# Capstone Project - The best place for a beer shop

Applied Data Science Capstone by IBM/Coursera

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#### **Customer requirements:**

Open a small business in Moscow

- Shop has to be located in the appropriate district.
- Shop has to be located near customer's house.
- Payback period should be minimal.
- Choose best price/quality trademark

#### **Business problems**

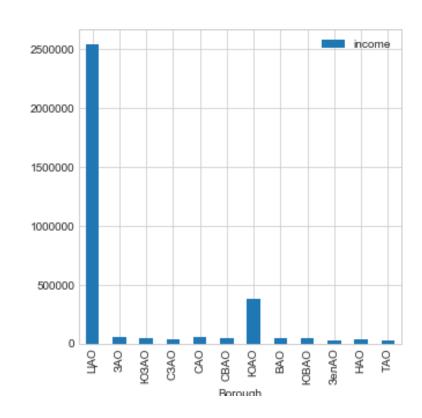
- What is the best trademark (according to customer's investments etc.)?
- What is the best place of the city to open a beer shop according to standard of living?
- What is the most visited place for the shop (place with other entertainment)?
- What is the best place for the shop depending on a location (the nearest to customer's house place etc.)?

#### Data acquisition

- Data is represented on the official web sites
  - http://moscow.gks.ru/
- Data from open sources (like Wikipedia)
  - https://en.wikipedia.org/
- GEO Data (retrieved by some web services)
  - https://tech.yandex.com/maps/
  - https://foursquare.com
- Standard of living indicators
  - https://www.irn.ru/rating/moscow/
  - https://rbc.ru/

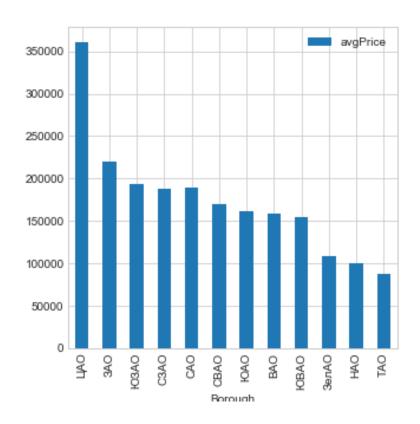
### Districts by income

- One district with extremely high price
- One district with high price
- Others are the same



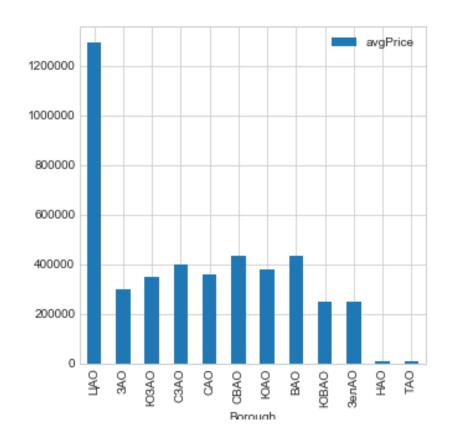
### Districts by real estate price

Districts may be divided into clusters

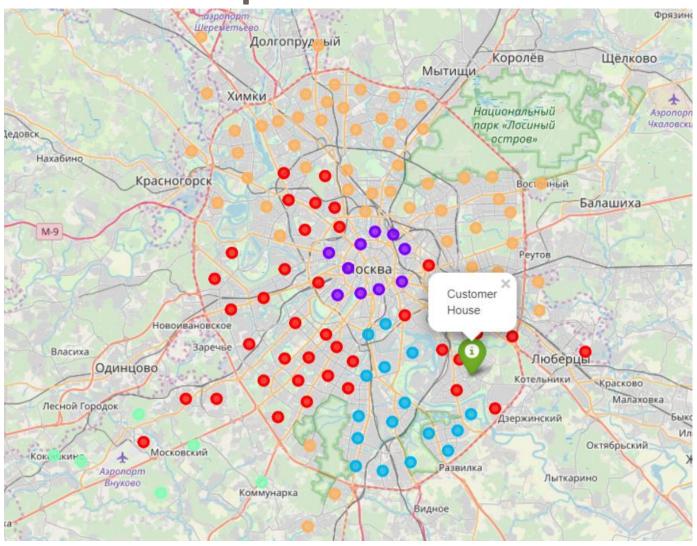


### Districts by average rent price

- One district with extremely high price
- Others may be divided into clusters



## General map of Moscow clusters



#### Table of selected franchises

	Trademark	RussianName	CapitalInvestment	${\sf EstimatedMonthlyProfit}$	ApproximatePaybackPeriod
0	Pivoteka 465	Пивотека 465	2500000	300000	9
1	Kalinkino	Калинкино	600000	110000	6
2	Pinta	Пинта	500000	120000	5
3	Piv&ko	Пив&Ко	1500000	240000	7
4	BeerMag	БирМаг	550000	100000	6

# The best districts by all the features (in Russian)

- Южнопортовый
- Нижегородский
- Рязанский
- Текстильщики
- Печатники
- Кузьминки
- Люблино
- Марьино
- Выхино-Жулебино
- Капотня
- Некрасовка
- Лефортово

#### The best franchises

- Kalinkino (<a href="http://kalinkino.com/franchise.html">http://kalinkino.com/franchise.html</a>)
- Pinta (<a href="http://pinta-company.ru/franshiza">http://pinta-company.ru/franshiza</a>)
- BeerMag
  (<a href="https://www.russtartup.ru/franchising/vsefranshiza/franchajzing-pivnogo-magazina-birmag.html">https://www.russtartup.ru/franchising/vsefranshiza/franchajzing-pivnogo-magazina-birmag.html</a>)

#### Conclusion

- The collected information helps to make a right decision.
- The collected information is statistically correct.
- The final decision of optimal business strategy will be completed by the customer only.