

GenAl4EU:

Creating European Champions in Generative AI - Healthcare use case

EIC Info Day, Brussels – 6. Nov. 2024

Mohamed Hedi KARRAY

Programme Manager for Al EISMEA

Federica Zanca

Programme Manager for Medical Imaging and AI in Healthcare EISMEA



GenAl4EU: Creating European Champions in Generative Al

 The aim of this Challenge is to support start-ups and SMEs committed to bringing transformative AI-driven solutions to market.



• Indicative budget: EUR 50 million



- Deadlines
 - Short applications: any time (continuous)
 - Full applications: 12 March 2025, 1 October 2025





Generative AI Challenges

- Unexplained inaccuracies (hallucinations)
- Lack of transparency and accountability
- Trust and reliability concerns
- Critical in advanced applications:
 - Greater scale and integration needed
 - Sensitive settings (e.g., clinical workflows, critical infrastructure management)



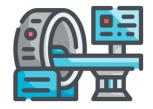


Call Specific Objectives

This Challenge will support start-ups and SMEs that are either:

- Further developing and validating <u>new GenAI models</u>;
- Adapting existing models to specific sectors or types of data where smaller faster and more energy-efficient models would also be applicable;
- Integrating the GenAl solutions in existing workflows, and testing these in regulatory sandboxes and real-life settings, including certification and post-market surveillance, as appropriate.

Eight areas: Healthcare, Energy, Security, Public Sector, Cultural and Creative Sectors and Industries, Manufacturing, Education, Science





Healthcare: Human-Al interaction in Radiology



- Design solutions for workflow optimization, focusing on triaging and prioritizing imaging studies.
- **Ensure accuracy and consistency** (quality assurance) for AI-generated reports, including results integrated from other AI applications.
- **Boost productivity** and alleviate workflow bottlenecks.
- **Facilitate seamless clinical integration** with existing RIS, PACS, EHR systems, and other infrastructure.



Energy

Managing the power grid, alongside the storage and use of renewables by grid operators,

Delivering safe, real-time decision making to enhance resilience and planning for energy





Security

Supporting security professionals to scale their work in threat and vulnerability detection and the subsequent response threats including those operating critical infrastructures

Supporting fault-tolerant, high quality and secure AI systems





Public sector

Improve the <u>quality</u>, ease of access and efficiency of public services

Increase the efficiency of public administration services and productivity.



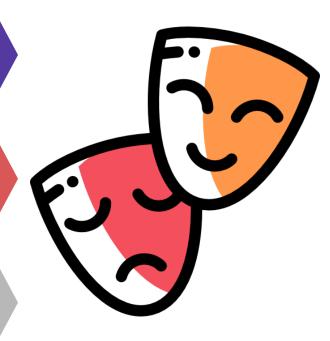


Cultural and Creative Sectors and Industries

Targeting the <u>needs of these sectors</u>

Catering for cultural and linguistic <u>diversity</u>

Ensuring transparency and full <u>respect and recognition of</u> <u>artists and creators rights</u>





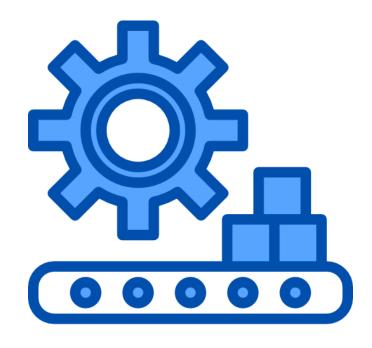
Manufacturing

Enable mass <u>customisation</u>

Enhance sustainability and automation

Propose options for design

Identify <u>maintenance</u> needs





Education

Enable personalised and adaptive learning experiences

Enhance educational <u>outcomes and accessibility</u>

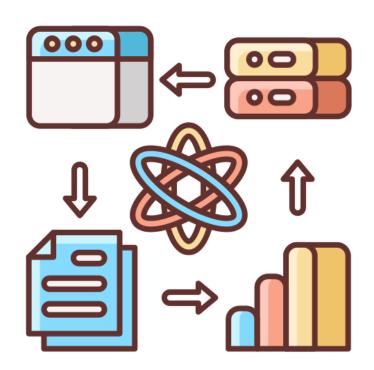




Science

Driving new levels of <u>productivity and capability for</u> <u>researchers</u>

Fostering innovation and scientific advancements





Expected Outcomes and Impact

Trustworthy AI Compliance:

Adhere to EU ethical principles: data quality, transparency, accountability, privacy, and security.

Reduce Dependencies:

Support companies in leveraging generative AI advances.

Optimize Workflows:

Use generative AI to improve operational processes.

Enhance Human Capabilities:

Apply AI to boost decision-making, creativity, and productivity.

Validation for Application:

Ensure AI models are validated for practical use and scalability.



Possible Benefits

- Favorable Access to Supercomputing Resources
- Opportunities to attract further capital
- Access to Scientific Datasets



Specific conditions

Robust Development

• Focus on safety, security, and ethics in future applications.

Avoid Technological Dependency

- Prevent reliance on non-EU sources.
- Assess and address strategic weaknesses, vulnerabilities, and high-risk dependencies.

Funding and Control Regulations

• Grant and equity funding recipients must not be controlled by non-associated third countries, except for specific exceptions.

Investment Safeguards

• Introduce specific safeguards in investment agreements to ensure economic security.



Thank you!

@EUeic #Eueic

© European Union, 2024

Reuse of this document is allowed, provided appropriate credit is given and any changes are indicated (Creative Commons Attribution 4.0 International license). For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

All images © European Union, unless otherwise stated. Image sources: tbc



Key links:

- GenAI4EU: Creating European Champions in Generative AI
- Info Day recording
- Challenge promotional video
- Cut-off date(s): 12 March 2025; 1 October 2025
- Indicative budget: € 50 Million
- EIC Work Programme 2025 Challenge at page 86