Opening a Restaurant in Paris

Finding the best location

Introduction

- Location is trivial when opening a restaurant
- A shortlist of the best location can be found through data clustering
- Understand the catering market in Paris is essential
- The catering market differ from borough (arrondissement) to another and even from neighborhood to other
- The analysis will be : which are the best neighborhood for opening a resultant knowing the population , farmer markets and events organized in the area.

Data Collection

- The data used is open source :

https://opendata.paris.fr/pages/home/.

- **Borough and neighborhoods & Population**

https://www.data.gouv.fr/fr/datasets/r/e88c6fda-1d09-42a0-a069-606d3259114e

- **Events** :

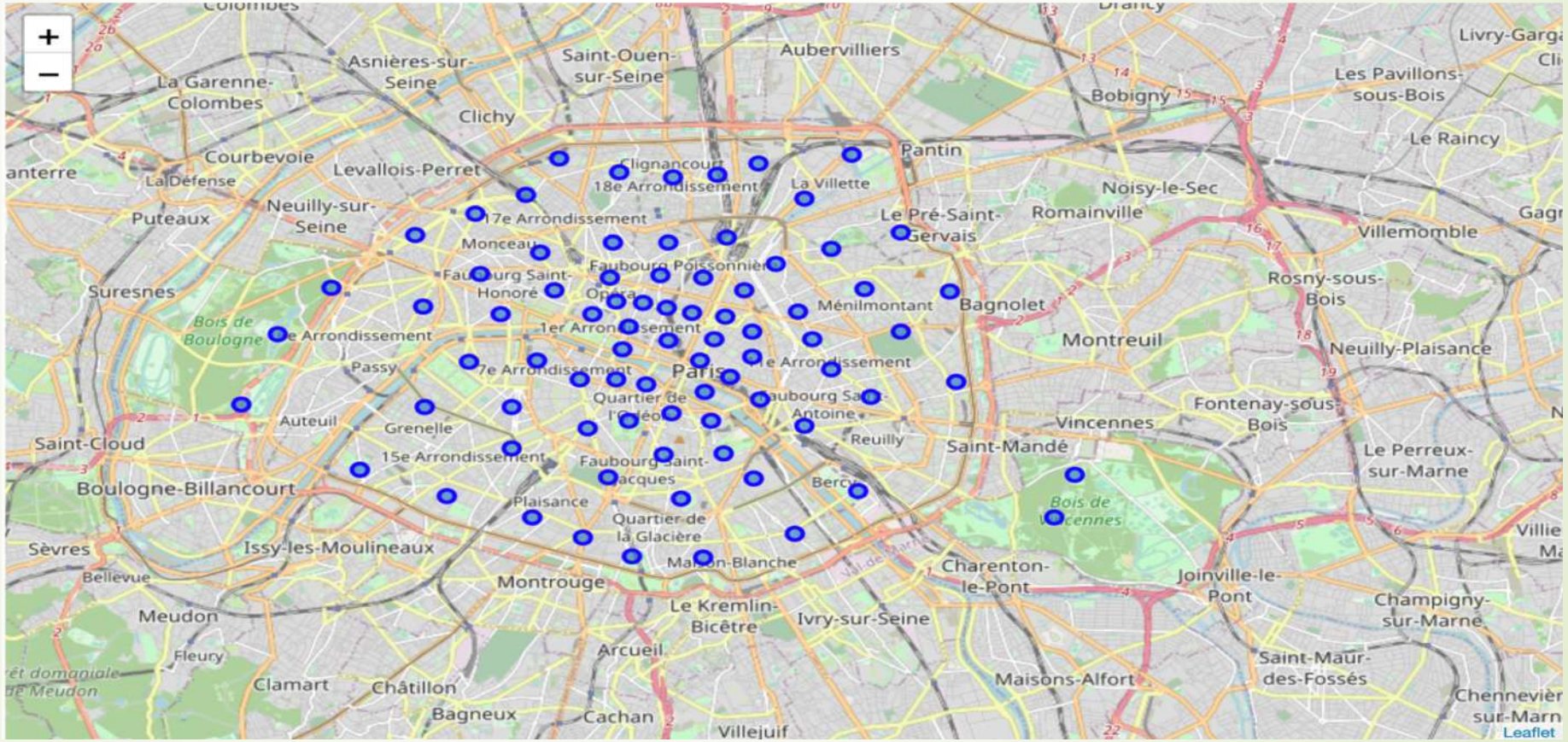
https://opendata.paris.fr/explore/dataset/que-faire-a-paris-/export/?disjunctive.category&disjunctive.tags&disjunctive.address_zipcode&disjunctive.address_city&disjunctive.access_type&disjunctive.price_type&basemap=jawg.transports&location=7,47.73195,2.41324

- **Farmer markets**

https://opendata.paris.fr/explore/dataset/marches-decouverts/download/?format=json&timezone=Europe/Berlin'

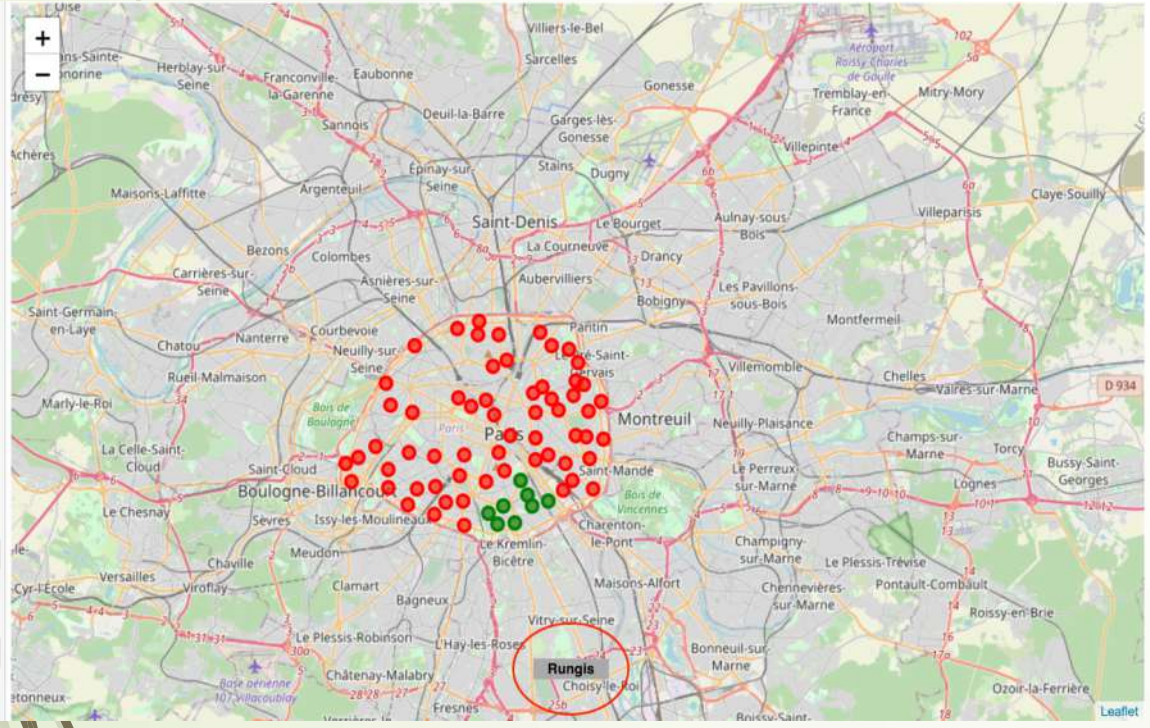
Analytic approach - **Neighborhoods** –

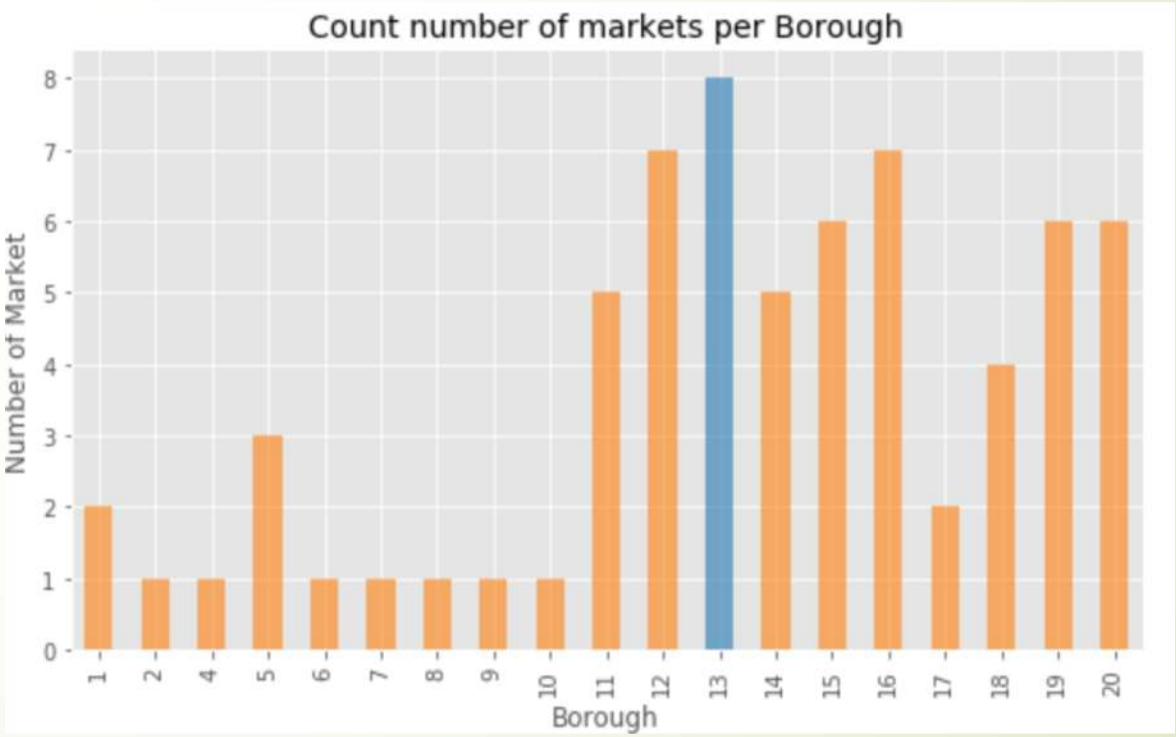
- The set of Paris' neighborhood
- there is the center of Paris , the inner circle , and the outer circle or what we call (the first crown).



Analytic approach - **Farmer markets** –

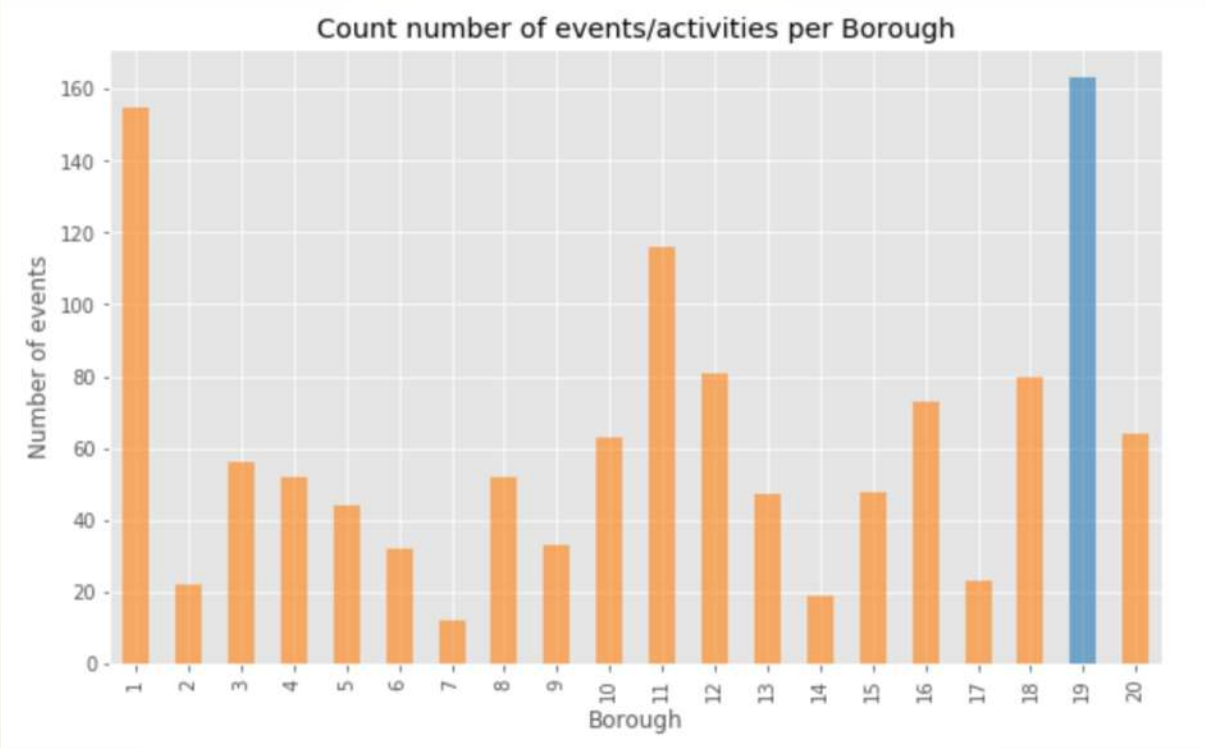
- Analyze the area where farmer market are more dominant
- We can see that there is a high concentration on the 13th arrondissement. Actually it is the neared to Rungis market which might explain this observation. Rungis is one of the biggest market in Europe





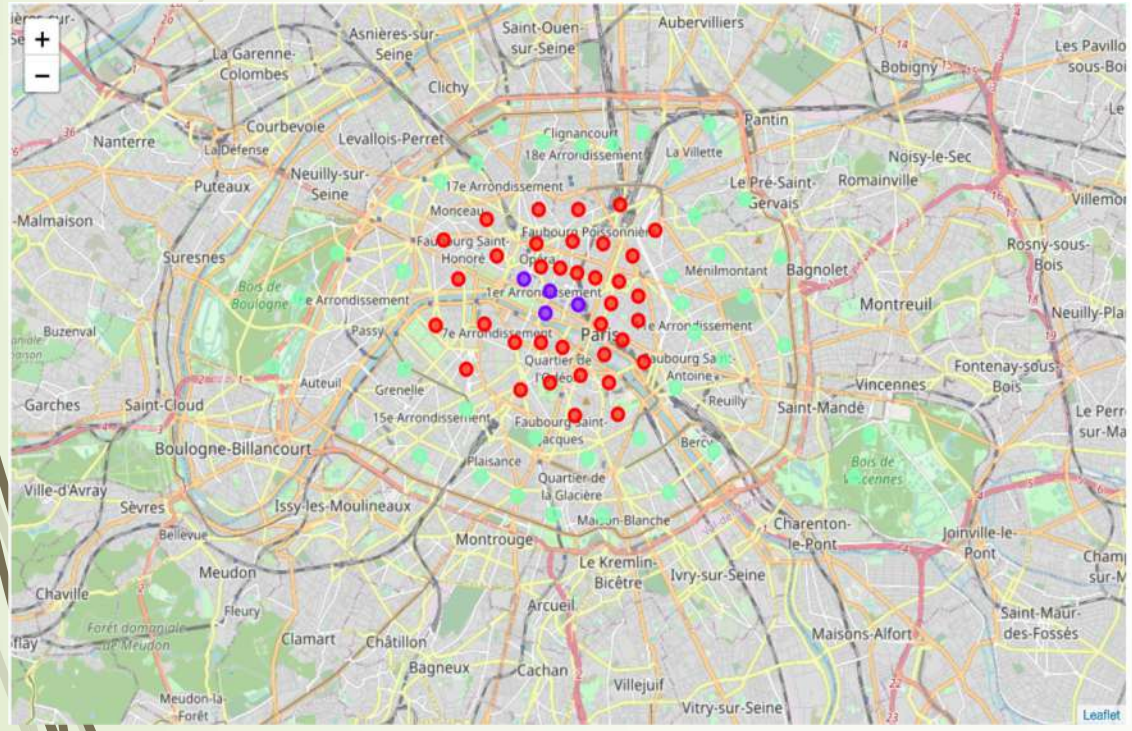
Analytic approach - **Events/activities** –

- Much more events are organized in the 19th arrondissement.
- As for the first conclusion, the density is on the outer circle , but in this case more on the north of Paris. We start sensing a certain trend



Results

- Using k-means (3 clusters) clustering algorithm we come to the following result



Cluster 0 is marked in red: This cluster unites the neighborhoods with the highest number of restaurant , but with a low number of markets and not a very significant number of events held during the year. Probably if we used the density of tourism , we would understand the high number of restaurant.

Cluster 1 is marked in purple : This cluster reflects low population , but very high event density. most people goes around these areas to attend event during the year , which might drive up the customer flow and hence increase the number of dishes served.

Cluster 2 is marked in purple : This cluster reflects a compromise between the three features. it is situated in area dense with population , adding the population movements coming for the events/activities and the advantages of having many markets. it seems it is the best areas to open a restaurant.

Conclusion & point of improvement

- We can say that the idea of investing in restaurant is more interesting around Paris rather than in the center of Paris.
- The main reason is that population boosted by the movement generated by events and other activities is situated around Paris.
- The competition is too harsh in the center of Paris.
- This is just a small analysis on the location choice , other aspects could be added to this analysis such as the purchasing power of the population
- The model can be improved using more pinpoint data to our analysis