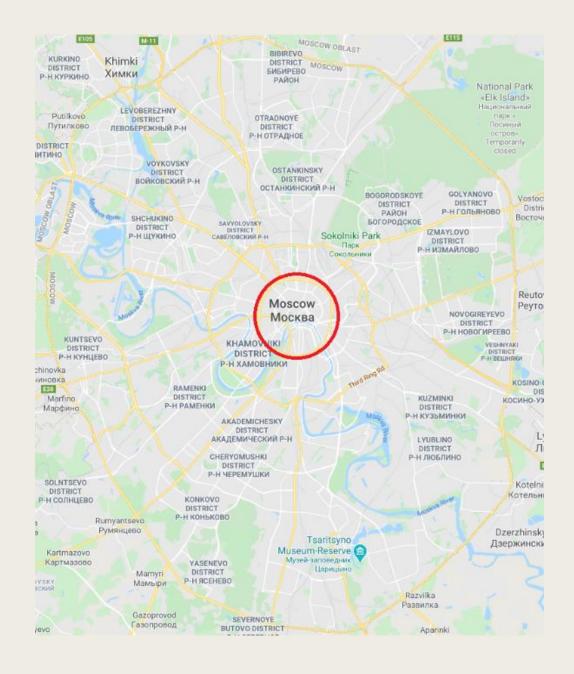
INVESTOR DILEMMA

AMK C-IBM-C9-F, Final Project

Moscow City Center

Problem

As a potential investor, we will be looking at the restaurants and cafes across Moscow city center, and the best place to open one. We will explore the best locations for Italian ("pizza"), Japanees ("sushi") and Russian cuisine ("Russian") restaurants across the city center of Moscow.



Data Description

- In order to answer the above questions, the data of Moscow city center will include city center point (latitude & longitude), restaurants, restaurant ratings, tips and likes.
- Moscow geodata containing the city center point (latitude & longitude) will be obtained from the public data: https://en.wikipedia.org/wiki/Moscow
- All data related to locations (restaurants, cafes) and the respective venues restaurants by cuisine type will be obtained via the FourSquare API utilized via the request library in Python.

Data for 100 Venues (head 5)

Italian

| | ID | Name | Category | Short | LAT | LON | Likes | Rating | Tips |
|---|--------------------------|-----------------------|-------------|-------|-----------|-----------|-------|--------|----------|
| 0 | 59be341a9cadd90e7e05adbc | Camorra Pizza e Birra | Pizza Place | Pizza | 55.755135 | 37.636913 | 962 | 7 | 0.785356 |
| 1 | 546e146b498e86d7178d336d | Pinzeria by Bontempi | Pizza Place | Pizza | 55.746038 | 37.602141 | 346 | 9 | 0.593781 |
| 2 | 59dcac56da2e0054b468441e | II Pizzaiolo | Pizza Place | Pizza | 55.756817 | 37.621677 | 688 | 7 | 0.982949 |
| 3 | 59a01396037be1415cee1310 | Pinsa Maestrello | Pizza Place | Pizza | 55.758779 | 37.645721 | 378 | 1 | 0.785356 |
| 4 | 5a366203838e5972571a9eed | Pinzeria by Bontempi | Pizza Place | Pizza | 55.766728 | 37.624124 | 345 | 5 | 0.003009 |

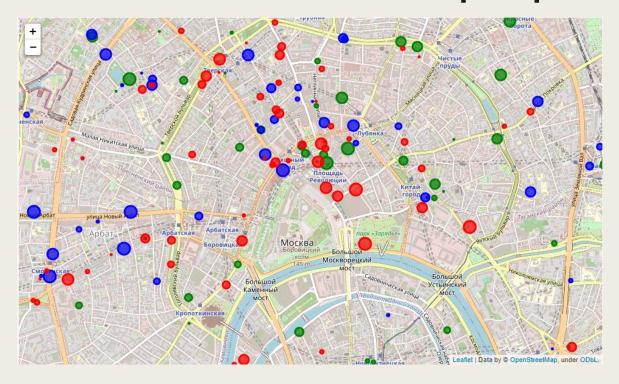
Japanese

| | ID | Name | Category | Short | LAT | LON | Likes | Rating | Tips |
|---|--------------------------|-----------------------|---------------------|----------|-----------|-----------|-------|--------|----------|
| 0 | 51cefa43498ebe6beaa060d9 | Novikov | Asian Restaurant | Asian | 55.757512 | 37.612967 | 638 | 6 | 0.864322 |
| 1 | 5ba3a67ead910e002c645e8c | Ки-До | Sushi Restaurant | Sushi | 55.747378 | 37.597697 | 698 | 6 | 0.467337 |
| 2 | 57c027d7498e8532054695f3 | Corner Café & Kitchen | Japanese Restaurant | Japanese | 55.751496 | 37.586757 | 106 | 7 | 0.416080 |
| 3 | 59248954a4ba7c7d5af54ff4 | Buba by Sumosan | Sushi Restaurant | Sushi | 55.769191 | 37.620782 | 426 | 9 | 0.997990 |
| 4 | 5adc8a6ddee7701e6bd89ba4 | Shiba | Japanese Restaurant | Japanese | 55.763537 | 37.597078 | 382 | 6 | 0.645226 |

Russian

| | ID | Name | Category | Short | LAT | LON | Likes | Rating | Tips |
|---|--------------------------|--|--------------------|---------|-----------|-----------|-------|--------|----------|
| 0 | 541c4b83498e3fbc997f2c61 | Dr. Zhivago (Dr. Zhivago (Dr. Живаго)) | Russian Restaurant | Russian | 55.756882 | 37.614406 | 464 | 9 | 0.728370 |
| 1 | 4b48b273f964a5202a5326e3 | Cafe Pushkin (Кафе Пушкинъ) | Russian Restaurant | Russian | 55.763797 | 37.604698 | 770 | 1 | 0.818913 |
| 2 | 4de4c0083151aec9e5cd2f25 | Mari Vanna (Мари Vanna) | Russian Restaurant | Russian | 55.762697 | 37.595644 | 617 | 5 | 0.597586 |
| 3 | 5873b35702b60e3b699f05bb | Beluga (Белуга) | Russian Restaurant | Russian | 55.756685 | 37.614032 | 571 | 4 | 0.356137 |
| 4 | 4dccf84eb0fb25f6e31e3408 | Ресторан «Сандуны» | Russian Restaurant | Russian | 55.764381 | 37.620988 | 420 | 1 | 0.396378 |

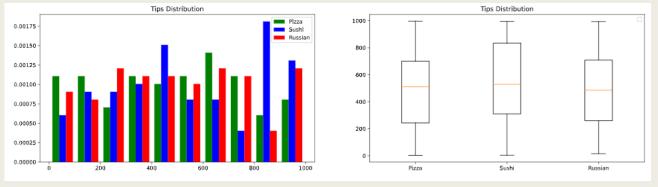
Distribution of Tips per Venue



Italian ("pizza")

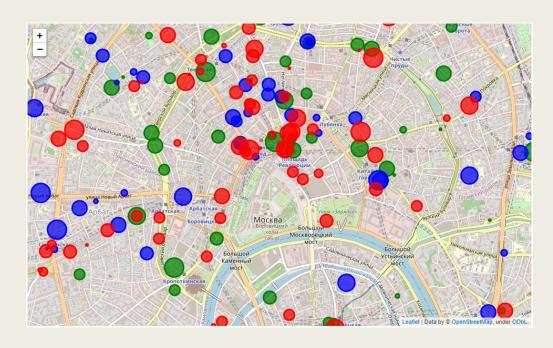
Japanese ("sushi")

Russian cuisine ("Russian")



Average tips for pizza = 486.69 Average tips for sushi = 549.84 Average tips for Russian = 496.86

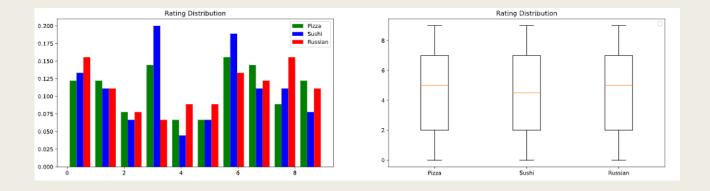
Distribution of Ratings per Venue



Italian ("pizza")

Japanese ("sushi")

Russian cuisine ("Russian")

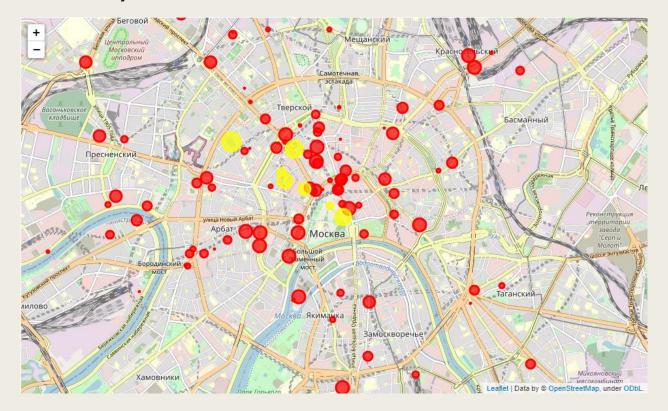


Average rating for pizza = 4.56 Average rating for sushi = 4.37 Average rating for Russian = 4.65

Results

So from the map we see that average tips are based on the distance from the city center (the far – the less). Based on ratings, investor should prefer Russian cuisine. It is also obvious that foreign tourists visiting city center would prefer Russian cuisine, rather than Italian or Japanese.

Map for a Potential Investor (K-Means 7)



Russian restaurants with their ratings are marked red in the picture. Yellow rounds represent clusters. We see that the best places are near the city center and near the Boulevard ring, where many cafes/restaurants are located, and many known tourist routes are also exist.