



Opening Five Italian Restaurants in Paris

THE BATTLE OF THE NEIGHBORHOODS

Introduction

- ▶ Review Paris for a company
- ▶ Best Location for opening five new Italian restaurants
- ❑ **Business Problem:**
 - ▶ Choose the five most suitable neighborhoods (arrondissements) for opening new restaurants in Paris.
 - ▶ Arrondissement with Few other Italian restaurants.
 - ▶ Arrondissement with no successful Italian Restaurants.
- ❑ **Success Criteria :**
 - ▶ Five arrondissements which meet the above criterias



Data acquisition and cleaning

- ▶ Paris is divided into 20 districts (or administrative districts), shortened to just “arrondissements”. They are referenced by the arrondissement number rather than a name.
- ▶ Data for the arrondissements was selected from Open | DATA France:
<https://opendata.paris.fr/explore/dataset/arrondissements/table/?dataChart>
- ▶ Data for the arrondissements of paris was selected, reorganized in a dataframe and cleaned.

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

Foursquare API venues explore : Getting the venues of given neighborhoods

- - Classified neighborhoods by using venues distribution and counts.

	Neighborhood	Afghan Restaurant	African Restaurant	American Restaurant	Antique Shop	Argentinian Restaurant	Art Gallery	Art Museum	Arts & Crafts Store	Asian Restaurant	
0	10eme Ardt	0.000000	0.02	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.020000	.
1	11eme Ardt	0.014925	0.00	0.000000	0.00	0.000000	0.000000	0.014925	0.000000	0.014925	.
2	12eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.000000	.
3	13eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.200000	.
4	14eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.000000	.
5	15eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.000000	0.016393	0.000000	.
6	16eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.090909	0.000000	0.000000	.
7	17eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.016949	0.000000	0.016949	.
8	18eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.000000	.
9	19eme Ardt	0.000000	0.00	0.02381	0.00	0.000000	0.000000	0.000000	0.000000	0.000000	.
10	1er Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.042254	0.000000	0.000000	.
11	20eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.000000	.
12	2eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.010000	.
13	3eme Ardt	0.000000	0.00	0.000000	0.00	0.011905	0.047619	0.011905	0.000000	0.000000	.
14	4eme Ardt	0.000000	0.01	0.000000	0.00	0.000000	0.020000	0.010000	0.010000	0.000000	.
15	5eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.000000	0.000000	0.000000	.
16	6eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.025000	0.000000	0.000000	.
17	7eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.000000	0.020000	0.000000	0.010000	.
18	8eme Ardt	0.000000	0.00	0.000000	0.00	0.000000	0.060606	0.030303	0.000000	0.000000	.
19	9eme Ardt	0.000000	0.01	0.000000	0.01	0.000000	0.000000	0.000000	0.000000	0.000000	.



	Neighborhood	Italian Restaurant
6	16eme Ardt	0.000000
2	12eme Ardt	0.000000
3	13eme Ardt	0.016667
0	10eme Ardt	0.020000
19	9eme Ardt	0.020000

Arrondissements having the lowest frequency mean of Italian Restaurants

Foursquare API venues method: checking competition in the selected arrondissements

- No Italian restaurant among the ten most common venues in the selected arrondissements.

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue
6	16eme Ardt	Plaza	Lake	Park	French Restaurant	Boat or Ferry	Art Museum	Bus Station	Bus Stop	Zoo Exhibit
2	12eme Ardt	Zoo Exhibit	Supermarket	Monument / Landmark	Zoo	Antique Shop	Dive Bar	Flower Shop	Fish & Chips Shop	Fast Food Restaurant
3	13eme Ardt	Vietnamese Restaurant	Asian Restaurant	French Restaurant	Chinese Restaurant	Thai Restaurant	Juice Bar	Brasserie	Coffee Shop	Butcher
0	10eme Ardt	French Restaurant	Bistro	Coffee Shop	Café	Hotel	Indian Restaurant	Japanese Restaurant	Pizza Place	Korean Restaurant
19	9eme Ardt	French Restaurant	Hotel	Cocktail Bar	Bakery	Bistro	Lounge	Wine Bar	Japanese Restaurant	Turkish Restaurant

Discussion and Conclusions:

The boroughs selected at the end of this study are as follows:

- ▶ -9eme arrondissement
- ▶ -10eme arrondissement
- ▶ -12eme arrondissement
- ▶ -13eme arrondissement
- ▶ -16eme arrondissement

This is a preliminary study which allowed us to select the districts of Paris where there is room for another Italian restaurant. It is one approach among many. In fact, there are several factors that can condition the success of these establishments, such as the **purchasing power** of the inhabitants or the **attendance rate** of these districts.