

# Al: an opportunity for all actuaries

Thomas Béhar, CNP Assurances



# **About the speaker**

2024 eca 2

- Thomas Béhar,
  - Deputy CEO and CFO
  - Actuary
  - Created the CNP Assurances Datalab
  - Initiates the CNP Assurances Ethics AI
- International and leading insurer (5<sup>th</sup> in Europe)
- Nearly 7000 employees around the world
- Attributable net profit : 1,5bn€ and SCR : 253%
- Green investments: 27,2bn€ and Gender Equality Index: 100%

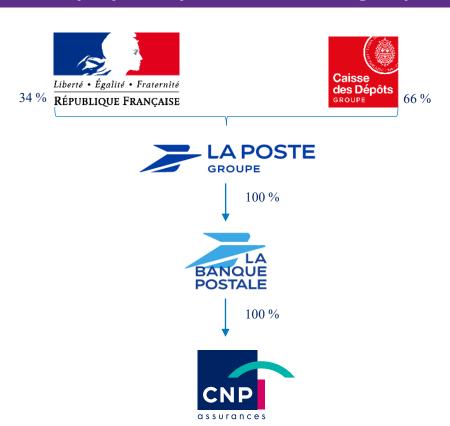


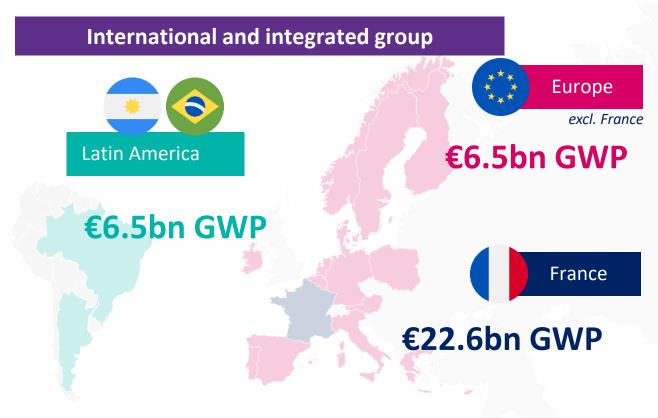


## CNP Assurances, a solid and international Group



### Major publicly owned financial group

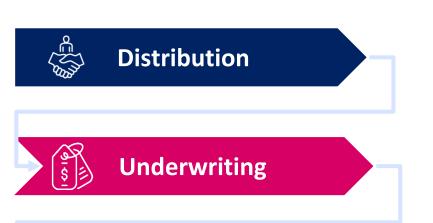




## Al one tool to support our Ambition

## Missing Person Recovery

In case of input error regarding the name, date of birth, or any other data related to the insured party, the algorithm is powerful enough to identify and correct the discrepancy, thus linking the CNP policyholder to the deceased individual.



Targeting Savings

Use case

Medical screening



Automatic processing of savings documents



**Risk management** 

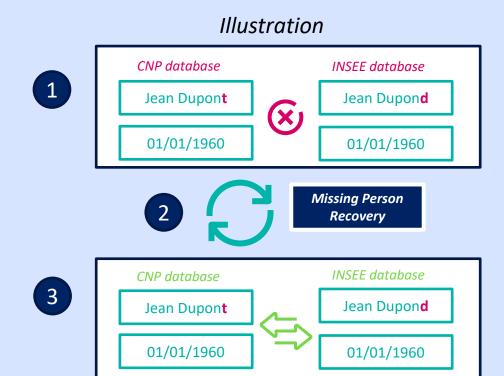
AML/CFT

Anti-Money Laundering/Combating the Financing of Terrorism



**Claims** 

Optimising beneficiary clauses



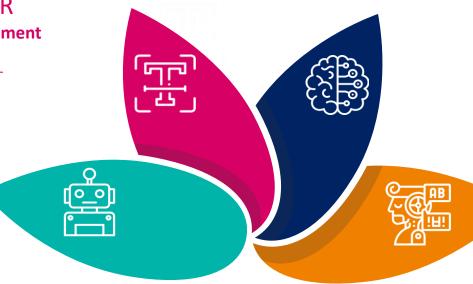
## New areas of expertise for actuaries at CNP Assurances



# Computer vision and OCR Image processing and automatic document

reading

- Recognition rate > 90
- Real-time recognition
- Anti-fraud controls



# Machine Learning & structured data

#### **Self-learning predictive algorithms**

- Customised marketing targeting Optimising pricing
- Other varied use cases (prioritisation of AML/CFT alerts, prediction for call centres, etc.)

#### **Robotics**

**Robots and process automation** 

- 117 RPA robots in production
- 18 Airflow processes orchestrated

#### NLP & STT

Natural language interpretation & speech recognition

- Trained solutions for specific insurance concepts
- Sentiment analysis
- Automatic mail processing

Proven technical expertise in many areas relating to Al.

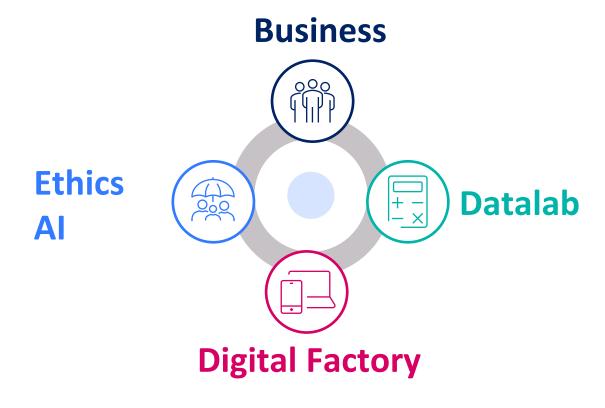
# Al for operational efficiency at CNP Assurances



2016-2018	R&D	First technological choices: Python, GPU Creation of a partnership with IT
2019	Création Datalab	APIisation of AI models Developing the loyalty of the data scientist population
2020-today	Global approach	Global approach to complete processes Stronger links with the BUs
2020-today	Ethics Al Function	Creation of the IA Ethics function within the actuarial function Definition of the Group's IA ethics policy
Next steps	IA Empowerment	Increasing skills throughout the Group Appropriation of AI solutions to be autonomous in the BUs

ECA 2024 www.eca2024.org

## Al for operational efficiency at CNP Assurances



#### An organisation that embraces:

- Sponsorship from business and group functions;
- The Digital Factory deploying large-scale algorithms,
- A team of data scientists developping tailor-made AI models
- an actuarial function team with a second look at the ethics of AI

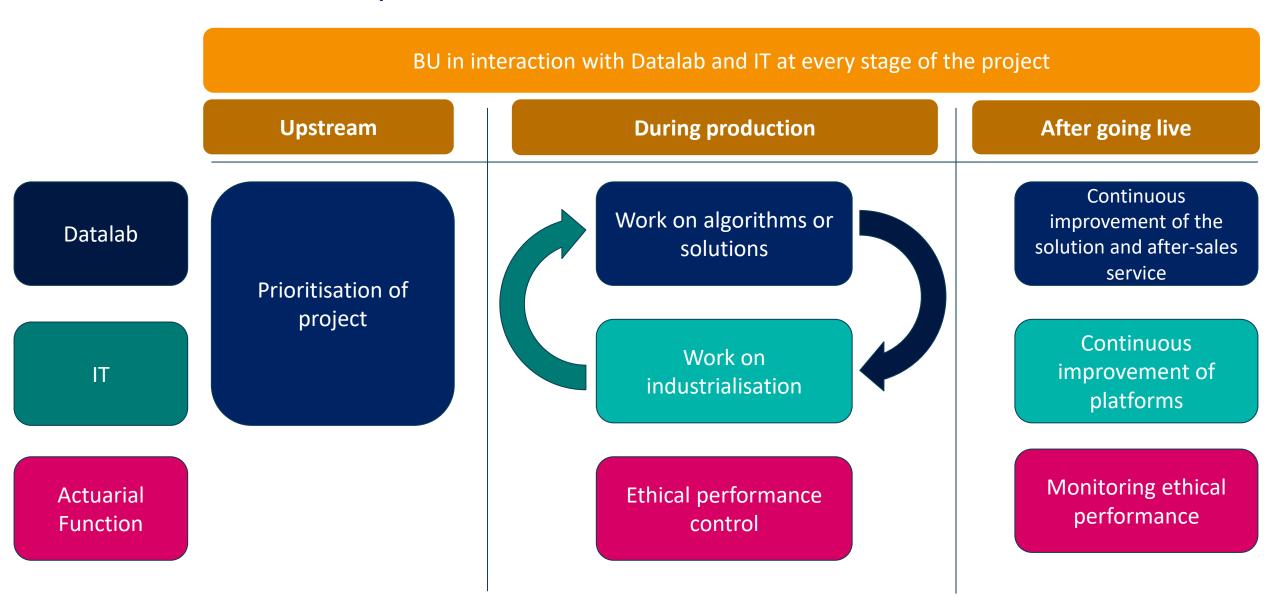
### **Keys to success:**

- Insurance centre of expertise
- Close to the business
- Agility with the Digital Factory
- Respect for our raison d'être



In addition to operational efficiency, which is at the heart of the raison d'être of finance functions, AI is a tool that is accessible to all functions, including IT and IT efficiency.

## Actuaries interact closely with IT and the BUs



## Ethical and technical performance



## **Technical performance**

Accuracy of results
Confidence and relevance indices



## **Ethical performance**

Reducing bias Energy consumption Respect for privacy

## Al Ethics Policy

Principle No. 1: We place data protection and privacy at the heart of our concerns

Principle No. 2: We ensure transparency in the use of AI tools

Principle No. 3: We ensure the fairness of AI tools by combating any form of bias or discrimination

Principle No. 4: We use AI tools responsibly, including by checking their reliability, fairness and impact.

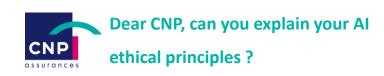
Principle No. 5: We place people at the heart of our AI tools and processes



You

Hey ChatGPT, do you have ethics?

"As an AI, I don't possess personal beliefs or ethical principles in the way humans do. However, the development and deployment of AI systems are guided by ethical considerations and principles:



"This policy aims to specify the ethical principles related to the use of AI to which CNP Assurances adheres, as well as the governance of AI ethics within the company"



Dear AAE, can you explain your

code of conduct?

"Common Principles of Ethical and Professional Behaviour accepted by the Actuarial Associations affiliated to the Actuarial Association of Europe"

Fairness	Fairness	— Integrity
Transparency	Transparency	miegrity
		Communication
Safety	Accountability	— Impartiality
Privacy	Privacy	
		Compliance
Human Oversight	Human Oversight	—— Professional judgement







