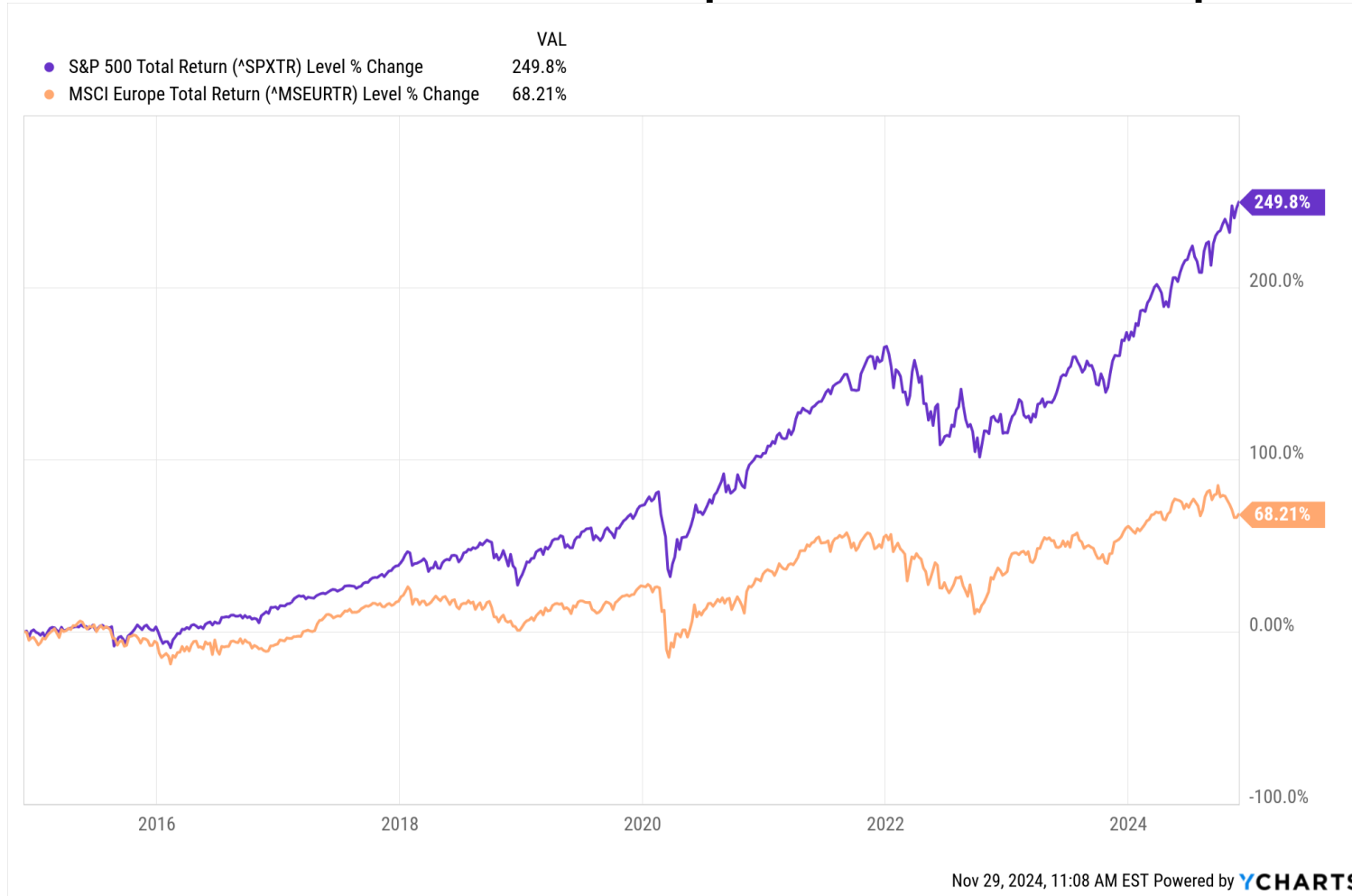


W H Y  
W H Y

Three white wooden blocks are arranged in a row on a light-colored surface. The top face of each block shows a letter, and the front face shows a larger version of the same letter. From left to right, the top faces show 'W', 'H', and 'Y', and the front faces show 'W', 'H', and 'Y'. The blocks are slightly angled towards the viewer, creating a sense of depth. The lighting is soft and even, highlighting the texture of the wood.

# Les marchés européens sont peu performants



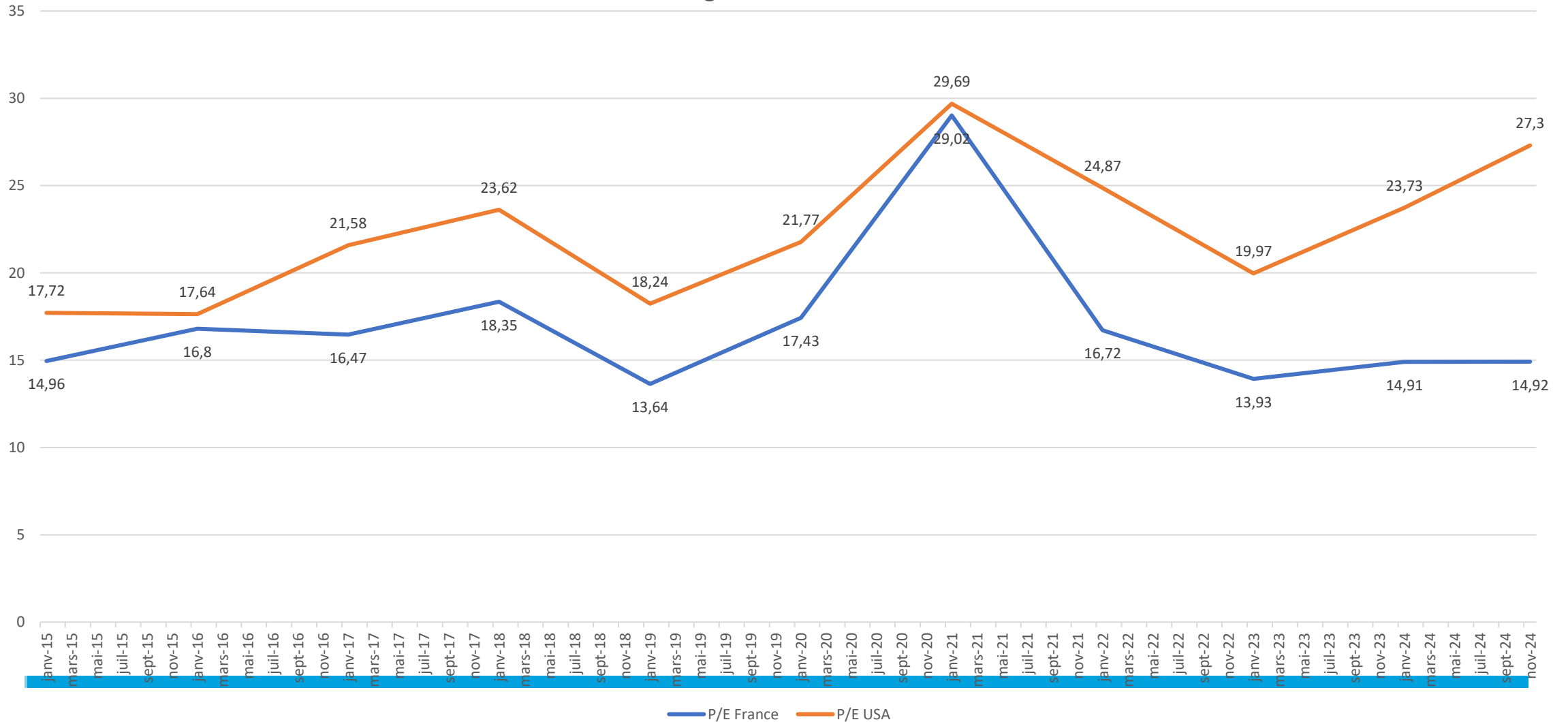
Performance  
annualisée

**13,3%**  
Aux Etats-Unis

**5,3%**  
en Europe

# Des écarts de valorisation qui se creusent

Price to earnings



# Constats et conséquences



- Moins bonne valorisation



- Des difficultés à lever des fonds

- Moins bonne capitalisation



- Des « proies » pour des acquéreurs

- Moins bon financement



- Des capacités d'investissement et d'innovation réduites

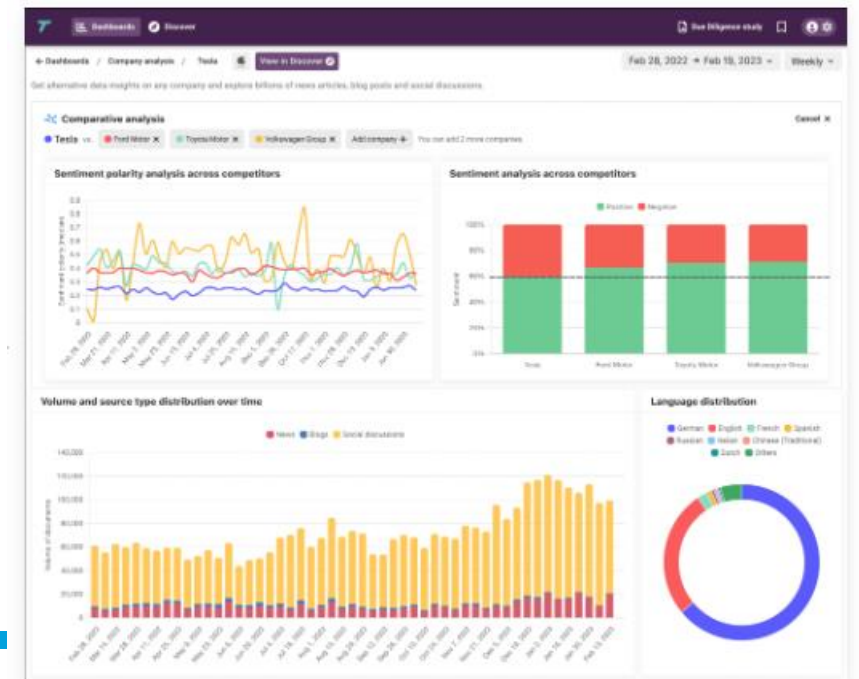
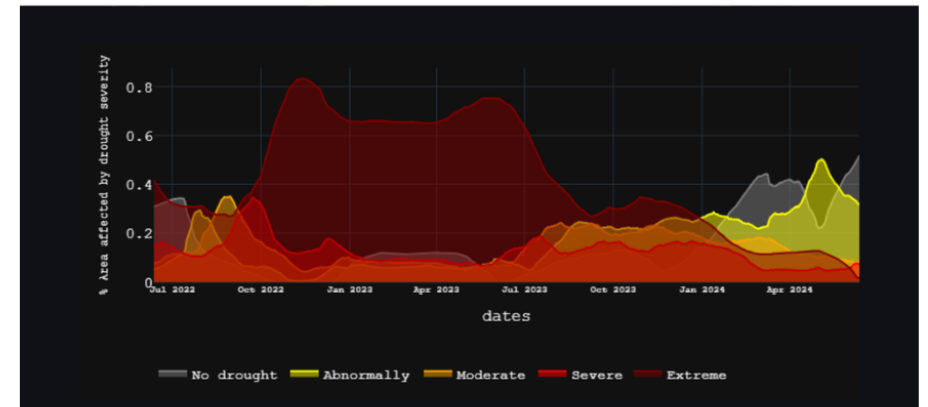


# Les capacités techniques

Les analystes ont déjà accès à des outils technologiques pour analyser :

- Des images satellites
- Les commentaires sur les réseaux sociaux
- Analyse de controverses

Exhibit 3 (a). QuantCube Drought Monitoring Indicator – Kansas





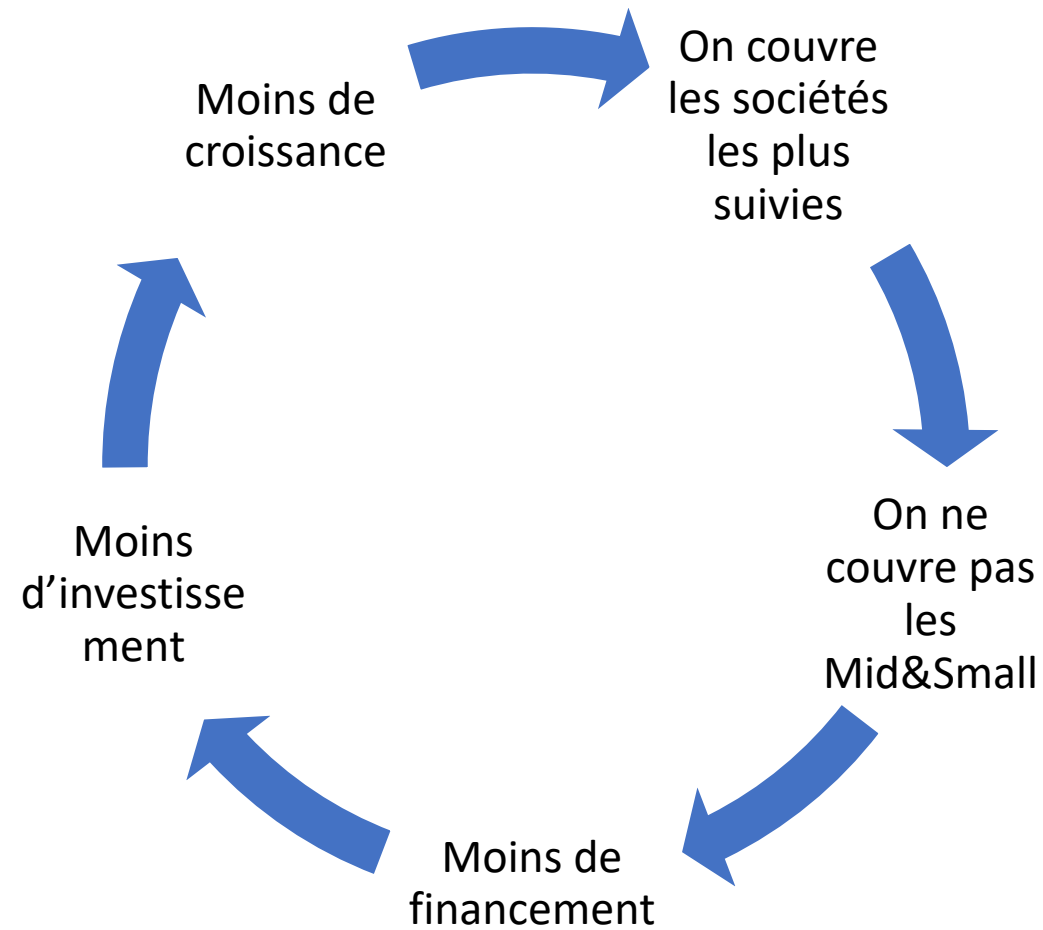
Et l'analyse de données fondamentales ?

# Les problématiques de l'analyste



- Des informations disséminées (Earnings call, interim report, annual report)
  - Des données difficiles d'accès
  - → 20 sociétés couvertes par analyste
-

# Le cercle vicieux





A BETTER WORLD

IS POSSIBLE

Les possibilités offertes par XBRL

# Cas d'usage – appliquer une méthodologie d'agence de notation

Environ ¼ des sociétés du SBF 120 notées par Moody's.

Investir dans les obligations selon la méthodologie d'analyse de Moody's.

Reprendre la méthodologie et essayer de l'appliquer avec les données digitales.

---

## How We Adjust the Financial Statements

The following exhibit describes our adjustment related to the cash flow presentation of interest and dividends.

---

EXHIBIT 13

### Cash Flow Presentation of Interest and Dividends

---

Balance Sheet	No adjustments made.
---------------	----------------------

---

Income Statement	No adjustments made.
------------------	----------------------

---

Cash Flow Statement	» Where the company reports dividends received as an investing activity, the amount reported is reclassified to operating cash flow.
	» Where the company reports interest received as an investing activity, the amount reported is reclassified to operating cash flow.
	» Where the company reports interest paid as a financing activity, the amount reported is reclassified to operating cash flow.
	» Where the company reports dividends paid as an operating activity, the amount reported is reclassified to financing cash flow.

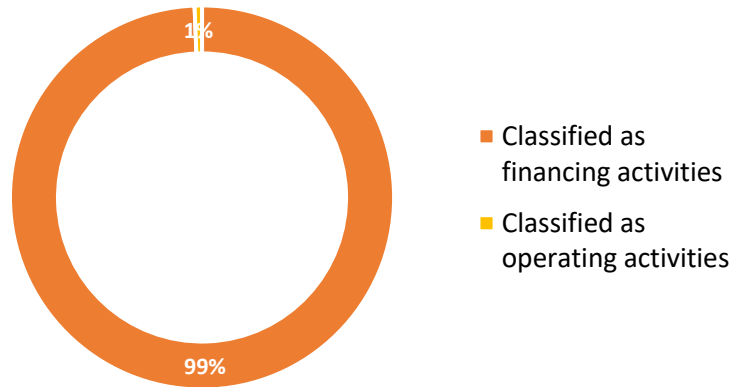
---

Source: Moody's Investors Service

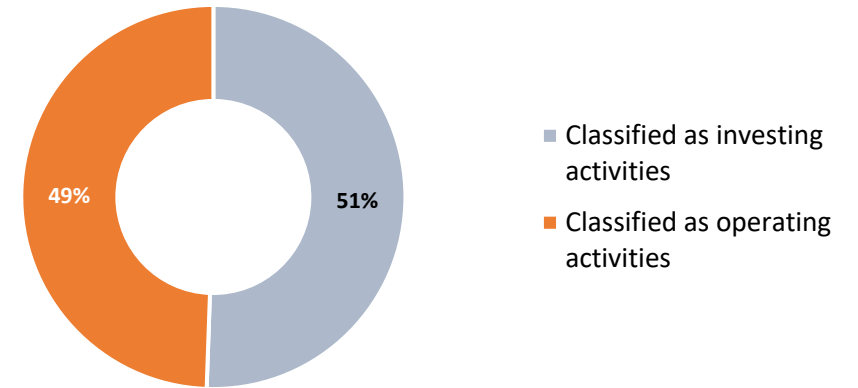
# How to use XBRL for these adjustments ?

- Cash Flow from used in operations
  - + Dividends received classified as investing activities
  - + Interests received classified as investing activities
  - - Interests paid classified as financing activities
  - - Dividends paid classified as operating activities
-

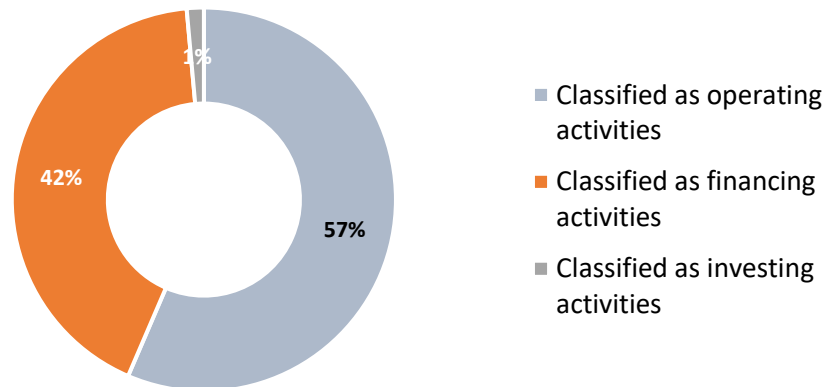
**Classification of dividends paid**



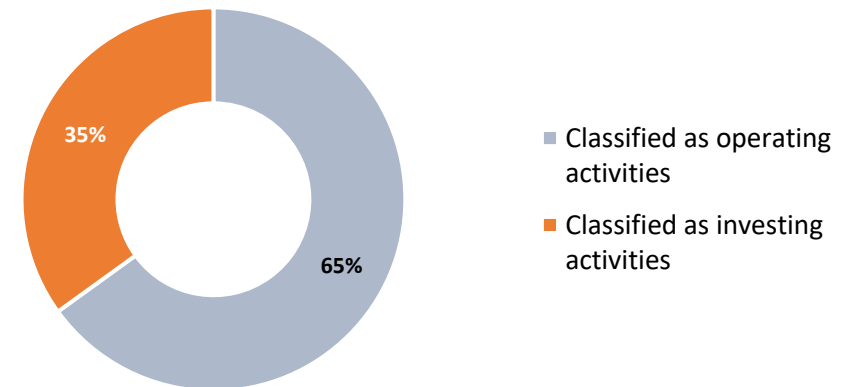
**Classification of dividends received**



**Classification of interests paid**



**Classification of interests received**



# Exemple d'exploitation : R&D Capitalisé

	Capitalized development expenditures	Patents, concessions and licenses	Other intangible assets	Total
	(€ million)			
Gross carrying amount at January 1, 2022	€ 28,965	€ 802	€ 3,814	€ 33,581
Additions	3,589	88	535	4,212
Divestitures	(54)	(6)	(225)	(285)
Change in scope of consolidation	—	31	11	42
Translation differences and other changes	481	1	164	646
At December 31, 2022	32,981	916	4,299	38,196
Additions	4,352	98	270	4,720
Divestitures	(49)	(13)	(334)	(396)
Change in scope of consolidation	5	6	29	40
Translation differences and other changes	(503)	—	(26)	(529)
At December 31, 2023	36,786	1,007	4,238	42,031
Accumulated amortization and impairment losses at January 1, 2022	15,320	459	1,167	16,946
Amortization	1,893	95	166	2,154
Impairment losses and asset write-offs <sup>(1)</sup>	67	—	6	73
Divestitures	(57)	(3)	(10)	(70)
Change in scope of consolidation	—	(1)	1	—
Translation differences and other changes	54	1	32	87
At December 31, 2022	17,277	551	1,362	19,190
Amortization	2,193	92	200	2,485
Impairment losses and asset write-offs	122	—	—	122
Divestitures	(38)	(11)	(3)	(52)
Change in scope of consolidation	5	5	17	27
Translation differences and other changes	(348)	(3)	(15)	(366)
At December 31, 2023	19,211	634	1,561	21,406
Carrying amount at December 31, 2022	€ 15,704	€ 365	€ 2,937	€ 19,006
Carrying amount at December 31, 2023	€ 17,575	€ 373	€ 2,677	€ 20,625

Attributes

Prev Next 3 of 24

Fact	17,575,000,000
Period	As of 12/31/2023
Axis	IFRS-FULL Classes Of Intangible Assets Other Than Goodwill Axis
Member	IFRS-FULL Capitalised Development Exp enditure Member
Explicit Member	ifrs-full.CapitalisedDevelopmentExpendit ureMember
Measure	FLIR

Format Error: Num Dot Decimal,000,00

Intangible Assets With Indefinite Useful Life And Goodwill

As of 12/31/2021

-40,000,000

Intangible Assets With Indefinite Useful Life And Goodwill

As of 12/31/2021

Données détaillées demandées par des analystes

Utilisé pour retraiter :

- Le résultat opérationnel
- Les cash flow opérationnels
- Les actifs intangibles

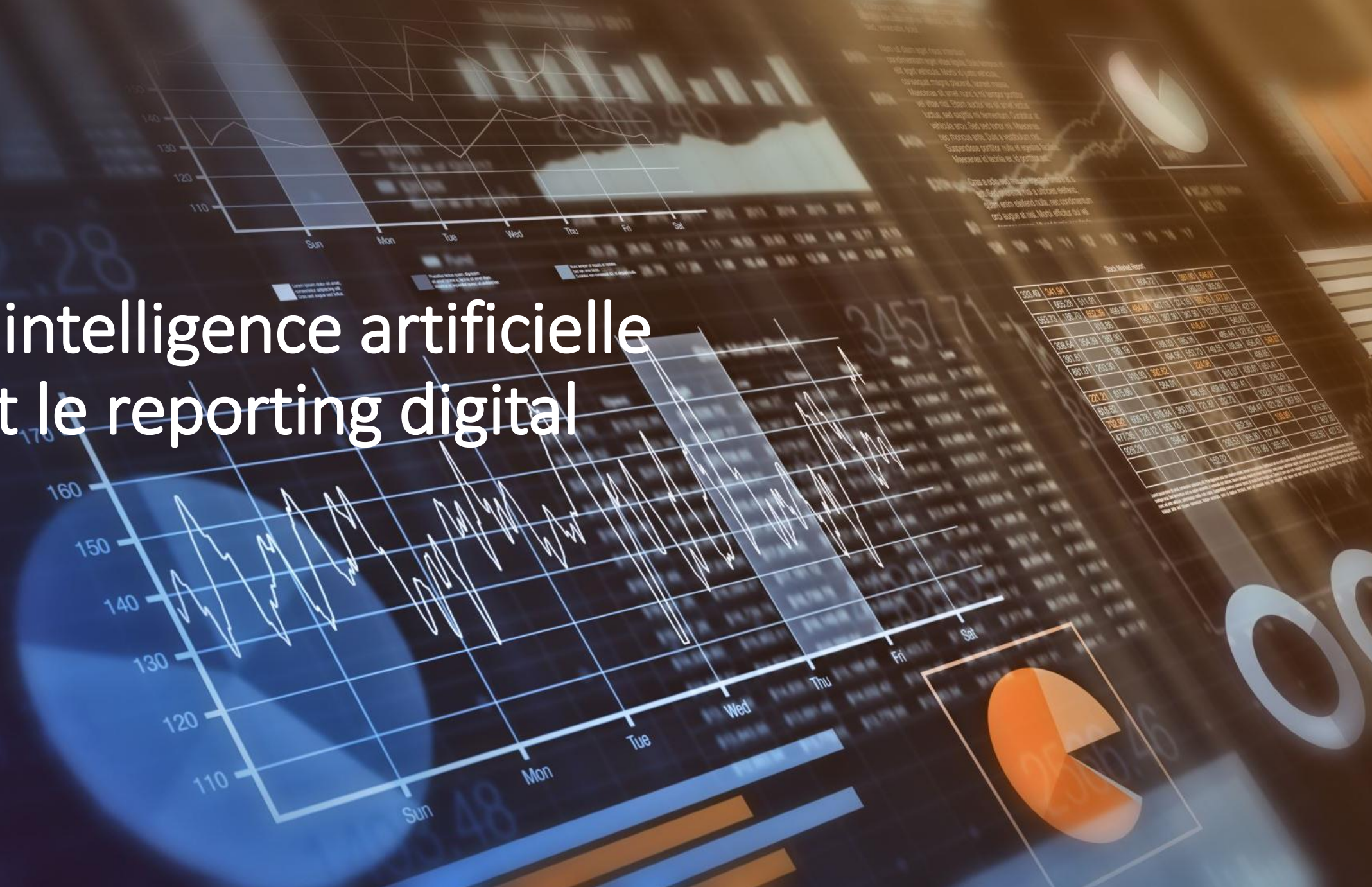
# La timeline de l'analyste

- **[PDF]** Publication des résultats annuels : 29/02/2024 (76 pages)
  - **[PDF]** Présentation des ventes du T1 : 25/04/2024 (24 pages)
  - **[XBRL]** Publication de l'URD : Avril 2024 (468 pages)
  - **[PDF]** Publication du résultat semestriel : 25/07/2024 (65 pages)
-

# Besoin en données détaillées

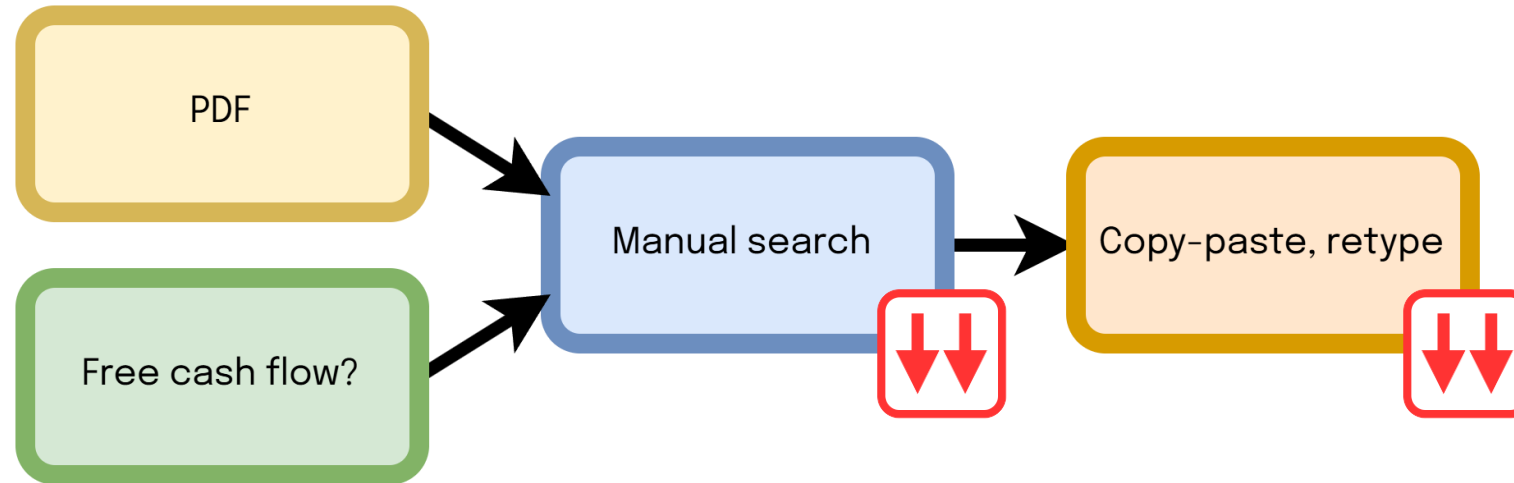
- Attention à l'optimisation malheureuse
  - Si les données existent au format PDF elles devraient être tagguées
  - La digitalisation n'est pas le problème, c'est le rapport en lui-même.
-

# L'intelligence artificielle et le reporting digital





# Le modèle archaïque



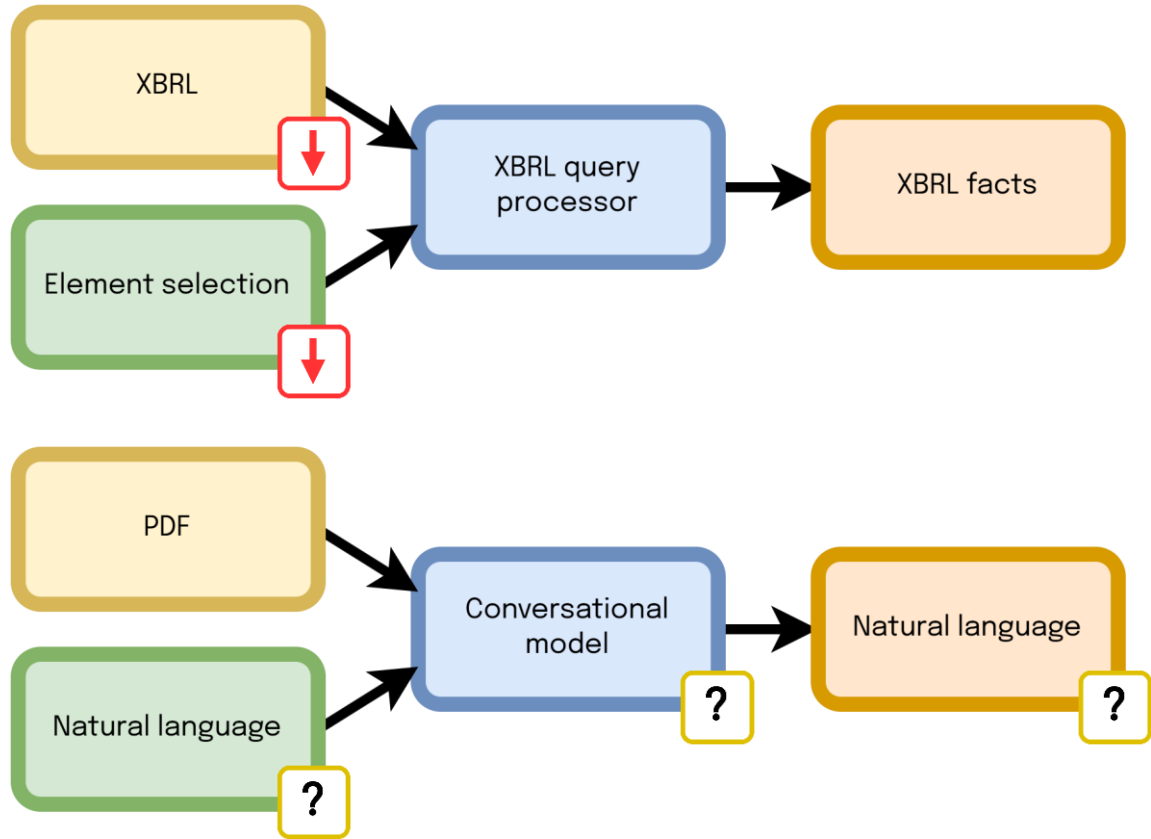
Potentially very complex search (foreign language, unknown presentation)



Tedious, error-prone transposition



# Des modèles en compétition ?



- ↓ Additional format for preparers
- ↓ Unfamiliar taxonomy vocabulary

- ? Necessitates 'prompt engineering'
- ? Unknown decision process
- ? Still necessitates intervention

# La performance de l'IA

Passifs d'impôts différés	16.3.2	6 624	7 056
<b>PASSIFS NON COURANTS</b>		<b>52 427</b>	<b>56 723</b>
Emprunts et autres passifs financiers courants	15.4	4	3 068
Obligations locatives à moins d'un an	10.2	9 056	8 974
Provisions courantes	12	2 647	963
Fournisseurs	7.9.1	64 119	65 010
Autres créditeurs	7.9.2	77 770	77 687
Passifs d'impôts exigibles	16.2	196	184
<b>PASSIFS COURANTS</b>		<b>153 792</b>	<b>155 886</b>
<b>TOTAL DU PASSIF CONSOLIDE</b>		<b>910 498</b>	<b>891 957</b>


# La performance de l'IA

What was the amount of liabilities for the company in 2023?

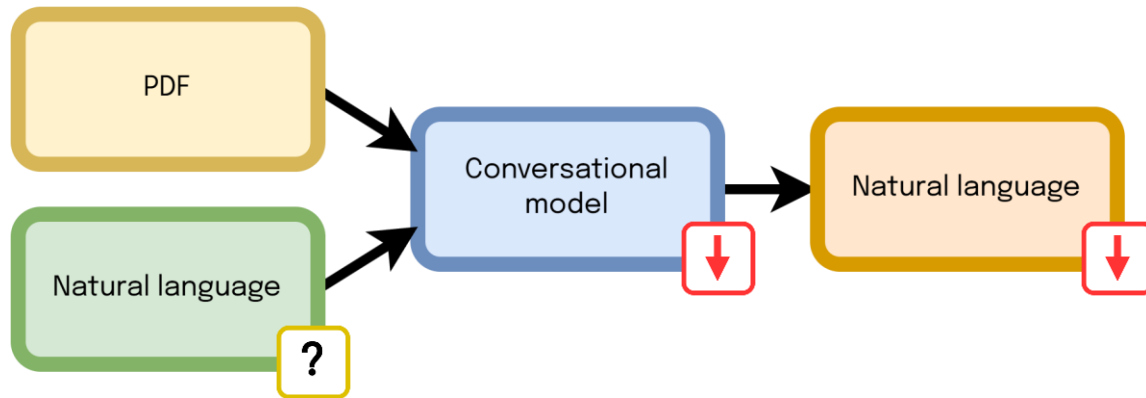
## NRJ Group's Liabilities in 2023

The total liabilities for NRJ Group as of December 31, 2023, amounted to **€910,498,000**. This is shown in the company's consolidated balance sheet, which reveals that total assets and total liabilities are both equal to this amount. <sup>1</sup>



 Save to note

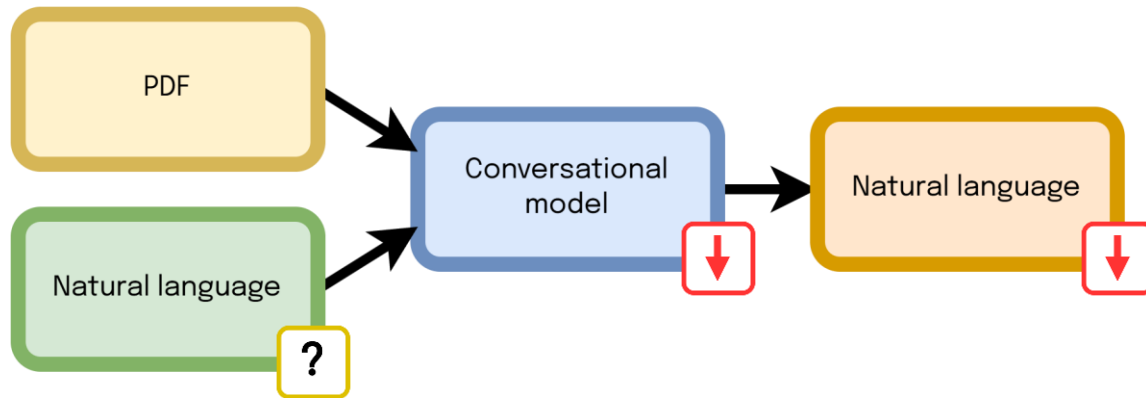
# La performance de l'IA



- ? Necessitates 'prompt engineering'
- ↓ Unable to make key distinctions
- ↓ Requires a lot of attention

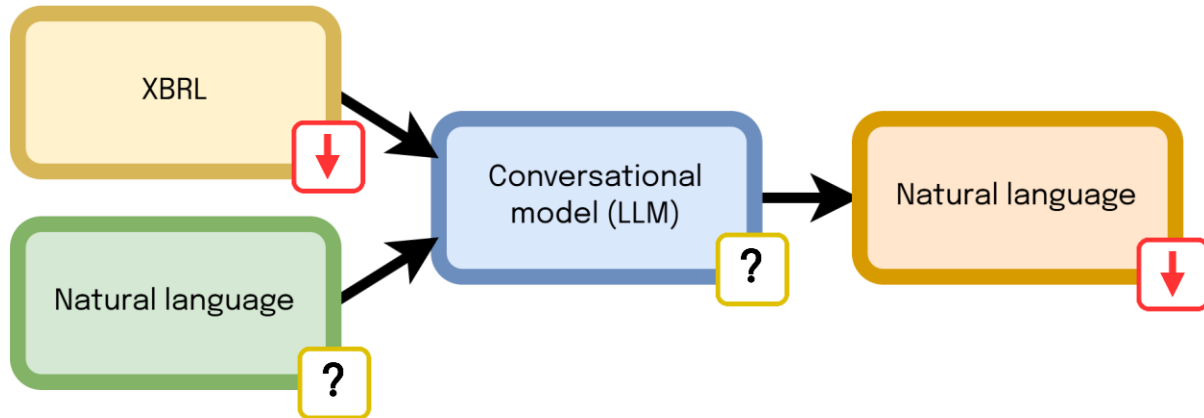


# La performance de l'IA



- ? Necessitates 'prompt engineering'
  - ↓ Unable to make key distinctions
  - ↓ Requires a lot of attention
-

# Utiliser l'IA sur des documents XBRL



? Does not really understand context and dimensions, relies on context id naming convention.  
(ctxRef="2024\_Geographical\_Asia")

---

Et si l'IA continue à s'améliorer ?

'Is this an image of a pyrophone?'





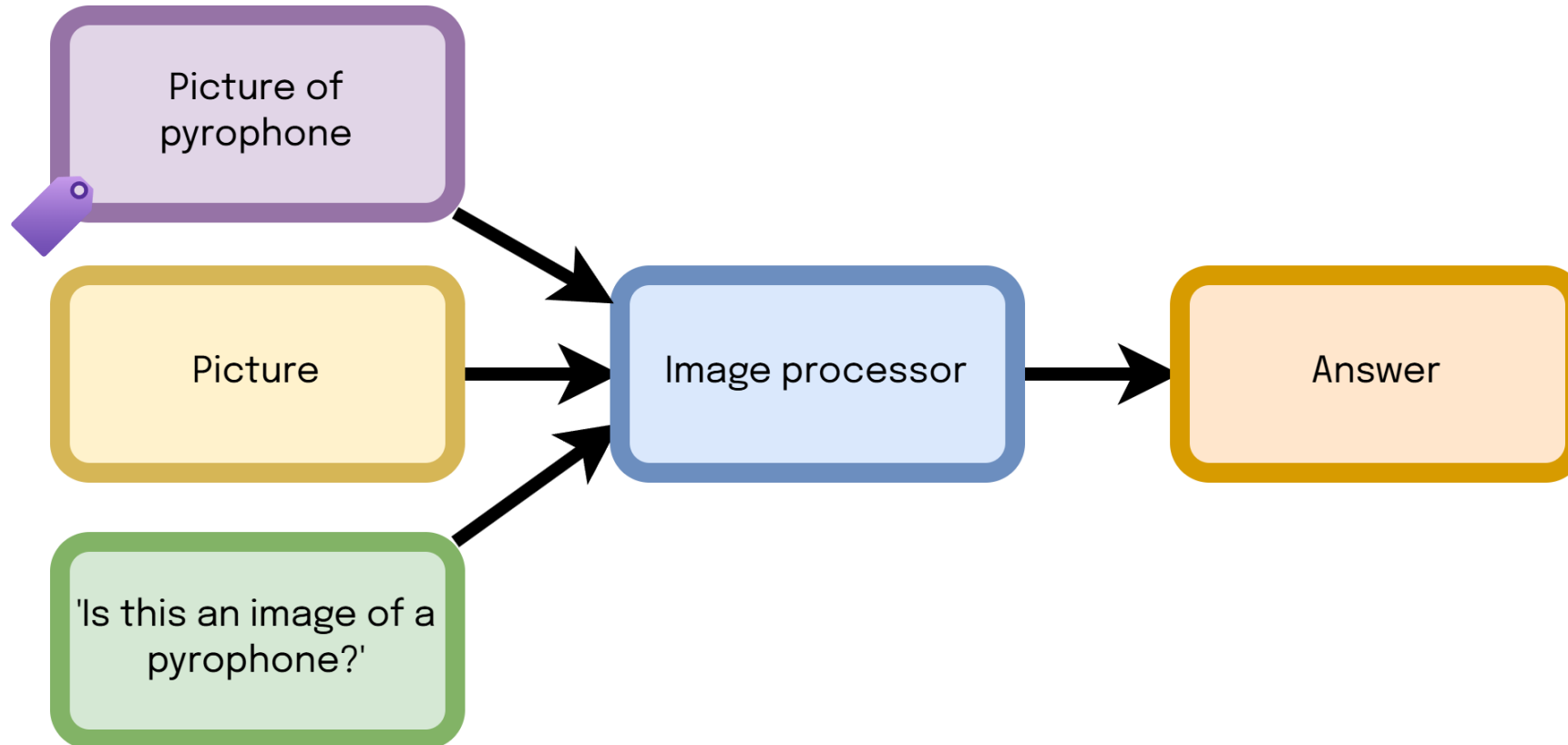
# Et si l'IA continue à s'améliorer ?

'Is this an image of a pyrophone?'

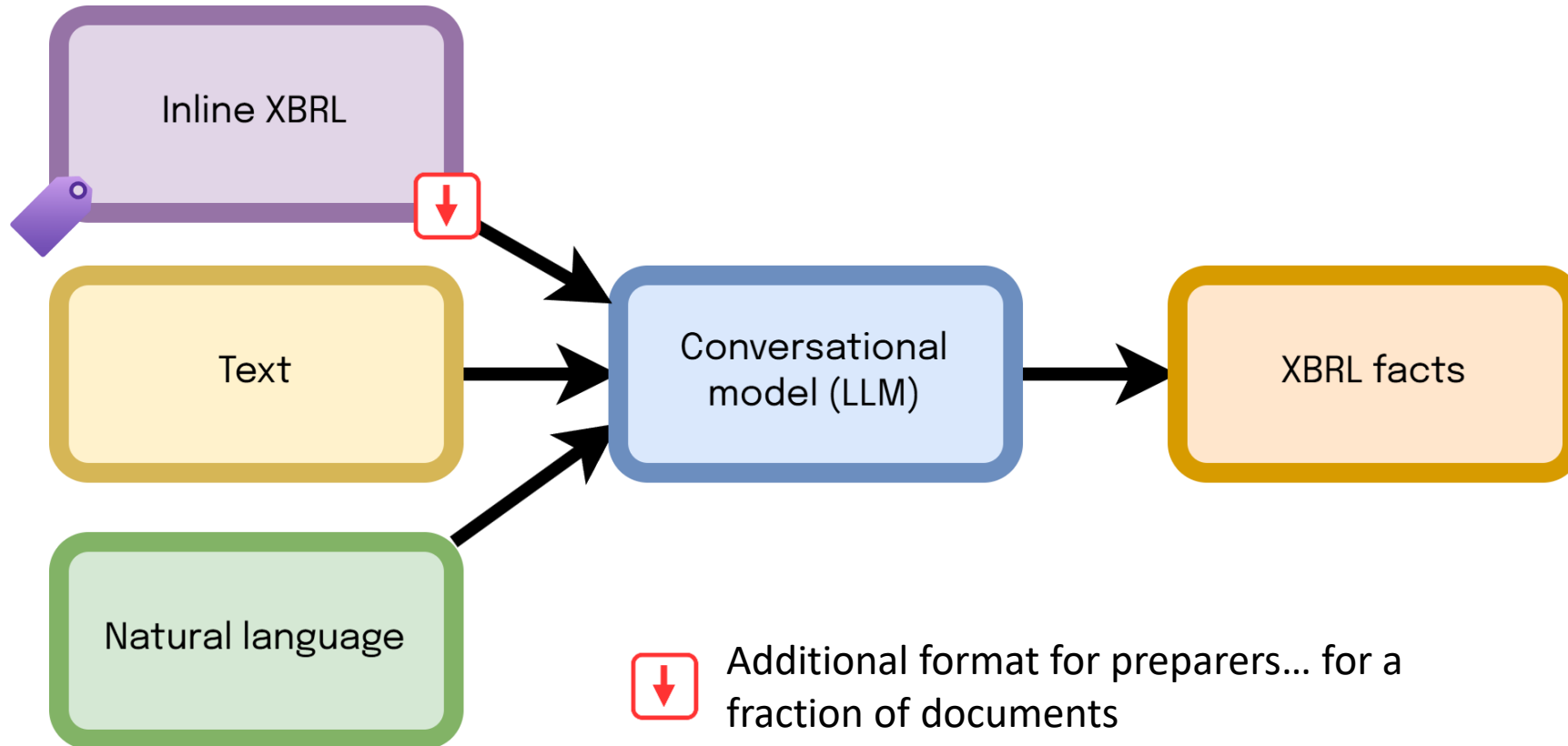


Wendelin  
Weißheimer playing  
the pyrophone

# La nécessité de la connaissance



# La nécessité de la connaissance



# L'IA et le **Inline** XBRL

- Correctly answering questions require **intelligence** and **knowledge**. One cannot be used as a substitute to the other, and improvements to AI will never be sufficient by themselves.
  - **Inline** XBRL tagging is a knowledge format that is easily fed into machine learning processes.
  - The real Inline XBRL advantage is not using data as a repository of possible answers (any format would work), but in its use as a basis for deduction.
-