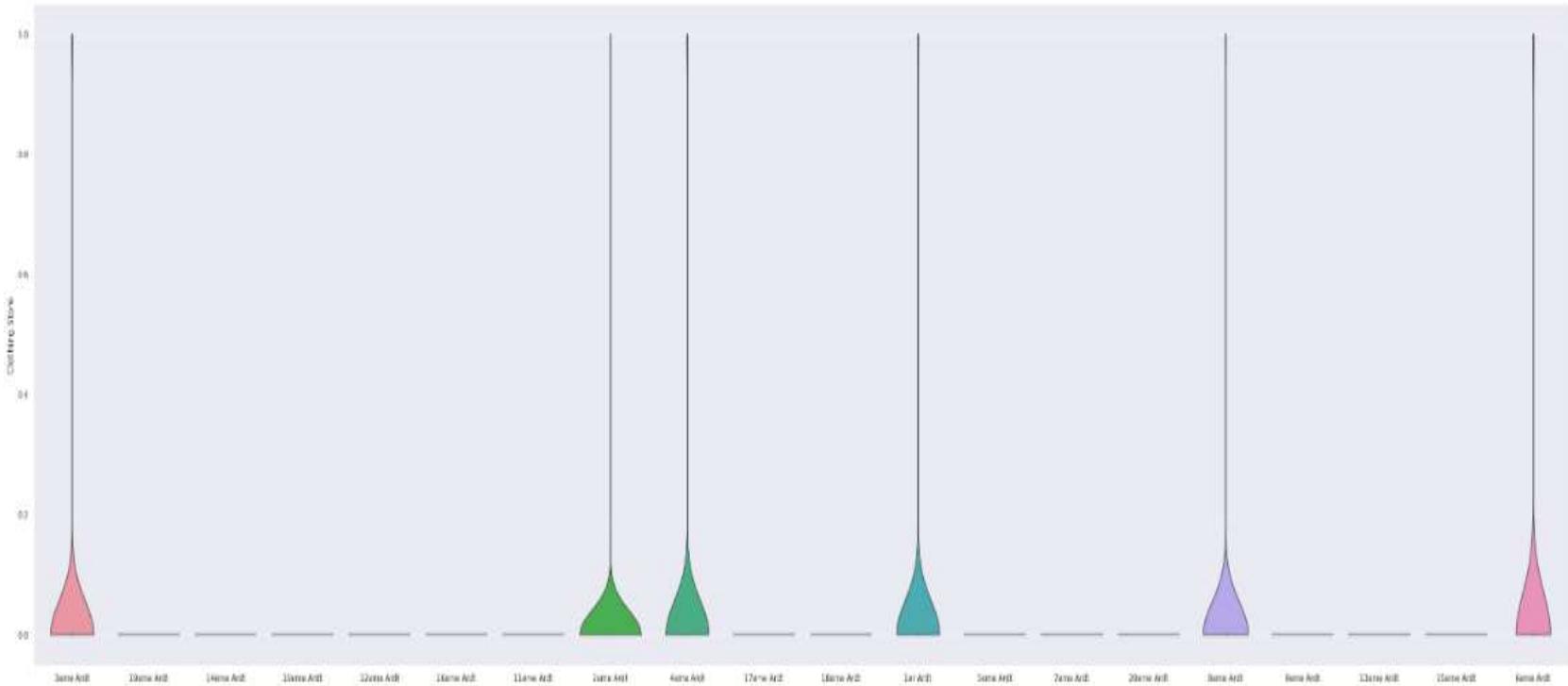
# Unique venue categories

French_Name	Latitude	Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
10eme Ardt	100	100	100	100	100	100
11eme Ardt	67	67	67	67	67	67
12eme Ardt	6	6	6	6	6	6
13eme Ardt	60	60	60	60	60	60
14eme Ardt	29	29	29	29	29	29
15eme Ardt	64	64	64	64	64	64
16eme Ardt	12	12	12	12	12	12
17eme Ardt	60	60	60	60	60	60
18eme Ardt	45	45	45	45	45	45
19eme Ardt	43	43	43	43	43	43
1er Ardt	100	100	100	100	100	100
20eme Ardt	48	48	48	48	48	48
2eme Ardt	100	100	100	100	100	100
3eme Ardt	100	100	100	100	100	100
4eme Ardt	100	100	100	100	100	100
5eme Ardt	94	94	94	94	94	94
6eme Ardt	73	73	73	73	73	73
7eme Ardt	100	100	100	100	100	100
8eme Ardt	65	65	65	65	65	65
9eme Ardt	100	100	100	100	100	100

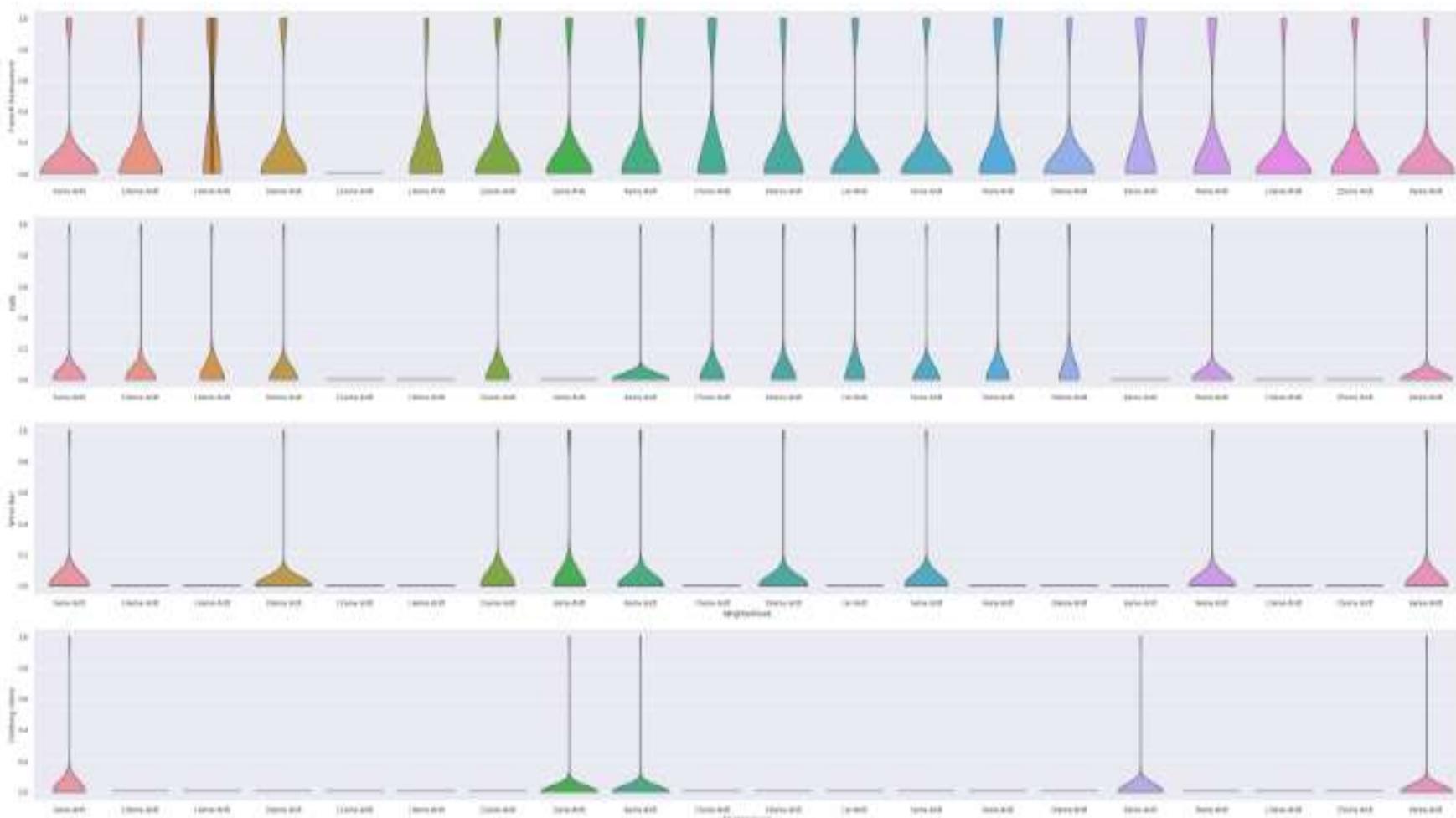
# Frequency distribution for the top 3 venue categories for each neighborhood



# Frequency of Clothing stores for each neighborhood



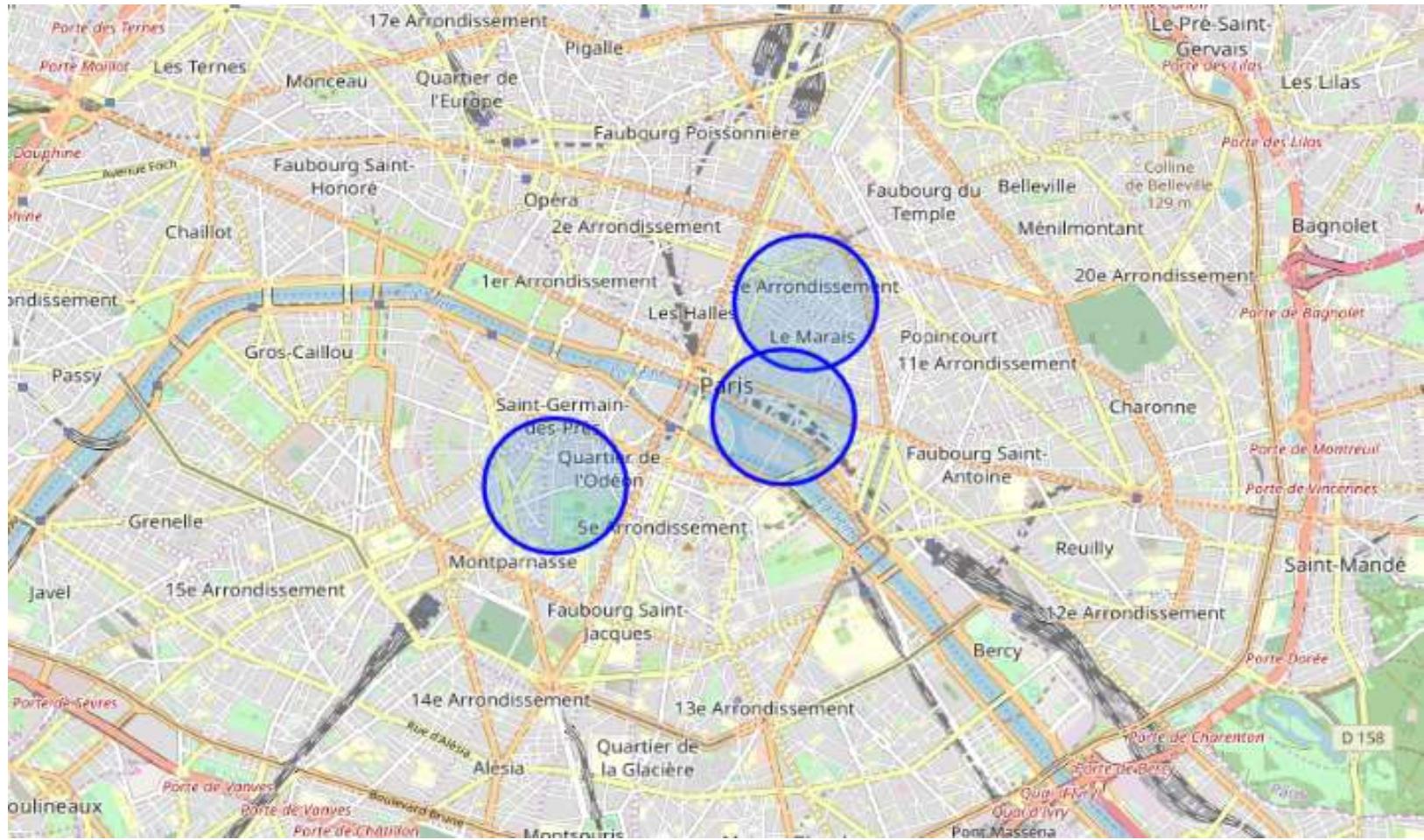
# Frequency distribution for each neighborhood



# Prospective neighborhoods for new store locations

Arrondissement_Num	Neighborhood	French_Name	Latitude	Longitude	
0	3	Temple	3eme Ardt	48.862872	2.360001
1	4	Hotel-de-Ville	4eme Ardt	48.854341	2.357630
2	6	Luxembourg	6eme Ardt	48.849130	2.332898

# Prospective neighborhoods for new store locations on the map



# Results, discussion and conclusion

- Inferential analysis using the data, as well as domain knowledge of retail and marketing, allowed narrowing the search area down significantly from 20 potential districts to 3 that should suit the retail business.
- The analysis and results are not an end point, but rather a starting point that will guide the next part of the process to find specific store locations.
- Data has helped to provide a better strategy and data-driven decisions will lead to a better solution in the end.