OPENING JAPANESE RESTAURANT IN PARIS

CHOOSING THE RIGHT LOCATION IS VALUABLE FOR INVESTORS

- -Knowing what are the factors to open a Japanese restaurants is the key of success.
- -Here are some insight to choose the best location:
- > Public transport proximity
- > Population and mean salary for each district
- > Japanese restaurants already in place in Paris
- > Famous places around the current Japanese places

DATA ACQUISITION

- Population by district from: https://en.wikipedia.org/wiki/Demographics_of_Paris
- Mean Salary by district from:
 https://www.apur.org/observatoires-apur/familles/obs/3-3revenus-s/revenus-tab.htm
- Metro station list from:
 https://en.wikipedia.org/wiki/List_of_Paris_M%C3%A9tro_stations

DEMOGRAPHICS OF PARIS

Arrondissement	Area (km2)	Population	Population per km2	Median salary	Salary normalisation	Population normalisation
1	1.826	17268	9457	47561	0.484570	0.000000
2	0.992	22558	22740	31413	0.208951	0.023674
3	1.171	36727	31364	38404	0.328275	0.087082
4	1.601	28068	17532	41225	0.376425	0.048332
5	2.541	61080	24038	52651	0.571448	0.196066
6	2.154	44154	20499	70965	0.884038	0.120320
7	4.088	58166	14228	77759	1.000000	0.183026
8	3.881	39409	10154	73493	0.927186	0.099085
9	2.179	60293	27670	44895	0.439066	0.192544
10	2.892	95436	33000	24950	0.098638	0.349815
11	3.666	156831	42780	26535	0.125691	0.624569
12	6.377	146527	22977	34289	0.258039	0.578457
13	7.146	184235	25782	27183	0.136752	0.747206
14	5.621	142535	25358	34966	0.269594	0.560592
15	8.502	240723	28314	44692	0.435601	1.000000
16	7.846	170239	21698	70532	0.876647	0.684572
17	5.669	171945	30331	39302	0.343603	0.692206
18	6.005	202780	33769	19171	0.000000	0.830198
19	6.786	187799	27674	19753	0.009934	0.763156
20	5.984	199113	33274	20861	0.028845	0.813788

EXPLORE USING FOURSQUARE AROUND METRO STATION

- Calling the foursquare API with the explore function and providing the coordinates of each metro station.
- We retrieve a list of famous places and their categories around those metro stations.

Station	Latitude	Longitude	Name	Place latitude	Place longitude	Categories
Abbesses	48.884568	2.337929	Al Caratello	48.885248	2.336002	Italian Restaurant
Abbesses	48.884568	2.337929	Place des Abbesses	48.884406	2.338538	Plaza
Abbesses	48.884568	2.337929	Amorino	48.885056	2.336719	Ice Cream Shop
Abbesses	48.884568	2.337929	Chez Toinette	48.884224	2.336904	French Restaurant
Abbesses	48.884568	2.337929	Guilo Guilo	48.885942	2.337048	Japanese Restaurant

EXPLORE USING FOURSQUARE AROUND JAPANESE RESTAURANT

- We select then only the Japanese restaurants from the previous explore and we use again the foursquare API to explore famous places around those restaurants.
- Then we group the restaurants by their names and display with the most common venue around.

Restaurant name	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue
Ayama	Hotel	Japanese Restaurant	Bakery	Farmers Market	Fruit & Vegetable Store
Blueberry	French Restaurant	Clothing Store	Pastry Shop	Japanese Restaurant	Café
Bon Kushikatsu	Speakeasy	Coffee Shop	Japanese Restaurant	Italian Restaurant	Bar
Côté Sushi Vaugirard	French Restaurant	Hotel	Gym	Japanese Restaurant	Plaza
Ebis	Hotel	Women's Store	Restaurant	Israeli Restaurant	Plaza
Eizosushi	French Restaurant	Bistro	Hotel	Japanese Restaurant	Supermarket
Fukuyama	Bistro	Tapas Restaurant	Organic Grocery	Vietnamese Restaurant	Sandwich Place
Garden Sushi	Plaza	Bookstore	Japanese Restaurant	Gourmet Shop	Korean Restaurant
Guilo Guilo	French Restaurant	Bakery	Italian Restaurant	Japanese Restaurant	Bistro
Himeji-Jõ	Korean Restaurant	Italian Restaurant	Bakery	Hotel	French Restaurant
Hoki Sushi	French Restaurant	Plaza	Convenience Store	Bar	Japanese Restaurant
Jipangue	French Restaurant	Hotel	Brasserie	Brewery	Salad Place
Karaage-Ya Bourse	French Restaurant	Italian Restaurant	New American Restaurant	Pedestrian Plaza	Nightclub

RUNNING THE KMEAN ALGORITHM

First cluster

Label	5th Most Common Venue	4th Most Common Venue	3rd Most Common Venue	2nd Most Common Venue	1st Most Common Venue	Restaurant name
0	Café	Japanese Restaurant	Pastry Shop	Clothing Store	French Restaurant	Blueberry
0	Bistro	Japanese Restaurant	Italian Restaurant	Bakery	French Restaurant	Guilo Guilo
0	Canal Lock	Historic Site	Bar	Multiplex	French Restaurant	Koko Bistro
0	Bakery	Scenic Lookout	Church	Bookstore	French Restaurant	Sola
0	Bookstore	Bagel Shop	Tech Startup	Bar	French Restaurant	Wanobi
0	Chocolate Shop	Bookstore	Thai Restaurant	Health Food Store	French Restaurant	Yoshi
0	Café	Sandwich Place	Bakery	Italian Restaurant	French Restaurant	Yoshida
0	Salad Place	Historic Site	Bakery	Café	French Restaurant	Yuzu

Third cluster

Restaurant name	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	Label
Bon Kushikatsu	Speakeasy	Coffee Shop	Japanese Restaurant	Italian Restaurant	Bar	2
Garden Sushi	Plaza	Bookstore	Japanese Restaurant	Gourmet Shop	Korean Restaurant	2
Himeji-Jõ	Korean Restaurant	Italian Restaurant	Bakery	Hotel	French Restaurant	2
Kintaro	Japanese Restaurant	Bookstore	Pastry Shop	Supermarket	French Restaurant	2
La Maison du Saké	Chinese Restaurant	French Restaurant	Spa	Japanese Restaurant	Sushi Restaurant	2
Mushimushi	African Restaurant	Asian Restaurant	Spanish Restaurant	Steakhouse	Restaurant	2
Nakagawa	Restaurant	Bakery	Chinese Restaurant	Indian Restaurant	Bar	2
Nana-Ya	Cheese Shop	Japanese Restaurant	Burger Joint	Bakery	French Restaurant	2
Osaka Sushi	Bakery	Chinese Restaurant	Café	Bistro	Rock Club	2
Otakuni	Indian Restaurant	Asian Restaurant	Cosmetics Shop	Café	Japanese Restaurant	2

Second cluster

Restaurant name	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	Label
Ayama	Hotel	Japanese Restaurant	Bakery	Farmers Market	Fruit & Vegetable Store	1
Ebis	Hotel	Women's Store	Restaurant	Israeli Restaurant	Plaza	1
Jipangue	French Restaurant	Hotel	Brasserie	Brewery	Salad Place	1
Kiku	Hotel	Candy Store	Karaoke Bar	Restaurant	Corsican Restaurant	1
Kinugawa Vendôme	Hotel	French Restaurant	Women's Store	Israeli Restaurant	Dessert Shop	1
Miss Kō	Hotel	French Restaurant	Japanese Restaurant	Boutique	Pastry Shop	1
Otaku	Hotel	Japanese Restaurant	Gym / Fitness Center	Pizza Place	Historic Site	1
Sushi Star	Hotel	Japanese Restaurant	Sandwich Place	Art Gallery	Auto Dealership	1
Wrap'n'Roll Sushi	Hotel	Chinese Restaurant	Japanese Restaurant	Sandwich Place	Bistro	1

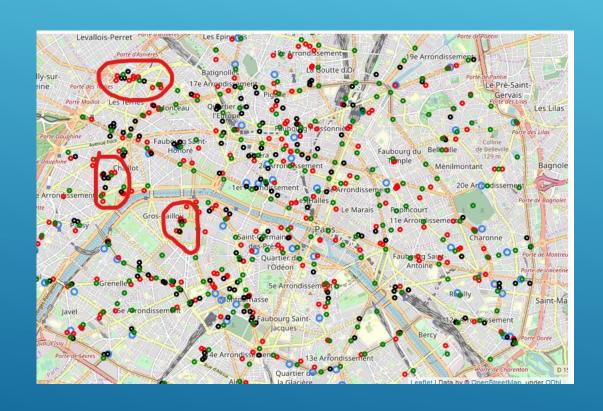
THE THREE DIFFERENT CLUSTERS

We can see three distinct clusters for famous places around Japanese restaurants:

- > 1st cluster: Around French restaurants.
- > 2nd cluster: Around hotels.
- > 3rd cluster: Around other Asians restaurants(or bars).

I decided to check more particularly clusters 1 and 2. We will visualize on a map the Japanese restaurant alongside with the French restaurants and hotels.

VISUALIZATION OF THE DIFFERENT PLACES



- Japanese restaurant
- Hotel
- French restaurant
- Metro station
- Suitable area

3 suitable areas around metro: Boissiere, porte de Champerret and La Tour-Mauburg.

CHECKING THE POPULATION AND MEDIAN SALARY

Station	Arrondissement	Population	Median salary
La Tour-Maubourg	7	58166	77759
Boissière	16	170239	70532
Porte de Champerret	17	171945	39302

Boissiere metro station seems to be in the district with high population and high salary.

CONCLUSION AND FUTURE DIRECTION

- Japanese restaurants seem to do well when there are some famous French restaurants, hotels or other Asian restaurant around.
- Based on this and on the demographics (salary and population) for each districts I can propose to the Japanese chef to settle down around **boissiere** metro station (which is 16 district, famous rich district).
- > Factors that could be included for future improvements:
- 1. Including the immigration by nationalities and by districts.
- 2. The renting price by meter square for each districts.
- 3. Age categories for each districts.