

I. Introduction/Business Problem

I would like to start a fast food restaurant, and therefore I am looking to identify which areas in Paris would be the best to do so. Hence, I could use datascience techniques to analyse paris boroughs environments to determine which boroughs are the most suitable. The ideal location will depend on the target market (families, young adults...)

The According to Statistita, there are around 180,000 restaurants in France including 20% located in Paris. The French restaurant industry sales increased by 1.6% to reach EUR50.4 billion in 2018. The fast food industry appears to be the most dynamic segment. It represents 37% of restaurants in France and generates around EUR19 billion of sales. The fast-food average ticket increased by 1.4%. Based on the figures displayed by the Paris Chamber of Commerce, 23% Parisian restaurants are fast-food restaurant only topped by traditional French restaurants. It is the fastest growing segment with a growth of 11% (in terms of number of restaurants) between 2014 and 2017.

II. Data description

In order to perform this analysis, I will use the following datasets :

1. The list of Paris boroughs
2. The list of Paris metro stations
3. The annual trafic for each metro stations
4. The Foursquare API

I will use the Foursquare API to get the venues around metro stations / neighborhoods.

Based on the venue type distributions, I will use a clustering algorithm (Kmeans) to group metro stations / neighborhoods. It would then be possible to determine which clusters would be suitable to start the business.