

ContÁgil



A Platform for solutions



- Tax Auditor in Brazilian Tax Administration
- National Team For Tax Accountability and Combating Tax Fraud (ECOFF): identification of beneficial ownership, asset search and asset liability (big debtors)
- National Team of Beneficial ownership: risk management regarding omissions and false information provide by legal entities abou beneficial owner



RELATIONSHIP OF INVESTIGATION AND LITIGATION ESPECIALLY IN ASSET RECOVERY



Importar Abrir Gráfico Plano de Contas Verificações Obrigatorias Balancete Configurações Ajuda Sobre... Sair

ContÁgil

- Servidor do ContÁgil
- Trabalhos Recentes
- Relacionamentos
- Cadastros
- Dados Abertos
- Dados Importados
- Bases sem Dados
- Tabelas do ContÁgil



Criar novo projeto

-  DRAWBACK
-  FISCALIZAÇÃO ADUANEIRA
-  FISCALIZAÇÃO IPI
-  FISCALIZAÇÃO IRPJ/LUCRO ARBITRADO
-  FISCALIZAÇÃO IRPJ/LUCRO PRESUMIDO
-  FISCALIZAÇÃO IRPJ/LUCRO REAL
-  FISCALIZAÇÃO PIS/COFINS
-  GENÉRICO
-  INSTITUIÇÕES FINANCEIRAS

Ok Voltar

Criar novo projeto

-  INTELIGÊNCIA ARTIFICIAL
-  INVESTIGAÇÃO PATRIMONIAL
-  MINERAÇÃO DE DADOS
-  MOVIMENTAÇÃO FINANCEIRA INCOMPATÍVEL
-  PREÇO DE TRANSFERÊNCIA
-  PREVIDENCIÁRIO
-  RENDA VARIÁVEL
-  SELEÇÃO
-  SELEÇÃO - ANÁLISE CONJUNTA

Ok Voltar

Ajuda



Definições

- ❖ Base de relacionamentos
- ❖ Consultas

Projeto Importar Ferramentas Scripts Análise Contábil

Importar Abrir Gráfico Plano de Contas Verificações O

- Relacionamentos
 - Base de Relacionamentos
 - Base de Relacionamentos no Projeto
 - Grafos de Consultas
 - Grafos de Relacionamentos

Relationship Graph

Use of network Science in tax auditing



Projeto Importar Ferramentas Scripts Análise Contábil

Importar Abrir

Scripts do ContÁgil

- ContÁgil - pr
SPACE - Espaço interativo do script visu
- Servidor c
Modelo Analítico Dinâmico (MAD)
- Plugins: Base de relacionamentos (grafos)

Building the Base of Relationship

Construção da Base de Relacionamentos

- ❖ Criar a base a partir de um grafo vazio



ContÁgil Lite 1.9.13 [64 bits]

Projeto Importar Ferramentas Análise Contábil Bancos Documentos Fiscais Projeto Farol Lite Configurações Ajuda

Importar Abrir Gráf

Scripts do ContÁgil Ctrl-S

SPACE - Espaço interativo do script visual

Modelo Analítico Dinâmico (MAD)

Calculadora de fórmulas F9

Teste de expressões regulares Shift-F9

Base de relacionamentos (grafos)

Dicionário de Palavras

Ferramentas de arquivos

Assistente de conversão de relatórios

Criar novo Grafo de Relacionamentos inicialmente vazio

Montar Base de Relacionamentos com dados do ContÁgil

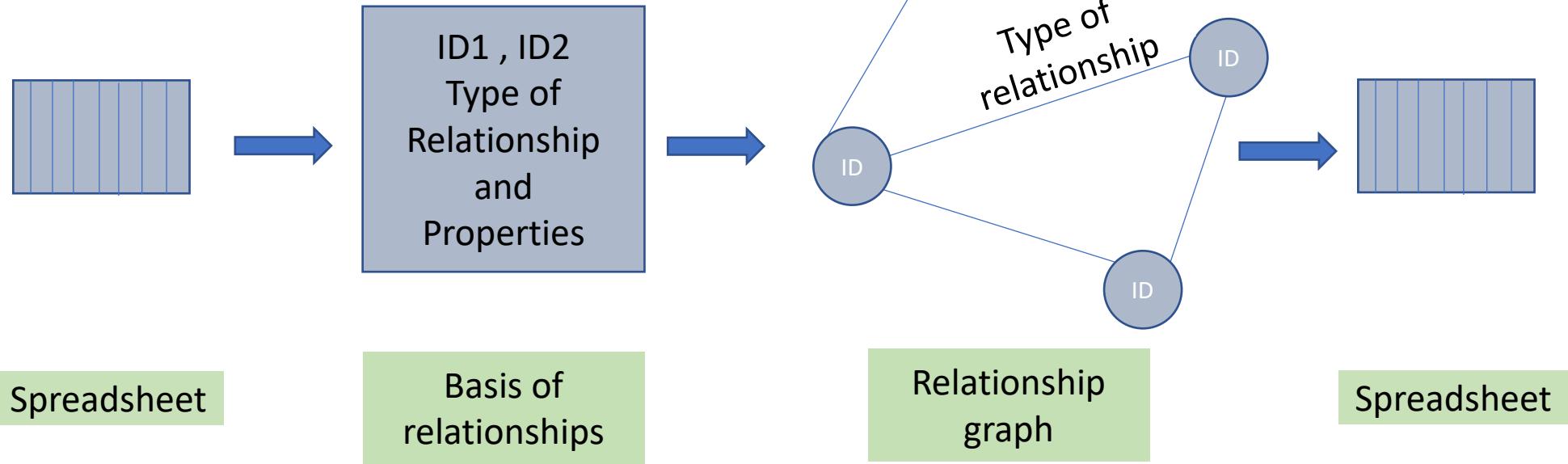
Montar Base de Relacionamentos com dados externos

Complementar Base de Relacionamentos com cadastro PF/PJ do ContÁgil

Juntar duas Bases de Relacionamentos

The screenshot shows the ContÁgil Lite 1.9.13 application interface. The menu bar includes 'Projeto', 'Importar', 'Ferramentas', 'Análise Contábil', 'Bancos', 'Documentos', 'Fiscais', 'Projeto Farol Lite', 'Configurações', and 'Ajuda'. The 'Ferramentas' menu is currently selected. A sub-menu for 'Base de relacionamentos (grafos)' is open, showing options: 'Criar novo Grafo de Relacionamentos inicialmente vazio', 'Montar Base de Relacionamentos com dados do ContÁgil', 'Montar Base de Relacionamentos com dados externos', 'Complementar Base de Relacionamentos com cadastro PF/PJ do ContÁgil', and 'Juntar duas Bases de Relacionamentos'. The application window title is 'ContÁgil Lite 1.9.13 [64 bits]'. The left sidebar shows a tree view of project files and other tools.

Relationship Graph



How to create a relationship graph:

- Manual: individual inclusion or from data in a spreadsheet
- Automated: running a script
- Joining relationship bases
- Complementing the graph manually

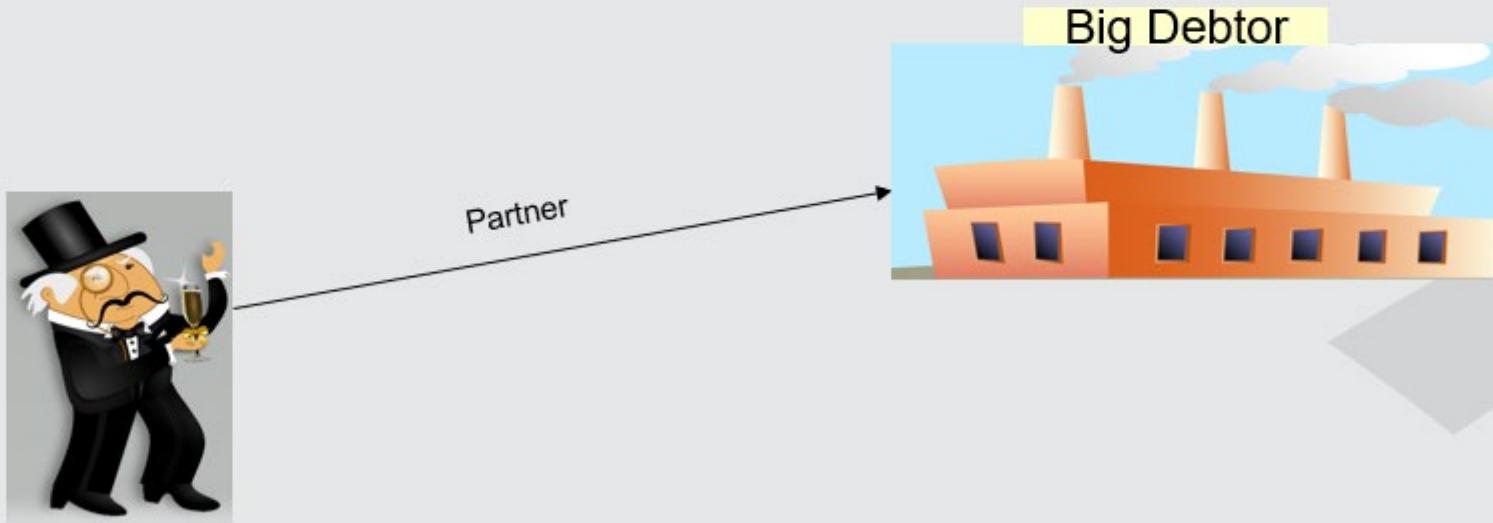
A case that generated graph automation ideas

Introduction

- Institution: Special Secretariat of the Federal Revenue of Brazil (RFB)
- Projection: Tax Credit Guarantee
- Origin: court order asking for information about a **big debtor** in Judicial Recovery process
 - Anonymous report from a “desperate creditor”
- Crime: evidence of fraud against creditors
- There was no Inter-agency or international co-operation in the elaboration of the information

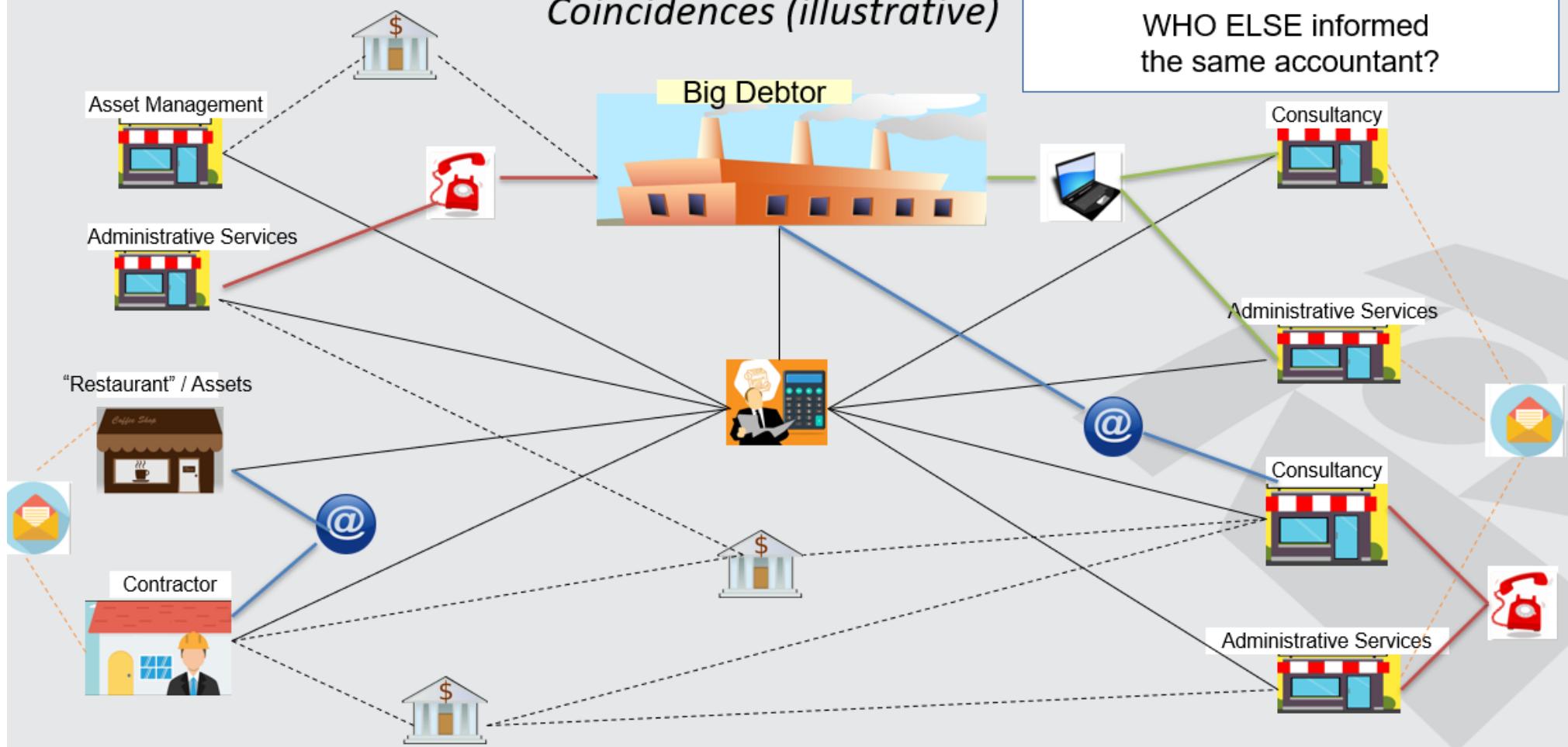


The case



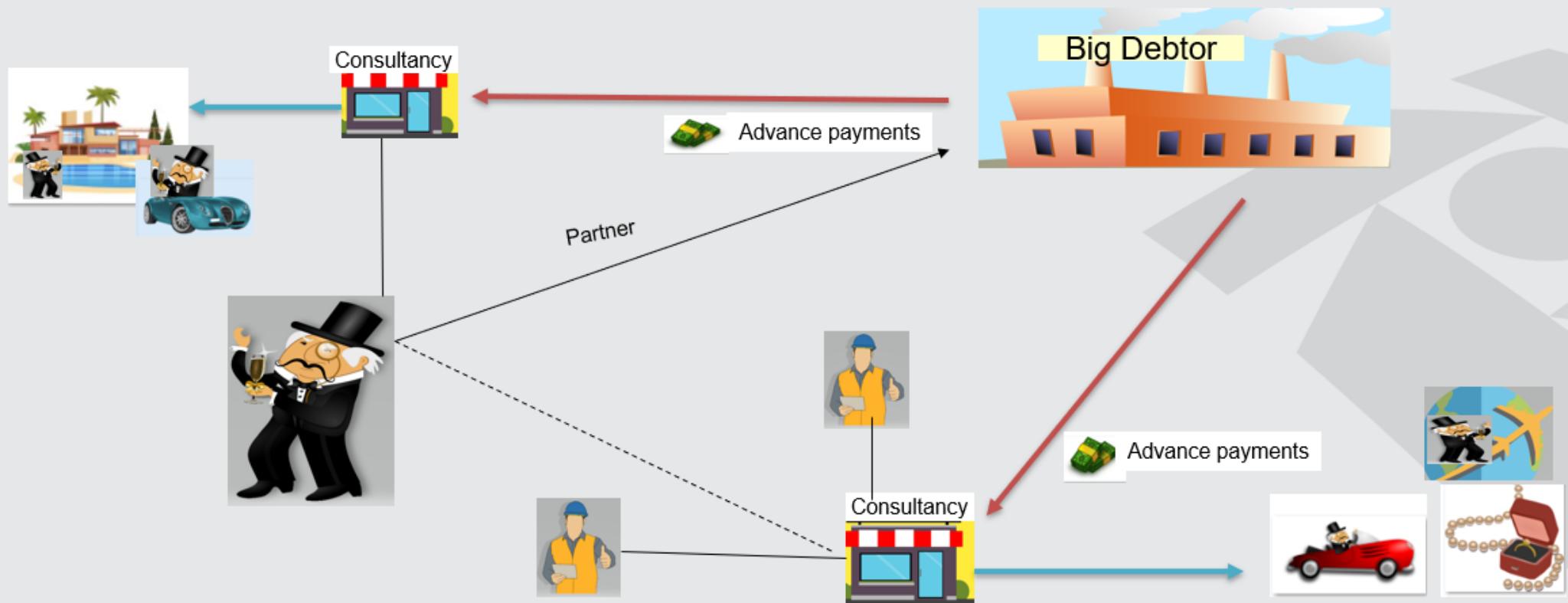
Coincidences (illustrative)

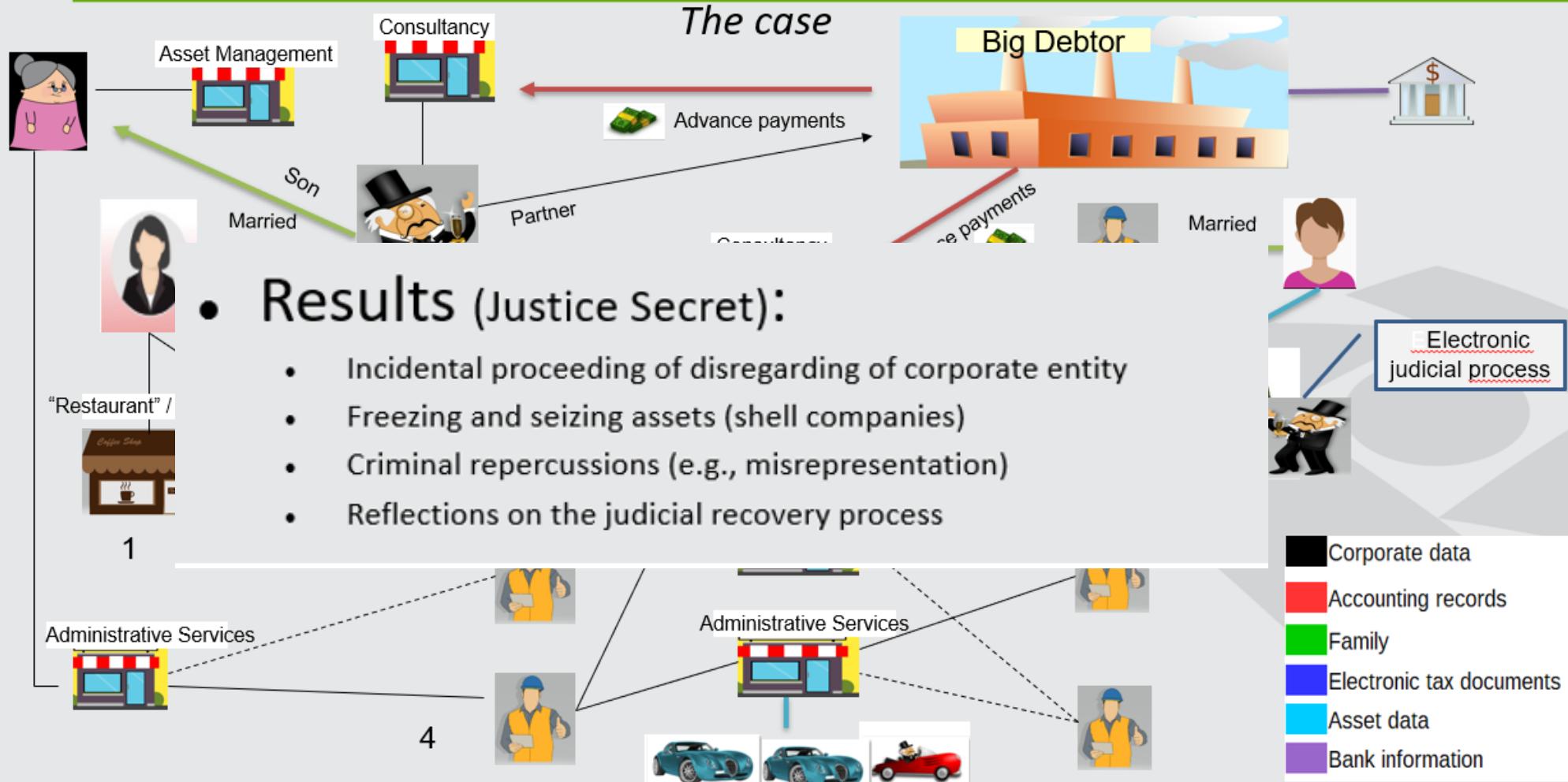
WHO ELSE informed
the same accountant?

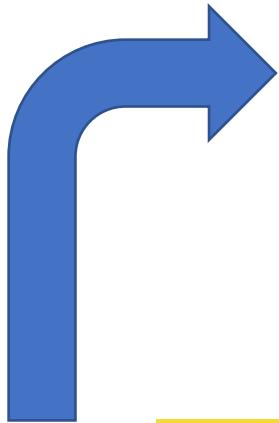
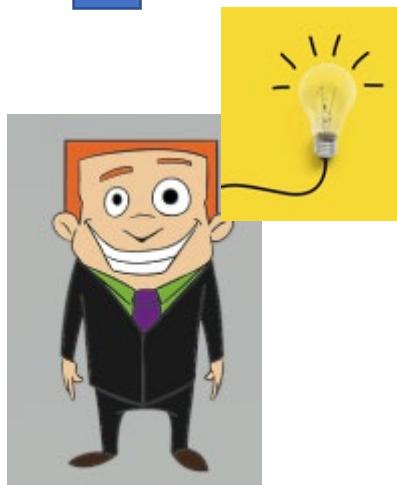


Simulation of Service Provision

- Cash outflows in anticipation of services that had not yet been performed
- Payments claimed as deduction for tax purposes
- Way to get money out of the company







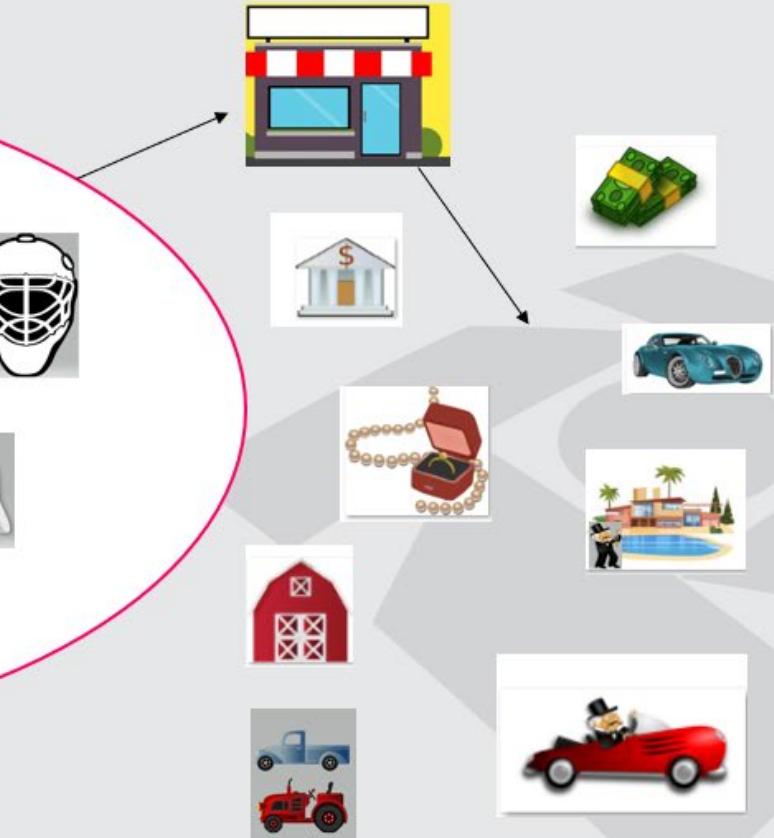
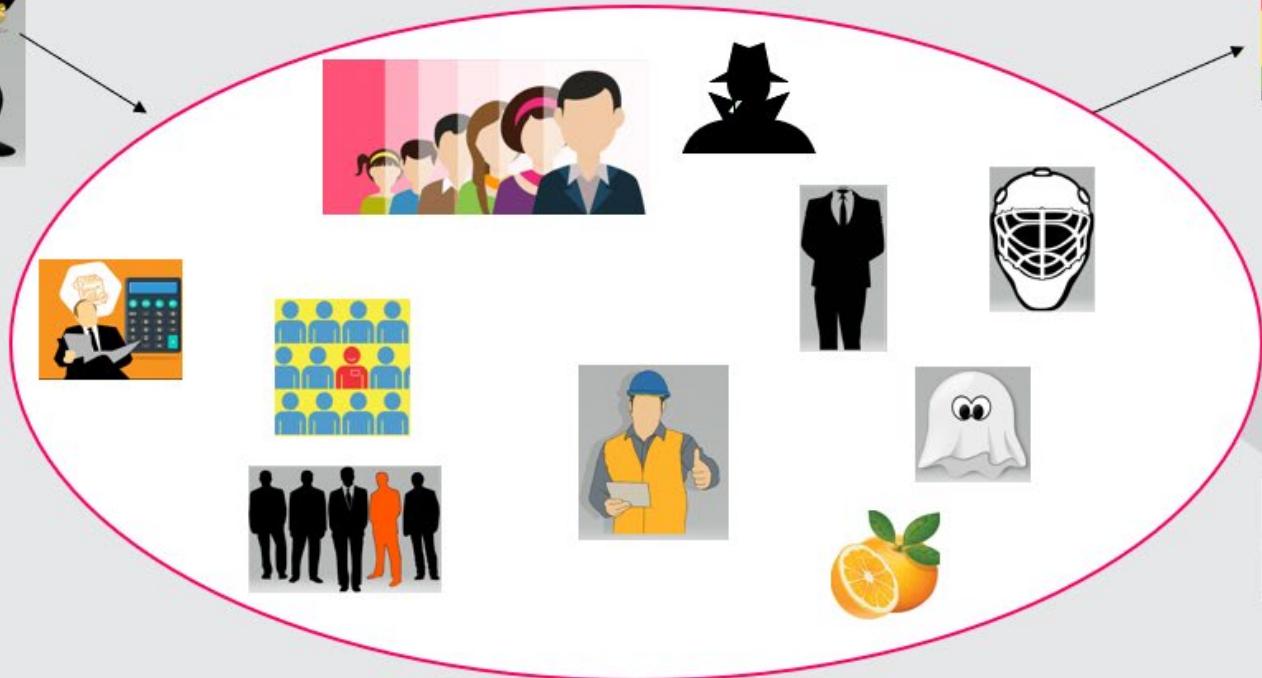
**Constant Improvement
Automation of ideas
“Script”**

Data Lake RFB

ContÁgil



“Circle of Trust”



Graph “Circle of Trust”

Geral CoAutores Dependências Externas

Informações Gerais do Compartilhamento

ID: 16711015

Nome: GRAFO CIRCULO DE CONFIANCA

Versão: 1.06

Complemento:

Descrição

Script created based on ideas of Tax Auditor

Script criado com base nas idéias da Auditora Fiscal Katia Regina Gomes Gatti.

Base de Relacionamentos referente ao círculo de confiança do cpf indicado pelo usuário, em uma lista.

Para cada CPF fornecido, busca-se no Cadastro CPF, nos cadastros auxiliares de filiação, nas DIRPF os relacionamentos, no E-Social, como:

- 'Conjuge ou Companheiro(a)',
- 'Filho(a) ou Enteado(a)',
- 'Irmão(a), Neto(a) ou Bisneto(a)',
- 'Pai, Mãe, Avô(ó), Bisavô(ó)',
- 'Sob a Guarda',
- 'Tutelado(a) ou Curatelado(a)',



Projeto Importar Ferramentas Scripts Análise Contábil

Importar

Abrir

Gráfico

Plano de Contas

Verificações

ContÁgil - projeto MIXPLASTIC

Servidor do ContÁgil

Plugins (extensões do ContÁgil)

Compartilhamentos dos usuários

Scripts Compartilhados

MAD's Compartilhados

Pedidos de Baixa de Arquivos

Tabelas do Servidor

Scripts Executados no Servidor

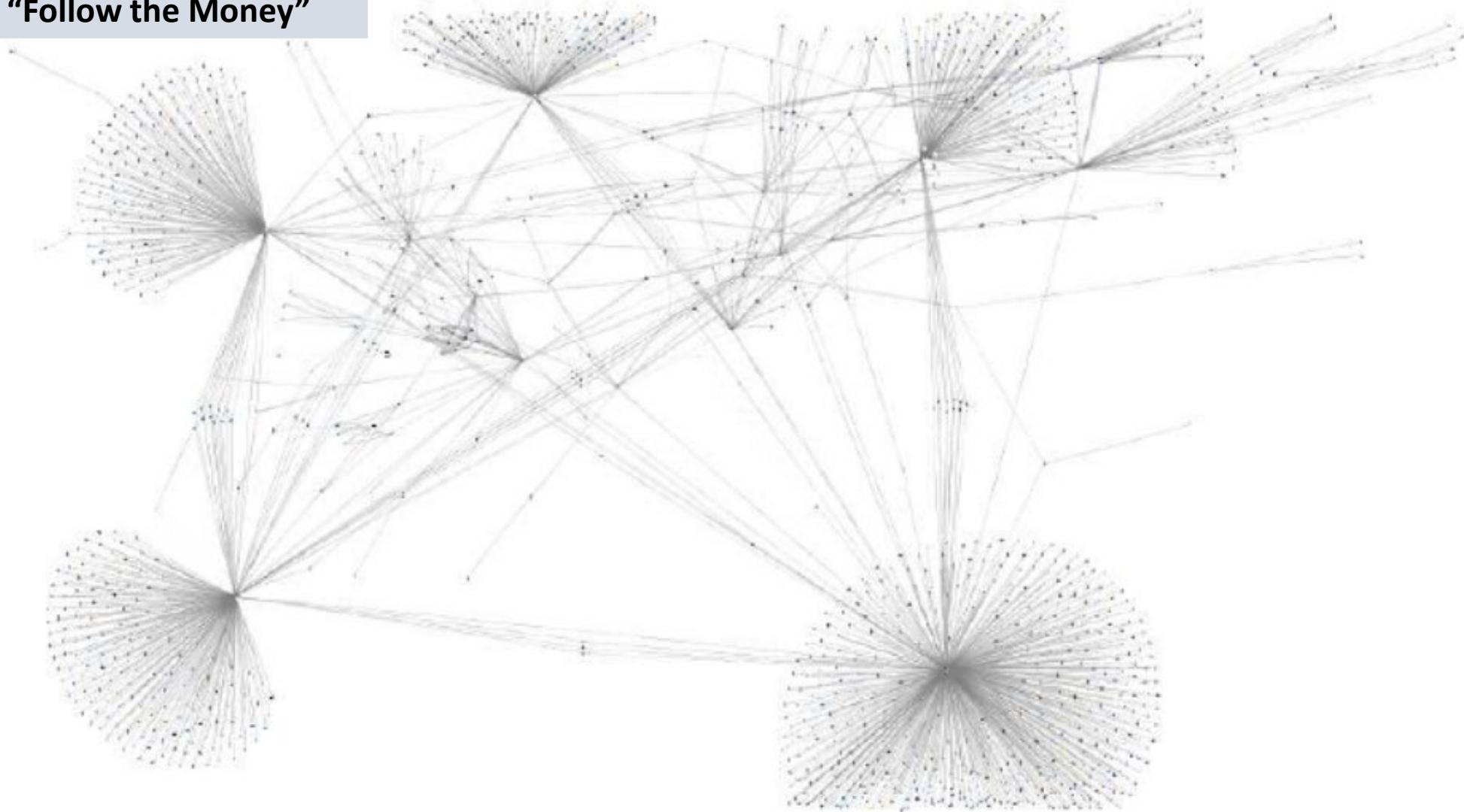
Grafos de Relacionamentos no Servidor

Administração do Servidor

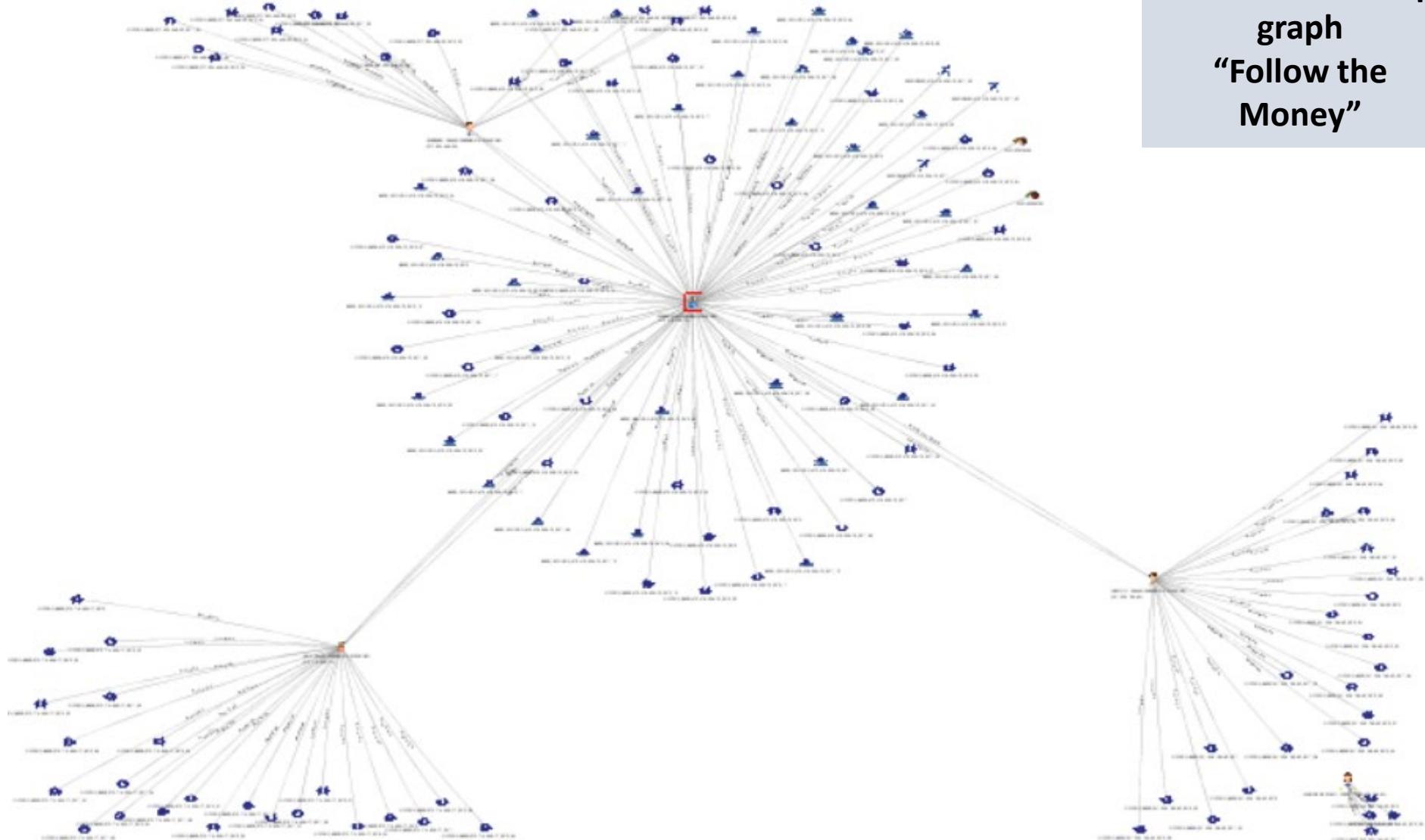


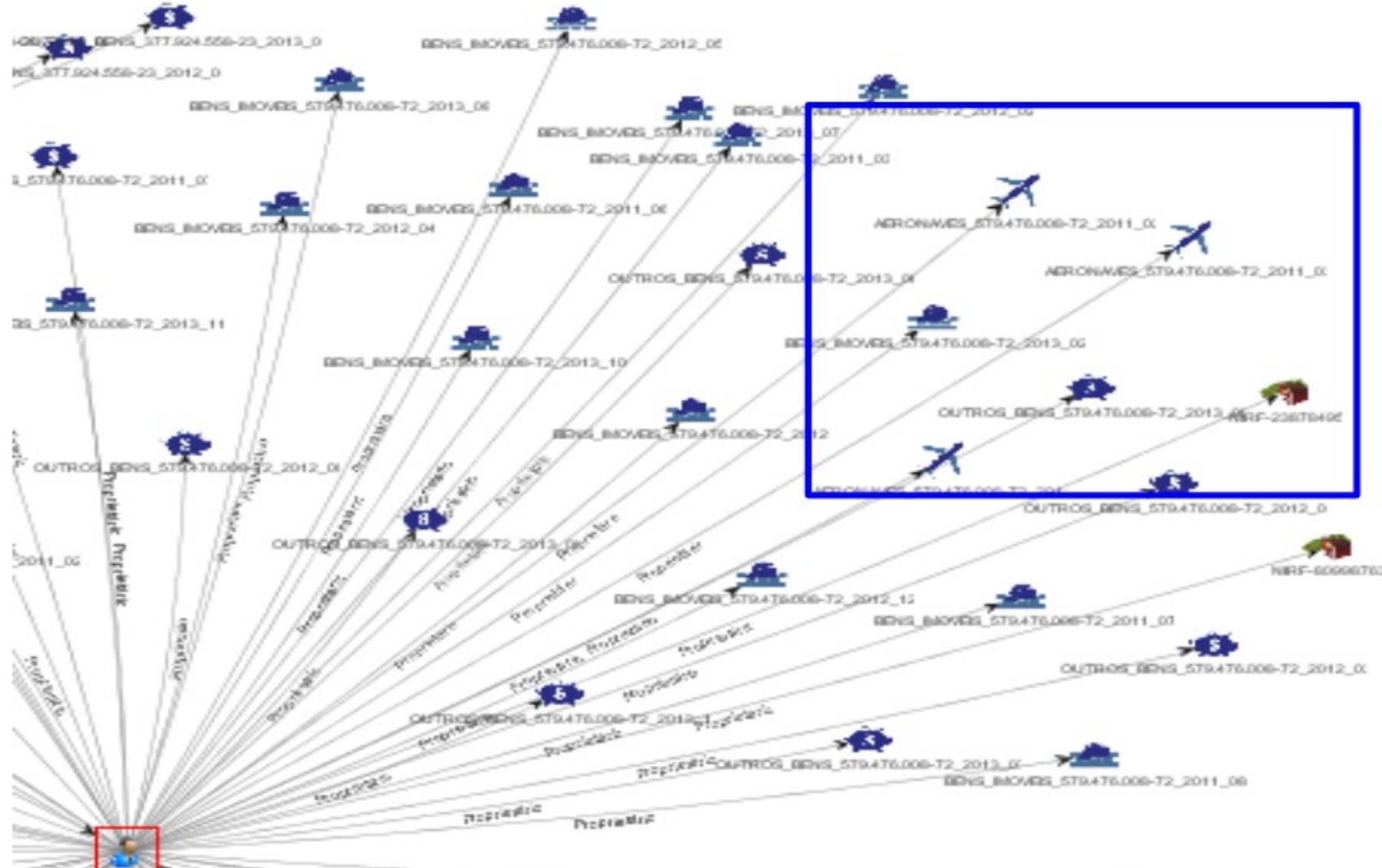
Asset relationship graph

“Follow the Money”

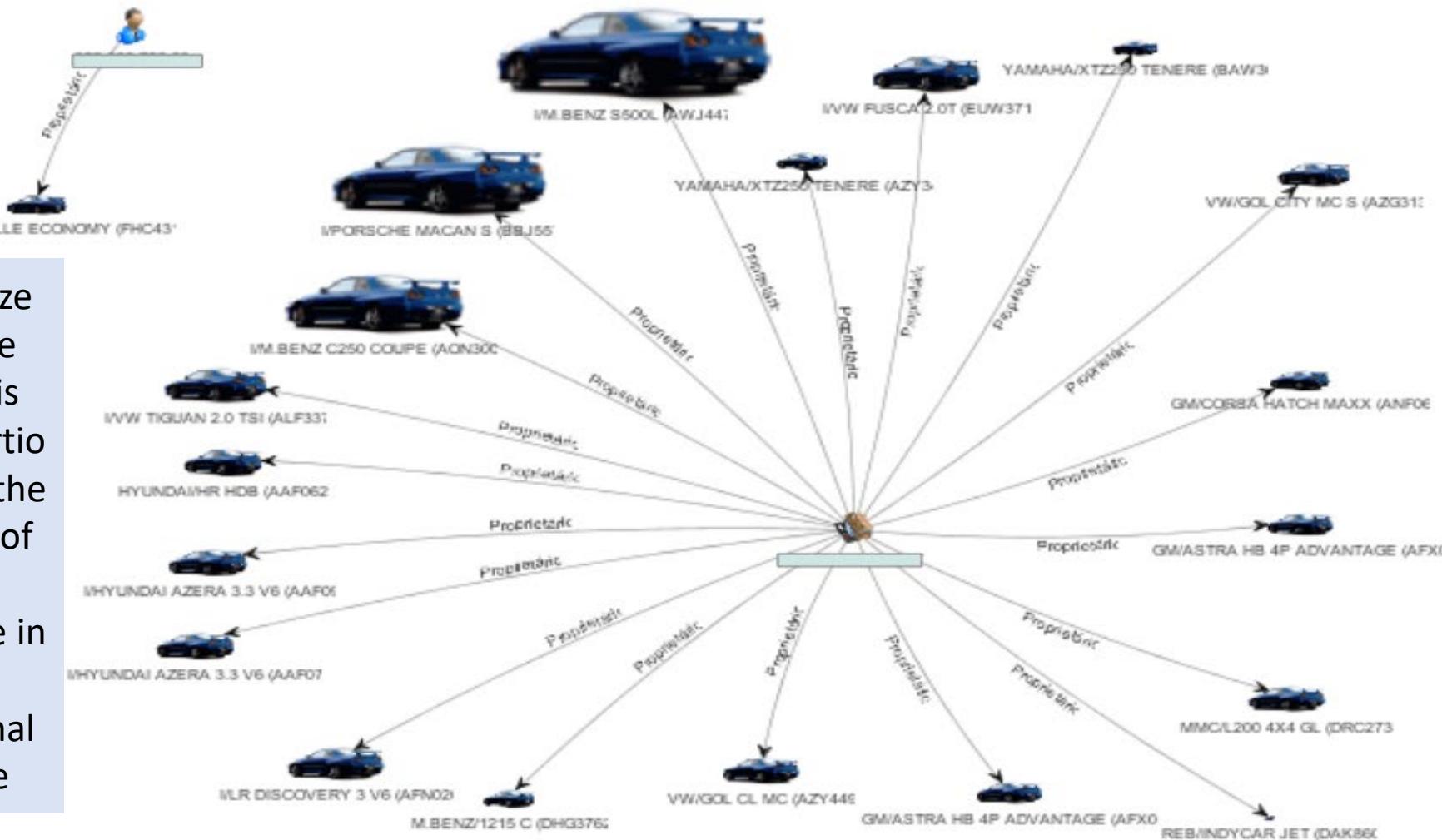


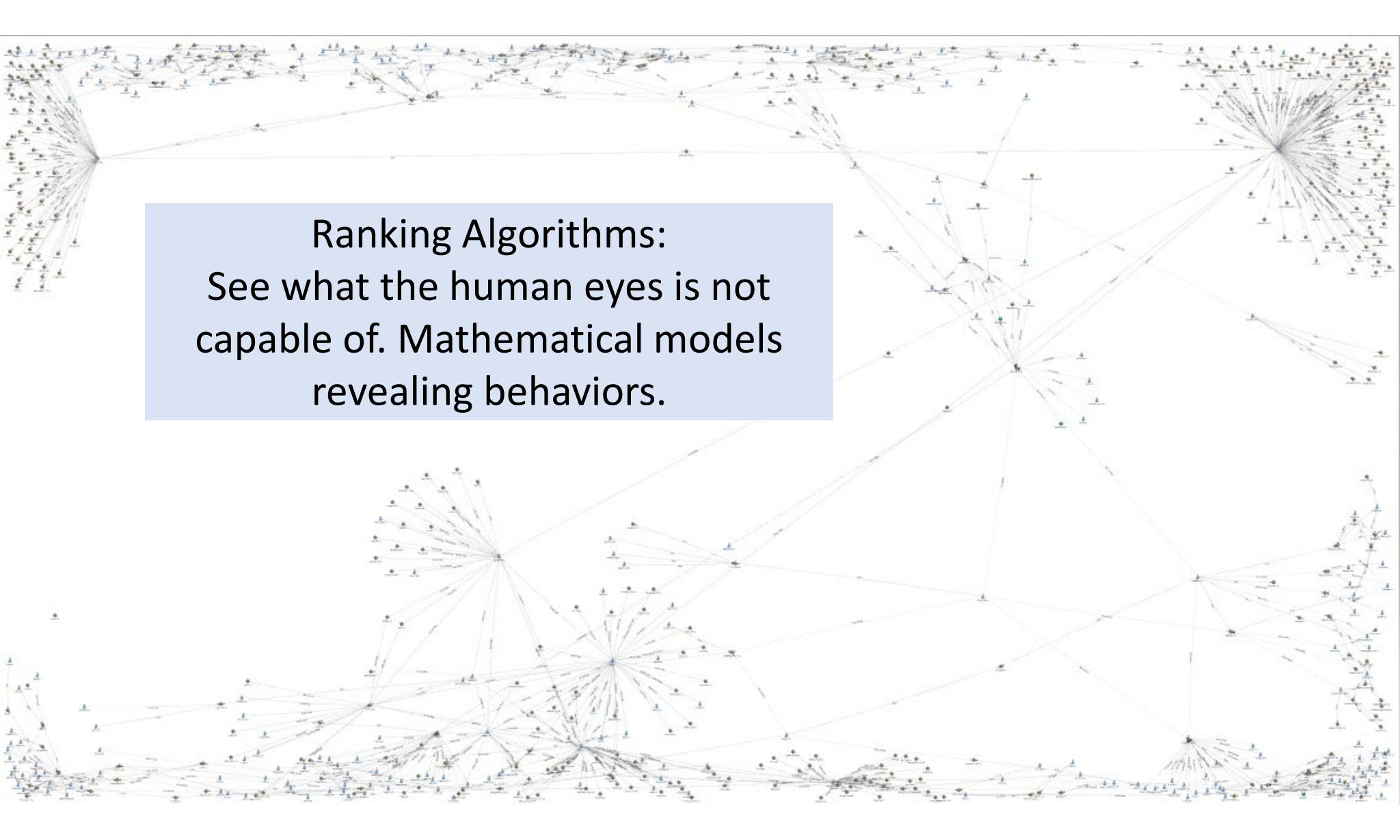
Asset relationship graph “Follow the Money”





The size of the icon is proportional to the value of the Vehicle in the national table





Ranking Algorithms:
See what the human eyes is not
capable of. Mathematical models
revealing behaviors.



Colunas:
Linhas:

Este é o resultado da aplicação da técnica "Centralidade de Intermediação" sobre o grafo de relacionamentos
'PONTUAÇÃO' depende do critério utilizado.



Ranking
Algorithms

| TIPO | ID | NOME | PONTUAÇÃO |
|---------|----|------|---------------|
| PF | | | 370.928,00000 |
| PF | | | 260.972,00000 |
| PJ | | | 234.264,00000 |
| PJ | | | 198.575,33333 |
| PJ | | | 182.597,76113 |
| PF | | | 116.833,83333 |
| PF | | | 115.265,33333 |
| PF | | | 105.783,62862 |
| PJ | | | 99.718,66667 |
| PJ | | | 95.979,16667 |
| PF | | | 90.670,14286 |
| PF | | | 83.206,83333 |
| PJ | | | 78.826,00000 |
| PJ | | | 75.925,83333 |
| PJ | | | 74.323,37108 |
| PF | | | 72.489,00000 |
| PF | | | 70.042,40000 |
| PF | | | 60.875,00000 |
| PF | | | 60.105,00000 |
| PJ | | | 57.929,50000 |
| Seleção | | | 0,00000 |

Selecionar no Grafo

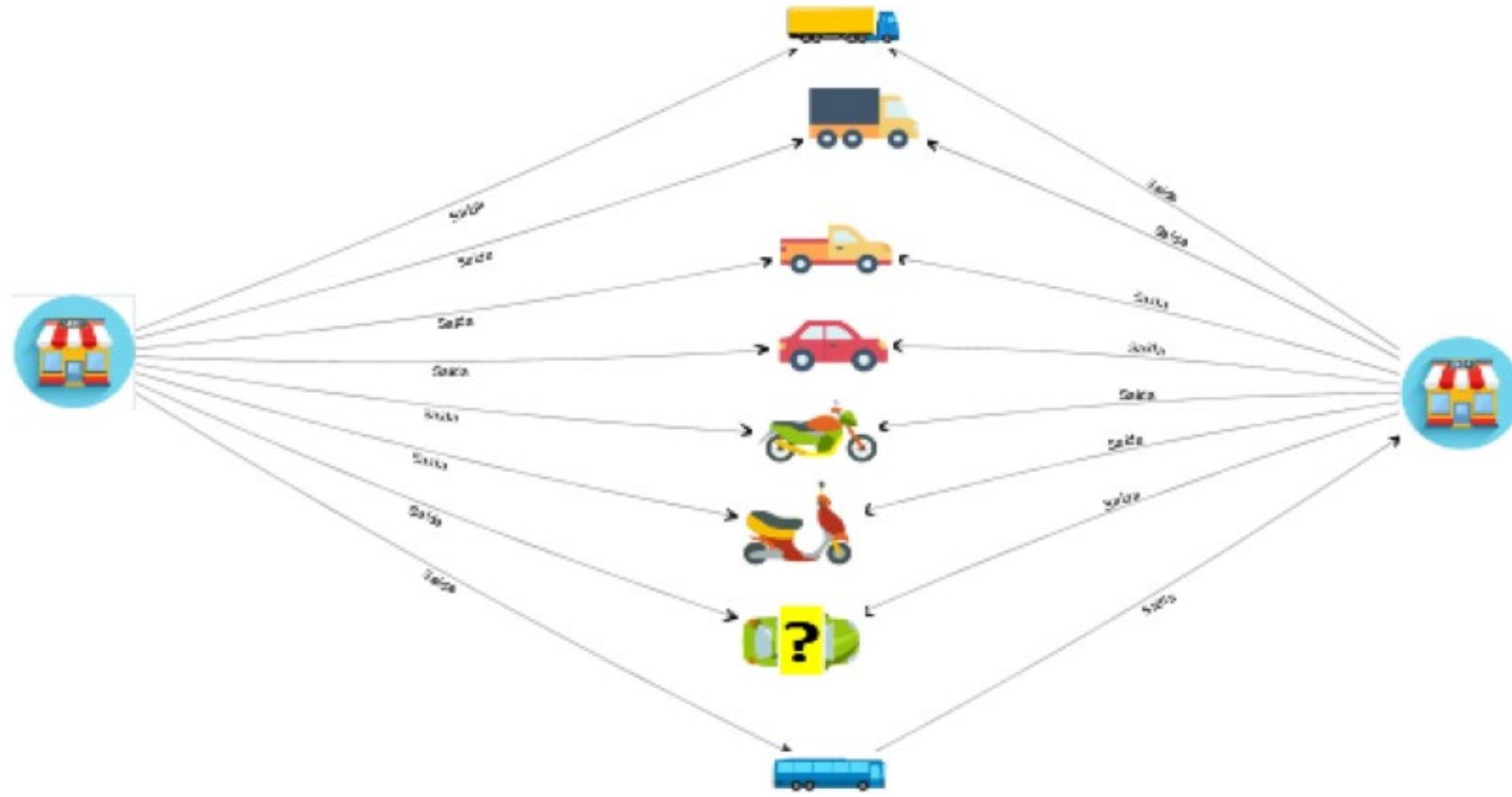
Calcular Tamanhos das Imagens

Atribuir Propriedade com Pontuação

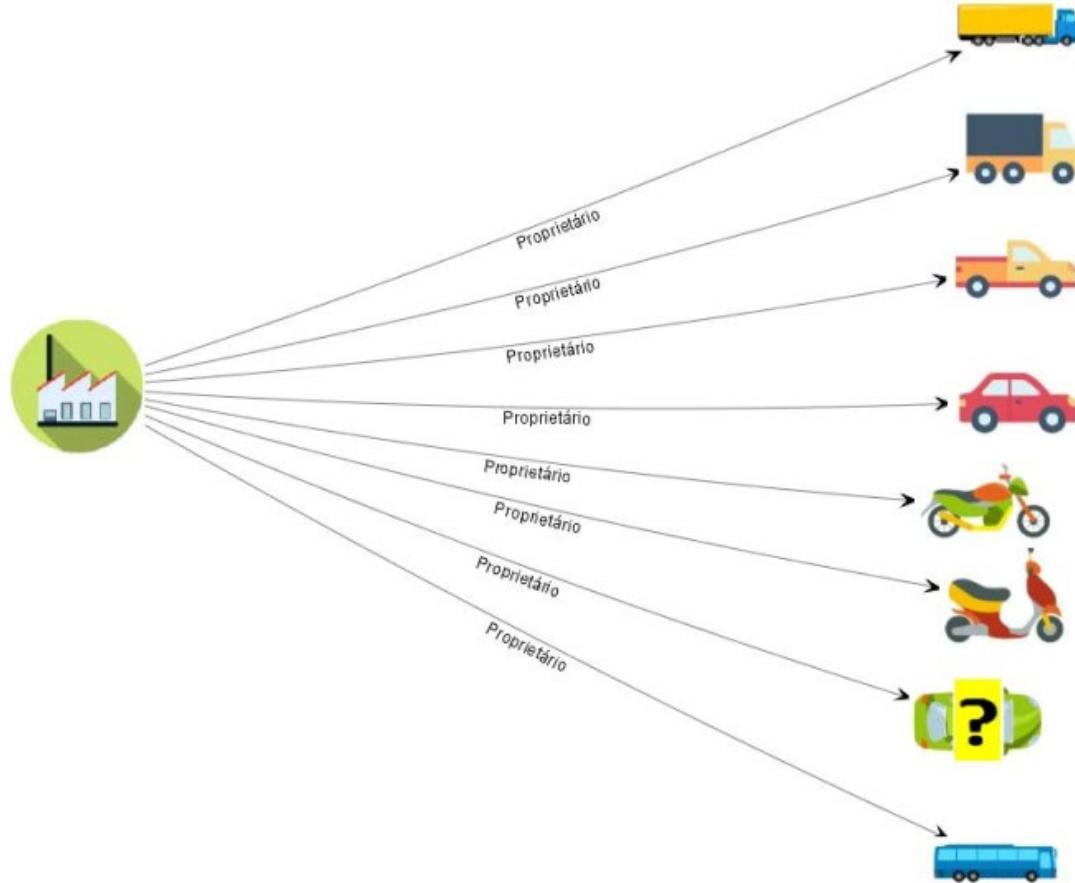
Identification of a link between 3 companies that sell tires and which are based in different cities and with different owners.



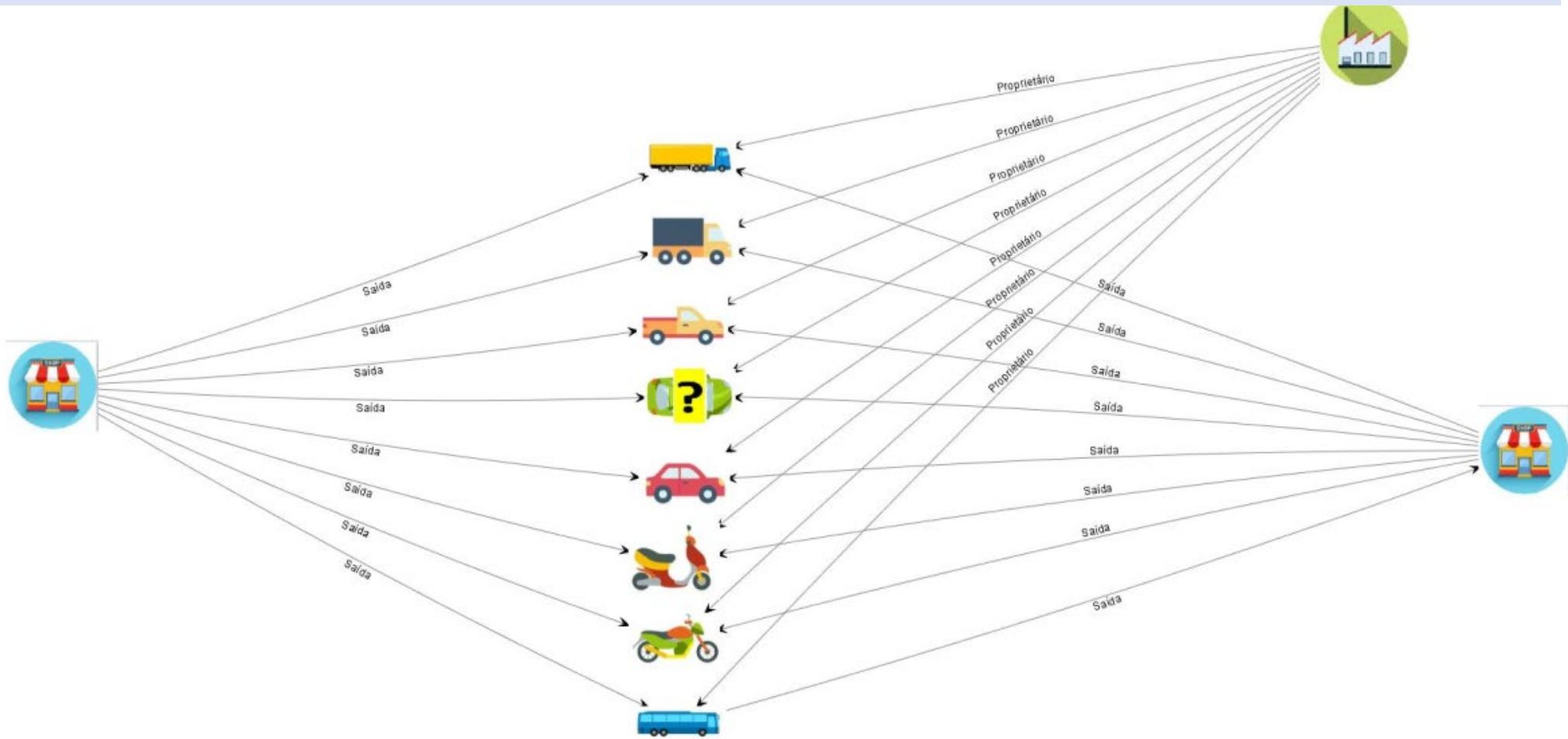
The licence plates of the vehicles that transported the products (electronic invoices) are consulted in the vehicle system. The icons are assigned according to the type of vehicle contained in the system



Identified the plates informed in the invoices, the owners are identified in the Vehicle system. It is a technique for identifying the beneficial ownership.

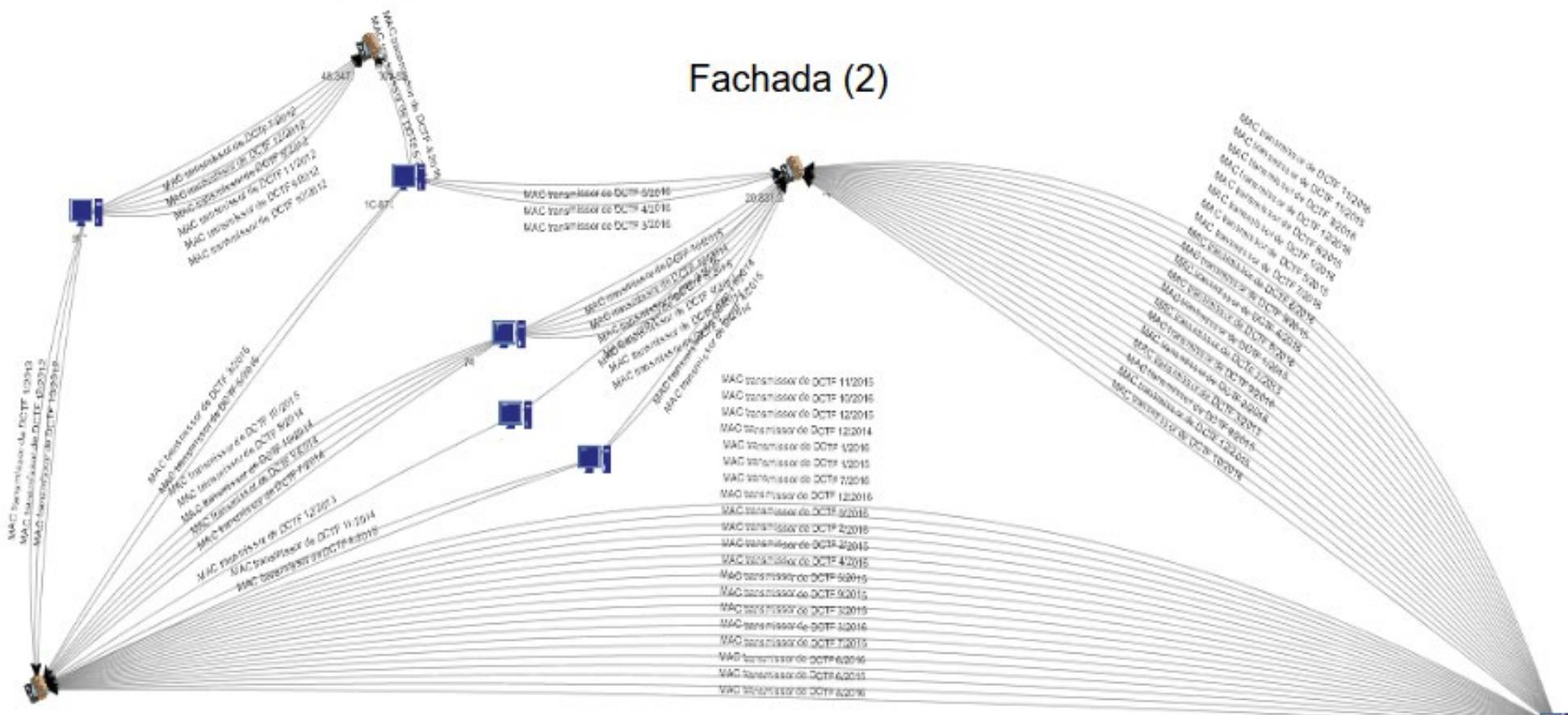


Joining the two graphs: vehicles that distributed the products (invoices) and the current owner of the vehicles in the system.



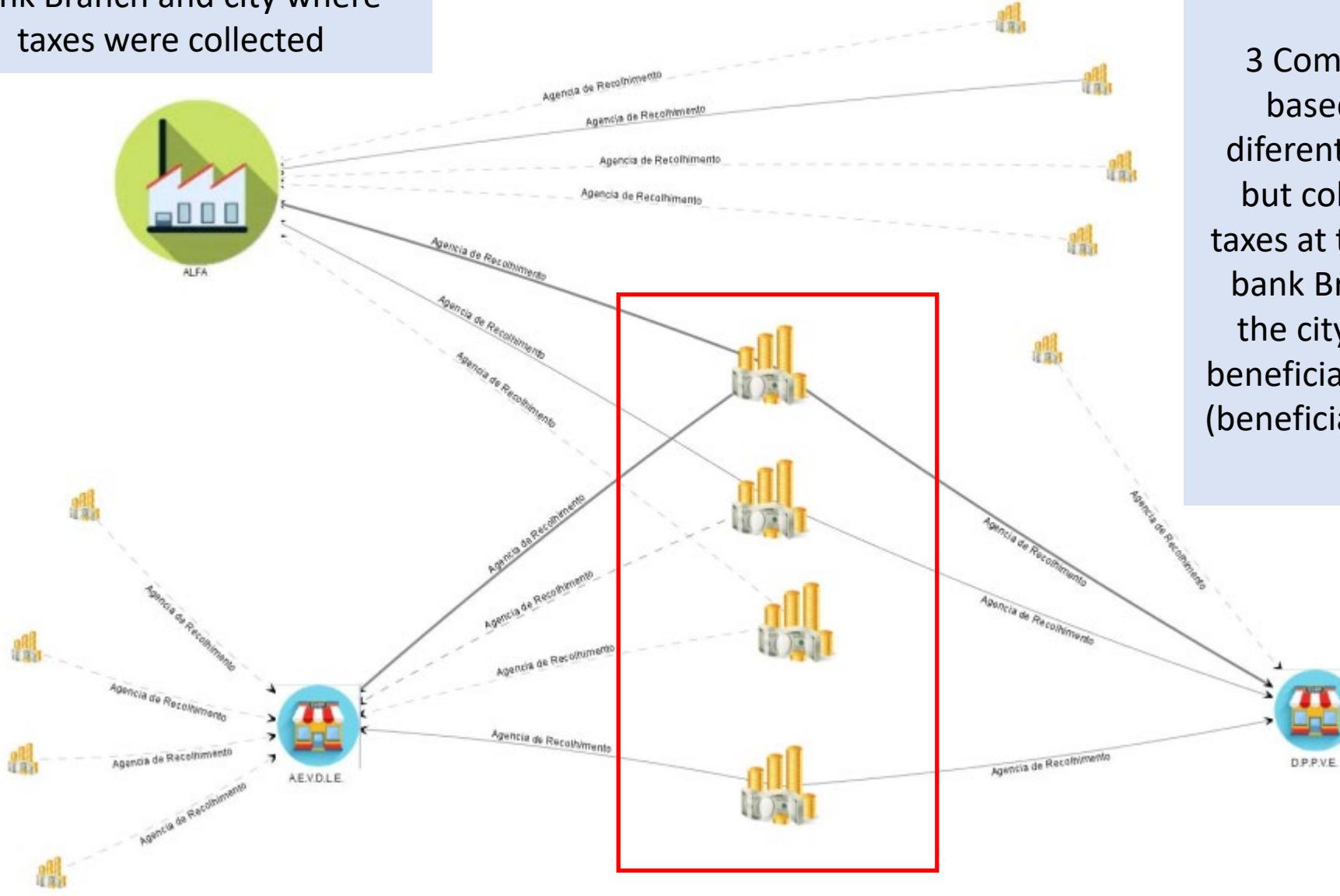
MacAddress: computer that transmitted statements and others documents

“Real”



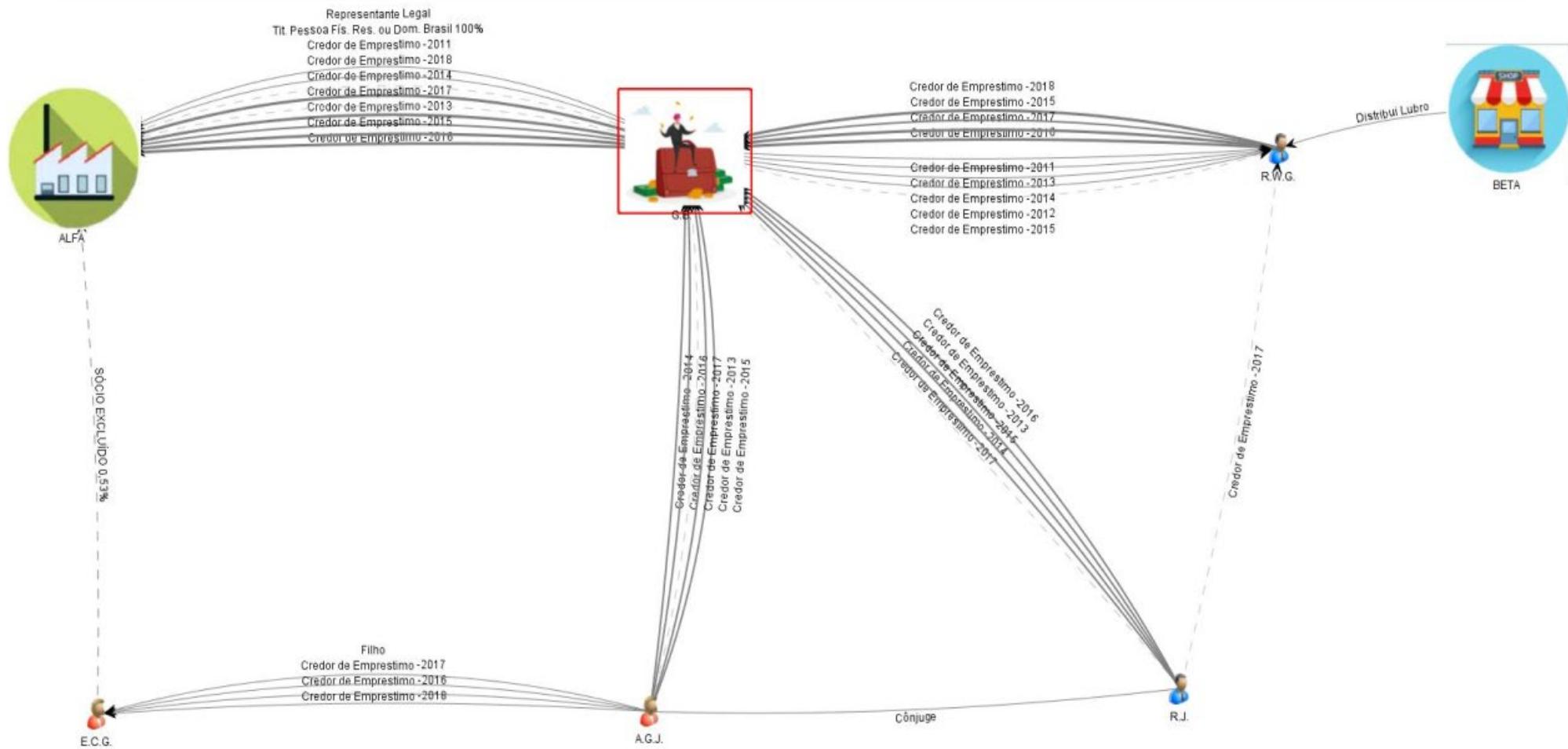
Fachada (1)

Bank Branch and city where taxes were collected



3 Companies based in 3 diferentes cities, but collecting taxes at the same bank Branch in the city of the beneficiary owner (beneficiário final)

Loan reported by individuals in their Income tax returns



The graph can be built from a spreadsheet with thousands of lines. (1.525 linhas)
 Graph about product code and description used by 3 different companies (ALFA ,
 BETA and GAMA) in their electronic invoices:
 Test to identify economic groups When there are coincidences



| Legal Person Name | Product Code | Product Description | Operation | Product Code and Description | Invoice Value |
|-------------------|--------------|---------------------|-----------|------------------------------|---------------|
| ALFA | 000104 | PNEU 215-75 R17,5 | Sale | 000104 PNEU 215-75 R17,5 | 7.451.061,79 |
| BETA | 000104 | PNEU 215-75 R17,5 | Sale | 000104 PNEU 215-75 R17,5 | 5.486.247,24 |
| GAMA | 000039 | PNEU 215-75 R17,5 | Sale | 000039 PNEU 215-75 R17,5 | 5.029.938,06 |
| ALFA | 000073 | PNEU 14.00x24 | Sale | 000073 PNEU 14.00x24 | 4.654.315,67 |
| ALFA | 0000681 | PNEU 10.00x20 | Sale | 0000681 PNEU 10.00x20 | 4.455.517,31 |
| BETA | 000073 | PNEU 14.00x24 | Sale | 000073 PNEU 14.00x24 | 4.076.507,39 |
| BETA | 0000681 | PNEU 10.00x20 | Sale | 0000681 PNEU 10.00x20 | 4.047.950,26 |
| ALFA | 000074 | PNEU 17,5x25 | Sale | 000074 PNEU 17,5x25 | 3.960.768,24 |
| GAMA | 000003 | PNEU 10.00x20 | Sale | 000003 PNEU 10.00x20 | 3.772.931,81 |
| ALFA | 000139 | PNEU 275-80 R22,5 | Sale | 000139 PNEU 275-80 R22,5 | 3.253.530,07 |
| ALFA | 000067 | PNEU 9.00x20 | Sale | 000067 PNEU 9.00x20 | 2.858.004,01 |
| GAMA | 000008 | PNEU 14.00x24 | Sale | 000008 PNEU 14.00x24 | 2.793.150,30 |
| BETA | 000139 | PNEU 275-80 R22,5 | Sale | 000139 PNEU 275-80 R22,5 | 2.477.337,67 |
| BETA | 000067 | PNEU 9.00x20 | Sale | 000067 PNEU 9.00x20 | 2.379.157,38 |
| BETA | 000074 | PNEU 17,5x25 | Sale | 000074 PNEU 17,5x25 | 2.367.051,46 |
| GAMA | 000073 | PNEU 14.00x24 | Sale | 000073 PNEU 14.00x24 | 2.314.431,18 |
| GAMA | 000002 | PNEU 9.00x20 | Sale | 000002 PNEU 9.00x20 | 2.136.889,26 |



ID 1

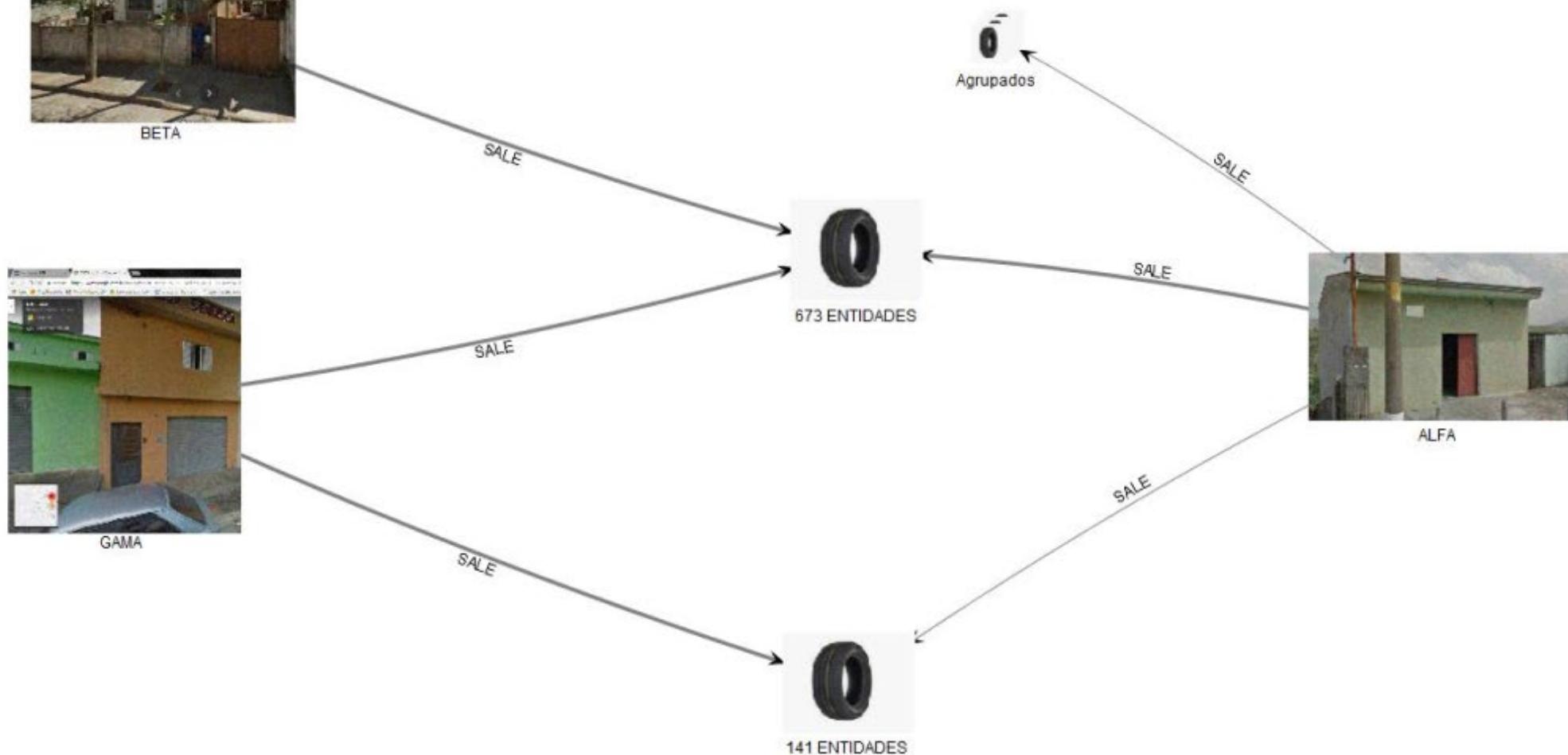
Type
of
Relat
ions
hip

ID 2

Relatório

| <input type="checkbox"/> <input type="button" value="X"/> Legal Person Name | <input type="checkbox"/> <input type="button" value="X"/> Op | <input type="checkbox"/> <input type="button" value="X"/> Product Code and Description | <input type="checkbox"/> <input type="button" value="X"/> Invoice Value SOMA |
|---|--|--|--|
| ALFA | SALE | 000017 PNEU 18.4X30 | 7.999,60 |
| ALFA | SALE | 000022 PNEU 175-70 R14 | 3.574,56 |
| ALFA | SALE | 000031 PNEU 225-70 R15 | 1.014,06 |
| ALFA | SALE | 000036 PNEU 205-75 R16 | 4.020,00 |
| ALFA | SALE | 000040 CAMARA DE AR 7.50X16 | 167,40 |
| ALFA | SALE | 000047 CAMARA DE AR FR-15 | 87,00 |
| ALFA | SALE | 000064 PROTETOR ARO 24 | 200,00 |
| ALFA | SALE | 000066 PNEU 7.50X16 | 1.289.800,09 |
| ALFA | SALE | 000067 PNEU 9.00X20 | 2.858.004,01 |
| ALFA | SALE | 0000681 PNEU 10.00X20 | 4.455.517,31 |
| ALFA | SALE | 000069 PNEU 10.00 R20 | 433.992,52 |
| ALFA | SALE | 000070 PNEU 11.00X22 | 203.231,58 |
| ALFA | SALE | 000071 PNEU 11.00 R22 | 32.310,00 |
| ALFA | SALE | 000072 PNEU 13.00X24 | 1.018.858,44 |
| ALFA | SALE | 000073 PNEU 14.00X24 | 4.654.315,67 |
| Seleção Geral | | | 150.532.891,89 |

Possibility of including fotos of establishments or of people (obs: fictional illustration)



Ungrouping

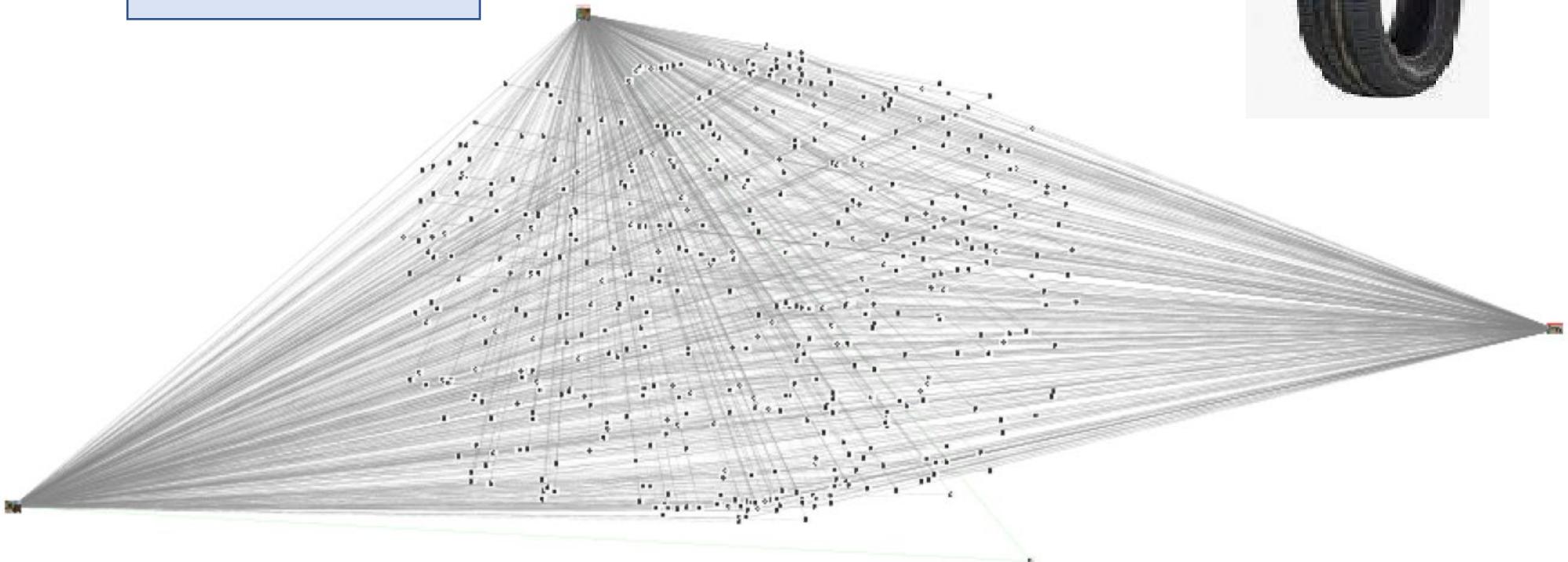
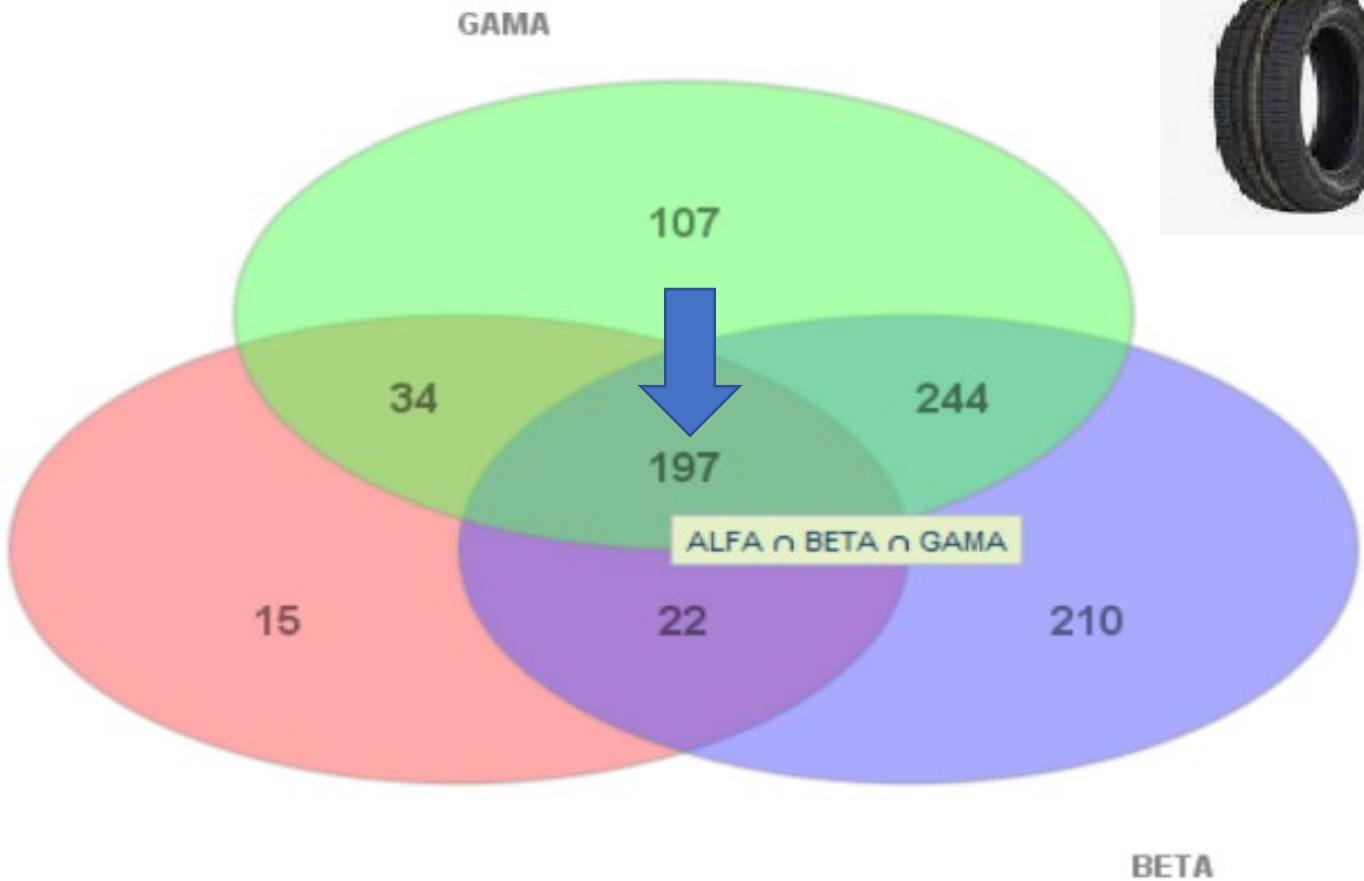




Diagrama de Venn sobre Relacionamentos

Clique sobre um número para visualizar a relação de entidades correspondente





| TIPO | ID |
|---------|-------------------------|
| GENERIC | 000022 PNEU 175-70 R14 |
| GENERIC | 000064 PROTETOR ARO 24 |
| GENERIC | 0000681 PNEU 10.00X20 |
| GENERIC | 000069 PNEU 10.00 R20 |
| GENERIC | 000070 PNEU 11.00X22 |
| GENERIC | 000071 PNEU 11.00 R22 |
| GENERIC | 000072 PNEU 13.00X24 |
| GENERIC | 000073 PNEU 14.00X24 |
| GENERIC | 000085 PNEU 175-70 R13 |
| GENERIC | 000086 PNEU 185-70 R13 |
| GENERIC | 000087 PNEU 175-70 R14 |
| GENERIC | 000088 PNEU 185-60 R14 |
| GENERIC | 000089 PNEU 185-65 R14 |
| GENERIC | 000092 PNEU 195-55 R15 |
| GENERIC | 000093 PNEU 195-60 R15 |
| GENERIC | 000095 PNFII 205-70 R15 |

Reverse engineering: we can also identify in ContÁgil (Big Data) **"who else?"** reports these codes and product descriptions when issuing electronic invoices in Brazil, in order to identify other companies involved.





Colunas:
3

Linhas:
197



TIPO

GENERIC



ID



NOME

Suppliers and
Clients



Second Level
Domain



Employee migration





Script that generates graph to identify fraud (interposed individuals (Orange) and shell companies, based in a score system



Relatório

| | | Total de Pontos de Indicios de Interposicao de PF SOMA | Risco Porcentual de Interposicao de PF no QSA ou como Responsavel pela PJ SOMA | P01 - CPF Tardio SOMA | P02 - Poucas DIRPF entregue nos ultimos 5 anos SOMA | P03 - Situacao Cadastral nao Regular SOMA | P12 - Baixo Valor de Bens Menos Dividas na DIRPF - Soma Contribuinte e Conjugue SOMA | P15 - Endereço Incompativel com Participacao em PJ grande SOMA | P14 - Recebimento de Auxilio Emergencial SOMA |
|----------------|--------|--|--|-----------------------|---|---|--|--|---|
| DAQUIM J... | 8,00 | 99,00% | 1,00 | 2,00 | 0,00 | 1,00 | 1,00 | 0,00 | 0,00 |
| LAUDETE ... | 8,00 | 99,00% | 0,00 | 2,00 | 0,00 | 1,00 | 0,00 | 0,00 | 0,00 |
| KEISSE KEL... | 8,00 | 99,00% | 0,00 | 2,00 | 0,00 | 1,00 | 0,00 | 0,00 | 0,00 |
| MAILTON HE... | 8,00 | 99,00% | 0,00 | 2,00 | 0,00 | 1,00 | 0,00 | 0,00 | 0,00 |
| ALDO NON... | 7,00 | 84,30% | 0,00 | 2,00 | 0,00 | 1,00 | 0,00 | 0,00 | 0,00 |
| ORTENCIO J... | 7,00 | 84,30% | 0,00 | 2,00 | 0,00 | 1,00 | 0,00 | 0,00 | 0,00 |
| Seleção | | | | | | | | | |
| Geral | 119,00 | 1.388,36% | | 1,00 | 34,00 | | 0,00 | 18,00 | 1,00 |

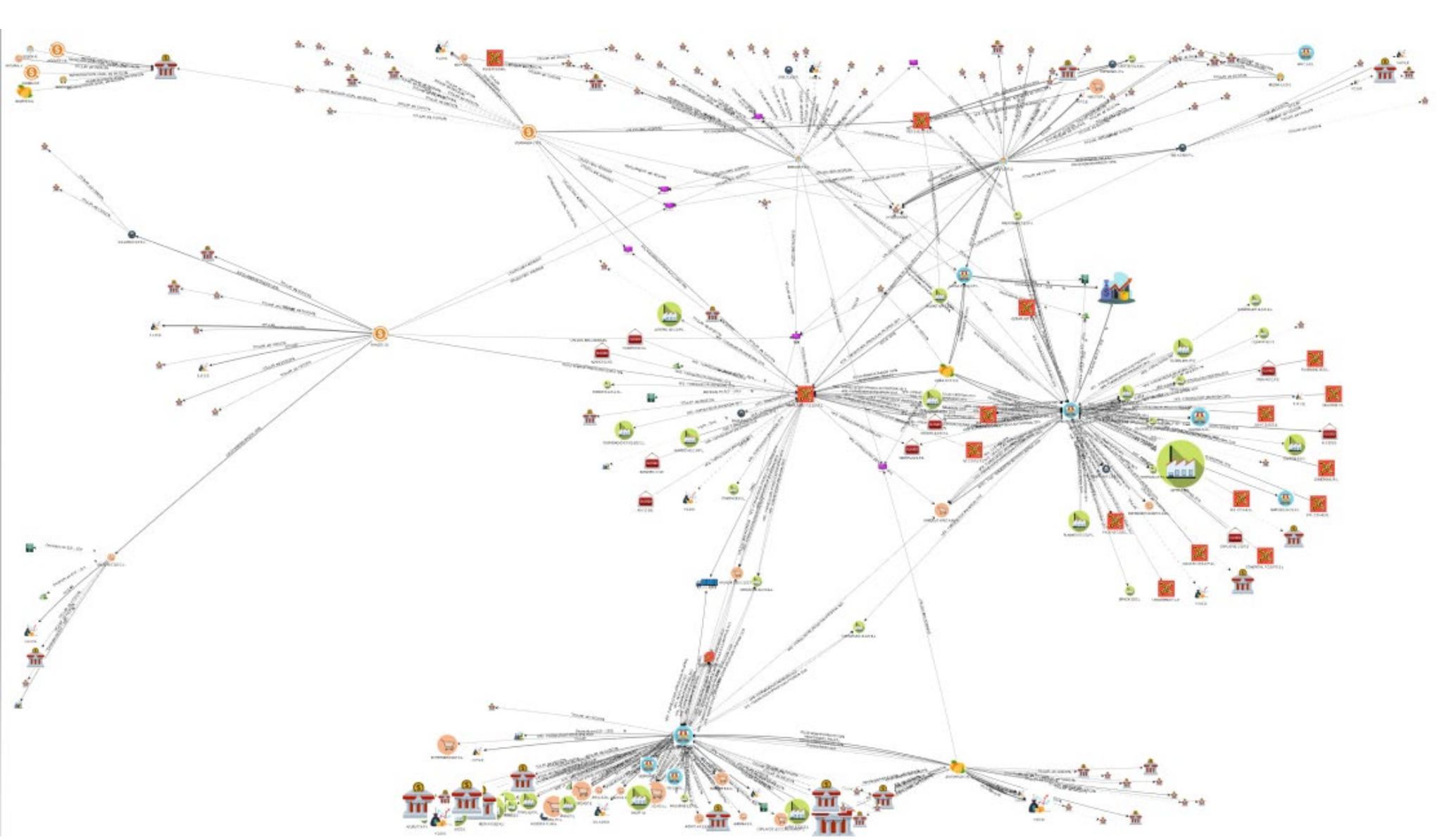
Quantidade de linhas listadas: 20 | Quantidade de linhas selecionadas: 10

The existence of probable “oranges” in the graph reinforces the evidence of fraud and the existence of a hidden beneficial ownership

“ORANGE CATHC” SCRIPT

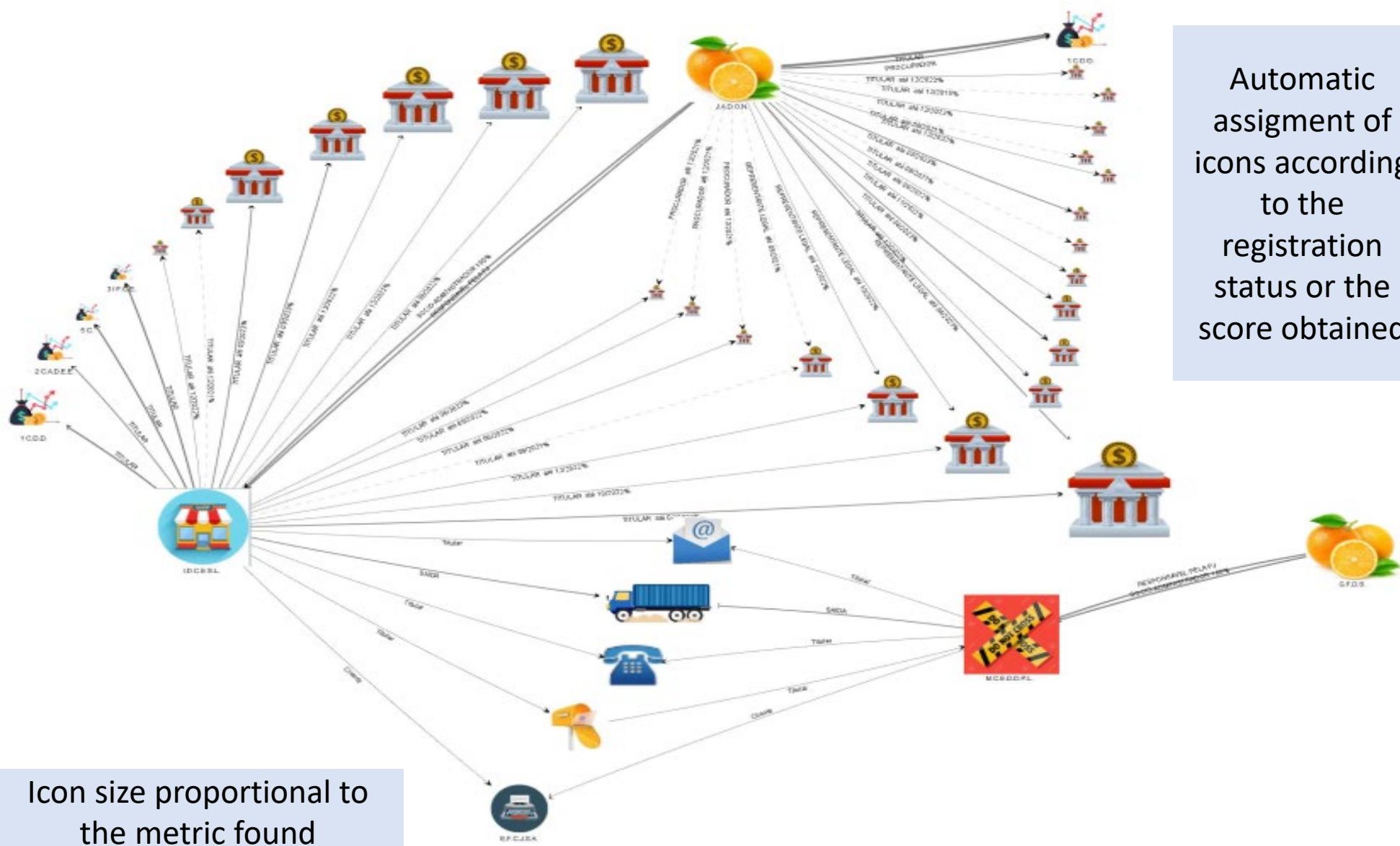


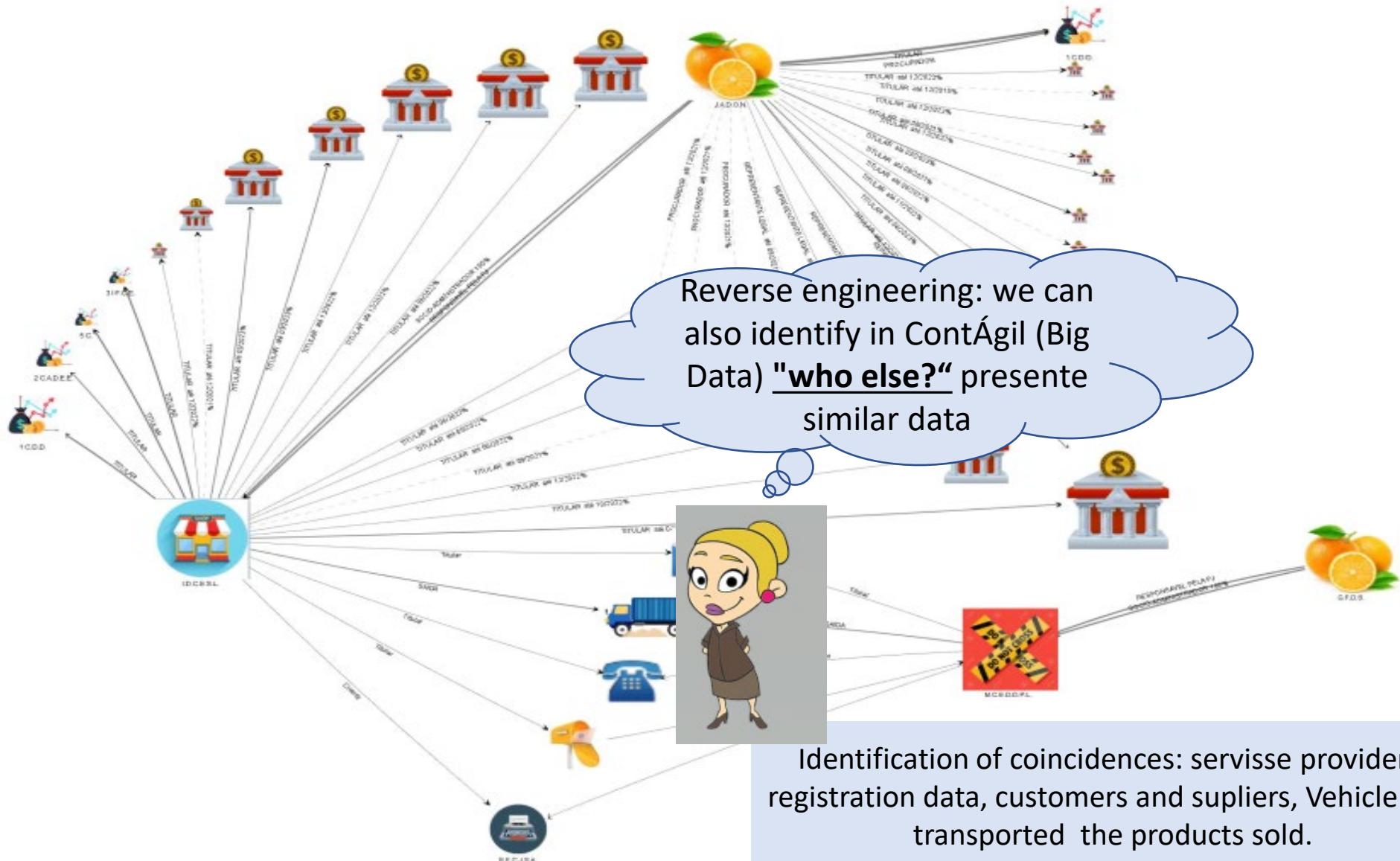
From 2 companies informed for the script, the following graph was generated, in an approximate execution time of 20 minutes



Automatic assignment of icons according to the registration status or the score obtained

Icon size proportional to the metric found



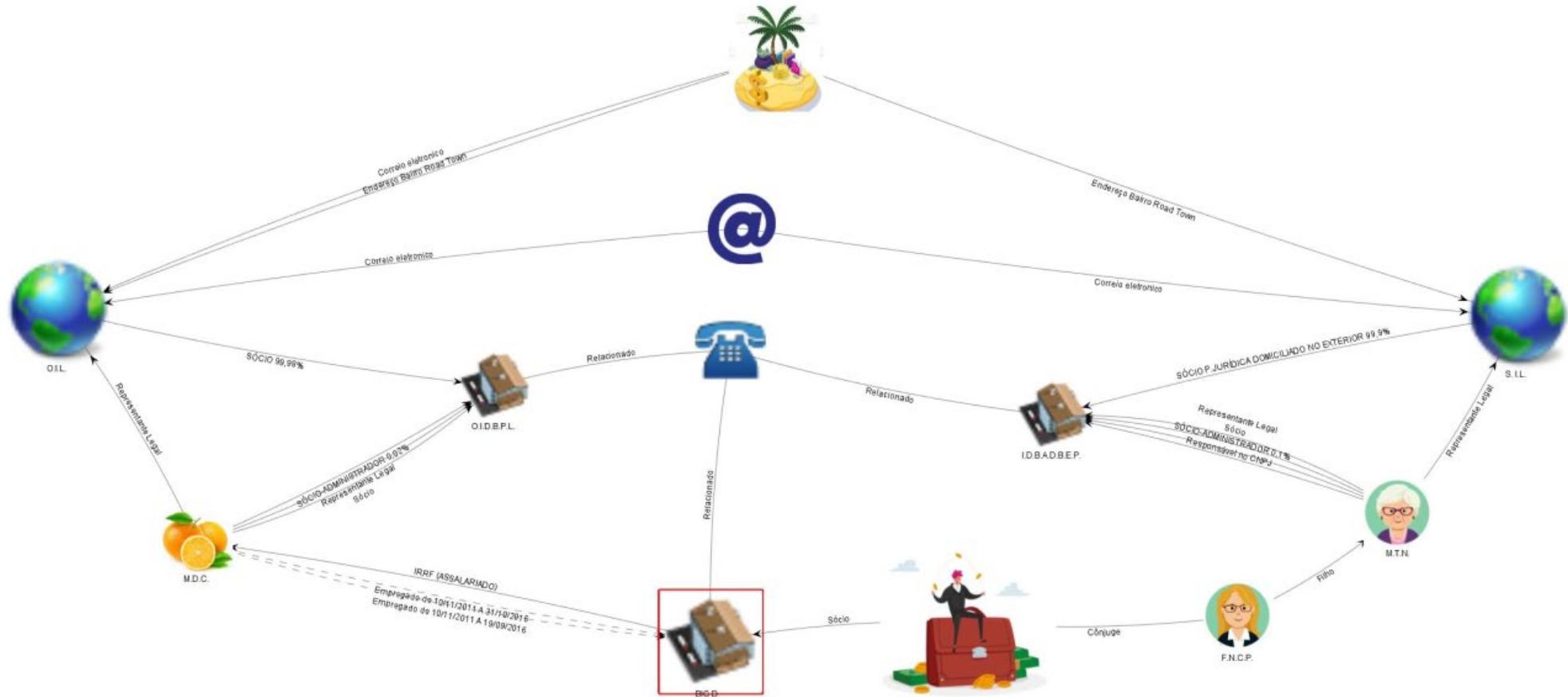


Reverse engineering: we can also identify in ContÁgil (Big Data) "who else?" presente similar data

Identification of coincidences: service providers, registration data, customers and suppliers, Vehicle that transported the products sold.



Companies with address abroad

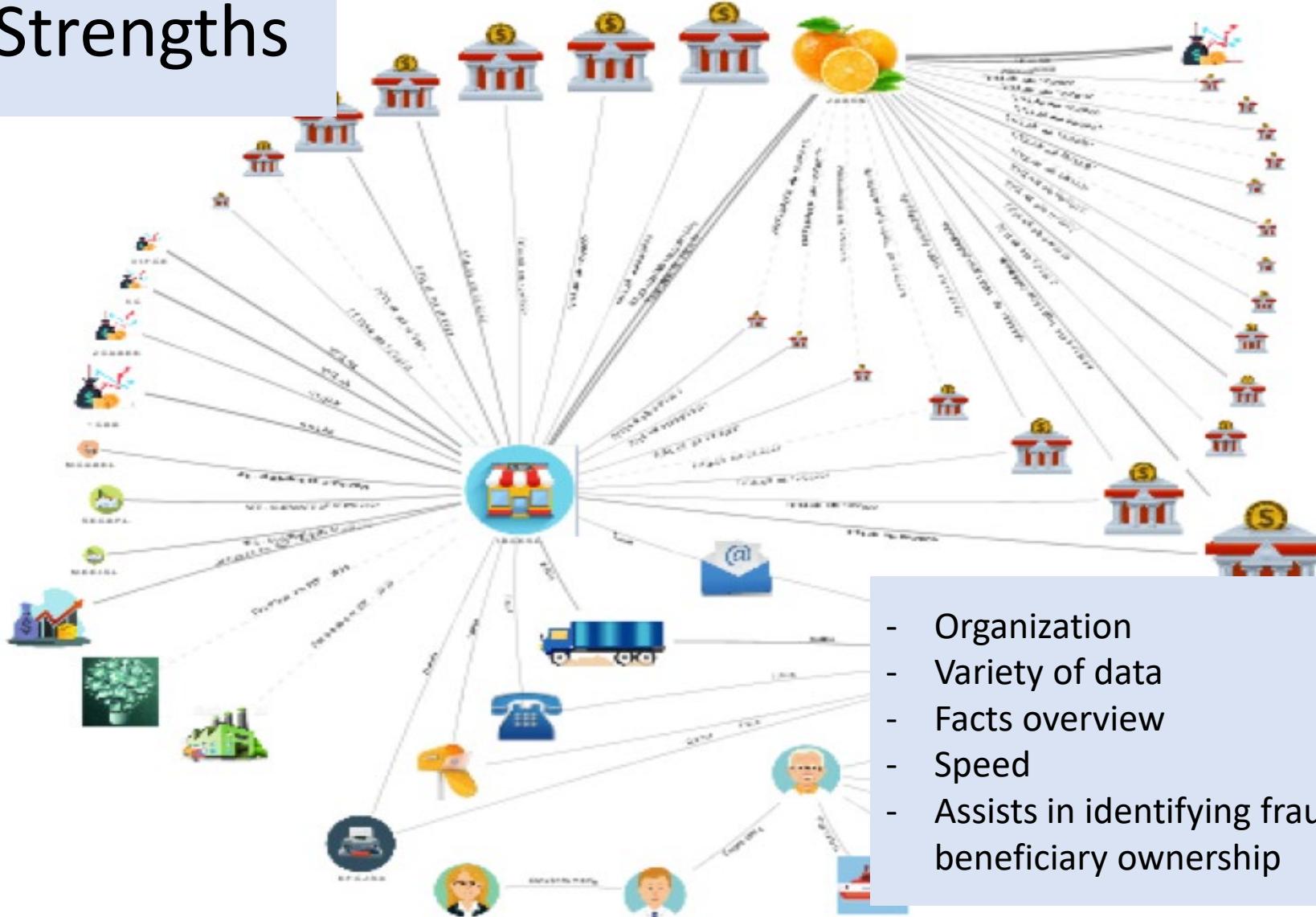


Challenges

“There is no favorable wind for those who don’t know where are going”
(Séneca, Séc. I)

- Working with a lot of data and information
- Validate and confirm the evidence
- Identify the role of each entity and apply appropriate accountability

Strengths



- Organization
- Variety of data
- Facts overview
- Speed
- Assists in identifying fraud, assets, beneficiary ownership

OPERAÇÃO “SUCATA”

Operation “Scrap”

Inter-agency



COMBATE À SONEGAÇÃO

OPERAÇÃO SUCATA - Receita Federal, Polícia Federal e Procuradoria Geral da Fazenda Nacional combatem sonegação fiscal praticada por grupo econômico

A ação conjunta tem como alvo um grupo empresarial que deve mais de 5 bilhões de reais à União Federal decorrentes de autuações tributárias.

Publicado em 18/10/2023 08h52

Atualizado em 18/10/2023 09h01

Compartilhe:     

[OPERAÇÃO SUCATA - Receita Federal, Polícia Federal e Procuradoria Geral da Fazenda Nacional combatem sonegação fiscal praticada por grupo econômico — Receita Federal \(www.gov.br\)](#)

PF e Receita Federal combatem sonegação de impostos e lavagem de dinheiro

A ação mira um grupo de empresários que deve mais de R\$ 5 bilhões em impostos. Eles também são alvos de bloqueio judicial de diversos bens, como veículos de luxo e um iate avaliado em R\$ 14 milhões.

Publicado em 18/10/2023 06h40 | Atualizado em 18/10/2023 09h30

Compartilhe: [f](#) [X](#) [in](#) [e-mail](#) [@](#)



Rio de Janeiro/RJ - Na manhã desta quarta-feira, 18/10, a Policia Federal deflagrou a Operação Sucata, em conjunto com a Receita Federal, tendo como alvo um grupo empresarial que deve mais de R\$ 5 bilhões em tributos à União.

Operação “Sucata”



- The operation originated from criminal news sent by the Federal Revenue, which pointed out that the group of businessmen created more than 50 companies - most of them “ghost” - to circumvent the payment of taxes. They still used “oranges” to avoid being held responsible for tax debts.
- Simultaneously with the outbreak, a court decision obtained by the Attorney General's Office of the National Treasury determined the freezing of all the business group's assets to ensure payment of the tax debt. Among the assets that will be made legally unavailable are more than 40 properties, valued at around R\$38 million; more than 120 vehicles, including luxury cars; a yacht valued at R\$14 million; and money deposited in bank accounts belonging to those involved, yet to be quantified.



Thank you!

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Tax Auditor

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