Places in Moscow to open Italian restaurant

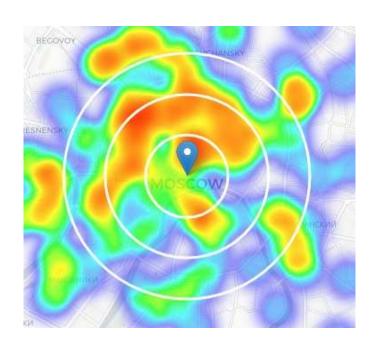
Introduction: Business Problem

- Trying to find an optimal location for Italian restaurant in Moscow, Russia.
- Detect locations that are not already crowded with restaurants.
- Particularly interested in areas with no Italian restaurants in vicinity.
- Prefer locations as close to city center as possible, assuming that first two conditions are met.
- Generate a few most promising districts based on this criteria.
- Advantages of each area will then be clearly expressed so that best possible final location can be chosen by stakeholders.

Data

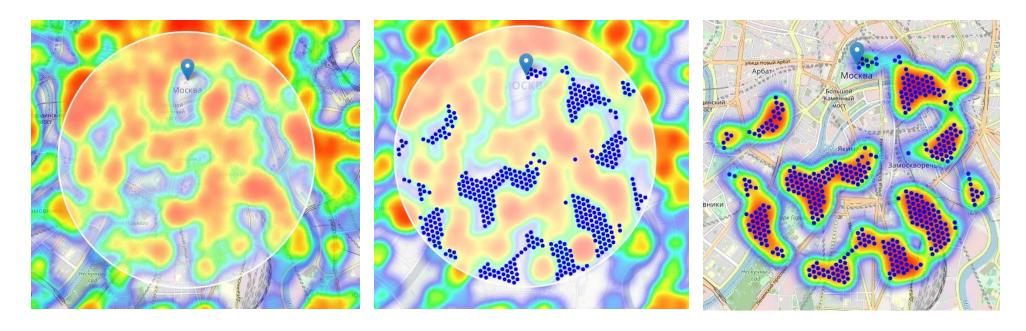
- centers of candidate areas will be generated algorithmically and approximate addresses of centers of those areas will be obtained using Google Maps API reverse geocoding
- number of restaurants and their type and location in every neighborhood will be obtained using Foursquare API
- coordinate of Moscow center will be obtained using Google Maps API geocoding of well known Moscow location (Kremlin)

Italian restaurants heatmap



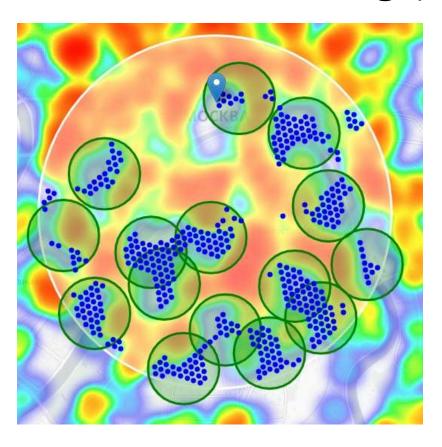
High density of Italian restaurants on the north

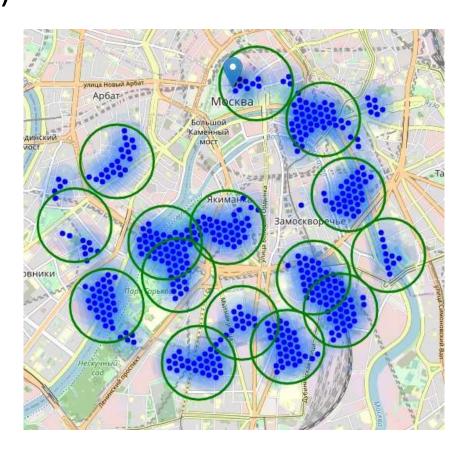
Location candidates



Locations with no more than two restaurants in radius of 250 meters, and no Italian restaurants in radius of 400 meters

K-mean clustering (15)





Recommended locations



Conclusion

- Found major zones of interest (containing greatest number of potential locations) and addresses of those zone centers were created to be used as starting points for final exploration by stakeholders.
- Final decission on optimal restaurant location will be made by stakeholders based on specific characteristics of neighborhoods and locations in every recommended zone, taking into consideration additional factors like attractiveness of each location (proximity to park or water), levels of noise / proximity to major roads, real estate availability, prices, social and economic dynamics of every neighborhood etc.