



The 2025 CFRR Ministerial Conference

# Çfarë vlere ka në të vërtetë IA-ja në raportimin financiar

Eleonora Laurenza

18 Mars 2025, Hotel "Imperial Riding School", Vjenë, Austri

## CFRR»

Centre for Financial and  
Sustainability Reporting Reform



REPARIS  
FOR SMEs

PULSAR



EAASURE

The CFRR Programs are co-funded by

 Federal Ministry  
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 Austrian  
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Swiss Confederation  
Federal Department of Economic Affairs,  
Education and Research EAER  
State Secretariat for Economic Affairs SECO



European Union

# ÇFARË ËSHTË INTELIJENCA ARTIFICIALE?

**Demis Hassabis**



**Çmimi "Nobel" për kimi, 2024**

Foto: Duncan Hull, CC BY-SA 4.0

**Geoffrey Hinton**



**Çmimi "Nobel" për fizikë, 2024**

Foto: Chloe Ellingson/The New York Times

**John Hopfield**



**Çmimi "Nobel" për fizikë, 2024**

Foto: Universiteti "Princeton"



# ÇFARË ËSHTË INTELIGJENCA ARTIFICIALE?

## Artificial Intelligence is a field of study

"AI is making machines do things  
that would require intelligence  
if done by humans."

"AI is understanding the nature of  
intelligence in machines...  
...and, why not, in humans."

AI as a field  
is relevant in multiple disciplines.

Nobel...

will AI increase human productivity?  
will AI revolutionize science?  
will humans become smarter?  
will AI replace human in many jobs?  
...  
will AI cause human extinction?

## Technology is its application

### AI Act (Regulation (EU) 2024/1689 art. 3

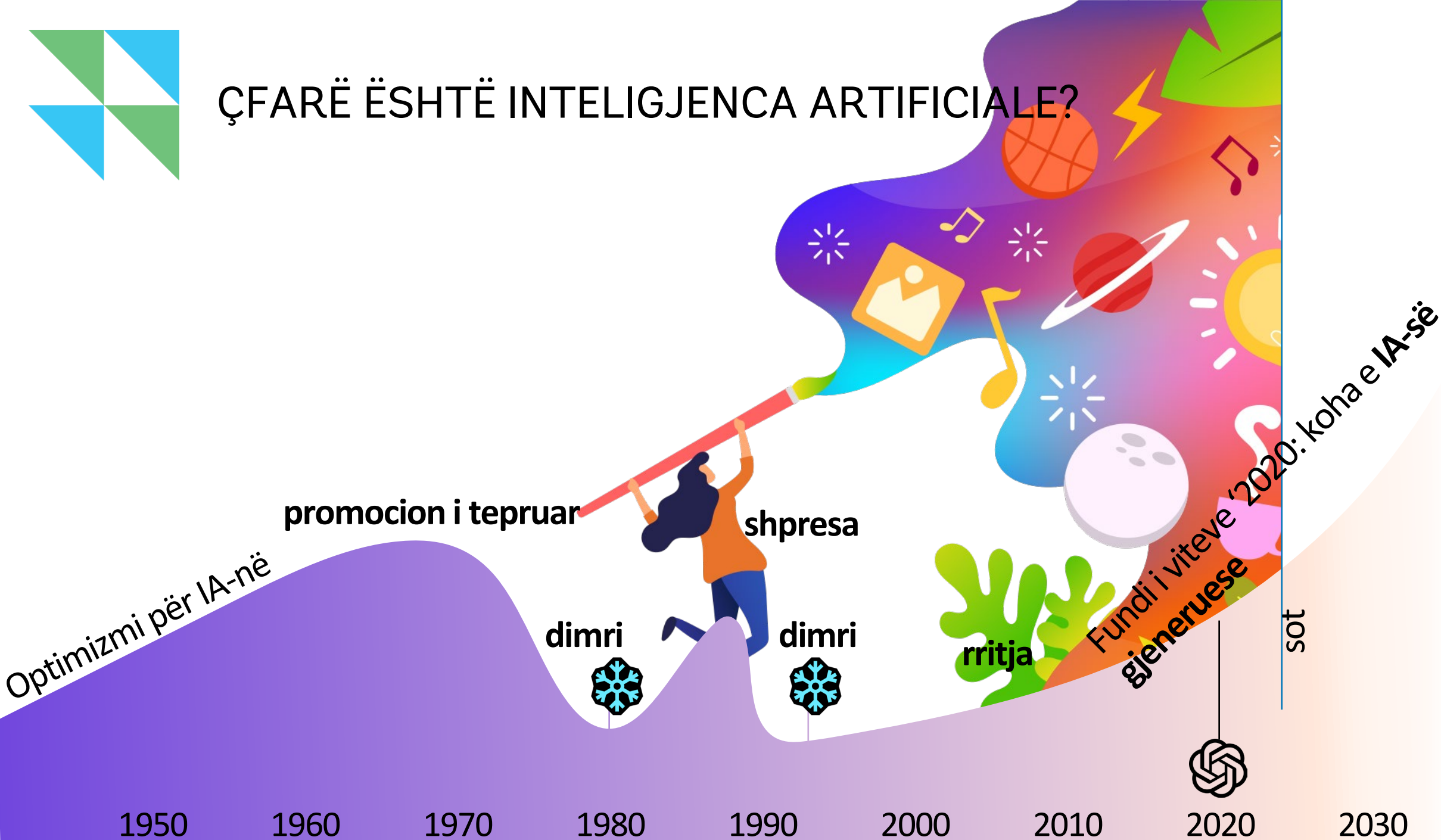
'AI system' means a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments.

AI as a technology  
is relevant in multiple domains.

Society...

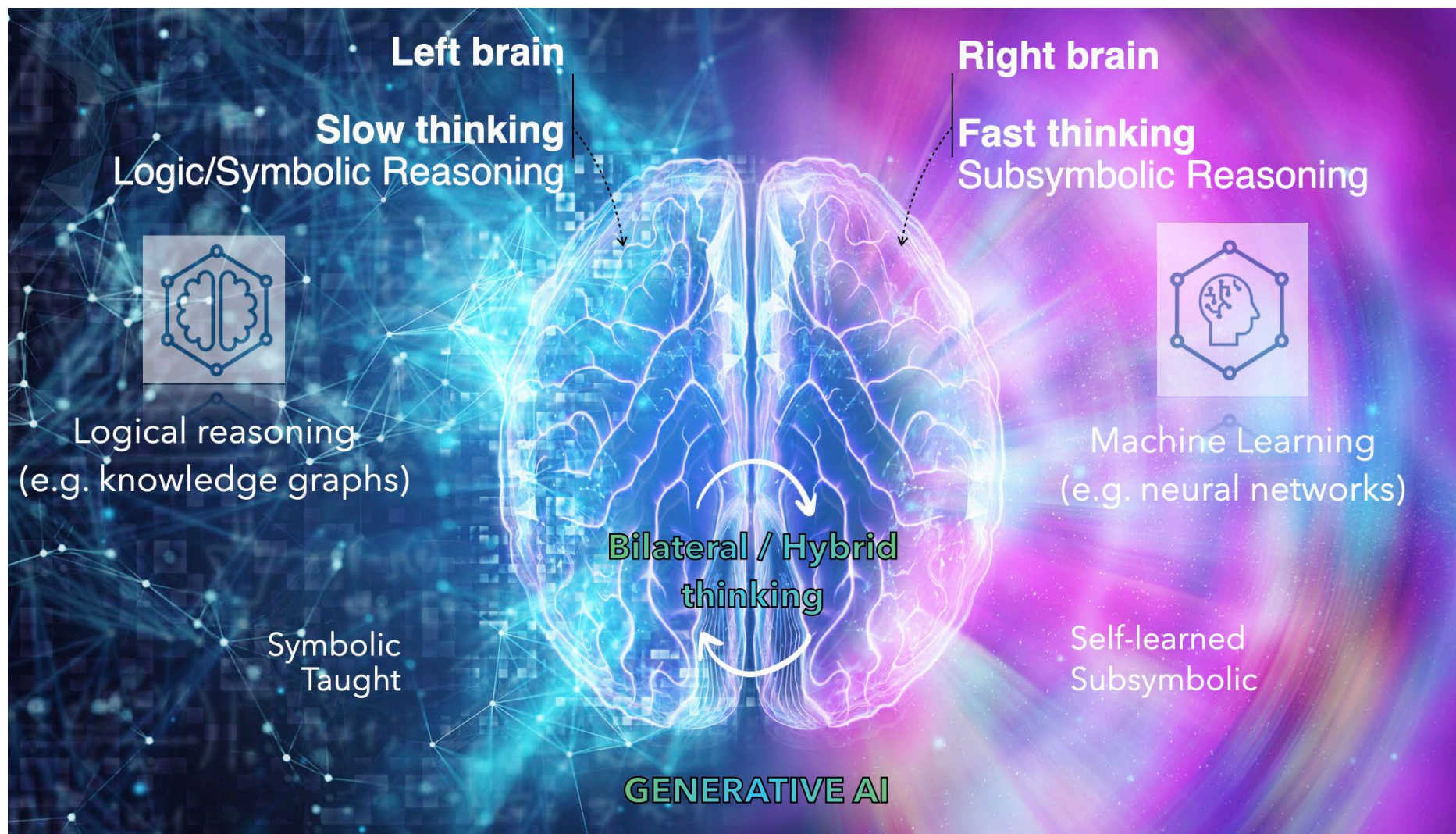


# ÇFARË ËSHTË INTELIGJENCA ARTIFICIALE?





# ÇFARË ËSHTË INTELIGJENCA ARTIFICIALE?





## Artikull në FORBES



FORBES > BUSINESS

BREAKING

# Lawyer Used ChatGPT In Court —And Cited Fake Cases. A Judge Is Considering Sanctions

**Molly Bohannon** Forbes Staff

*Molly Bohannon has been a Forbes news reporter  
since 2023.*

Updated Jun 8, 2023, 03:42pm EDT

**TOPLINE** The lawyer for a man suing an airline in a routine personal injury suit used ChatGPT to prepare a filing, but the artificial intelligence bot delivered fake cases that the attorney then presented to the court, prompting a judge to weigh sanctions as the legal community grapples with one of the first cases of AI “hallucinations” making it to court.

Artikull në FORBES



# IA KREJT INDUKTUES (MENDIM I SHPEJTË)



Kur “MyCom” zotëron 51,07% të shoqërisë “Società di Gestione BestBanca” dhe shoqëria “Società di Gestione BestBanca” zotëron 23,1% të aksioneve të shoqërisë “BestBanca”, **a do të ndryshonte kontrolli** i shoqërisë “BestBanca” në qoftë se “MyCom srl” do të blinte 30% të aksioneve të “BestBanca” në treg?



GPT4  
June 2024





# IA KREJT INDUKTUES (MENDIM I SHPEJTË)



GPT4  
qershor  
2024



Kur "MyCom" zotëron 51,07% të shoqërisë "Società di Gestione BestBanca" dhe shoqëria "Società di Gestione BestBanca" zotëron 23,1% të aksioneve të shoqërisë "BestBanca", **a do të ndryshonte kontrolli** i shoqërisë "BestBanca" në qoftë se "MyCom srl" do të blinte 30% të aksioneve të "BestBanca" në treg?

(...) MyCom effectively controls approximately 11.85% (51.07% \* 23.1%) of BestBanca's shares (...)

Now, if MyCom s.r.l. were to buy an additional 30% of BestBanca's shares from the market, it (...) could impact control:

1. Direct Ownership Increase: (...) its direct ownership stake in BestBanca would increase by 30%.
2. Combined Ownership: MyCom s.r.l. would then own approximately 41.85% (11.85% + 30%) of BestBanca's shares (...)
3. Potential for Majority Control: Depending on (...) structure (...) and (...) distribution of shares (...), MyCom s.r.l. could potentially achieve majority control of BestBanca with this increased ownership stake.
4. Voting Rights and Board Representation: With a majority ownership stake, MyCom s.r.l. would likely have significant influence (...)
5. Regulatory Considerations: (...)

In summary, if MyCom s.r.l. were to buy 30% of BestBanca's shares from the market (...) it (...) **could potentially achieve** majority control of BestBanca (...)

*lack of knowledge*

*lack of factuality*

*lack of context*

*lack of reasoning*

*lack of common sense*

*lack of explanation*

*Horoscope answer!*





# IA KREJT DEDUKTUES (MENDIM I NGADALTË)

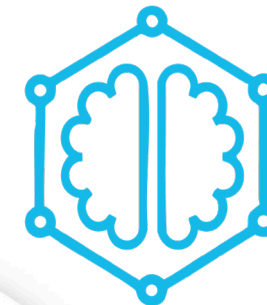


Table P

Person	Parent
Luigi	Giusto
Augusto	Giusto
Mario	Umberto
Sandra	Paola
Umberto	Vincenzo
Paola	Vincenzo
Enzo	Mario
Laura	Sandra

Who are the **pairs of persons**  
of the **same generation**?

Every person  
belongs to a  
generation

$$P(x) \Rightarrow \dots \\ \exists q \ G(x, q)$$

$$P(x, v), P(y, w), \\ G(v, z), G(w, z) \Rightarrow \\ \exists q \ G(x, q), G(y, q)$$

.....  
If parents are in the same  
generation, children are in the  
same generation

Person	Person
Luigi	Augusto
Umberto	Paola
Mario	Sandra
Enzo	Laura

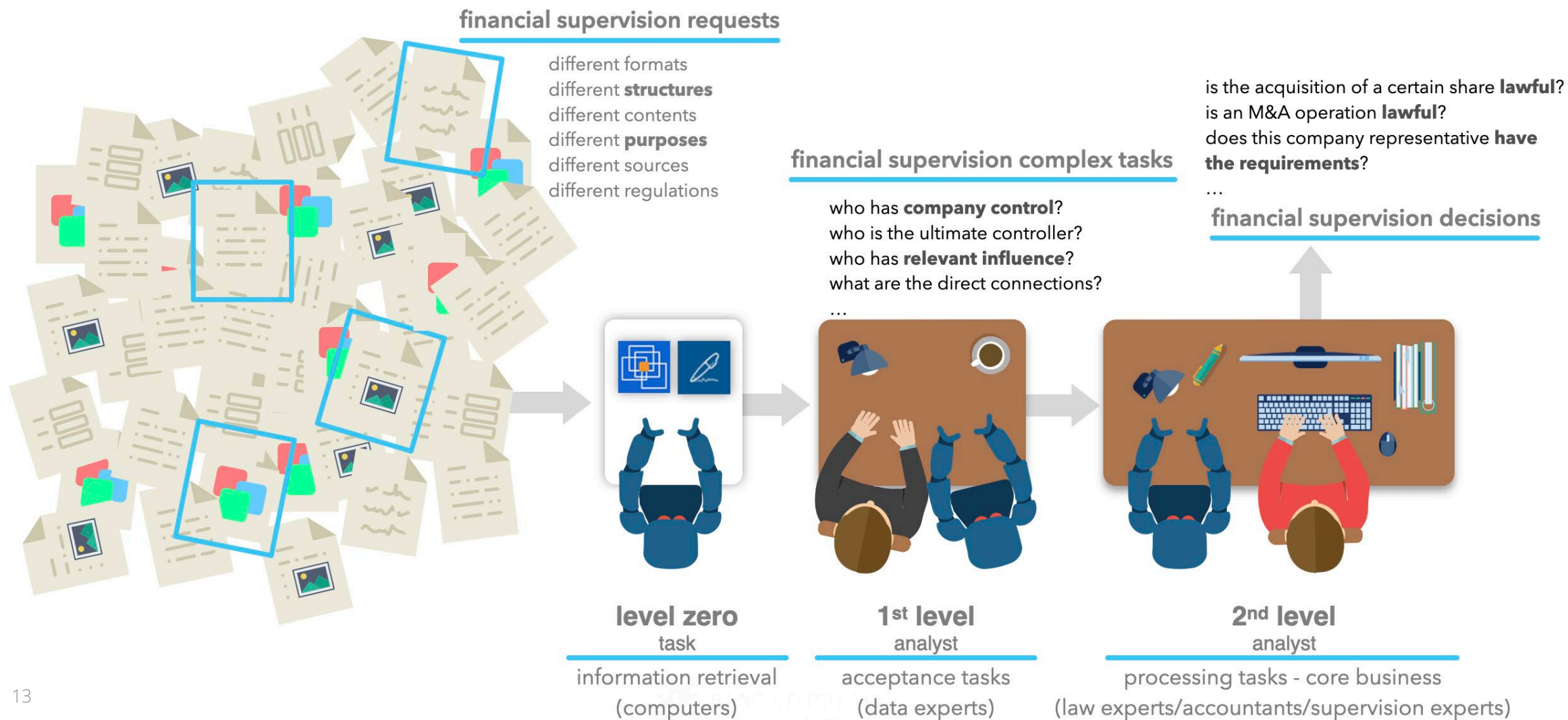




# RAST PËRDORIMI HIBRID I IA-SË NË MBIKËQYRJEN FINANCIARE: KGROAR

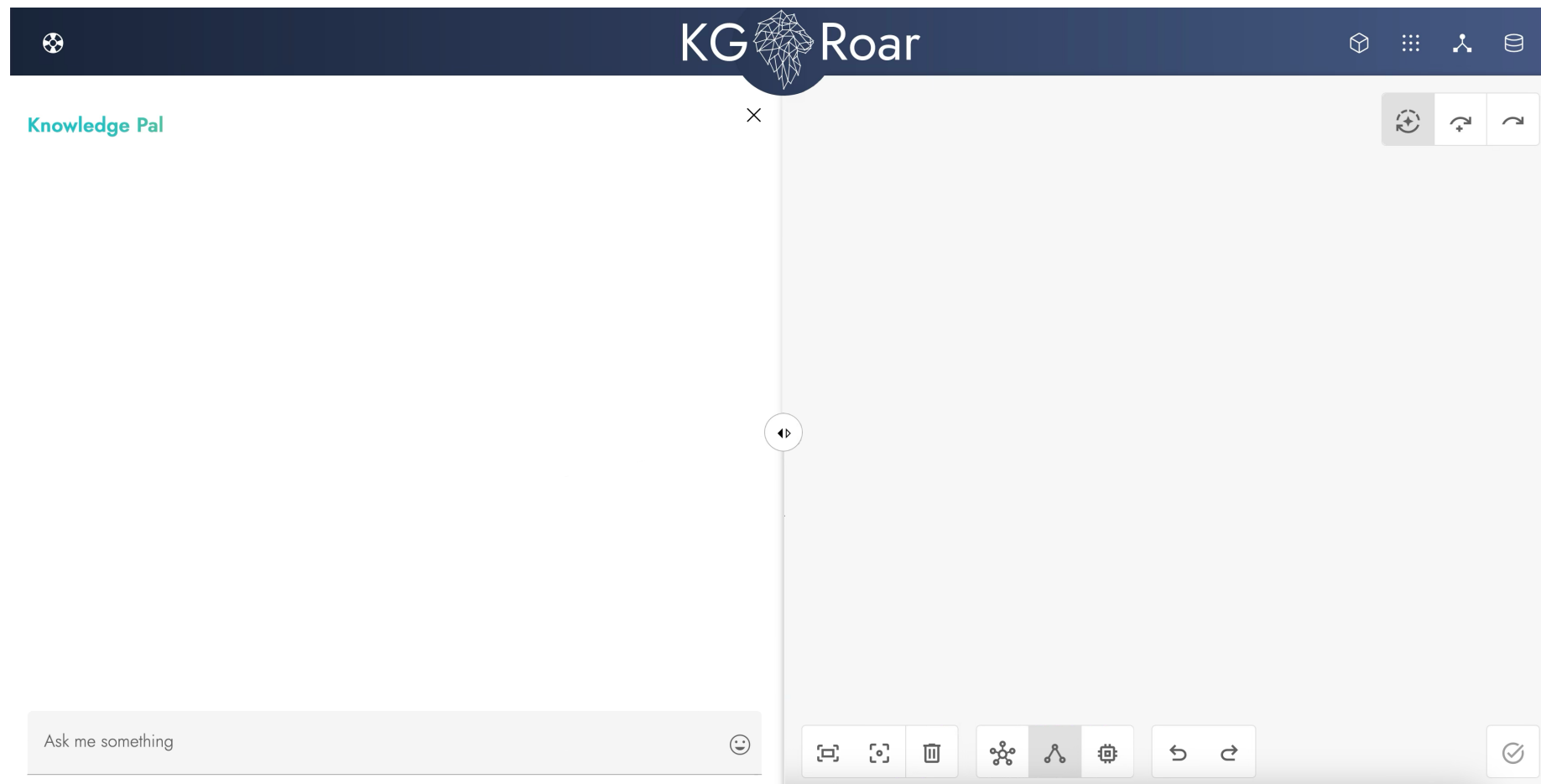
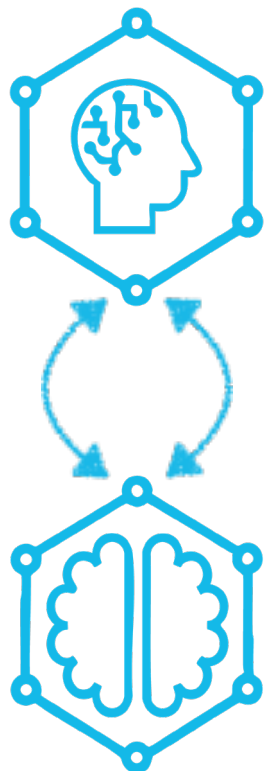


# IA hibride në mbikëqyrjen financiare: KG ROAR



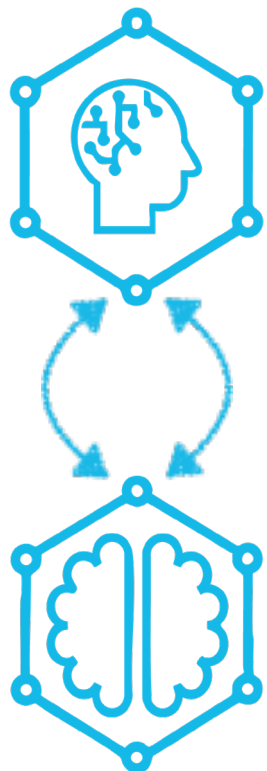


# IA ibride në mbikëqyrjen financiare: KG ROAR





# IA hibride në mbikëqyrjen financiare: KG ROAR



KG Roar

Knowledge Pal

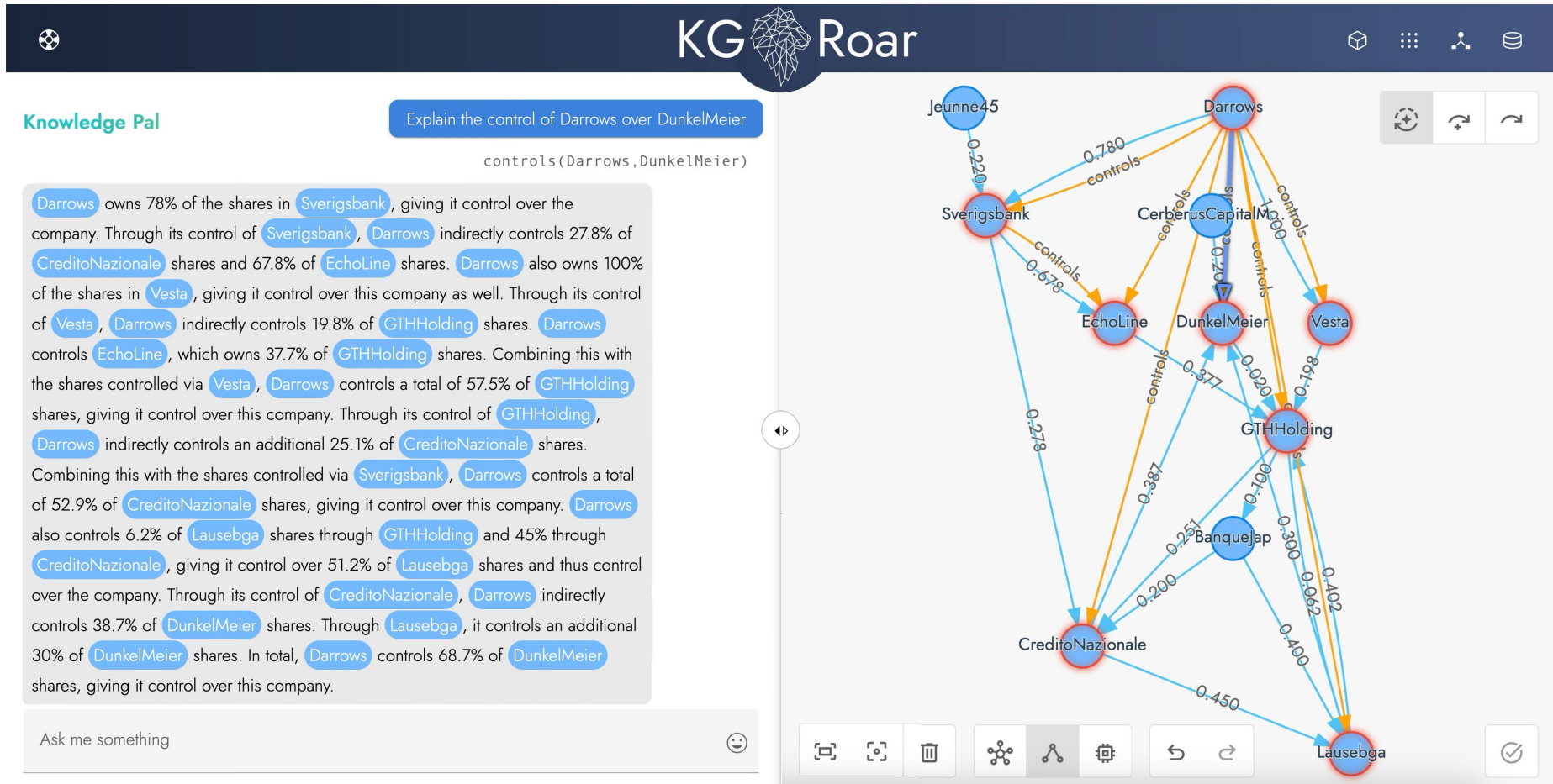
Explain the control of Darrows over DunkelMeier

... controls(Darrows,DunkelMeier)

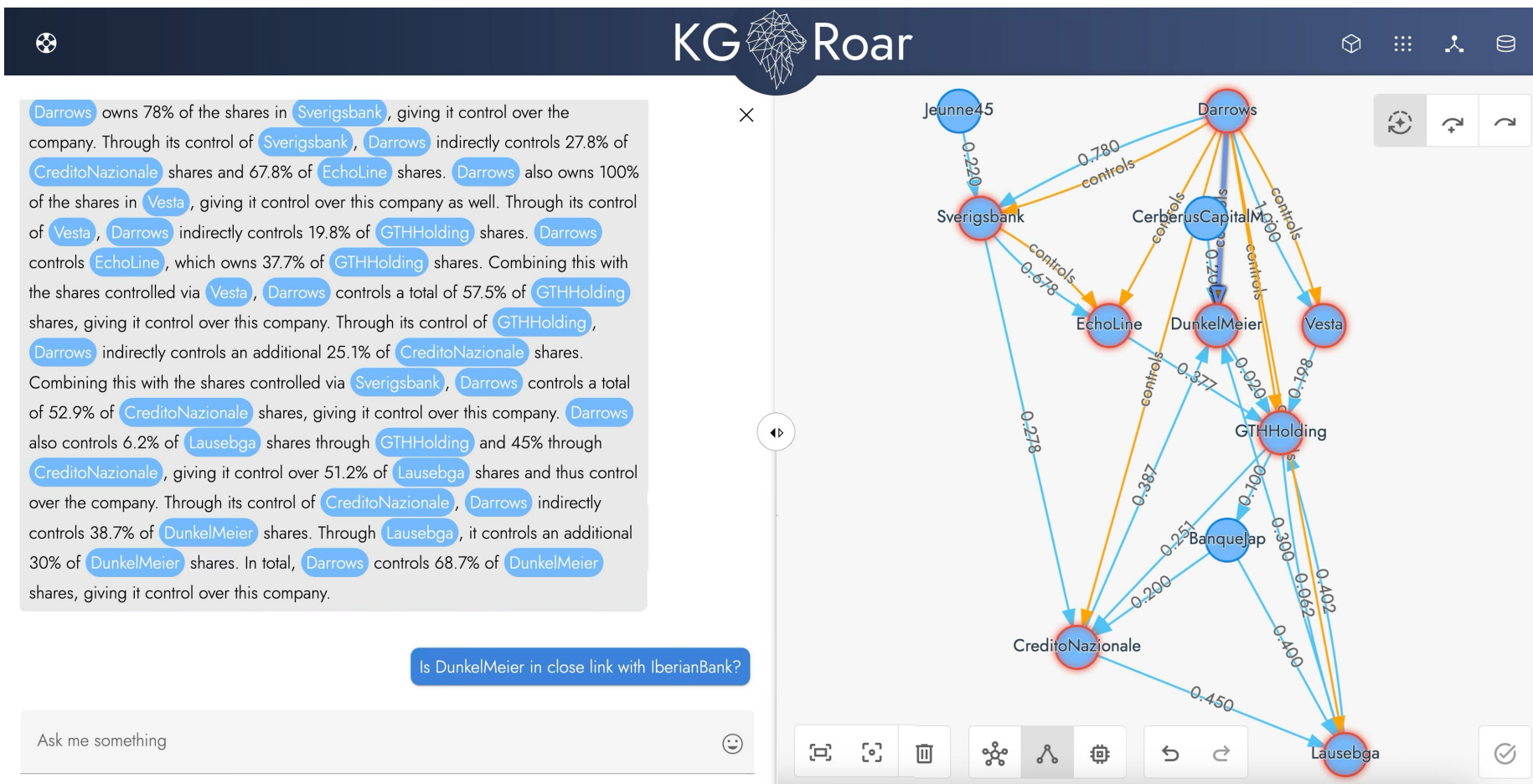
Ask me something

KG Roar interface showing a chat window with a query and a response.

# IA hibride në mbikëqyrjen financiare: KG ROAR

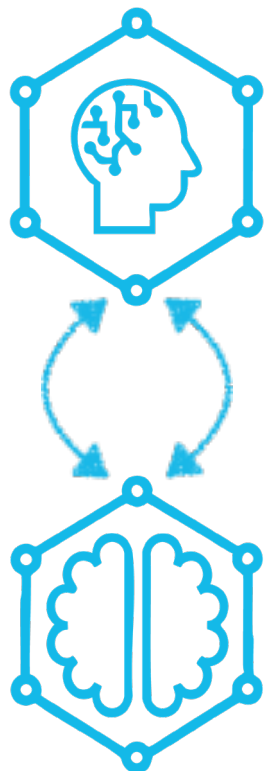




# IA hibride në mbikëqyrjen financiare: KG ROAR





# IA ibride në mbikëqyrjen financiare: KG ROAR



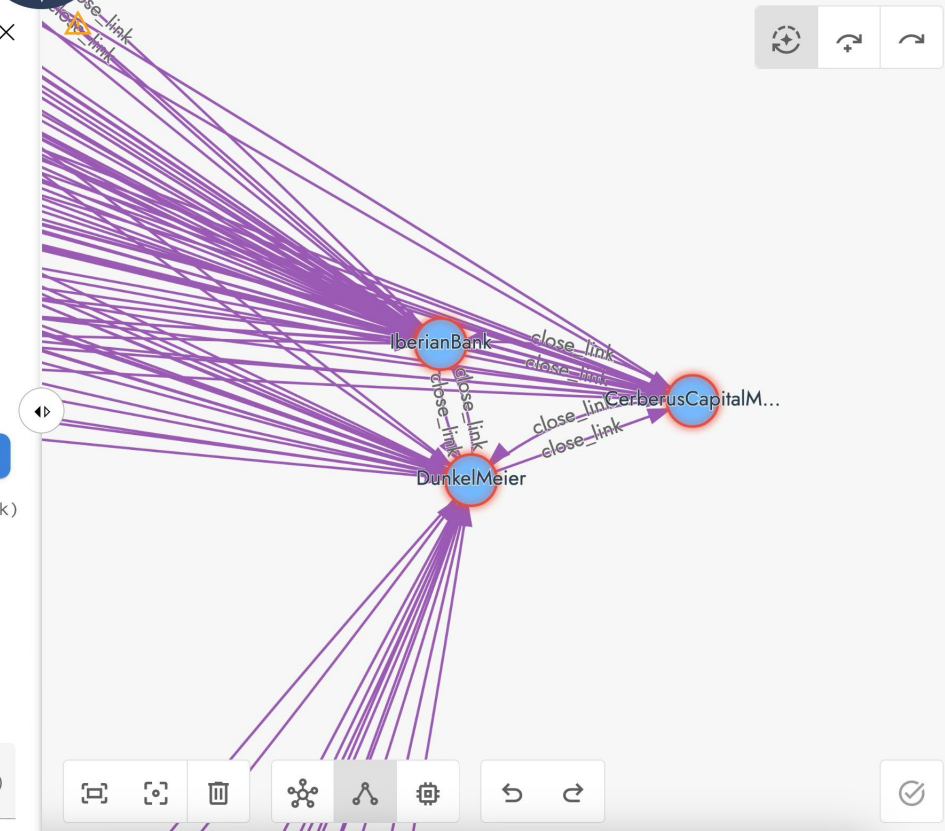
KG Roar

the shares controlled via **CreditoNazionale** / **Darrows** controls a total of 52.9% of **CreditoNazionale** shares, giving it control over this company. Through its control of **GTHHolding**, **Darrows** indirectly controls an additional 25.1% of **CreditoNazionale** shares. Combining this with the shares controlled via **Sverigsbank**, **Darrows** controls a total of 52.9% of **CreditoNazionale** shares, giving it control over this company. **Darrows** also controls 6.2% of **Lausebga** shares through **GTHHolding** and 45% through **CreditoNazionale**, giving it control over 51.2% of **Lausebga** shares and thus control over the company. Through its control of **CreditoNazionale**, **Darrows** indirectly controls 38.7% of **DunkelMeier** shares. Through **Lausebga**, it controls an additional 30% of **DunkelMeier** shares. In total, **Darrows** controls 68.7% of **DunkelMeier** shares, giving it control over this company.

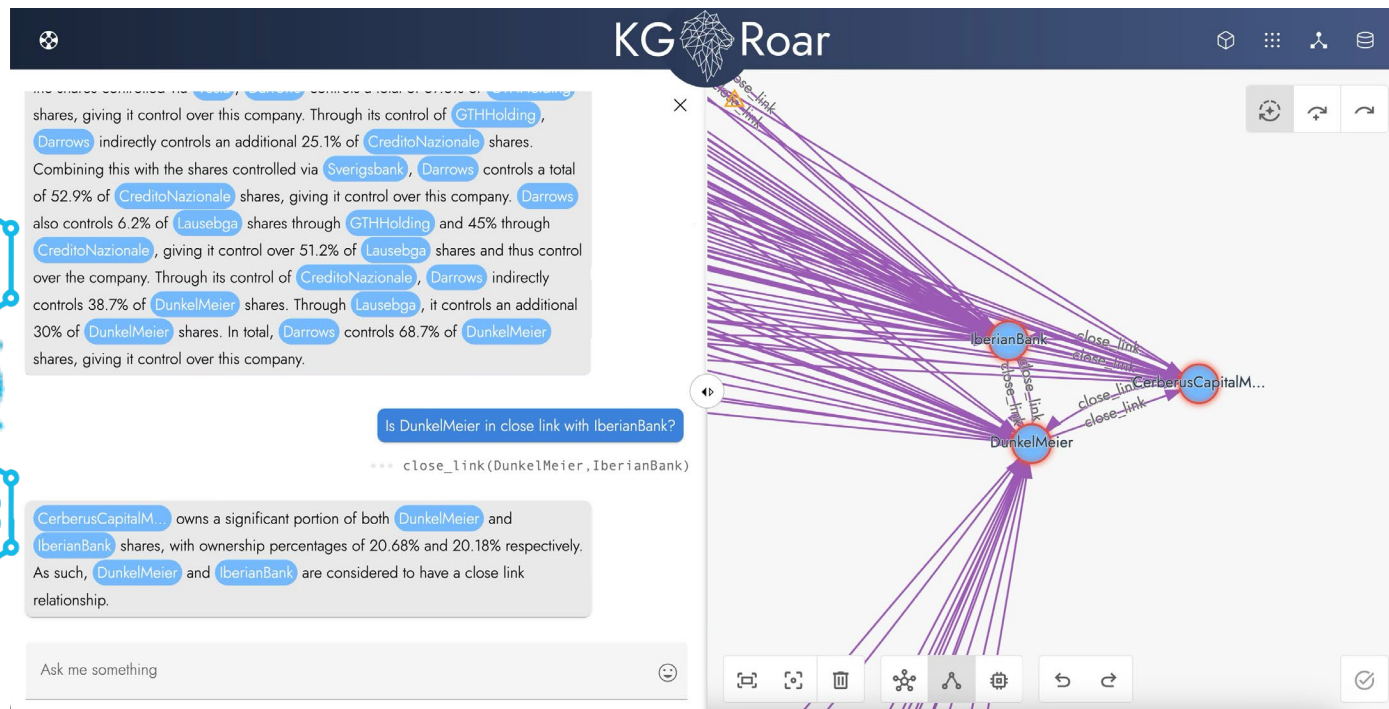
Is DunkelMeier in close link with IberianBank?

```
*** close_link(DunkelMeier, IberianBank)
```

**CerberusCapitalM...** owns a significant portion of both **DunkelMeier** and **IberianBank** shares, with ownership percentages of 20.68% and 20.18% respectively. As such, **DunkelMeier** and **IberianBank** are considered to have a close link relationship.



# IA hibride në mbikëqyrjen financiare: KG ROAR



The screenshot displays the KG Roar interface. On the left, a text-based reasoning engine provides detailed analysis of share ownership and control. The central part of the interface shows a knowledge graph with nodes representing companies and banks, connected by edges indicating relationships like 'close\_link'. On the right, a chat interface allows users to ask questions.

**Text-based Reasoning Engine Output:**

no shares controlled by **Darrows**, **Darrows** controls a total of 52.9% of **CreditoNazionale** shares, giving it control over this company. Through its control of **GTHHolding**, **Darrows** indirectly controls an additional 25.1% of **CreditoNazionale** shares. Combining this with the shares controlled via **Sverigsbank**, **Darrows** controls a total of 52.9% of **CreditoNazionale** shares, giving it control over this company. **Darrows** also controls 6.2% of **Lausebga** shares through **GTHHolding** and 45% through **CreditoNazionale**, giving it control over 51.2% of **Lausebga** shares and thus control over the company. Through its control of **CreditoNazionale**, **Darrows** indirectly controls 38.7% of **DunkelMeier** shares. Through **Lausebga**, it controls an additional 30% of **DunkelMeier** shares. In total, **Darrows** controls 68.7% of **DunkelMeier** shares, giving it control over this company.

**Query and Answer:**

Is DunkelMeier in close link with IberianBank?

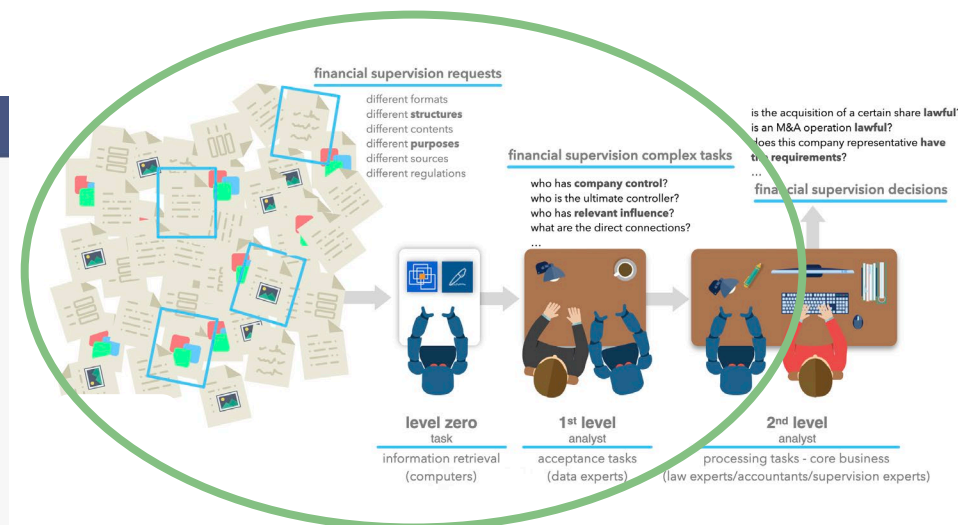
```
*** close_link(DunkelMeier,IberianBank)
```

**Knowledge Graph:**

The graph shows nodes for **IberianBank**, **DunkelMeier**, and **CerberusCapitalM...** connected by edges labeled 'close\_link'.

**Chat Interface:**

Ask me something



## MATERIALET MBËSHKETËSE:

[“KG-Roar: Interactive Datalog-Based Reasoning on Virtual Knowledge Graphs.”](#)

Bellomarini, Luigi; Benedetti, Marco; Gentili, Andrea; Magnanini, Davide; Sallinger, Emanuel  
Proceedings of the VLDB Endowment, vol. 16, no. 12, 2023, pp. 4014–17.

[“Data Science with Vadalog: Knowledge Graphs with Machine Learning and Reasoning in Practice.”](#)

Bellomarini, Luigi; Fayzakhmanov, Ruslan; Gottlob, Georg; Kravchenko, Andrey;  
Laurenza, Eleonora; Nenov, Yavor; Reissfelder, Stéphane; Sallinger, Emanuel;  
Sherkhonov, Evgeny; Vahdati, Sahar; Wu, Lianlong

Future Generation Computer Systems, vol. 129, 2022, pp. 407–22.

[“Vadalog: A Modern Architecture for Automated Reasoning with Large Knowledge Graphs.”](#)

Bellomarini, Luigi; Benedetto, Davide; Gottlob, Georg; Sallinger, Emanuel  
Information Systems (Oxford), vol. 105, 2022,.



# RAST STUDIMOR PËR IA-NË HIBRIDE NË RAPORTIMIN KONTABËL: FINREP



# RAPORTIMI KONTABËL: FINREP

Direktiva 2013/36/BE - CRS IV

Rregullorja (BE), nr. 575/2013

Rregullorja (BE) 2021/451

Rregullorja (BE) 2024/3117

SNK – KIRFN – SNRF

Kuadri i raportimit i ABE-së  
Zbatimi i standardeve teknike  
Shtojca V



OJ L, 27.12.2024

EN

**1. Balance Sheet Statement [Statement of Financial Position]**

**1.2 Liabilities**

27.6.2013

	References	breakdown in title	Carrying amount

**eba** European  
Banking  
Authority

**ANNEX V**

**INSTRUCTIONS FOR REPORTING ON FINANCIAL INFORMATION**

Annex V, Part 1.37

8

Annex V, Part 1.38-41

8

FN

**balance sheet items**

**IAS 1.54(n-o)**

**IAS 1.54(n); IAS 12.5**

**Accounting Directive art 17(1)(f);  
CRR art 4(1)(108)**

**IAS 32 IE 33; IFRIC 2; Annex  
V, Part 2.12**

**Annex V, Part 2.13**

**Annex V, Part 2.13**

**IAS 1.54 (p); IFRS 5.38, Annex  
V, Part 2.14**

**Annex V, Part 1.29**

**IAS 1.9(b); IG 6**

57. 'Share capital repayable on demand' shall include the capital instruments issued by the institution that do not meet the criteria to be classified in equity. Institutions shall include in this item the cooperative shares that do not meet the criteria to be classified in equity.

**0290 Liabilities included in disposal groups classified as held for sale**

**IAS 1.54 (p); IFRS 5.38,**

**Annex V, Part 2.14**

**0300 TOTAL LIABILITIES**

**IAS 1.9(b); IG 6**



# RAPORTIMI KONTABËL: FINREP

OJL, 27.12.2024

Official Journal  
of the European Union

EN  
L series

2024/3117

27.12.2024

## 1. Balance Sheet Statement [Statement of Financial]

### 1.2 Liabilities

European Banking Authority		ANNEX V	
		INSTRUCTIONS FOR REPORTING ON FINANCIAL INFORMATION	
		ECB/2013/33 Annex 2, Part	
		Balance sheet items	
0010	0240	Tax liabilities	IAS 1.54(n-g)
0020	0250	Current tax liabilities	IAS 1.54(n); IAS 12.5
0030	0260	Deferred tax liabilities	Accounting Directive art 17(1)(f); IAS 1.54(o); IAS 12.5; CRR art 4(1)(108)
0040	0270	Share capital repayable on demand	IAS 12.12.33; IFRIC 2; Annex V, Part 2.12
0050	0280	Other liabilities	Annex V, Part 2.13
0060	0290	Liabilities included in disposal groups classified as held for sale	Annex V, Part 2.13
0070	0290	Liabilities included in disposal groups classified as held for sale	IAS 1.54(p); IFRS 5.38; Annex V, Part 2.14
0080	0295	Liabilities for trading liabilities at fair value	Annex V, Part 1.29
0090	0300	TOTAL LIABILITIES	IAS 1.8(b); IAS 6
0100			
0110			
0120			
0130			
0140			
0150			
0160			
0170			
0180			
0190			
0200			
0210			
0220			
0230			
0240			
0250			
0260			
0270			
0280			
0290			
0300			

57. 'Share capital repayable on demand' shall include the capital instruments issued by the institution that do not meet the criteria to be classified in equity. Institutions shall include in this item the cooperative shares that do not meet the criteria to be classified in equity

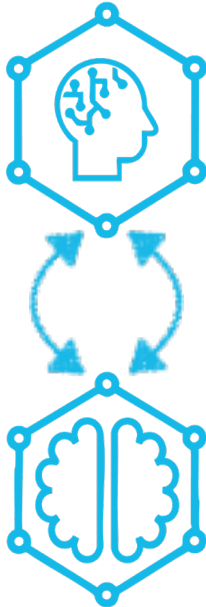
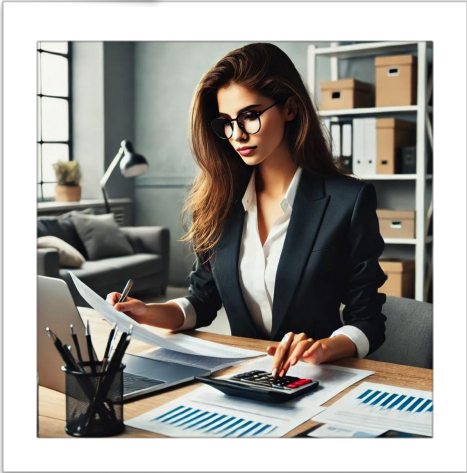
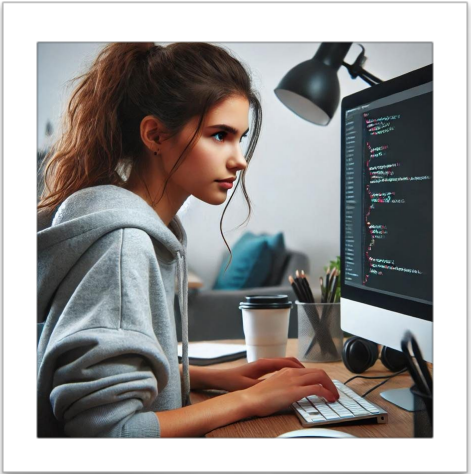


L 176/338 EN Official Journal of the European Union 27.6.2013

## DIRECTIVES

DIRECTIVE 2013/36/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL  
of 26 June 2013

on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC





# IA HIBRIDE NË RAPORTIMIN KONTABËL: FINREP

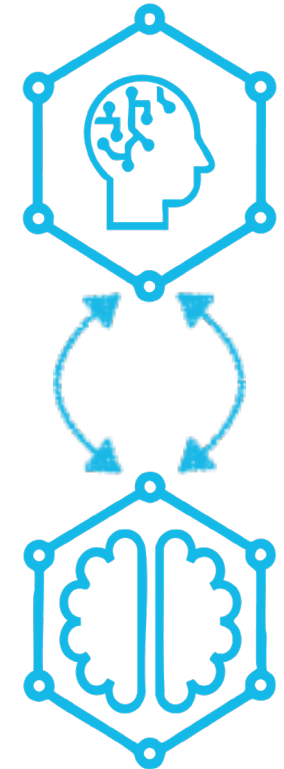
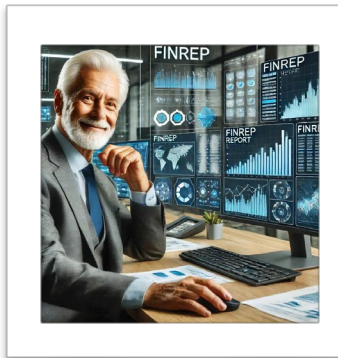
## *kapitali aksionar i shlyeshëm me të parë*

Të lutem Bilateral AI,  
lexo të gjithë dokumentacionin  
dhe më jep zgjidhjen si të  
jem në përmbushje të FINREP  
në lidhje me konceptin  
“kapitali aksionar i shlyeshëm me të parë”

....

ShareCapitalRepayableOnDemand (x) :-  
CapitalInstrument (x), Issued (x),  $\neg$  Equity (x).

ShareCapitalRepayableOnDemand (x) :-  
CooperativeShare (x),  $\neg$  Equity (x).

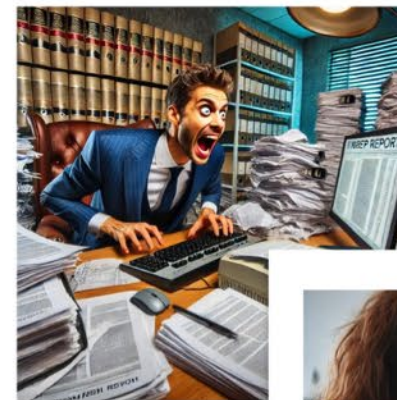




# HYBRID AI IN ACCOUNTING REPORTING

## HYBRID AI OUTCOMES

- quasi-zero coding approach
- explainable by design
- inspectable
- handle alignment risks
- inclusive
- human in the loop
- factuality
- chatbot/data retrieval vs real-world tasks
- cost-effective
- scalability
- flexible to amendments





# FALEMINDERIT PËR VËMENDJEN



Knowledge Graph Lab



BANCA D'ITALIA  
EUROSISTEMA

## AI made in Austria: Kick-off Meeting of the FWF-funded Cluster of Excellence "Bilateral AI"

On February 26, 2025, around 300 researchers, industry professionals, and decision makers gathered at Johannes Kepler University Linz (JKU) to discuss the project's vision and goals. Two Vice Rectors of TU Wien, Peter Ertl (Vice Rector Research, Innovation, International Affairs) and Wolfgang Kastner (Vice Rector Digitalization and Infrastructure), attended the event, as did Gerti Kappel, Dean of TU Wien Informatics.



### CENTRAL BANKING

Economics Fintech Governance Reserves Directory Benchmarking Training Events Awards

Central Banking Awards press release | Fintech Benchmarks 2025 report | Fernando Restoy interview | Revamped Central Bank

## Risk manager: Bank of Italy

New credit assessment, corporate mapping and climate tools have helped to bolster risk oversight



### The Central Banking Awards

Fabio Panetta, Governor, Bank of Italy, said:



Fabio Panetta

"I am very proud of this prestigious recognition from Central Banking. The Risk manager of the year award honours our unwavering commitment to prudent, forward-looking risk management. It also highlights our key role in supporting the financial system when, in times of crisis, other market participants engage in widespread de-risking."

Since the outbreak of the pandemic, banks around the world have been managing large-scale asset portfolios.

Measured using credit ratings, that financial risk has grown at the same rate as balance sheets, since rating agencies tend to look at the average probability of default of issuers over time.



## Office of Science and Technology Policy

...mentioned in a [technology report](#) by the White House ([Office of Science and Technology Policy](#)) as a "key innovator in the European Financial Knowledge Graph Space". Such report is a step for the White House to defining a strategy to "power 21st century data science and next-generation Artificial Intelligence". The Team was explicitly mentioned with reference to its Knowledge Graphs track and to the ability to consistently disseminate its AI/CS research in academic venues...