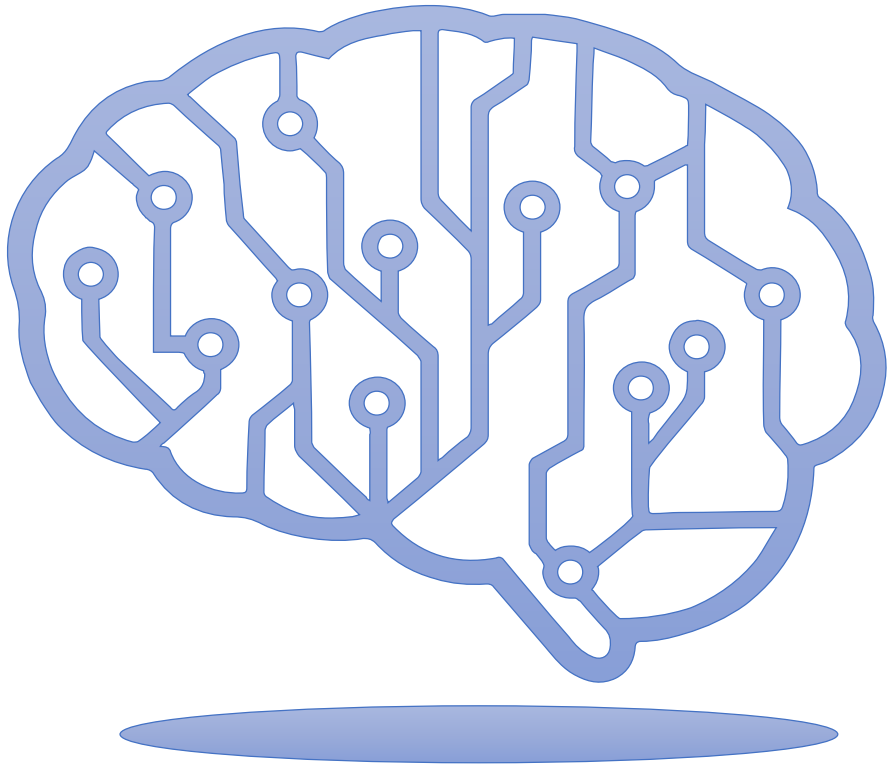


# What is Artificial Intelligence?

An optimistic view on a ground-breaking technology



1

AI is an umbrella term that covers a wide range of old and new technologies that often have little more in common than being guided by a given set of human-defined objectives and having some degree of autonomy in their actions.

2

Although modern AI is much more powerful than the rule-based systems that dominated until the 90s, it can only solve tasks in domain-specific niches such as chess. Experts are therefore still speaking of 'weak AI' but describe AI as a tool that provides (better and better) recommendations and predictions.

3

Many fears linked to AI are based on TV shows and hypothetical concepts such as artificial superintelligence or singularity. In reality, there are significant doubts as to whether machines will ever be able to break free from human control, considering our technologies and scientific laws.

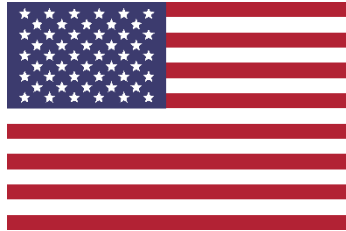
4

As the vast majority of AI systems - that are currently in use - are almost or even completely risk-free, the public debate should focus more on the enormous potential of AI (from combating global societal challenges such as climate change to enhancing quality of life through personalised medicine).

# The EU's place in the global AI competition

A comparison: the US, Chinese and European approach to AI

## USA



The US government focusses on sector-specific laws and promotes private sector innovation, in particular by their tech giants and leading universities.

As global AI leader, the US hosts the vast majority of top AI firms, is predominant in VC, R&D spending and AI talent, and has an excellent digital infrastructure as well as a coherent and unified digital market.

## CHINA



The Chinese regime considers AI as the key factor in the global tech race and developed several long-term plans to become the global leader in AI and to overtake the US in terms of military supremacy.

While five years ago China was significantly lagging behind in all AI related fields, it quickly caught up and could soon become the new global leader in AI.

## EU



The EU wants to bring AI in line with its core values, human rights and democratic principles and hopes to achieve another GDPR-like 'Brussels effect' by setting global standards on AI.

Especially after Brexit, the EU fell behind the US and China in virtually every category and loses even further ground despite the current AI measures on EU and Member State level.

# EU Roadmap for AI

How to become a global leader

## 4. Ecosystem of excellence

Develop more AI talent and make better use of the excellent AI research within the EU.

## 3. Digital green infrastructure

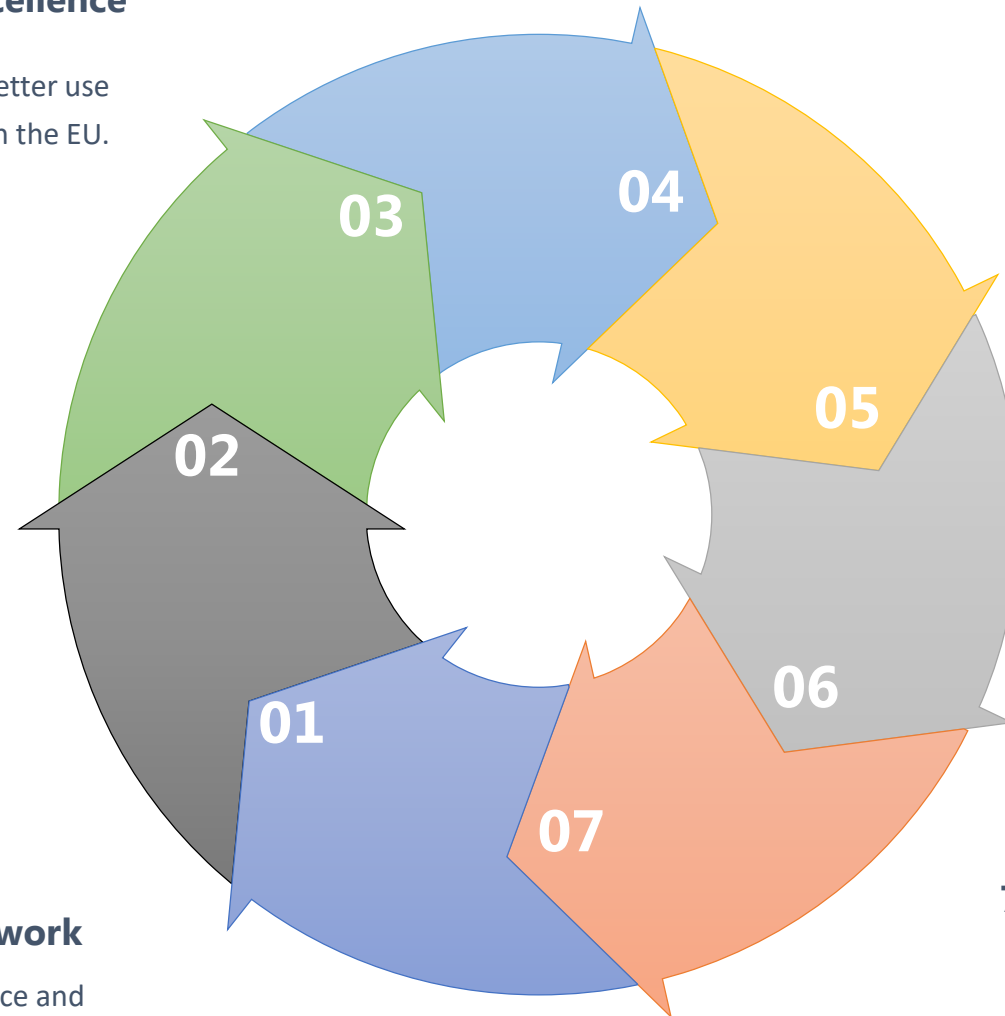
Improve connectivity and invest in better computing power. Build up a sustainable and reliable digital infrastructure.

## 2. Complete the DSM

Streamline the national AI Strategies. Remove market barriers. Establish a level playing field.

## 1. Favorable regulatory framework

Improve EU law-making, governance and enforcement. Establish a legal framework for AI. Solve the EU data challenge.



## 5. Ecosystem of trust

Inform and empower EU citizens. Establish a reliable and secure e-governance and e-health system.

## 6. Industry strategy

Increase the strategic planning and investments in AI. Better support SMEs and start-ups. Form an alliance with like-minded partners on the international stage.

## 7. Security and military deterrence

Find the right balance for using AI in law enforcement and the military. Counter cybersecurity threats by building up an effective cyber defense structure.

# Trustworthy European AI

Creating a competitive edge for AI products and services from the EU



## Ethical standards

Guidelines make sure that European AI follows mandatory principles, while promoting adherence to good practices in AI development and the UN SDGs.



## Risk-based approach

The regulatory intervention depends solely on the type of risk incurred by the use of an AI system. Self-regulation by businesses is sufficient for low-risk AI.



## Safety and liability

Adjustments to existing product safety and liability rules make sure that the new challenges posed by AI are addressed without hampering AI innovation.



## International cooperation

The EU regulatory approach is aligned with concepts, terminologies and standards that were already developed by international organizations.