# Enhanced BI towards tourist activity in Fano Italy

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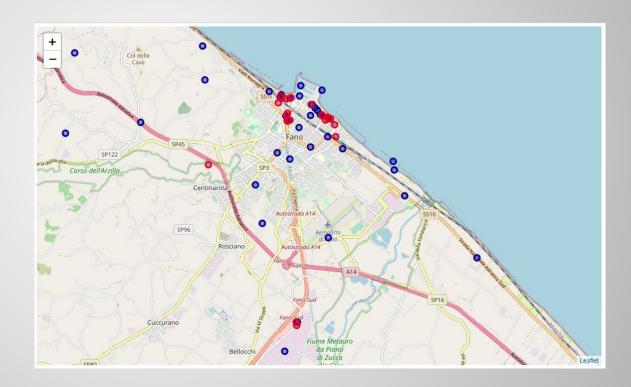
# Enhanced BI towards tourist activity in Fano Italy

- Tourism is one of the main economical drives in certain italian cities, specially during sea cities in the summer season.
- This implies in high tourist density in search for a hotel and/or place to eat during the vacation.
- Getting a deeper understanding of the disposal of restaurants and hotel in the city may enhance the chances of a more profitable restaurant and/or hotel

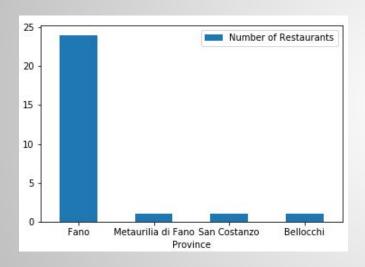


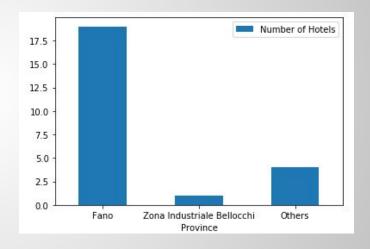
#### Amount a restaurants and Hotels

- Blue points are restaurants in the metropolitan area.
- Red points are hotels in the metropolitan area.

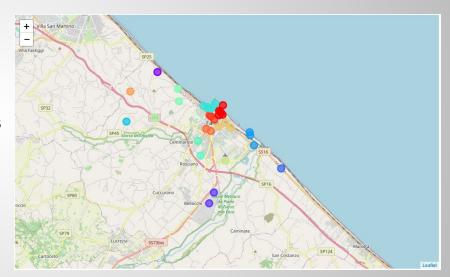


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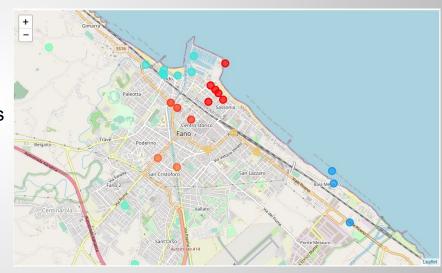




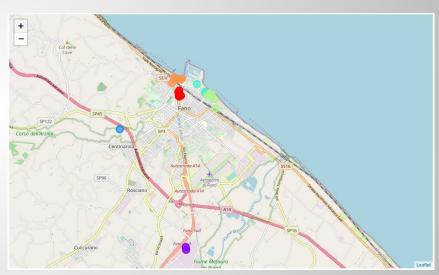
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- Using K-Means we can group all the restaurants into main clusters to understand where in the city there is a high/low restaurant density



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- Using K-Means we can group all the restaurants into main clusters to understand where in the city there is a high/low restaurant density
- 6 main Clusters can were found after convergence.



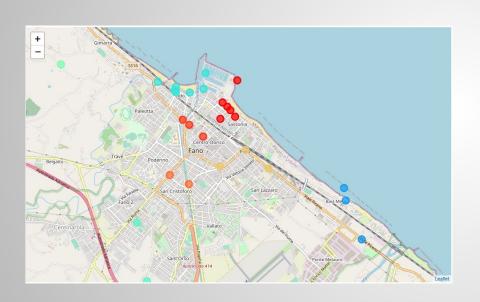
 Based on the amount of Restaurants clusters, we applied the same methodology for clustering the hotels in the city.

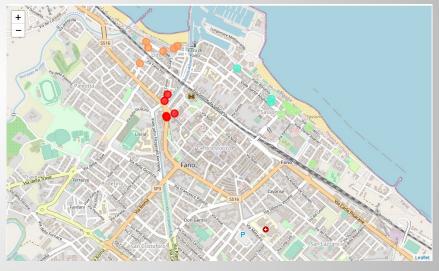


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- It can be seen that the highest hotel density clusters are the ones denoted by red and orenge.



# Grouping all of them





#### Conclusion

- From our analysis we have narrowed down the neighborhoods and found the locations in Fano with the highest/lowest restaurant and hotel density.
- Closest to the costal area there are a high number of restaurants bot almost no hotel as for the region close to the historical city there are a quite high number of restaurants and hotels.
- Very likely opening a restaurant close to the beach may not be so profitable due to the high competition. However, a hotel may be a good choice due to the low competitivity and high number of restaurants in the surroundings.

#### Limitations:

- Ranking of the restaurants is not included in the dataset.
- More data such as population, tourist activity, shops in each neighborhood will result in a better model output.



