

Beneficial owners in ownership networks

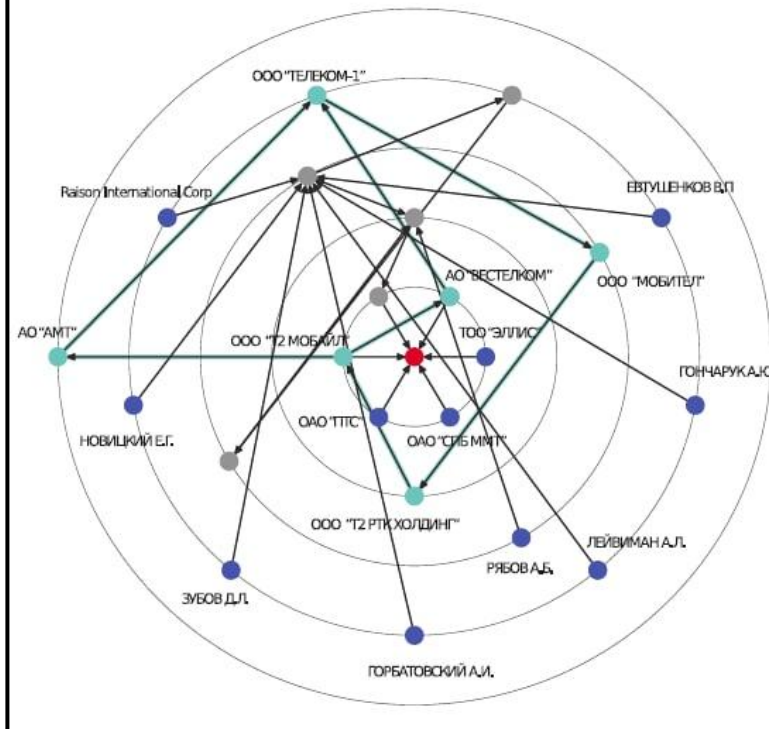


Problem statement

- **People who conclude large contracts** (investors, bankers) need to investigate their counterparties.
- Part of this investigation is **search of beneficial owner**.
- Real owner of a company can be **hidden by complexity of ownership network**^[1].
- We help our users to untangle this network using graph theory approach^[2].

Example of complex ownership network:

“АО Межрегиональный ТранзитТелеком”



Cycle of 6 companies!



Цикл из шести компаний:

АО «Вестелком», ООО «Т2-Мобайл»,
 ООО «Т2 РТК Холдинг», АО «АМТ»,
 ООО «Мобител», ООО «Телеком-1» 0.447

ОАО «Петербургская телефонная сеть»	0.188
ОАО «Санкт-Петербургский между-городний международный телефон»	0.188
Евтушенков В.П.	0.148
ТОО «Эллис»	0.125
Лейвман А.Л.	0.009
Новицкий Е.Г.	0.009
Горбатовский А.И.	0.006
Гончарук А.Ю.	0.006
Raison International Corp.	0.004
Зубов Д.Л.	0.004
Рябов А.Б.	0.0004

Users' testimonies



"It sounds fascinating and it's something that I would use"

- John Robert Sutton
CEO Sutton Selects



"Sometimes I need to find the beneficiary owner of a company. I do it manually, and it can consume hours. It will be comfortable, if I can do it by one click. However, I appreciate free services. I am not ready to pay a big price for this product"

-Valeriy Doronin, director of Russian
Direct Investments Fund

Users' testimonies

“All companies could be interested, especially for risk management in subcontracts and due diligence companies but the model should work with little information in input. In order to discover these triangulations, there is need of too many information by those who request the investigation. A model that exploits all data sources and learns from the actions performed would certainly be of interest”

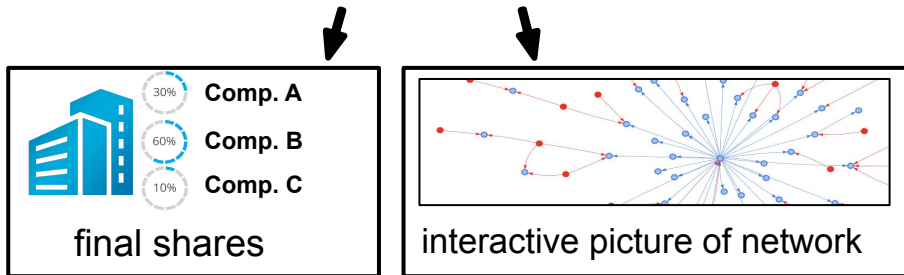
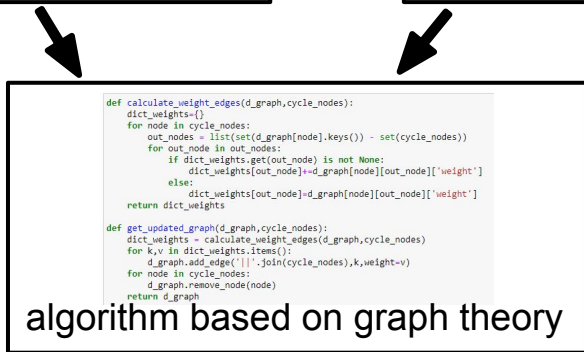
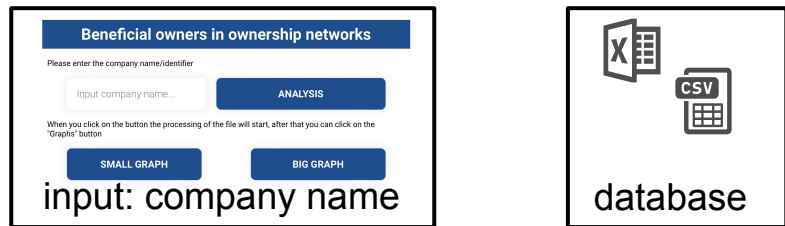
- Head of a company with 5000 employees

“Dear brothers, thanks for choosing me to help you in such a noble cause. The idea is valid and this product is needed in our industry and it can help us serve millions of people.”

-Abdallah Alwahsh
Software Engineer of
Al-Radjhi Bank

Team #13

Beneficial owners in ownership networks



Prototype description & scientific validation

Data: table of ownership shares (csv/xlsx format)

company_owner	company_owned	shares
Comp. A	Comp. B	0.75
...

Algorithm: csv/xlsx table => graph (cycle removal + extract connected component) => adjacency matrix
=> matrix of final shares $T = \sum_{l=0}^{\infty} A_l = A(I - A)^{-1}$

Output: summary of company shares, graphical representation of results

Validation: scientific paper about implemented algorithm, checking the performance on small data that can be analyzed manually.

Feedback on tangible prototype

Dear brothers, (...) I find this software is very interesting and i hope you'll succeed.


Please find the points below as suggestion :

1- provide the software in multi languages to make internationally more attractive

 **Multi-language app - plan for future**

2- provide the feedback of judgement Commission Specialized in Islamic law (...)

3-make trusted list and black list of company names to allow a quicker and easier decision

 **Different colour for blacklisted companies - already done**

4-the core of software should be in language could be working on any platform like Java or Python this is will make the software easy to install in any environment , servers or link it to other softwares .

 **Cross-platform app - plan for future**

5-the design of the software should be divided in nodes or packages so the update and maintenance the software will be more stable and effective

Abdallah Alwahsh Software Engineer of Al-Radjhi Bank

“Freemium” business model

Key partners:

- Skoltech (owner of IP)

Key activities:

- Database development & updating
- Customers support
- Validation

Key resources:

- High-qualified personnel
- Program code
- Data

Value

propositions:

- For investors:
 - Saving of time & money during data search
- For advertisers:
 - The audience of people involved in investments
- For whoever may be concerned
 - Awareness

Customer

relationships

- Long-term or short-term use of software

Channels

- Online software trade

Customer

segments:

- A) Investors, ethical investors, journalists, activists
- B) Advertisers

Cost structure:

- Salary
- Marketing costs
- Cost of statistical data
- Therapists for IW related PTSD

Revenue streams:

- Payment for placement of advertisements
- Subscription fee for premium version
- Regular payments to not reveal compromising data

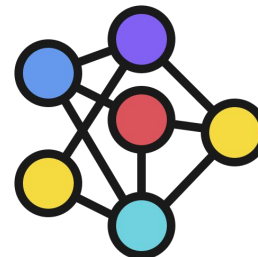
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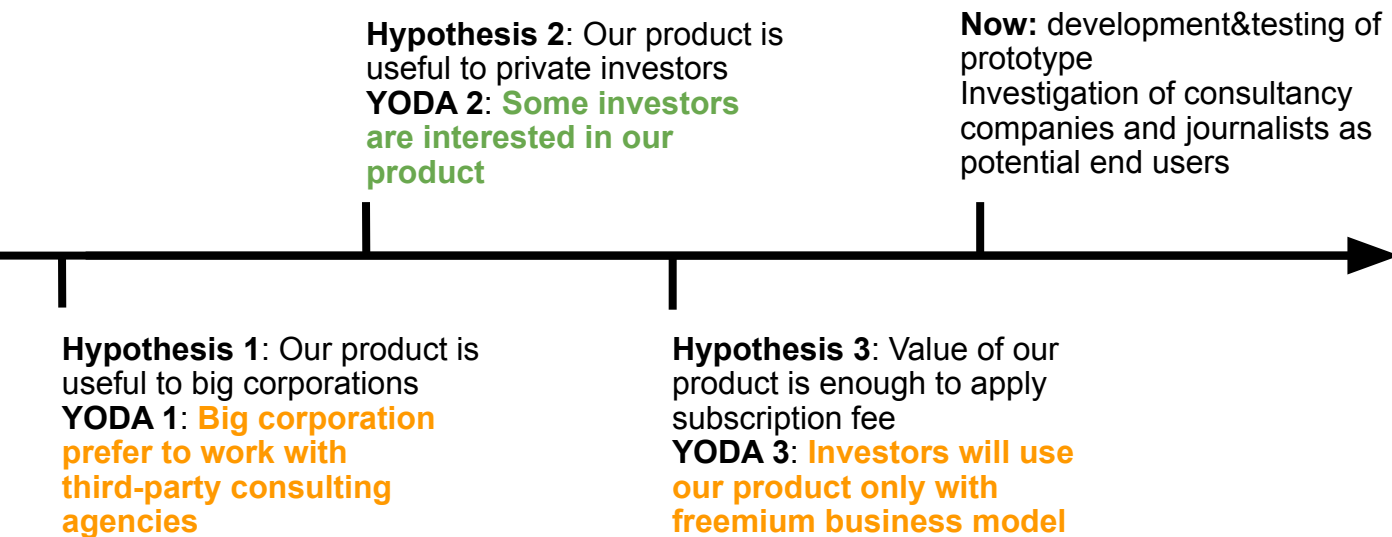
Всероссийская система проверки контрагентов

Comparison with competitors



Big analytic systems of Russian market	Our product
No resolving of circular ownerships and calculating of final shares Less efficient algorithms	Resolving of circular ownerships, calculating of final shares Efficient algorithm of network data analysis
High subscription fee (26400-75000 rub for “KonturFocus”), small amount of functions in free version	Freemium business model
Many services in one system	One service (currently)
KonturFocus, ZaChestnyBiznes covers Russia, SPARK is international	International

Evolution of project



How to increase the value of the product?

- A) Become international, create own international database from different sources
- B) Add other metrics

Evolution of project

Hypothesis 2: Our app can be useful for specific organizations, such as ethical banks, to identify connection with undesired or boycotted industries and entities

YODA 2: We have added two lists of 'blacklisted' and 'trusted' companies whose label can be inherited through the network. Product with such feature is useful and convenient for these companies.

Now: Uploading a local application to the server for users to try it out

Hypothesis 1: different design can be more attractive for our customers

YODA 1: 100% potential users says that the new design is better than the old one, and 70% of those surveyed consider the improvement significant

Hypothesis 3: International DataBase can increase our product's value for end users

YODA 3: Data is available so the potential of the product significantly increased. Part of Russian data is added

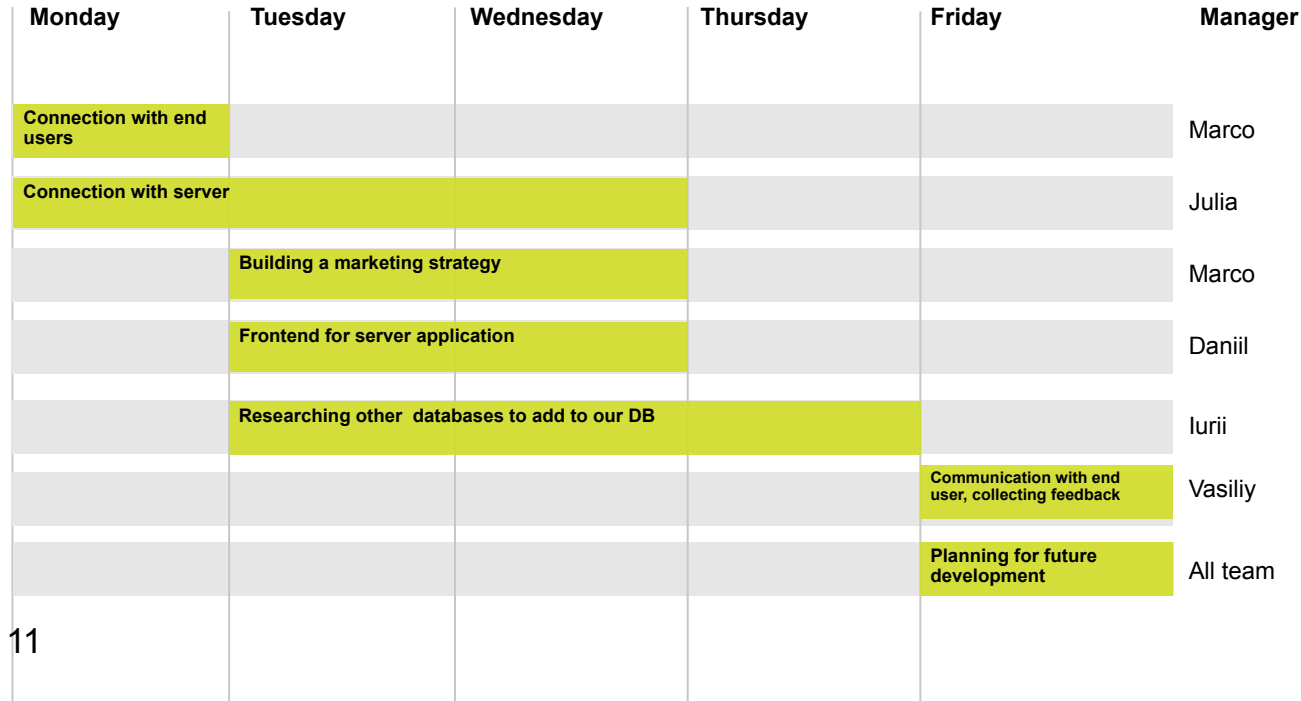
Further options for project development

- A) Expand database including other countries
- B) Make prototype publicly available
- C) Add other metrics

Team #13

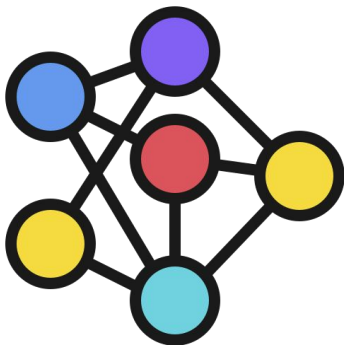
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Gantt chart for the next sprint with the team roles



Contact us!

Visit our website: financialguys.ru



Scientific supervisor: **Dr. Kirill Polovnikov**



Marco Offidani, project manager



Julia Orlova, data scientist



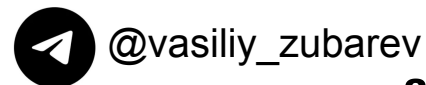
Iurii Rogov, back-end developer



Daniil Sherki, front-end developer&designer



Vasiliy Zubarev, CustDev



Thx