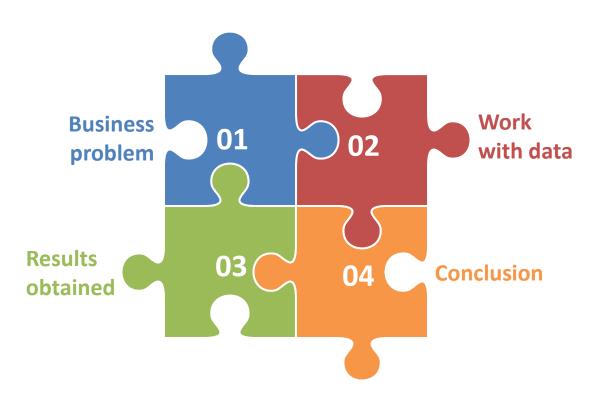
Viktor Klementev, klementiev.victor@gmail.com





#### **Business problem**



There are 119 districts in Moscow and there should be similarities among them



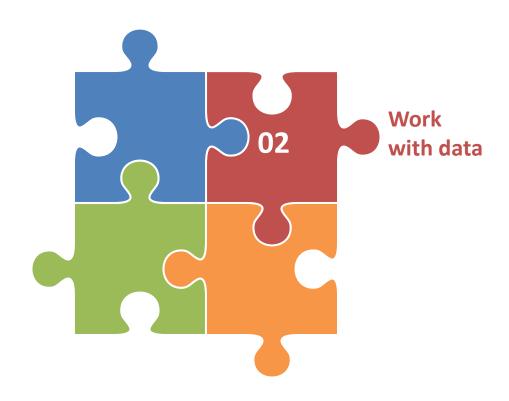
To find similarities I'm going to analyze socioeconomic indicators and venues clustering

Interested in final results parties:

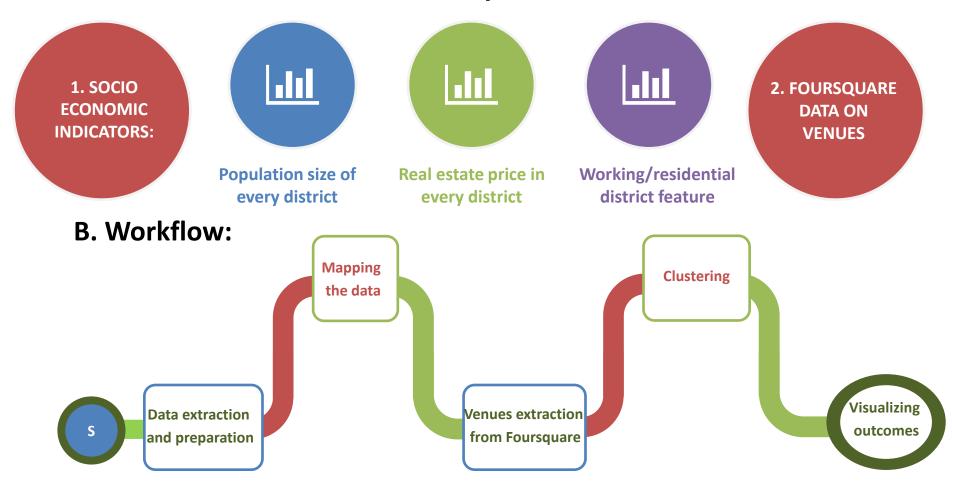


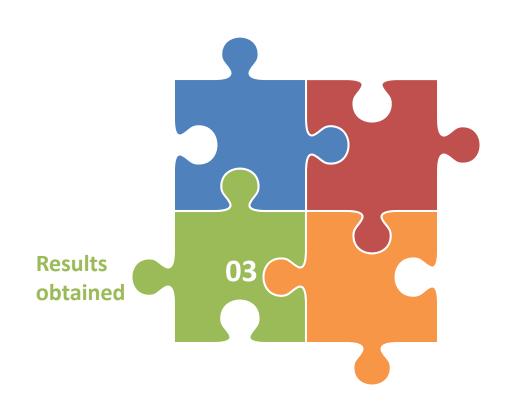
- business people who study city environments to find out new opportunities;

- urbanists and sociologists



#### A. Data that will be used and analyzed:



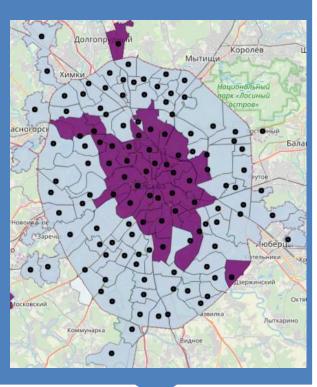


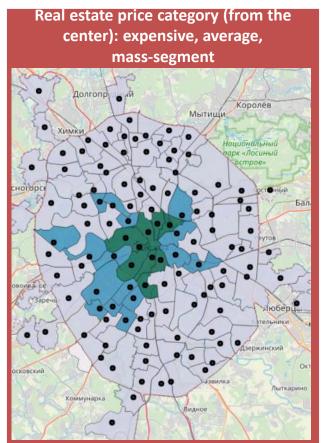
## Web scrapping and data cleaning/wrangling results:

	District	District_en	Population	% of homeplaces	% of workplaces	Price per sq m	Latitude	Longitude	Work/residential district	Dummies for work/residential district	Price categories	Dummies for price
0	Академический	Akademichesky District	109387	41.5	58.5	205702	55.689738	37.576771	residential	0	average	3
1	Алексеевский	Alexeyevsky District	80534	35.4	64.6	191495	55.814878	37.650668	mostly for work	1	mass- segment	2
2	Алтуфьевский	Altufyevsky District	57596	60.5	39.5	147175	55.880255	37.581635	residential	0	mass- segment	2
3	Арбат	Arbat District	36125	12.7	87.3	362197	55.751199	37.589872	mostly for work	1	expensive	4
4	Аэропорт	Aeroport District	79486	38.5	61.5	206218	55.800402	37.533156	mostly for work	1	average	3
5	Бабушкинский	Babushkinsky District	88537	60.0	40.0	154080	55.865958	37.663894	residential	0	mass- segment	2
6	Басманный	Basmanny District	110694	17.0	83.0	224197	55.767281	37.669773	mostly for work	1	average	3
7	Беговой	Begovoy District	42781	18.8	81.2	237475	55.781917	37.566300	mostly for work	1	average	3
8	Бескудниковский	Beskudnikovsky District	79603	75.1	24.9	149875	55.863739	37.557322	residential	0	mass- segment	2

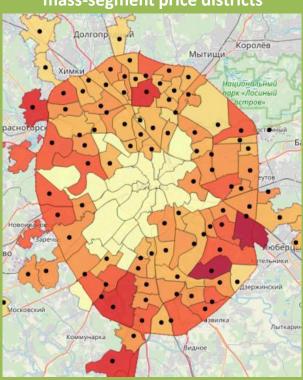
### **Results: chronolepth maps**

# District for work / residential district (blue)





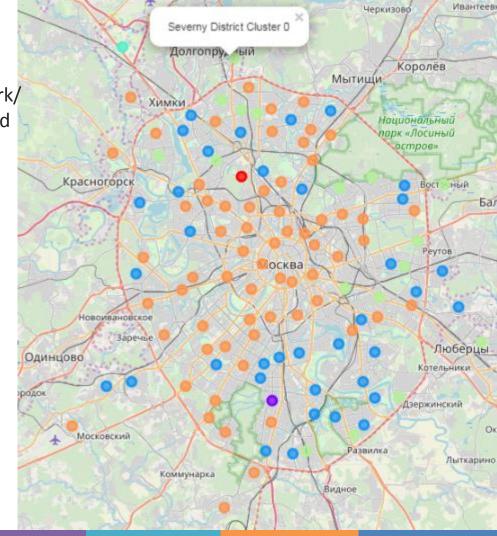
# Division by population for mass-segment price districts

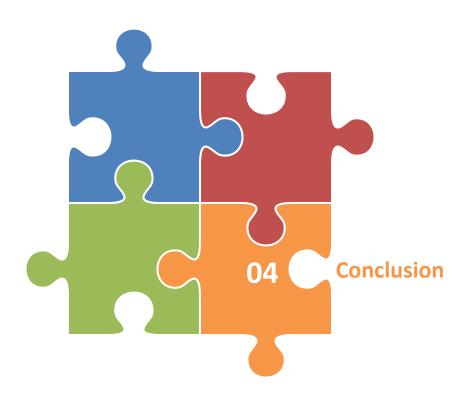


## **Clustering results:**

Division by real estate prices, population and for work/ residential feature of district showed that there could be 6 groups of districts. Clustering showed there are 3 actual clusters.

- Other results of cluster analysis:
- 2. Some food and everyday supply venues are pre-dominantly concentrated in residential mass-segment districts.
- 3. The majority of work districts are in one cluster, but not all.





### Now it's easy to identify what venues are the most popular for every district

