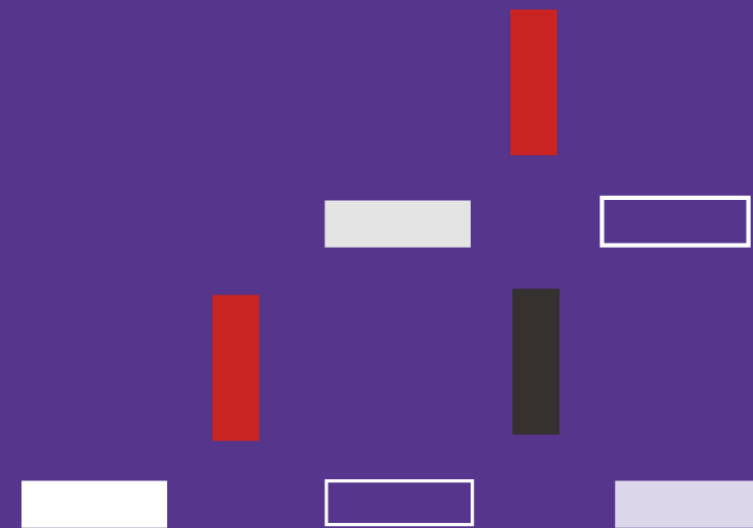




Challenge: GenAI4EU: Creating European Champions in Generative AI



GenAI4EU: Creating European Champions in Generative AI

Europe's Generative AI Strategy

Cécile HUET, PhD

Head of Unit Excellence in AI and Robotics
European AI Office



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Ecosystem of Excellence, what next?

Political guidelines for the next European Commission



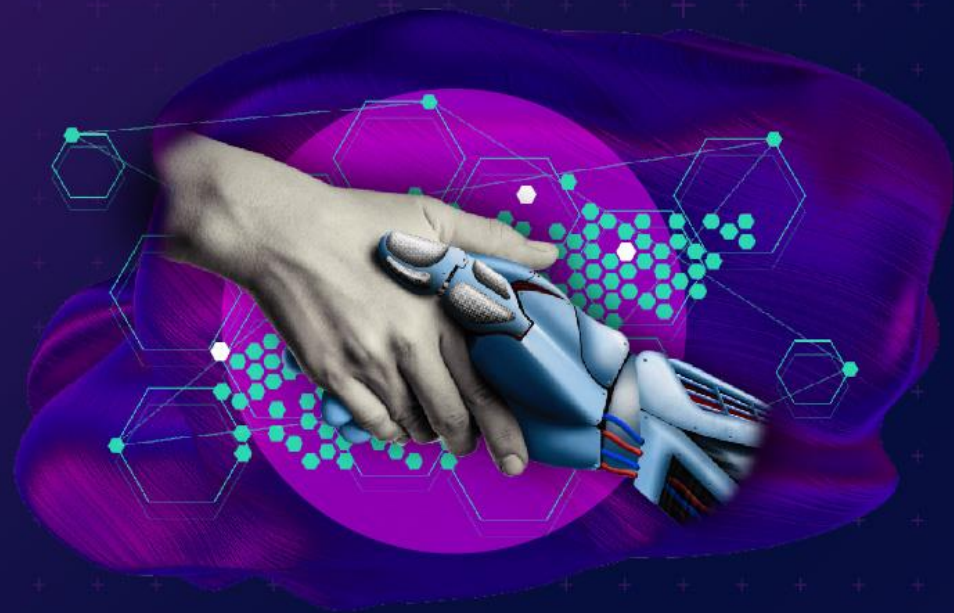
Development and diffusion AI - key to competitiveness



Develop **Apply AI strategy** to boost new industrial uses of AI and to improve the delivery of **public services such as healthcare**



Set up a European AI Research Council



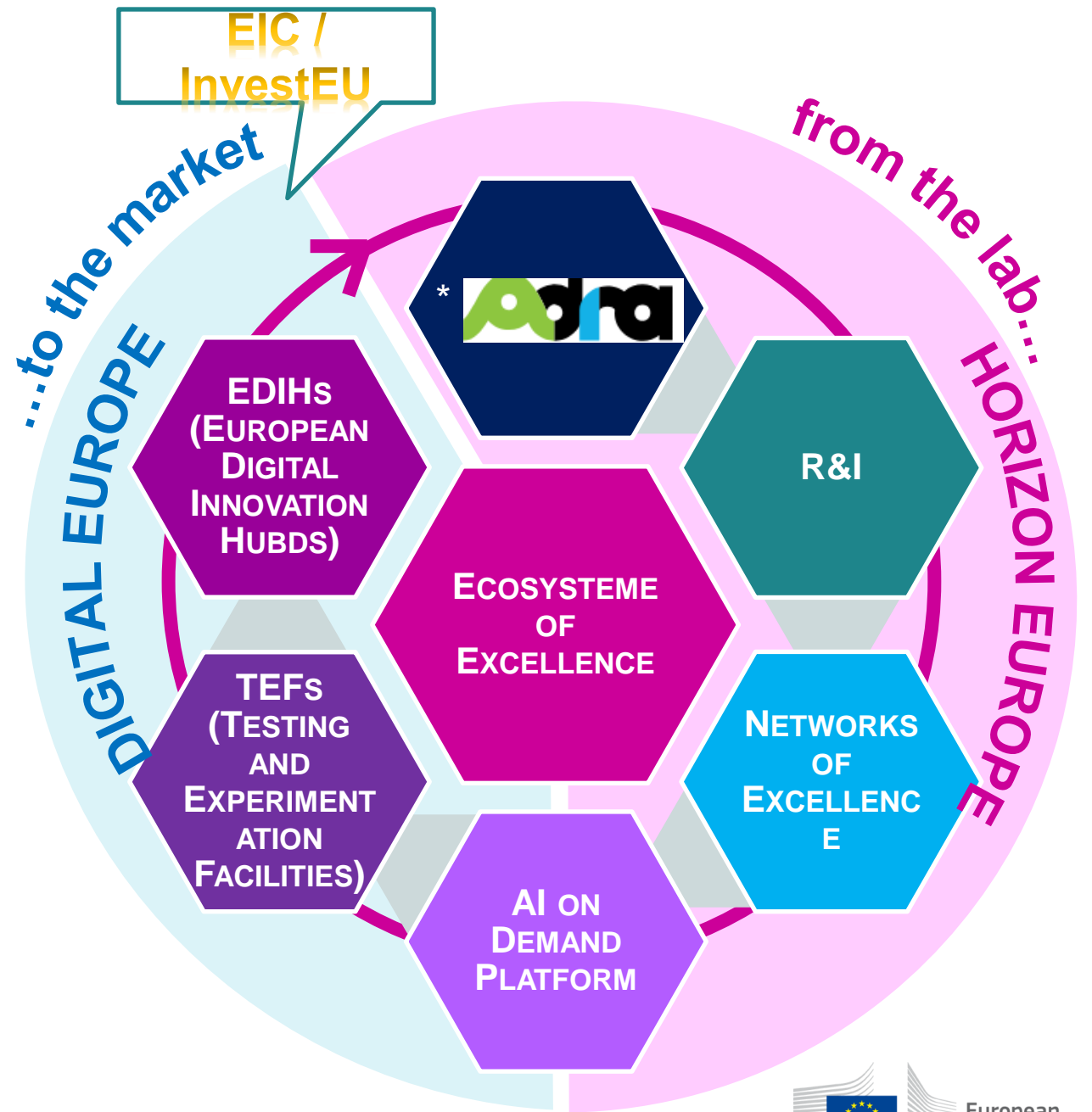
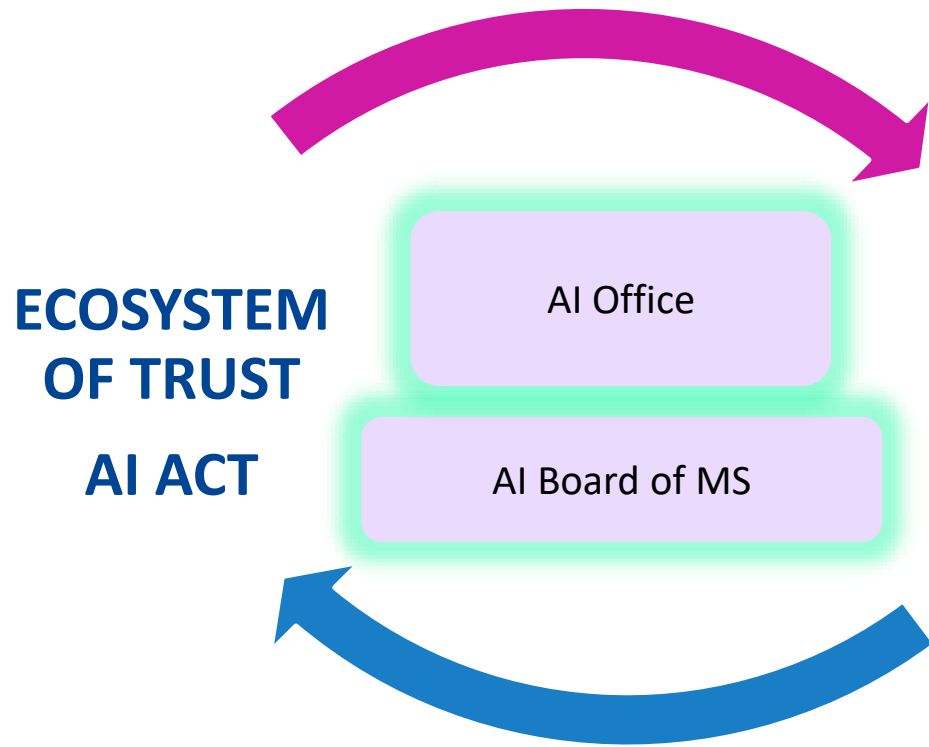
Building on today's Ecosystem



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Commission



Putting EU in the map of Generative AI

Innovation: From the lab to the market

Opening 16/04/2023
Deadline 18/09/2023

HORIZON EUROPE

- **Advancing Large AI Models:** Integration of New Data Modalities & Expansion of Capabilities
€50 million
- **Explainable and Robust AI**
€15 million



Opening 29/02/2024
Deadline 29/05/2024

DIGITAL EUROPE

- **Alliance for Language Technologies**
€24 million
- Making available a **high performing open-source European foundation model** for fine-tuning
€25 million

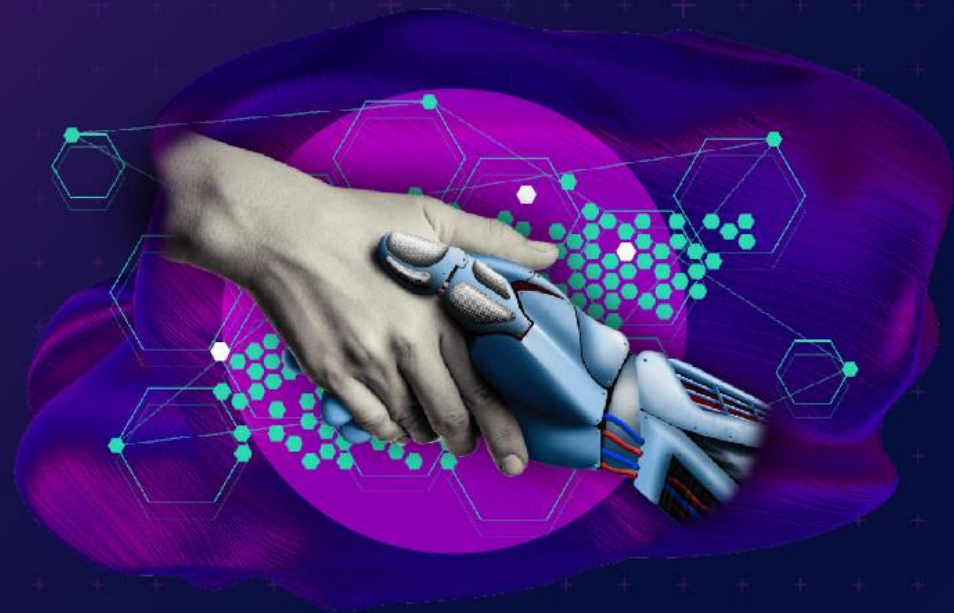


Cut-off dates: 12/03/2025
and 01/10/2025

EIC ACCELERATOR

- **GenAI4EU:** Creating European Champions in Generative AI
- €50 million
- Development of foundation 'frontier' models
- → see dedicated presentation





From GenAI4EU to Apply AI

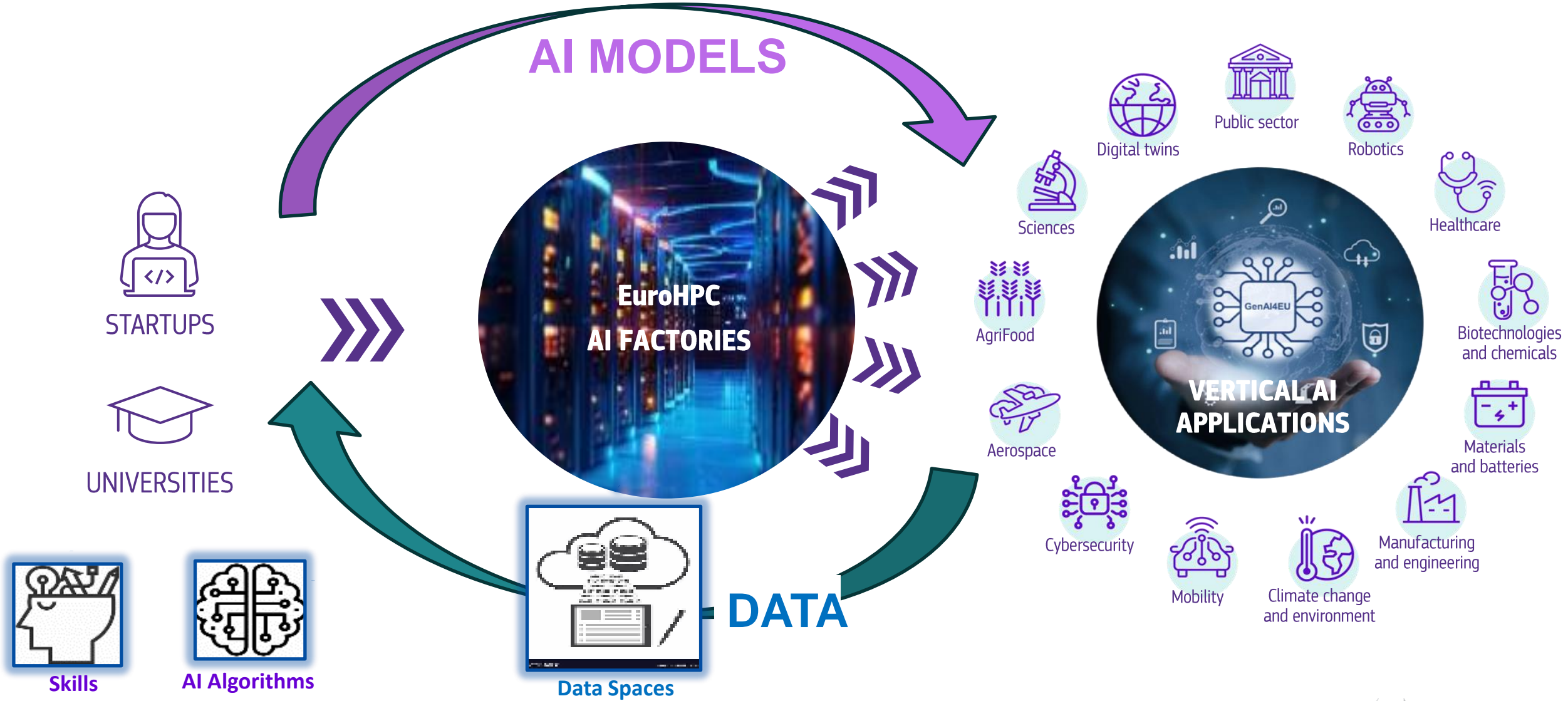


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European
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2024 Innovation Package: from AI Factories to GENAI4EU

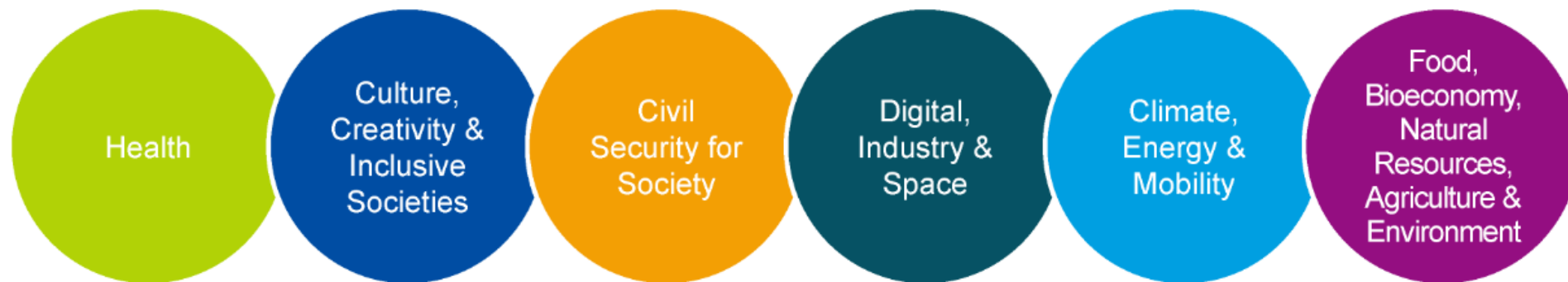


From GenAI4EU to the Apply AI Strategy

GENAI4EU in
Horizon
Europe
&
Digital Europe
Programmes

Pillar II - Clusters

GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS:



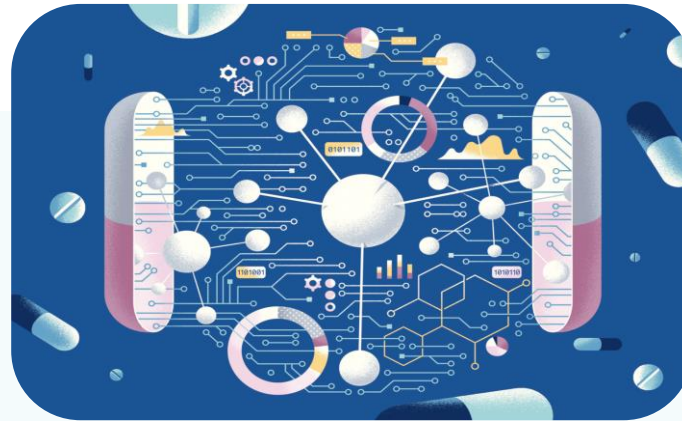
Public Administration

Example GenAI Applications | Healthcare

Medical Imaging and Diagnostics



Drug Discovery and Development

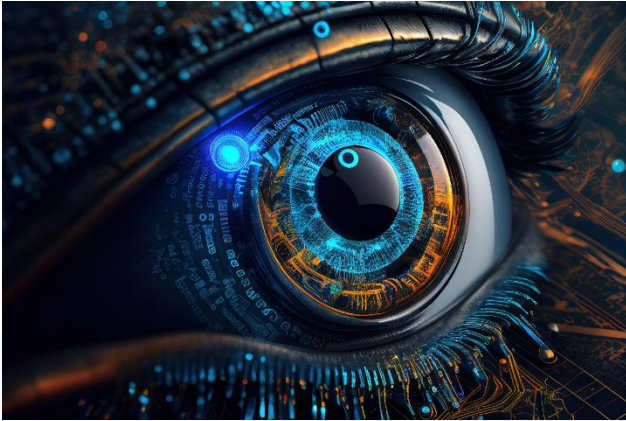


Personalised Medicine



Example GenAI Applications | Cybersecurity

Enhanced Threat Detection and Prediction



Vulnerability Identification



LLMs as cybersecurity assistants



Example GenAI Applications Robotics and Manufacturing



GenAI-powered Robotics

- Enhance robot **planning** capabilities to **predict the outcomes of different actions**
- Enhanced Human-Robot **Interaction**: enhance the robot's ability to understand and respond to human actions
- Robots **learning** from their experiences: increased robustness and adaptation
- **Simulate realistic environments** for robot training, especially in challenging environments such as nuclear or space environments.
- **Robot Design**

Manufacturing

- Realistic Environment Simulation
- Process Optimization and Waste Reduction
- Predictive maintenance



Example GenAI Applications | Energy



- More than 5Bn€ global market for Generative AI in energy by 2032
- Use-case:
 - Energy production optimisation (renewable)
 - Virtual power plant
 - Predictive Maintenance
 - Smart grid supply-demand optimisation
 - ...

From GenAI4EU to the Apply AI Strategy

**EUR 500 million in applications
(GenAI4EU initiative)**

Development and uptake of VERTICAL applications



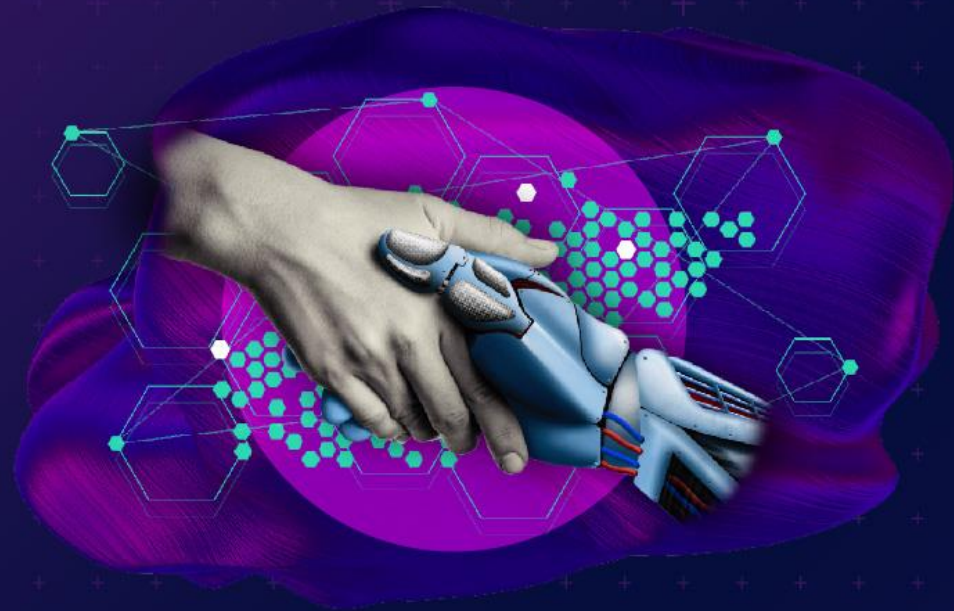
- Digital twins
- Public sector
- Robotics
- Sciences
- Healthcare
- AgriFood
- Biotechnologies and chemicals
- Aerospace
- Materials and batteries
- Cybersecurity
- Mobility
- Climate change and environment
- Manufacturing and engineering

+ 14 Strategic Industrial Ecosystems

- *Aerospace & Defence*
- *Digital*
- *Electronics*
- *Energy Intensive Industries*
- *Energy-Renewables*
- *Mobility-Transport Automotive*
-

* 10 verticals from Draghi Report

- Telecoms
- Energy
- Pharma
- Climate and environment
- Automotive
- Defence
- Health
- Aerospace
- Manufacturing and Robotics
- Agriculture



Thank you!



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