IBM Data Science Capstone project. Report

Districts of Moscow. Data analysis

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1. Introduction

As each big city Moscow has districts that differs from each other by their accommodation, prestigiousness and house values. The modern division of the city was set during the Soviet period of our history. The idea of my research is to look, which types of venues are popular within different parts of Moscow and see which recommendations can be given to stakeholders that wants to set up a new place in Moscow: where and what should be done to attract local people.

2. Data

2.1. Foursquare location data.

As I observed earlier Foursquare has a lot of Data about venues in Moscow, that will help us to examine most popular venue types in each district. As I observed earlier Foursquare has a lot of Data about venues in Moscow, that will help us to examine most popular venue types in each district.

2.2. Moscow administrative data.

As many big cities all around the world Moscow has a lot of administrative data in open admission, which will help us to distinguish districts relying on its administrative quality.

2.3. Structured and unstructured data.

Another our task is to collect (and structure) data which will us represent prestigiousness of districts: average price of an apartment, average price of a square meter of an apartment and so on.

3. Methodology

As almost every old European city Moscow is stretched from its center, thus its center districts are more prestigious than far ones. Looking where the density of a specific type of venue is higher we may suggest where it is better to open a coffee shop for example. Therefore we regard the city as a set of clusters based on its administrative districts.

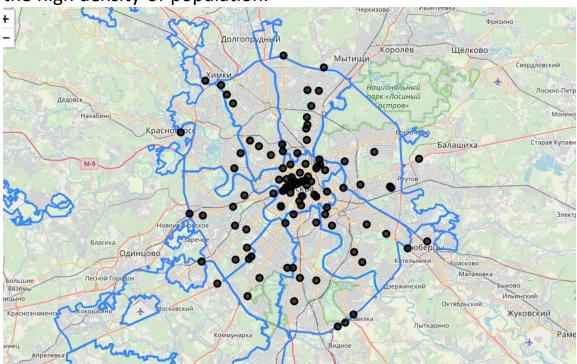
4. Results

As a result we obtained a certain number of maps with shown clusters of

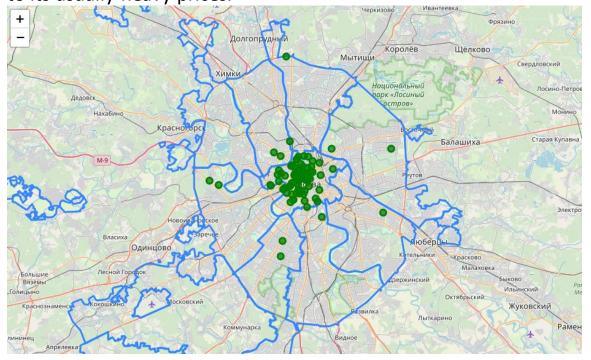
distribution of a specific type of venues. Analyzing them gave us the opportunity to suggest a certain venue to open in certain district.

5. Discussion

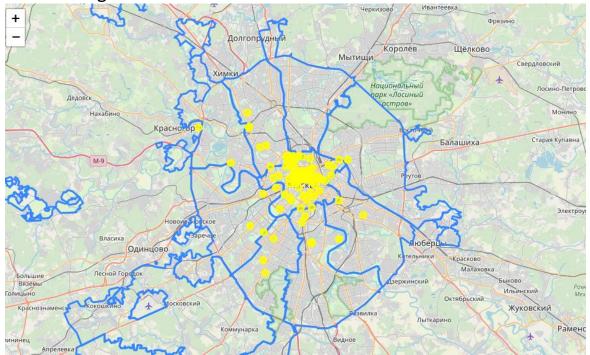
5.1. Central administrative district is a good place to open any kind of venue due to a big number of tourists visiting it and offices located nearby. 5.2. Fast food restaurants may be opened in any district od Moscow due to the high density of population.



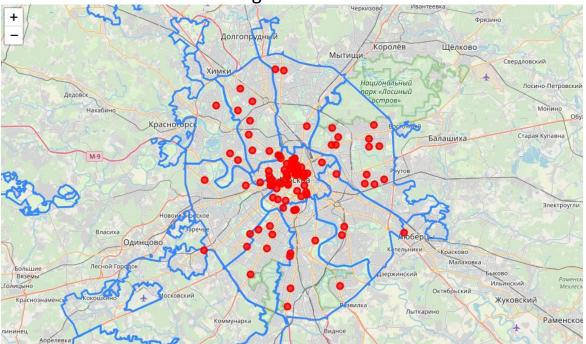
5.3. French restaurants should be opened mostly in the central district due to its usually heavy prices.



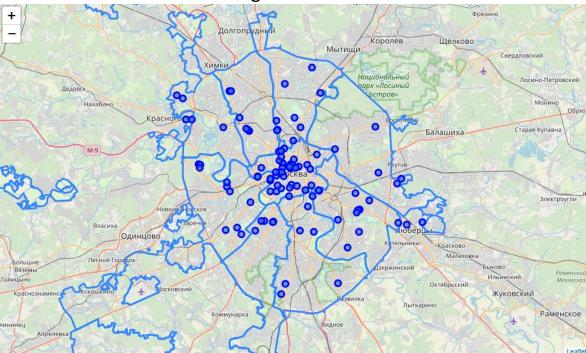
5.4. Coffee shops may be opened in central, western and southern Moscow due to a big number of offices located there.



5.5. Pizzerias may be opened in any district but opening in the Southern administrative district is of high risk.



5.6. Sushi bars may be opened in any district but opening in the Eastern administrative district is of high risk.



6. Conclusion

Moscow is a big city and it gets bigger and bigger from day to day. A lot of people come here everyday. That is why Moscow needs new places to go, new venues to visit. Thus choosing right address for it is a key to a profitable business.