



EUROPEAN CLUSTER
COLLABORATION PLATFORM

Generative AI: Potential and challenges for business application

Summary



EU Clusters Talks
22 November 2023, 8:30 – 9:45 CET

An initiative of the European Union





Generative AI: Potential and challenges for business application

The European Cluster Collaboration Platform organised this EU Clusters Talk on 22 November, 8:30 – 9:45 CET, to speak about the application potential of generative AI in business practices, discuss the difficulties, and look at the legal framework.

Agenda of the meeting

Moderation: Zivile Kropaite

1. News from the European Cluster Collaboration Platform
Nina Hoppmann, team member, European Cluster Collaboration Platform
2. The EU AI Act
Antoine-Alexandre André, DG CNCT, European Commission
3. Views from practitioners
Antonio Novo, Managing Director, Cluster IDiA
Dobroslav Dimitrov, Co-Founder, Imperia Online JSC; member of ICT Cluster Bulgaria
4. Funding opportunities
Nina Hoppmann, team member of the European Cluster Collaboration Platform

Key messages

- Generative AI has increased competition globally, as current competitive advantages are rendered less important.
- We are experiencing a historical revolution, which forces us to adapt quickly.
- While regulation is necessary, Europe should remain able to be innovative.
- Clusters can help companies explore AI technologies and how to use them for their competitive advantage.
- A major challenge concerns the control and transparency of data.



1. News from the European Cluster Collaboration Platform

Nina Hoppmann, team member, European Cluster Collaboration Platform

After the introduction by moderator Jennifer Baker, the following news item were presented:

1. Save the date for the next European Cluster Conference, which will take place on 7-8 May 2024. Ideas for topics and speakers [can be submitted](#).
2. Invitation to [apply for the Cluster Booster Academy](#).
3. Open call to host the next [“Clusters meet Regions”](#) events in 2024/2025.
4. Share feedback and topic suggestions for the EU Clusters Talks via the open [survey](#).

2. The EU AI Act

Antoine-Alexandre André, DG CNCT, European Commission

Antoine-Alexandre André presented the European Commission's proposal for regulating Artificial Intelligence (AI). He explained that they are in the final stages of negotiations for the regulation, which is based on **creating horizontal, generic rules applicable to all AI systems**. The European Parliament and Council are negotiating the Act, aiming to reach an agreement by the end of the year.

The AI Act fundamentals consider product safety legislation, fundamental rights, a risk-based approach, and a set of requirements for providers of high-risk AI systems.

The risk-based approach foresees four AI categories:

- No-Risk AI Systems: No restrictions are imposed, encouraging innovation.
- “Transparency risks” for AI systems interacting with humans: Transparency requirements are mandated.
- High-Risk AI Systems: High-level obligations are set, operationalised through standardisation.
- Unacceptable Risk AI Systems: Certain AI systems posing significant risks are prohibited (e.g., social scoring systems, biometric identification in public spaces).

Key discussion points in the current negotiations are the foundation models (discussions to govern foundation models with transparency obligations and possibly further obligations for models which pose particular risks), the governance structure (AI Office vs. AI Board), and the law enforcement.

The initial Commission proposal categorises tools like ChatGPT as requiring transparency requirements. However, the evolving nature of AI, including generative AI systems and foundation models, might lead to additional obligations. The legislation does not distinguish between cloud-based and local AI systems, treating all AI systems as products. This approach aims to be forward-thinking and adaptable to technological advancements.



3. Views from practitioners

The speakers discussed the revolution brought about by Artificial Intelligence, the challenges it poses to humans to comprehend and to apply it to the industry, the significance of generative AI for global competition, and the need to adapt to the new reality.

In the beginning of the exchange, Antonio Novo detailed the experience of Cluster IDiA in the field of AI. Their specific engagement with AI began around 2016, when they formed a group led by automotive and space companies to explore big data and AI applications in advanced manufacturing. The cluster has executed several substantial projects, including integrating over 4,000 robots in real-world environments, and applying AI in industry, particularly for product and component quality verification, classifying information and understanding semantic relationships in industrial processes. They also explore AI-based maintenance strategies. Looking at generative AI, cluster IDiA has formed a **working group**, collaborating with universities and meeting with high-level experts to understand the technology's potential and limitations. The organization has launched a **sandbox** at the cluster level to experiment with this AI technology.

Dobroslav Dimitrov, co-founder of several software companies and a space engineering firm shared valuable insights into the evolving landscape of artificial intelligence (AI) and its implications for business and society. AI is truly a **disruptive technology**, and we face an **inherent difficulty in comprehending its exponential growth**. He drew parallels to historical shifts to underscore the challenges posed by rapid changes, stressing the urgent need for adaptation. We are confronted with a historic revolution. Within his companies, the integration of generative AI across all functions is not just encouraged but mandatory. The rationale is that AI significantly amplifies human capabilities, enhancing productivity and efficiency across various roles, from business development to creative endeavours.

The discussion highlighted that the **democratisation** of generative AI is levelling the **global competitive field**. Skills that were once seen as competitive advantages, like multilingualism, are now less significant due to AI's capabilities, bringing a new intensity to global competition. Additionally, the epicentre of AI development has shifted from academic institutions to major tech corporations, most of which are not based in Europe. This shift could potentially put Europe at a disadvantage in the long term. While acknowledging the necessity of regulatory frameworks for AI, the speaker cautioned against regulations that might hinder **innovation and competitiveness**, especially in a global context where AI development is rapidly advancing.

Antonio Novo emphasised the role that clusters can play as **facilitators** in the economy, particularly in the context of adopting and implementing new technologies like AI. He urged cluster managers and European clusters to quickly educate themselves about these emerging technologies. Clusters should actively assist their member companies in exploring and implementing these new technologies. The aim is to help these companies understand potential applications and integrate them effectively into their operations. There are "low hanging fruits," or areas where technology implementation is relatively straightforward and can yield quick benefits.

Talking about the challenges, the speakers identified **controlling the data** used in AI applications, especially when it involves sensitive or proprietary information. Cluster IDiA is exploring ways to leverage public market data for strategic decisions like raw material sourcing while maintaining data



privacy and control. Another challenge is the significant concern regarding the **reliability and accuracy** of information produced by AI systems. These systems can sometimes produce incorrect or misleading information, and there are instances where they might not adhere to set rules or instructions. The speaker highlighted the importance of continuous testing and updating of AI systems to ensure the data they use is current and relevant. Wrong or misleading data can lead to incorrect conclusions or suggestions by the AI.

The final takeaway was the emphasis on adaptation. Humanity's greatest strength is adapting to challenges, and this AI revolution is seen as the most significant challenge yet, requiring a profound adaptation in how we think and operate.

4. Funding opportunities

Nina Hoppmann, team member of the European Cluster Collaboration Platform

Closing the EU Clusters Talk, Nina Hoppmann shared the following examples of funding opportunities:

1. [Beyond the horizon: A human-friendly deployment of artificial intelligence and related technologies](#); deadline 7 February 2024.
2. [Leverage the digital transition for competitive European cultural and creative industries](#); deadline 7 February 2024.
3. [AI-driven data operations and compliance technologies \(AI, data and robotics partnership\)](#); deadline 19 March 2024.
4. Opportunities for SMEs: Calls from Euroclusters; published on [European Cluster Collaboration Platform](#)