MEMBERS OF NATIONAL JUDICIARIES IN THE DIGITAL ERA

Pēteris Zilgalvis, Judge, General Court of the European Union

COURT OF JUSTICE
OF THE EUROPEAN UNION

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ARTIFICIAL INTELLIGENCE (AI)
&
EUROPEAN DIGITAL INITIATIVES

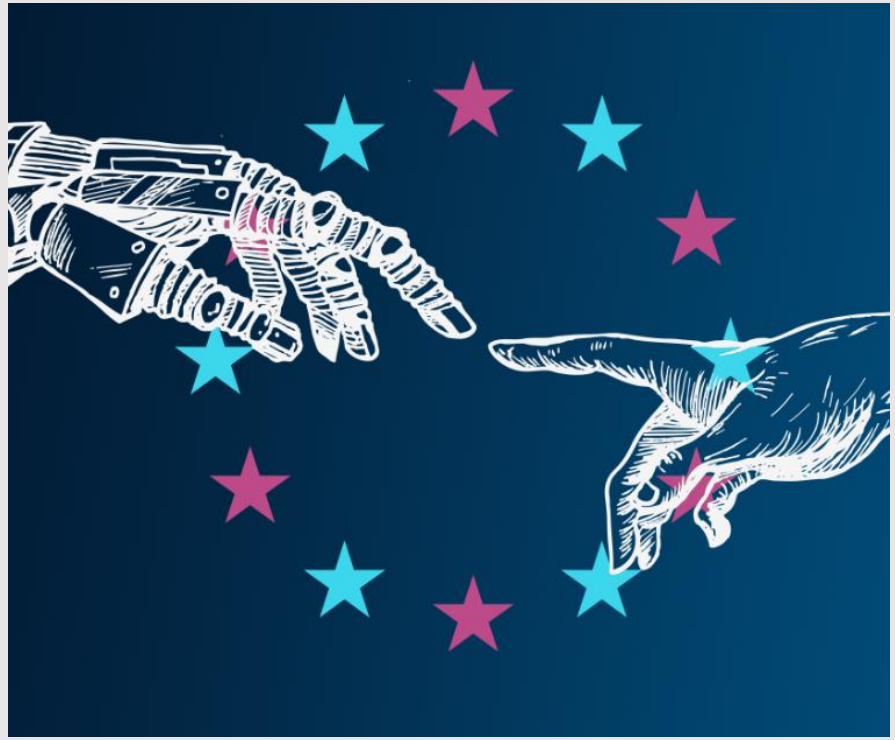
1) **THE CJEU'S ARTIFICIAL INTELLIGENCE STRATEGY**

2) **GENERATIVE AI AND ITS USE BY JUDICIAL PROFESSIONALS**

3) **AI AND COMPETITION LAW**

4) **INTERIM MEASURES CONCERNING THE DIGITAL SERVICES ACT**

5) **EU DIGITAL INITIATIVES: THE EU DIGITAL IDENTITY WALLET**

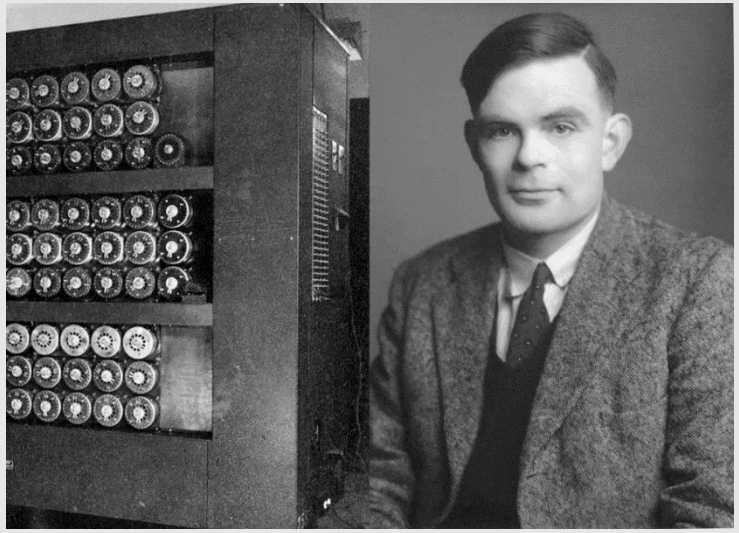


Source: European AI Office

GOVERNANCE OF AI

Already in 1951, Alan Turing warned –

"At some stage ... we should have to expect the machines to take control ...."



Can we expect the machines to take over the judiciary?

Alan Turing, *Intelligent Machinery, A Heretical Theory*, 3.4 PHILOSOPHIA MATHEMATICA 256, 260 (1996); *see also* Alan Turing, *Computing Machinery and Intelligence*, 236 MIND 433–60 (1950).

GOVERNANCE OF AI

It is important to harness the potential of AI, while reconciling it with the values of the rule of law and judicial independence, as well as ensuring the quality of justice for the benefit of citizens.

AI is not a technological evolution, but a technological revolution that requires revolutionary governance.

THE CJEU'S AI STRATEGY

The CJEU will leverage responsible, equitable, traceable, reliable and governable A.I. capabilities as well as the talents of its own workforce in its journey towards becoming a Smart Court.

- Vision statement, CJEU AI Strategy -

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Image source: Katarina Dzurekova

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THE CJEU'S AI STRATEGY

AI technology can be leveraged to achieve multiple goals, with a primary focus on three key areas:

1) improving the efficiency and effectiveness of our administrative and judicial processes,
2) enhancing the quality and consistency of judicial decisions, and
3) increasing access and transparency for EU citizens.

The use of any new AI technology within the Court will have to be implemented in a manner that *preserves the independence and impartiality of the judiciary and respects fundamental rights such as privacy and data protection.*

IMPROVING EFFICIENCY AND EFFECTIVENESS

Source: Octoguard

Helping judges and lawyers as well as staff to become more productive and creative in ways such as:

1) Increased support in the text processing of decisions and conclusions,
2) Possibility of semantic research: the machine understanding the context and meaning behind a query instead of simply attempting to match key words,
3) Natural Language Processing of judicial documents for fast and accurate analysis. There is the possibility of generating automatic case summaries, provided that the machines are trained on sufficient data.

IMPROVING EFFICIENCY AND EFFECTIVENESS

Source: Octoguard

To enable these uses, attention needs to be given to:

1) **Data governance**
   - ✓ Without quality and representative data, developers cannot train AI algorithms to produce a quality output.
2) **A data strategy**
   - ✓ How the Court will collect, process, store and disseminate data when using AI. The judiciary process will employ mainly algorithms created and used within the organizational boundary, due to the high sensitivity of the data related to cases and data protection requirements.
3) **Adaptive, future-ready workforce**
   - ✓ People are the most important asset of the organization. To fulfil its future mission, the workforce needs to adapt continuously. New skills and competences are already required.

ENHANCING QUALITY AND CONSISTENCY

Source: European Commission

Judicial decisions can be enhanced through the use of AI technology.

Current technology allows for the automated correlation and classification of cases, or the automated processing of originating documents.

In the future, AI systems may be able to:

1) **Quickly analyse a large amount of legal data**, identifying relevant jurisprudence, and providing recommendations. It is possible to develop such systems so that they explain or offer evidence on how it reached a particular recommendation.

2) **Standardise the format of judicial documents from different Member States.** Especially useful when combined with the possibility of AI neural translation. Enhances the accessibility and comprehension of documents that may be in difficult formats or not yet translated.

INCREASING ACCESS TO JUSTICE AND TRANSPARENCY

Increasing access to justice and transparency *vis-à-vis* EU citizens. **AI offers an additional guarantee for the operation of a fair and just legal system.**

1) **Increased accessibility** for disabled citizens with the implementation of assistive technologies such as automatic real-time subtitles or image and object recognition tools.
2) The general public or legal professionals could find information more effectively through the use of **Court chat-bots, virtual assistants or AI avatars.**
3) **Neural translation** also offers the unprecedented possibility of making much more information available in all 24 languages of the Union.

INCREASING ACCESS TO JUSTICE AND TRANSPARENCY

Creating active partnerships in the e-Justice ecosystem:

- ✓ Cooperation with national courts via Judicial Network of the EU ("JNEU").
- ✓ Collaboration at EU inter-institutional level.
- ✓ Find the right partners in the academic and research world.

European e-Justice portal

THE RISKS OF USING AI IN THE ADMINISTRATION OF JUSTICE

Courts need to be aware of the following risks:

1) Lack of clarity
2) Lack of neutrality
3) Risk to the independence of the judiciary
4) Risk of undermining the right to a fair trial
5) Risks of confidentiality and the protection of personal data

Source: OECD

THE RISKS OF USING AI IN THE ADMINISTRATION OF JUSTICE

… given the opacity which characterises the way in which artificial intelligence technology works, it might be impossible to understand the reason why a given program arrived at a positive match. In those circumstances, use of such technology may deprive the data subjects also of their right to an effective judicial remedy enshrined in Article 47 of the Charter.

Grand Chamber - C-817/19 - *Ligue des droits humains* – at [194]-[195]

PRINCIPLES FOR THE USE OF AI IN THE ADMINISTRATION OF JUSTICE

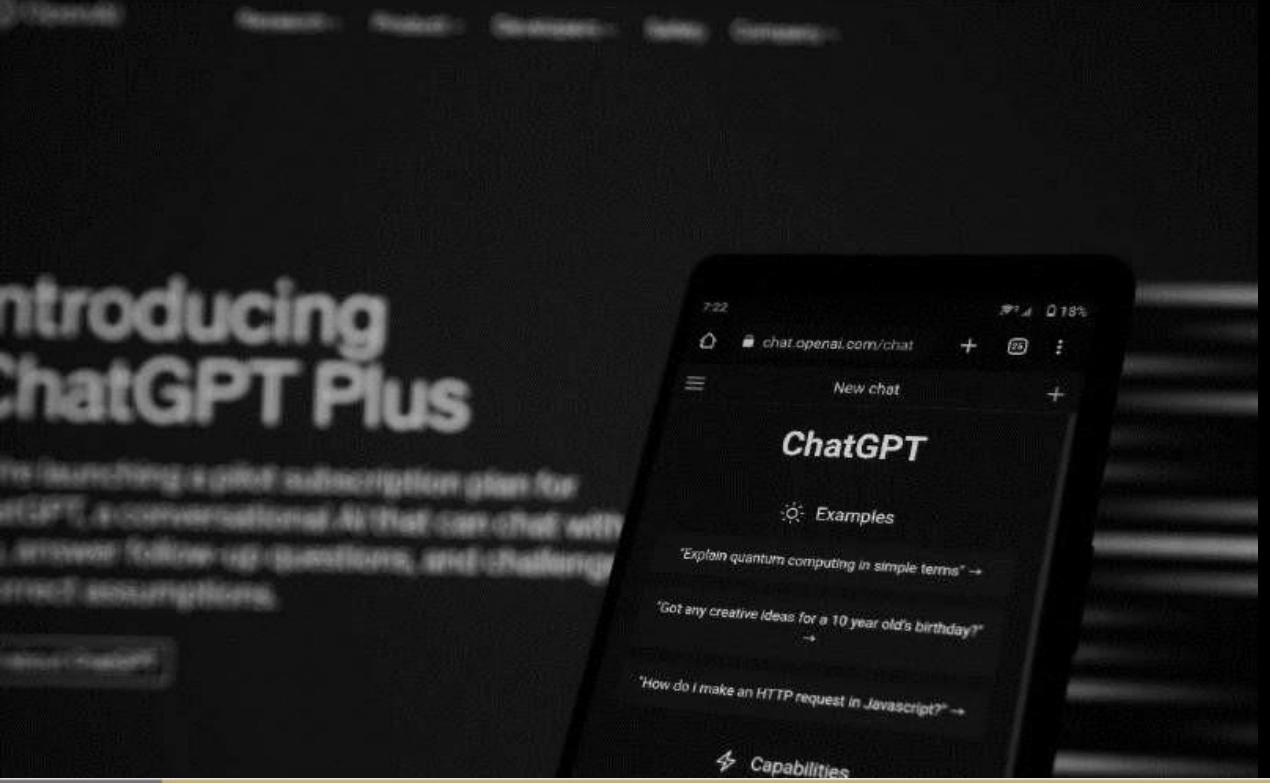
Transparency: The rationale and justification for the development of AI algorithms should be clear and understandable.

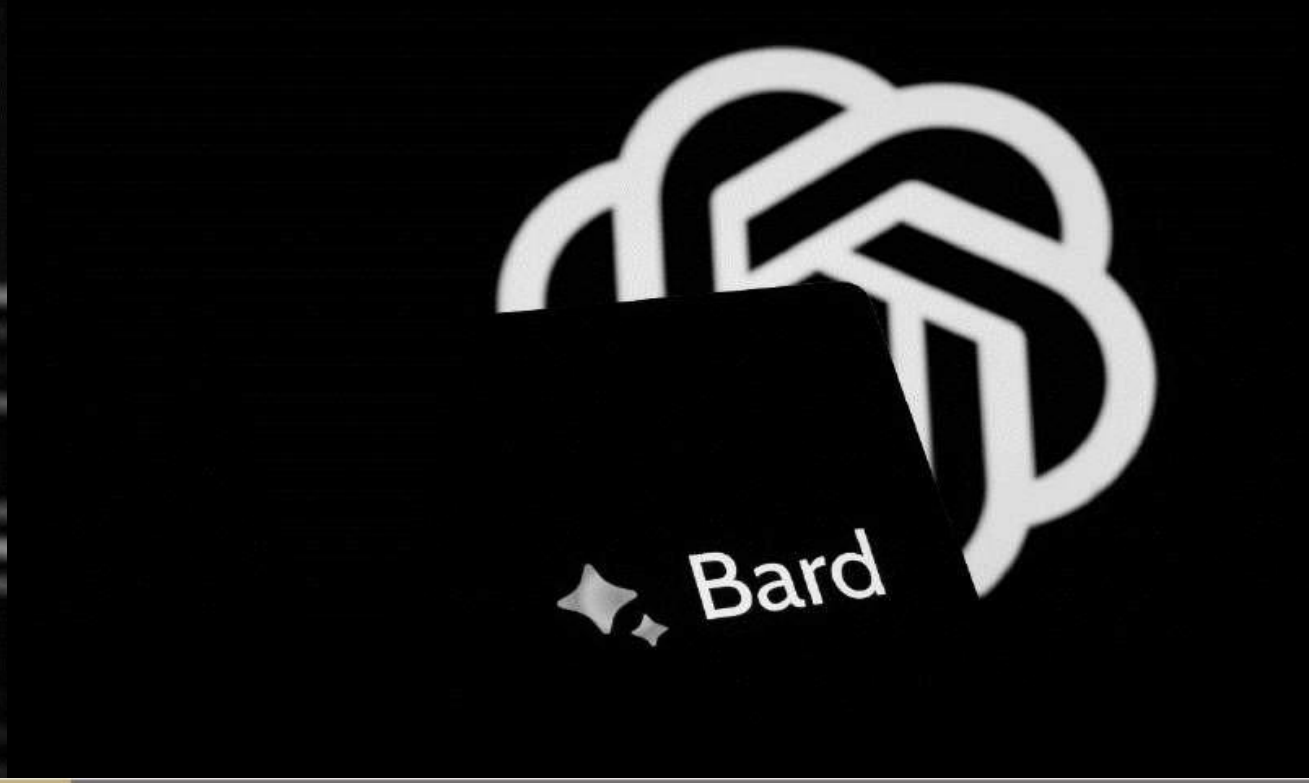
Traceability: AI solutions should be auditable and explainable.

Privacy and data protection: processing of personal data in a secure and ethical manner.

Close monitoring by humans: all AI tools must be monitored by humans.

Continuous improvement.





GENERATIVE AI

GENERATIVE AI
A BREAKTHROUGH INNOVATION

Source: Luca Bravo

Foundational models

- Trained on large datasets of text and code
- Uses: generating text, translating languages, answering questions

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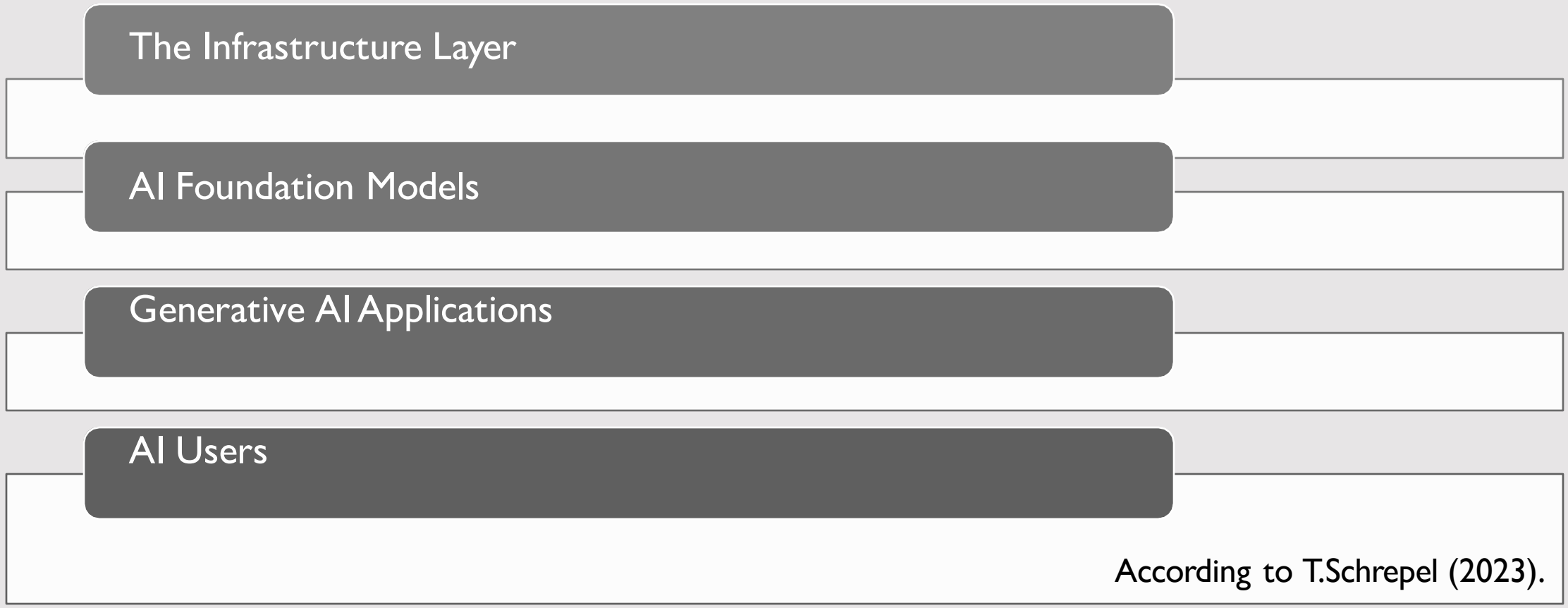
Large language models

- A foundational model that is trained on a very large text dataset
- Capable of learning complex language patterns, enabling it to perform creative tasks

THE FOUR INTERCONNECTED LAYERS OF GENERATIVE AI



According to T.Schrepel (2023).

GENERATIVE AI

Foundational and large language models use the information provided in the training data to create associations between different pieces of information.

For example, when a generative AI system writes:

The principle of supremacy of EU law was established by the case Costa v. ENEL (Case 6/64)

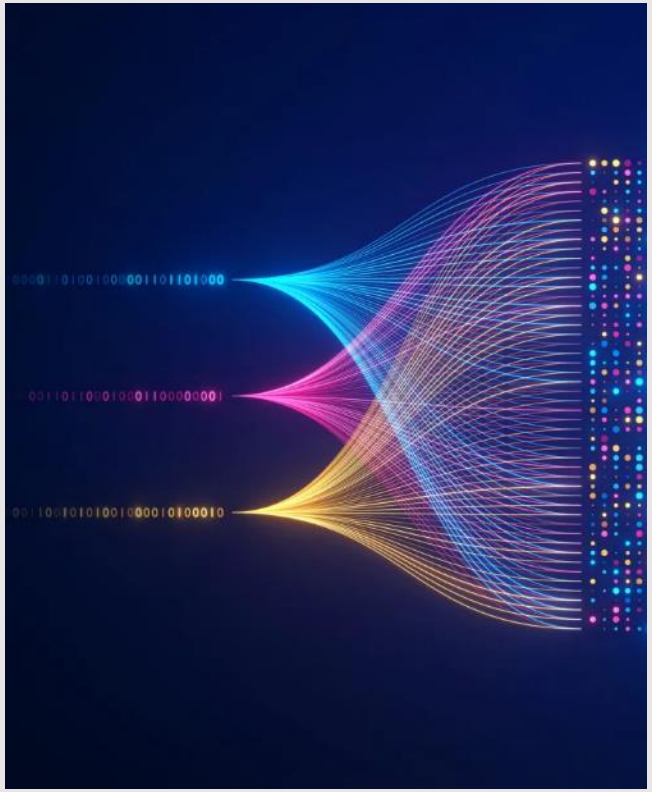
The system writes this not because it is relying on a knowledge base that makes a direct link between these two pieces of information. Instead, it is because in the cases that it has encountered in the training data, the association between '*Costa v. ENEL*' and 'the principle of supremacy' was very often made.

Thus, the system can deduce that the association was likely to be relevant.

GENERATIVE AI

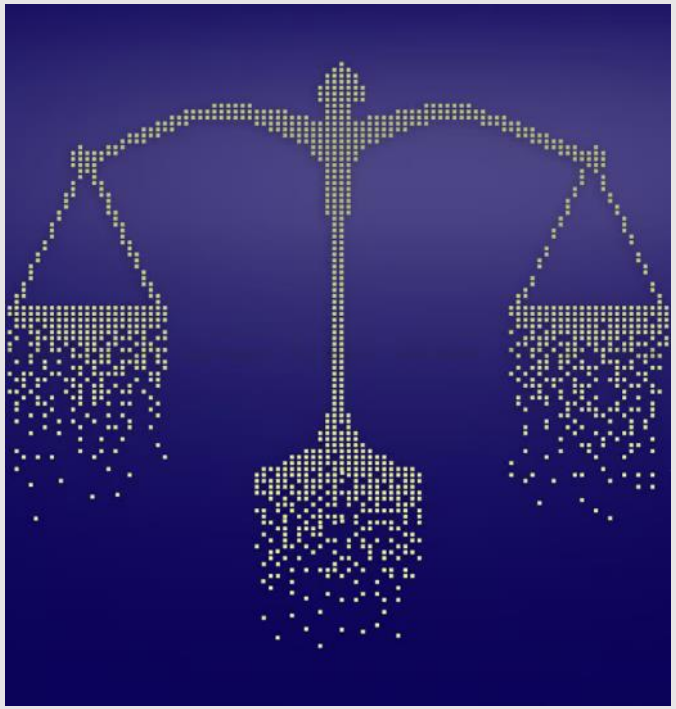
This model means that generative AI produces particularly good results for:

- translation of texts (for example English to French and vice versa),
- the generation of coherent (but not necessarily true) text, images or sounds,
- **automatic summary of texts,**
- **semantic analysis and opinion detection,**
- **text mining and content access.**



Source: Getty

THE USE OF GENERATIVE AI BY JUDICIAL PROFESSIONALS



Source: Bar and Bench

Generative AI can be very useful for improving the efficiency and effectiveness of the work of judicial professionals as well as enhancing the quality and consistency of said work.

However, generative AI **does not** possess the ability to **reason, understand context, or perform a wide range of intellectual tasks across different domains**.

This is not to say that a generative AI system cannot provide reasons for its decision, most systems are able to provide reasons that appear logical at first sight.

The problem is that current generative AI systems can produce results which are wrong or inaccurate. This is the result of "hallucinations", in which a generative AI system invents information and makes it sound real.

GOVERNANCE OF GENERATIVE AI

The results given by generative AI systems must be **continuously verified and human critical thinking must be applied**. In case of errors, the machine has to be retrained or corrected.

The rapid advancement in Generative AI algorithms, such as ChatGPT, may lead some to adopt these solutions in an uncontrolled way.

This risks disregarding rules of good practice, particularly in terms of security and data protection. A proper system of governance in analysing and adopting such tools is essential to mitigate such a risk.

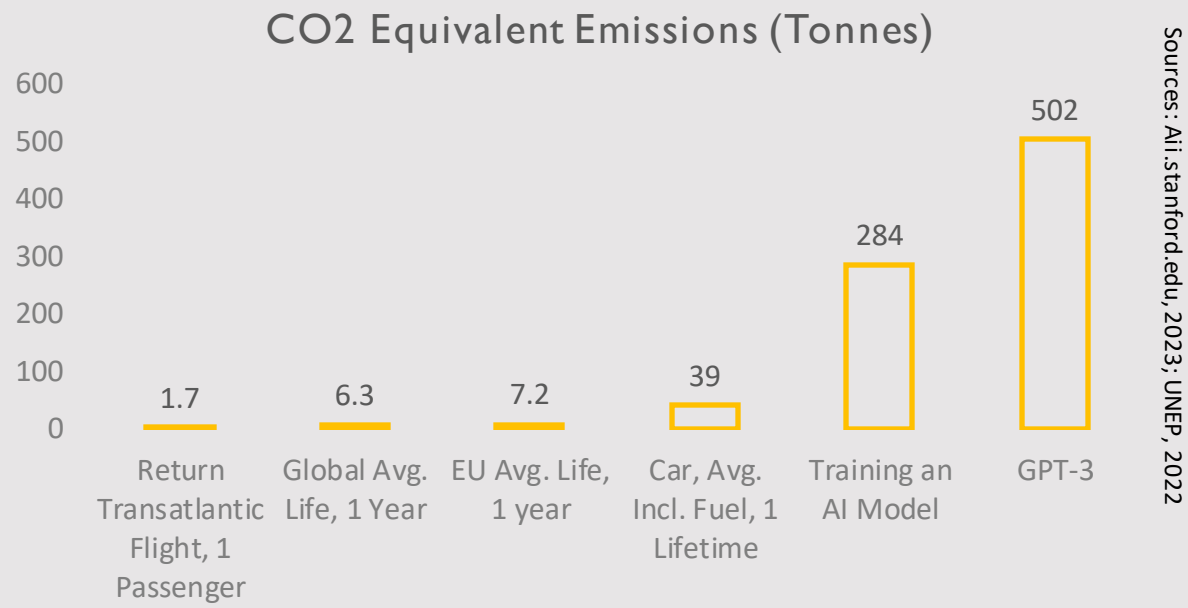
Source: Getty

THE EFFECTS OF AI ON CLIMATE CHANGE

Every user should be aware of **the impact of AI tools on energy consumption**, as the training data and computationally intensive systems of AI tools produce significant greenhouse gases.

Using large generative models to create outputs is, on average, 30x more energy intensive than using **smaller AI models tailored for specific tasks.**

- Melissa Heikkilä, *Making an image with generative AI uses as much energy as charging your phone*, MIT Technology Review



THE EFFECTS OF AI ON CLIMATE CHANGE

Source: Traci Daberko

The use of AI systems can have a positive impact on the environment.
For example:

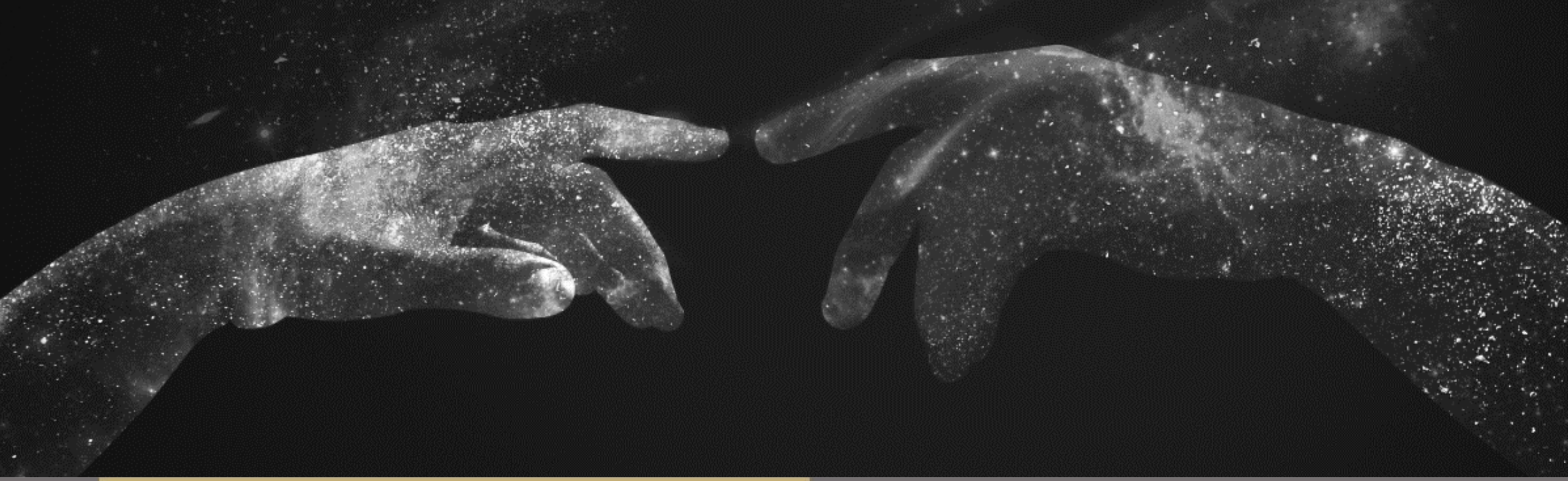
- Existing AI systems include tools that predict weather, track icebergs and identify pollution.
- AI is being used to help companies in the metal and mining, oil, and gas industries to decarbonize their operations.

World Economic Forum

AI systems emit between 130 and 1500 times less CO2e per page of text generated compared to human writers, while AI illustration systems emit between 310 and 2900 times less CO2e per image than their human counterparts.

Tomlinson, Black, Patterson & Torrance, *The carbon emissions of writing and illustrating are lower for AI than for humans*

Must be used effectively = i.e. using smaller AI models for specific tasks



AI AND COMPETITION LAW

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Image source: Telefónica

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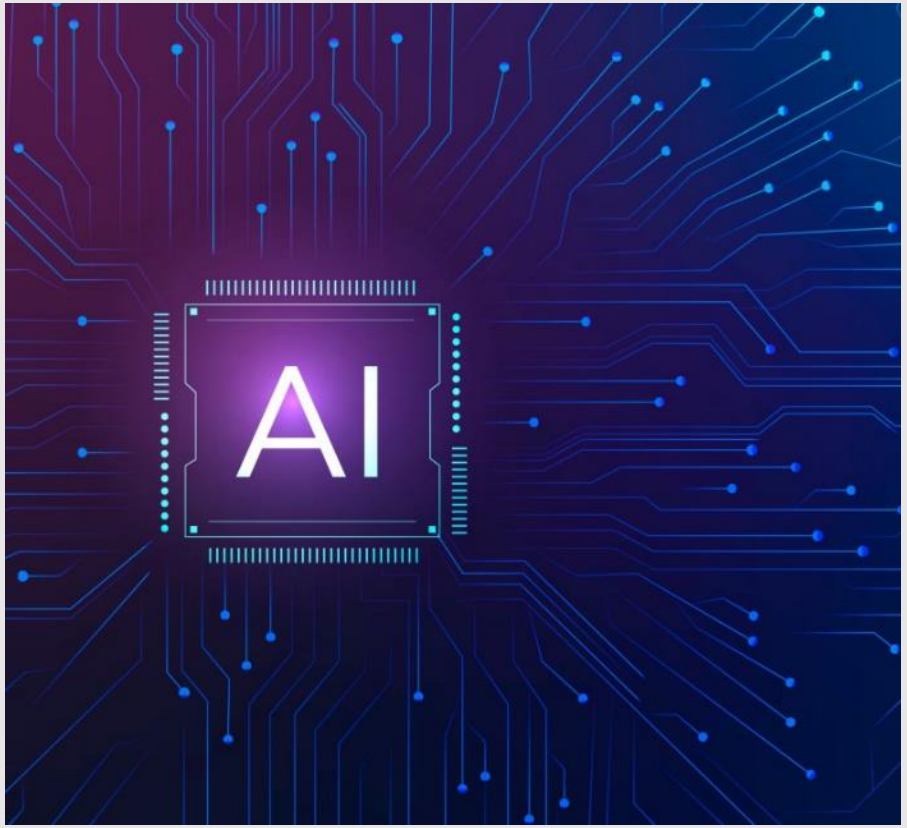
AI AND COMPETITION LAW

The current competition landscape is dynamic

Numerous firms are innovating and competing to develop LMs and AI powered applications.

At the same time, warnings that foundation models might end up in the hands of only a few large players with dominant positions in the digital sector.

A rapid consolidation of the entire space around a few players can happen due to the nature of the foundation models themselves.



Source: Getty

AI AND COMPETITION LAW

Meeting demand *for cheap and seamless services usually requires scale (massive up-front investment in chips, people, security, innovation) which rewards and accelerates centralization. In this scenario,* ***there will be just a few mega-players whose scale and power will begin to rival traditional states.***

Mustafa Suleyman, "The Coming Wave: Technology, Power, and the Twenty-first Century's Greatest Dilemma" 2023, p.190.

In sum, returns on intelligence will compound exponentially. ***A select few artificial intelligences that we used to call organizations will massively benefit from a new concentration of ability*** *– probably the greatest such concentration yet seen. Re-creating the essence of what's made our species so successful into* ***tools that can be reused and reapplied over and over, in myriad settings, is a mighty prize, which corporations and bureaucracies of all kinds will pursue, and wield.***

Suleyman, M., p.191.

AI AND COLLUSIVE CONDUCT

Pricing collusions involving an algorithm can be caught under competition law.

In 2018, the Commission sanctioned four electronic consumer manufacturers for engaging in **fixed or minimum resale price maintenance** ("RPM") by restricting the ability of online retailers to set their own retail prices for widely used consumer electronics products, including tablets, headphones, speakers and kitchen appliances. Commission Decisions of 24 July 2018 relating to a proceeding under Article 101 TEU, Cases: AT.40465 — Asus, C 338/13, 21.09.2018;AT.40469 — Denon & Marantz, C 335/5, 20.09.2018;AT.40181 — Philips, C 340/10, 24.09.2018;AT.40182 — Pioneer, C 338/19, 21.09.2018.

E-commerce allowed cross-border trade in the EU to grow, but the rapid advancement into the digital age may also have facilitated implementation and monitoring of **vertical (and horizontal) restrictions that may be contrary to EU law.**

Pricing algorithms and especially **self-learning algorithms** form a **significant challenge** to the competition authorities.

The ever-changing nature of the digital markets calls for a **pro-active, flexible, and creative approach to competition law enforcement, at all levels.**

COLLUSION DECIDED ON AND IMPLEMENTED BY AI

AI "acted independently"

Genuinely independent AI conduct resulting in parallel behavior

- Absence of concentration and the *knowing* substitution of cooperation for the risks of competition

Does not meet the conditions to be prohibited

Enforcement gap for the authorities.

Two distinct AI systems communicated

The communication/ signaling of two AI systems leads to parallel behavior)

Law prohibiting anti-competitive agreements applies.

AI AND ABUSIVE CONDUCT

Examples of anti-competitive strategies that AI could facilitate:

- Predatory pricing – rapid analysis of pricing data to determine the response of the competitor to changes in the market.
- AI integration in consumer facing products could allow excluding competitors, push customers toward their own offerings without their knowledge.
- AI use in collection of information on customers (preferences, brand loyalty, purchasing patterns) resulting in discrimination.
- AI abuses without intended harm.

INTERIM MEASURES CONCERNING THE DIGITAL SERVICES ACT

Order of the Vice-President of the Court of Justice, 27 March 2024, C-639/23 P(R),

Commission v Amazon Services Europe

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Image source: Jasmina El Bouamraoui
and Karabo Poppy Moletsane

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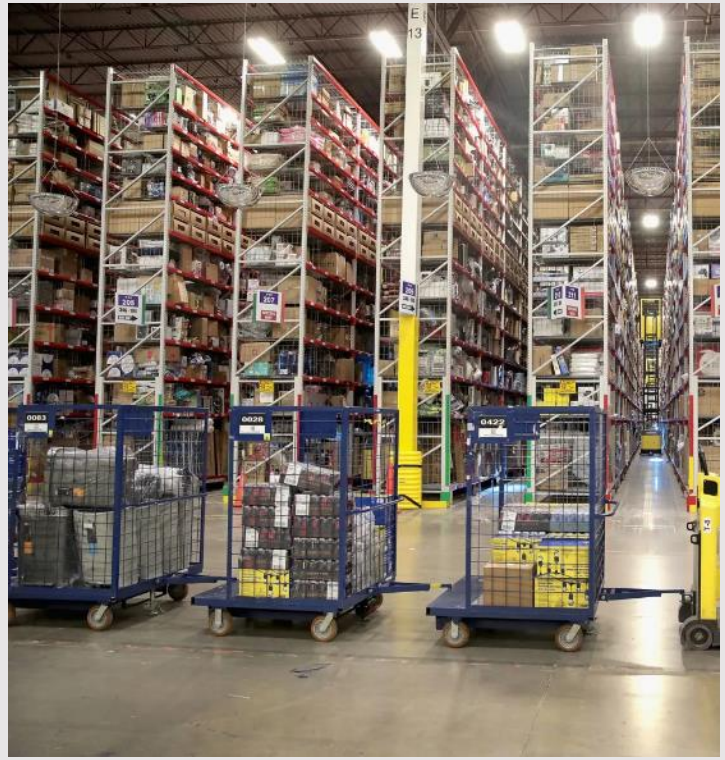
LARGE ONLINE PLATFORM UNDER THE DIGITAL SERVICES ACT ("DSA")

Amazon ("A.") challenged its designation as "a very large online platform" ("VLOP") before the General Court.

A. also filed for interim measures to suspend certain requirements under the DSA pending a decision on the wider legal challenge.

The General Court ruled in its favor, agreeing to suspend a requirement under the DSA that A. must make an ads library public.

However, **the Court did not agree to suspend a separate DSA requirement** on A. to offer the store's users a non-profiling option powering the recommendations it serves them.



Source: Scott Olson

LARGE ONLINE PLATFORM UNDER THE DIGITAL SERVICES ACT ("DSA")

On the Ads Library issue, **A.'s lawyers argued:**

- **The requirement to publish an ads archive** would result in the disclosure of confidential information that **would cause "serious and irreparable harm** to its advertising activities and, by extension, to all its activities".
- **The disclosure of the ad information would weaken its competitive position** and cause an irreversible loss of market share, and harm its ad partners.

The General Court agreed A. had established that the release of the information could cause serious and irreversible commercial harm.

Source: AuxAdi

LARGE ONLINE PLATFORM UNDER THE DIGITAL SERVICES ACT ("DSA")

On recommender systems, where A. was not successful in its application for interim measures, A.'s lawyers argued:

- the DSA obligation on VLOPs to provide **an opt-out to users of profiling-based recommendations would result in a significant and irreversible loss of its market share** — triggering serious and irreparable harm.

However, A. was unable to quantify the level of claimed harm to its business (a ballpark estimate could fall within a range of between $500 million and $3.8 billion).

The General Court:

- **DSA does not demand that there be no profiling-based recommender systems, merely that users be given a choice to opt-out** — further pointing out A. remains free to inform users about the impacts such choices might have on their experience of its platform.
- Expresses **skepticism over A.'s assertion that the existence of an opt-out would reduce use of its Store**, since customers could opt to switch the profiling recommendations back on.
- **Did not find A. had established the existence of irreparable harm to the required legal standard to grant interim measures — declining to suspend this DSA requirement.**

LARGE ONLINE PLATFORM UNDER THE DIGITAL SERVICES ACT ("DSA")

The Commission lodged an appeal against the order of the President of the General Court.

The Court of Justice:

- On 27 March 2024, the Vice-President of the Court of Justice set aside the part of the order of the President of the General Court suspending the requirement under the DSA that A. must make an ads library public.
- The Vice-President found that the Commission was denied the opportunity to comment on the arguments put forward by A. during the proceedings before the General Court.
- This was in breach of the principle that the parties should be heard.
- The Commission was able to present its arguments before the Court of Justice and the Vice-President of the Court gave final judgment and **dismissed the application for interim measures.**

Source: Arne Immanuel Bänsch

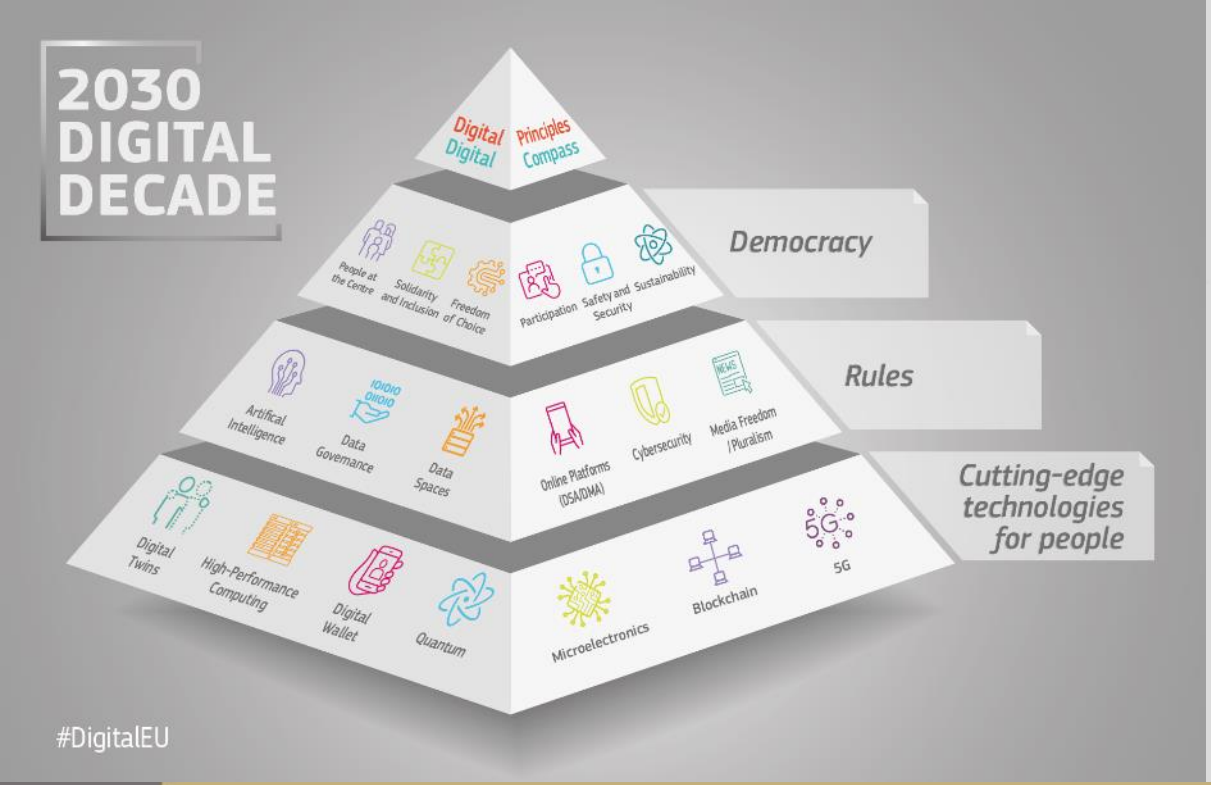
LARGE ONLINE PLATFORM UNDER THE DIGITAL SERVICES ACT ("DSA")

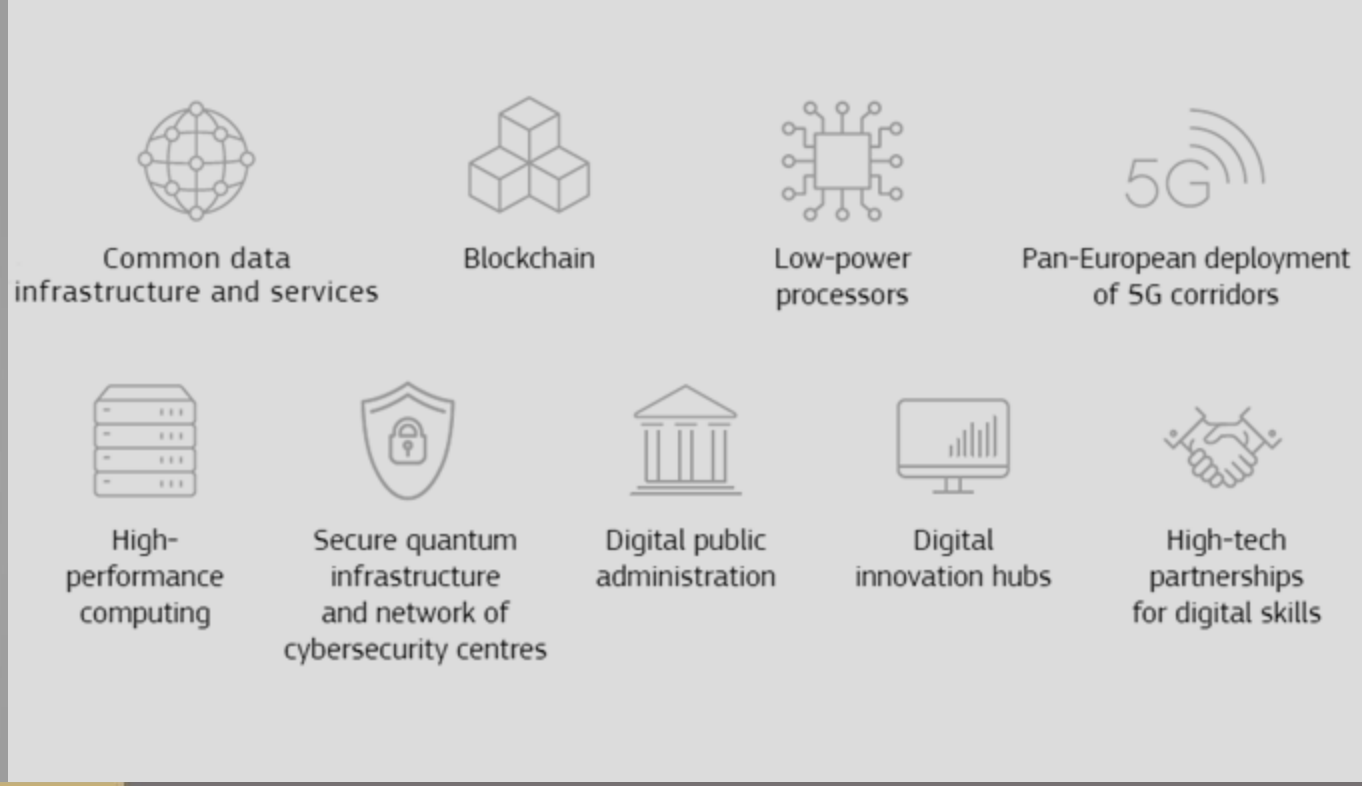
- The Vice-President of the Court considered that A.'s argument that the obligation to make an ads library publicly available unlawfully limits its fundamental rights to respect for private life and the freedom to conduct a business, cannot be regarded, prima facie, as irrelevant and as lacking in seriousness.
- He also concluded that, in the absence of a suspension, it is likely that A. would suffer serious and irreparable harm before any decision as to annulment of the Commission decision is made.

Those findings were not decisive in themselves. They have to be balanced with all of the interests involved in order to come to a decision on the matter of suspension.

- In the eyes of the Vice-President, it had not been demonstrated that A.'s existence or long-term development would be jeopardised if the suspension was not granted.
- **Suspension would delay, potentially for several years, the full achievement of the objectives of the DSA and therefore potentially allow an online environment threatening fundamental rights to persist or develop.**

The Vice-President concluded that the interests defended by the EU legislature prevail over A.'s material interests, with the result that the balancing of interests weighs in favour of rejecting the request for suspension, overturning this part of the General Court's order.





EU DIGITAL INITIATIVES

THANK YOU FOR YOUR ATTENTION

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