

Risks and Benefits of AI

Benefits of AI

AI technologies bring about numerous benefits for society and the economy, including improving process efficiency, fostering innovation, minimising errors, assisting in risky tasks, and addressing complex global challenges.



improved process efficiency

processes become smarter and more efficient, boosting productivity and profits. AI automates tasks, identifies patterns, optimises workflows and makes real-time adjustments



greater creativity

AI can automate tedious or repetitive tasks, such as production line work, data gathering, emailing, billing or customer service. This way people can spend more time on more creative or more human-centric tasks



lower risk of error

AI can enter data, do calculations or perform manoeuvres more quickly and more efficiently than humans. In critical sectors, such as healthcare or aviation, AI plays a vital role in assisting with high-risk surgery or predicting technical failures



performance of dangerous tasks

artificial intelligence can assist with tasks that endanger human safety or health, such as rescue operations, bomb disposal, managing contagious or radioactive substances or inspecting hostile environments

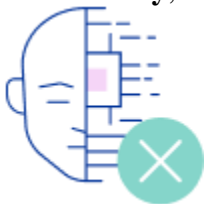


resolution of global challenges

AI can tackle complex global challenges such as improving healthcare, addressing climate change and ensuring food security, by for instance enhancing disease prediction, reducing energy use and optimising crop yields

Potential risks of AI

While most AI applications pose little or no risk, certain uses of AI can be harmful. The AI act, a regulatory framework that aims to make sure **AI systems are safe, ethical and trustworthy**, addresses the following key risks:



opacity

AI systems often lack transparency, and it is hard to know how they make decisions. The law requires that users be informed whenever they interact with AI, and that they have access to information on how AI works and what the associated risks are



lack of accountability

without clear guidelines and rules, AI can be used irresponsibly with no consequences. The act sets out rules and penalties for non-compliance, which ensures that developers and users are held accountable for their actions



risks to safety

AI systems, especially in critical sectors such as transport or infrastructure, can pose major health and safety risks if they make errors or are wrongly designed. The law sets out strict requirements, such as risk assessments, human oversight, technical compliance or periodic reviews



bias and discrimination

AI can unintentionally perpetuate biases and discrimination when trained on biased data. The AI act establishes measures to prevent and mitigate biases in order to promote fairness and equality



violation of fundamental rights

some AI applications may violate individuals' fundamental rights, such as privacy, freedom of expression and non-discrimination. The law bans systems that threaten these rights, such as those used by governments for mass surveillance or social scoring