IBM DATASCIENCE CAPSTONE

"IBM Data Science Capstone Project for Coursera"

Opening of a business in the city of Toulouse

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Introduction:

Opening a company is difficult and finding the right industry is complicated. An entrepreneur starting his business will find it difficult to function and make a profit if all the aspects are not studied. Of course, we could go blind, but this is not a solution. I therefore prepared this project, which is primarily intended for businesses or future businesses in the city of Toulouse. It is a question here of rigorously studying the data present on the city of Toulouse, restaurants, hotels, bars, various and varied sales companies, much more. All in order to make a complex but detailed analysis of the current state of the market. We will help companies here to make decisions, since this is one of the essential aspects of Data Science and Business Intelligence. Make yes, but wise decisions, taking into account the issues of the business, which I will detail in the section below.

Methodology of data:

We will use data from the city of Toulouse via the Foursquare site. With the collection of important data, within a fairly large radius, from the city center, we will be able to establish statistics. We are going to transform the desired data, it's a saying the name, the sector of activity, the location into a table. Then we will clean up the data and normalize it so that we can use it afterwards. Then I would do a statistical analysis of what is present in the table, average, outliers. Then we visualize the whole rendering in a Matplotlib graphic. From there we can determine which sectors of activity are blocked or free.

We will then analyze from another source of data, the influx of visitors depending on the location in Toulouse. The figures are official data of the city and we will analyze them, put them in relation to determine which places are the most frequented. We think we find a link between the number of businesses and attendance, but we cannot be sure without having made a correlation. If we manage to find a place frequented, with few companies, this could be an advantage for starting a business. This is why, in addition to the descriptive statistics, we will compare the following elements:

- Number of businesses per street
- Number of companies by sector of activity
- Crowds of visitors by street