Finding the best district in Bangkok to open a foreign restaurant

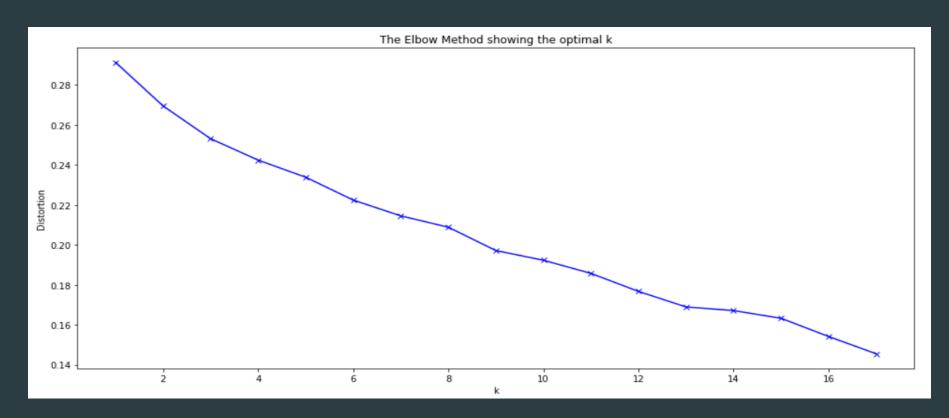
Finding the ideal district is valuable for expats willing to open a food busines

- Bangkok is a very attractive destination for tourists, welcoming more than 22 million visitors every year
- Expats and locals like foreign food, either out of curiosity, change or habit
- ► Each of the 50 districts of Bangkok is unique, so locating the best district to open a foreign restaurant is a very important factor for success

Data Acquisition and Cleaning

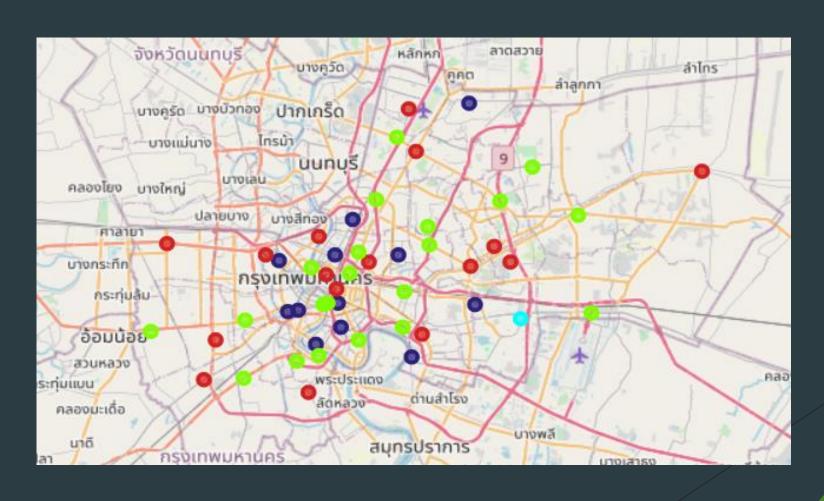
- Hypothesis: the nature of the demographics in the district doesn't matter, and the nature of the venues is enough to classify the districts. Therefore, the two following data sources are enough.
- Wikpiedia for scraping the district data https://en.wikipedia.org/wiki/List_of_districts_of_Bangkok The idea is to scrape the data and make it a useable dataframe
- Foursquare to use the API. We will be able to locate which places are the most suited for opening a restaurant based on their venue data.
- ► Merge the two datasets and process it (groups and aggregations, OHE)
- ▶ Result is a dataframe of 50 rows and 170 attributes. For each district is given the frequency of occurrence of each of the 170 venue types.

Clustering: no elbow on the graph



Some empirical tests with the map rendering show us that a good value of k for this purpose is 4.

Result: 4 types of district spread all over Bangkok



Conclusion

- Found 4 types of district:
 - ► The outsider (ignored)
 - ▶ The dynamic areas (the cluster that we will focus on)
 - ► The resiential areas
 - ► The food areas
- By looking at the most occurring venues or real-life details such as the population or the activity, we can pick within the 21 districts of the dynamic areas.
- The best district to open a foreign restaurant is Phayathai (10400).