

The background is a dark, textured surface composed of numerous small, dark gray or black 3D cubes and geometric shapes. These shapes are scattered across the entire frame, creating a sense of depth and complexity. The lighting is subtle, highlighting the edges of the cubes and giving them a three-dimensional appearance. The overall effect is a modern, abstract, and somewhat industrial aesthetic.

Centers of coffee

AN ANALYSIS OF COFFEE SHOPS IN ROME

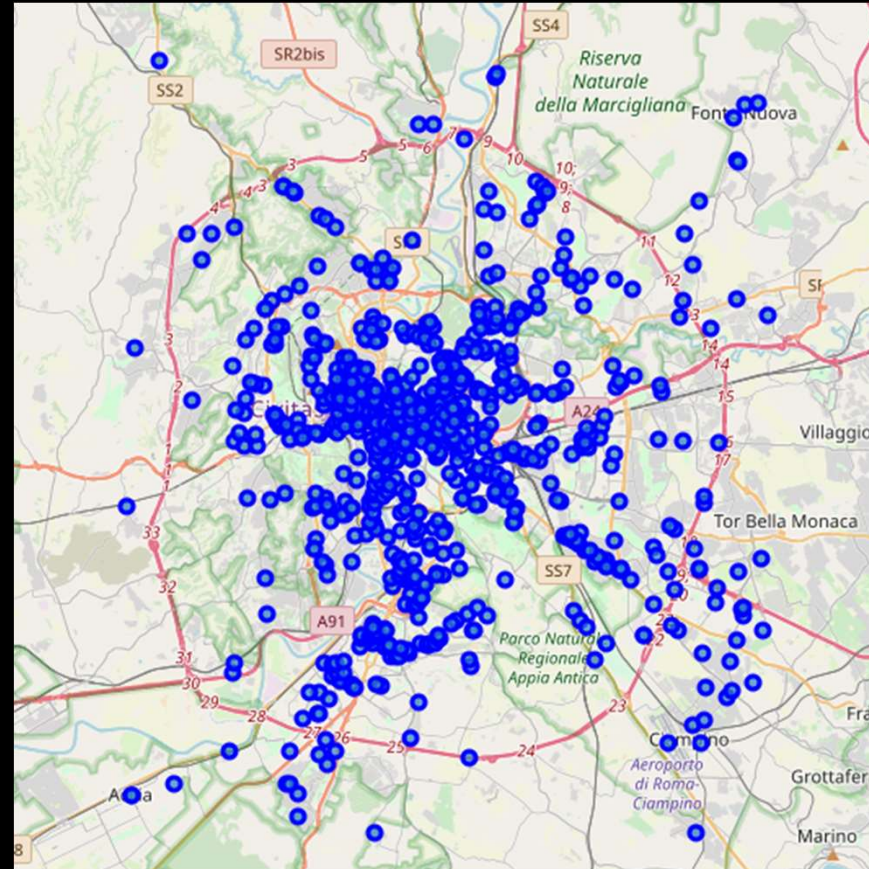
Business Problem



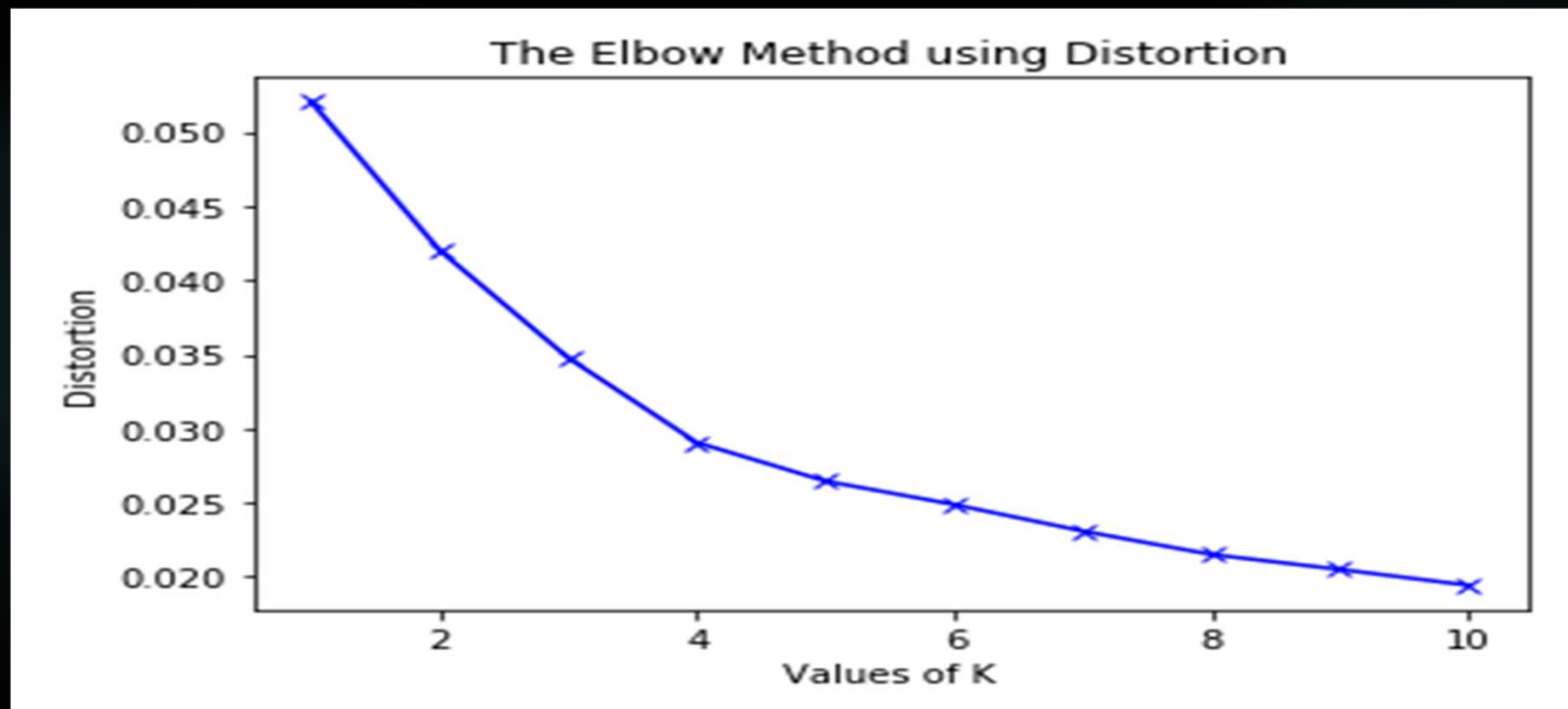
- ▶ An imaginary global coffee company is interested in entering a new city (Rome, Italy), they have decided to open coffee shops to compete with all the local vendors. They want to open the new shops as close as possible to the competition in order to have the cheapest prices in the area and run the competition out of business. They have come to me to ask for a geographical analysis, to find the perfect place for their shops. The coffee shop industry is worth over 100 billion dollars and is growing fast.

Data from foursquare

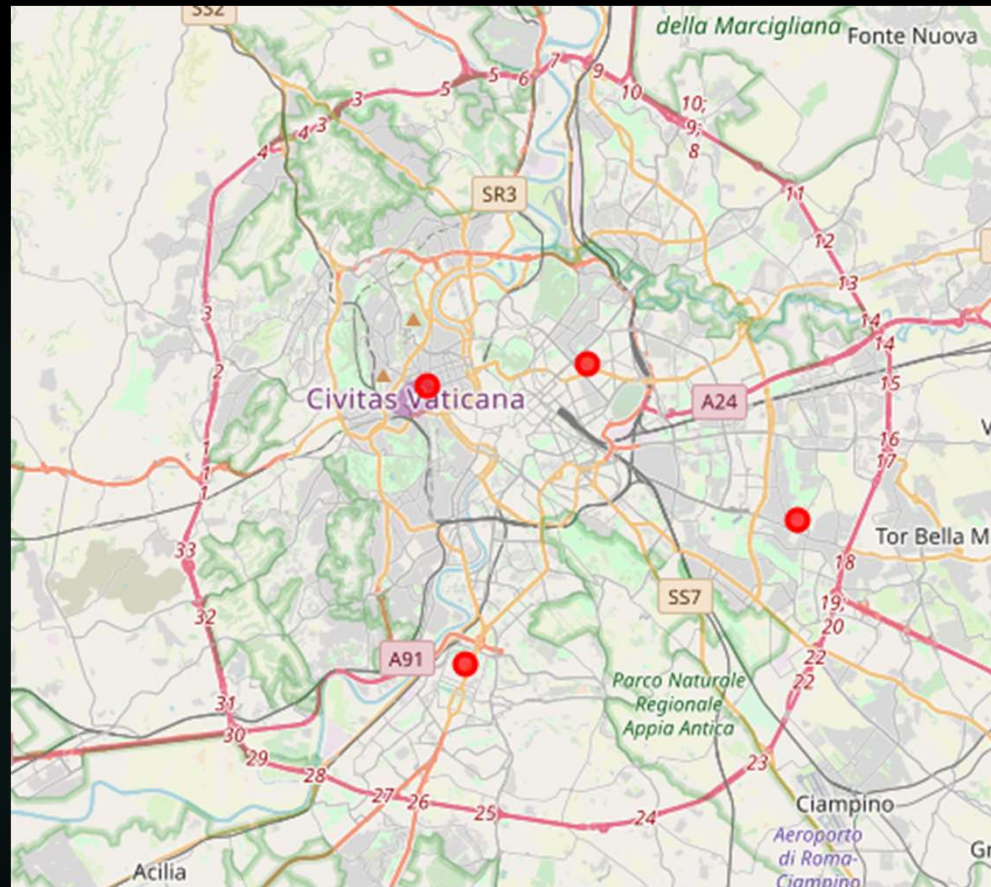
- This is a map of all the coffee shops in Rome.



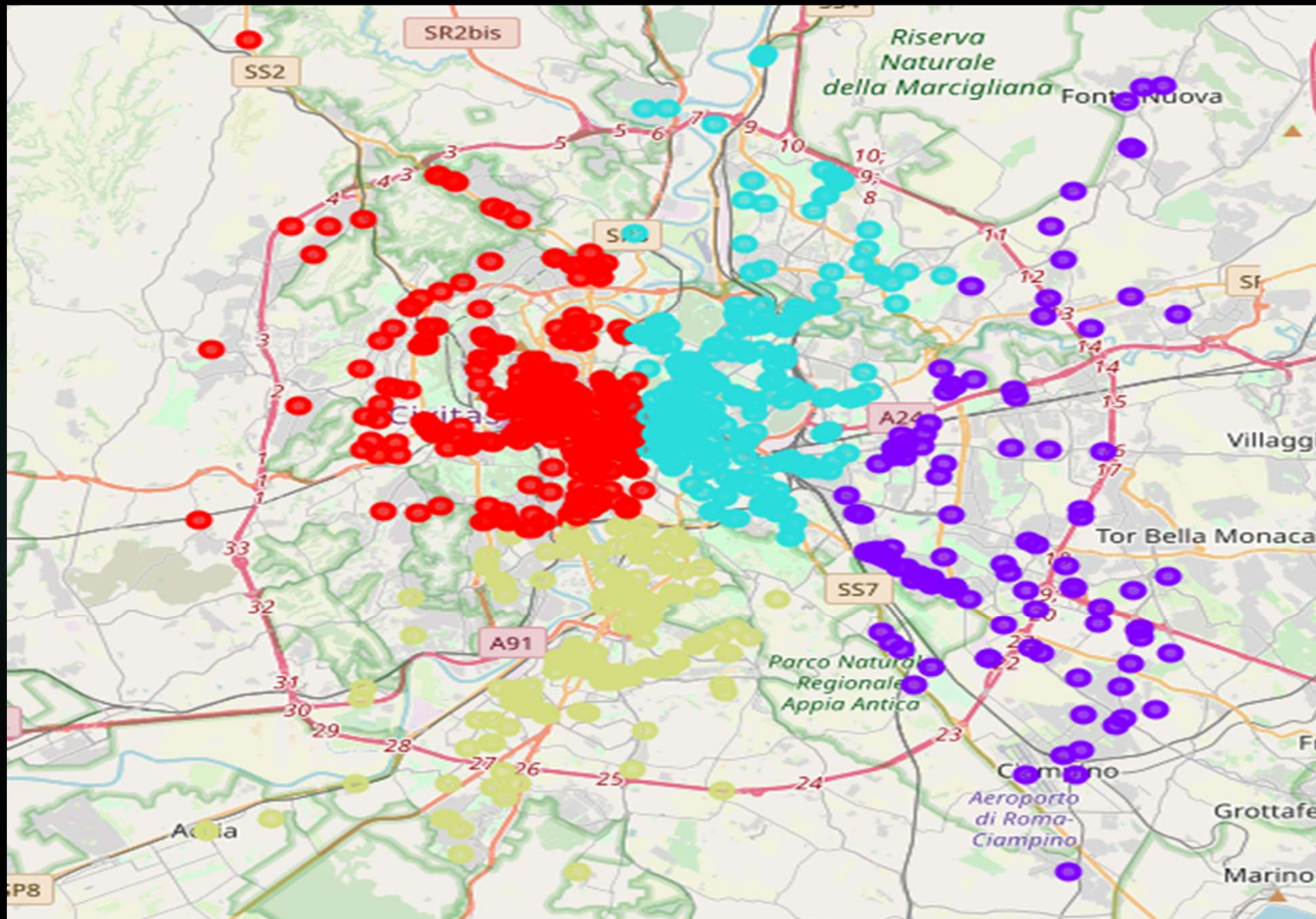
Elbow method to find the best k ($k = 4$)



The 4 centers



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Conclusion



- ▶ I used the foursquare API and I have found the four centers of coffee in Rome.
- ▶ This project can be expanded too any location-based industry and any city, I think it is a very useful tool to have. Rome has a lot of coffee shops, so it makes for a good example.
- ▶ It can also be applied with weights for multiple types of shops, for example close to coffee shops but far away from ice cream shops.