Capstone Project - The Battle of the Neighborhoods (Week 2)

Opening a New Coffee Shop in Madrid

English Adaptation

Introduction: Business Problem

The aim of this project is to find which is the optimal location to open a new Coffe Shop. Specifically, this report will be targeted to stakeholders interested in opening a "Realfood" restaurant in Madrid, Spain.

The new coffee is supposed to have healthy menus for having lunch and breakfast, in order to be the favourite place to have lunch of business travellers that are in the city for working. For this reason, the target group of the restaurant are male and female workers of companies, with good salaries to afford eating out every day, who are really concerned about the quality of the products that they eat.

Since there are many coffees in Madrid, I will try to detect locations that are not already crowded with coffees and near big business hotels. I will use data science to find these areas.

Data Section

Based on definition of our problem, for the project it is needed the following data:

- The number of menus restaurants that are in the same zone.
- The number of business hotels in the area.

To explore and target recommended locations across different venues I will access data through FourSquare API.

Methodology

The Methodology section will describe the main components of our analysis and predication system. The Methodology section comprises five stages:

1. Collect the Data about the coffees shops and hotels in Madrid.
2. Explore and understand the data obteined with FourSquare API.
3. Data preparation to find the nearby of the issues.

4. Visualize the results.
5. Obtein conclusions.

Results

In the following picture we can see the currently density of coffee shops and hotels in the city centre of Madrid.

In the map above, we can see Madrid city and the density of coffee shops and hotels in its city centre. The analysis shows 100 issues in radius of 15km. The huge density is south of the area, very close to the train station, where we can see a great number of hotels. In the north, there is also a good proportion between hotels and coffee shops.

Gran Via, the main street of the city shows less density than other areas. However, it is a commercial crowd street and the target group of the project is supposed to avoid this area. In addition, buying or renting a local in that street is very expensive and there are not free locals neither.

The West part, exactly over Retiro's Park shows like the perfect place to set up the new coffee shop. It is an area with low density, with important and business hotels. Furthermore, the area is crow of enterprises so it is perfect to attract the target group.

Conclusion

To sum up, the aim of the project was to achieve the perfect location to set up a new coffee shop in the city centre of Madrid. Data science tools were used to get the best optimal place.

The target group of the coffee shop were business travellers, so the location of hotels and currently coffee shops in Madrid were gotten thanks the FourSquare Api application.

After having all the necessarily information in a map, we were able to take a conclusion based on evidences. The best area to open the new coffee shop is in the Goya's neighbourhood (over Retiro's Park), where there are companies and business hotels and the currently density of coffees is low.