

Artificial Intelligence Governance to Reinforce the 2030 Agenda and Leave No One Behind

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01 Introduction

AI can unlock economic growth, innovation, and solutions to global challenges, but ethical concerns and regulatory needs require urgent attention.

Governments, as key regulators and users, must establish robust safeguards for privacy, security, and ethical deployment of AI, especially in sensitive areas like law enforcement and social services. International collaboration is essential to maximize AI's benefits while mitigating risks.

In 2023, the UN established an AI Advisory Body to address the risks and opportunities of artificial intelligence. The UN Secretary-General proposes a "Global Digital Compact" at the 2024 Summit of the Future, potentially including AI regulation aligned with shared global values.

02 Definition & evolution of AI

Definition of Artificial Intelligence

“The ability of machines to imitate intelligent human behaviour by performing various cognitive tasks, such as sensing, processing oral language, reasoning, learning, making decisions, and demonstrating an ability to manipulate objects accordingly. Artificial intelligence is essentially using algorithms to imitate the operations and procedures of the human brain with the aim to make computers think and act like humans.”

- **Traditional AI:** relies on rule-based approaches, where explicit instructions and predefined rules designed by human experts are programmed to enable the system to perform specific tasks and generate outputs.
- **Generative AI:** a data-driven approach, learning patterns and structures from large datasets using machine learning techniques. Instead of relying on explicit rules, generative artificial intelligence models learn from the data and generate new content by capturing underlying patterns and relationships within the data ex: ChatGPT

02 Definition & evolution of AI

Evolution of AI

AI started in the 1950s and has evolved ever since

50s: Artificial intelligence was introduced with the work of Alan Turing, who invented the Turing Test to determine if a machine could mimic human intelligence.

60s: The first artificial intelligence programming language “LISP” was developed by John McCarthy.

70s and 80s: Expert systems (namely computer systems) were developed, emulating the decision-making ability of human experts.

90s: Artificial intelligence shifted its focus towards machine learning and data-driven approaches, provoked by the increased availability of digital data and the advancement of computers.

2000s: Artificial intelligence research delved into new areas, including natural language processing, computer vision, and robotics which paved the way for today’s artificial intelligence revolution.

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Potential of artificial intelligence for accelerating SDG implementation



Supporting the identification of vulnerable groups and tracking of poverty levels

Improving access to basic services

Fostering agricultural development & promoting financial inclusion

Personalized and dynamic learning

Fostering inclusion, as technology can help bridge knowledge and language gaps irrespective of language or regional constraints

Fostering economic indicators

Bridging language and knowledge gaps

Increasing productivity

Assisting with complex tasks & creating new jobs

Innovation acceleration

Infrastructure management

Enhanced manufacturing

Improving, modeling and predicting climate change patterns

Improving urban planning and traffic management

Supporting carbon neutrality

04 Risks & Challenges of AI

Overdependence on technology	Over-reliance on artificial intelligence could reduce human interaction and connection, critical thinking, and other essential soft skills, leading to loss of creativity, social skills, and empathy. In addition, technical difficulties and glitches can disrupt education, learning and productivity.
Job Displacement	According to the World Economic Forum's Global Risks Report 2023, around 85 million jobs may be lost by 2025 as a result of the development of artificial intelligence and related technologies. Traditional roles might experience diminished demand and compensation, widening disparities within the workforce of many countries and potentially exacerbating international inequalities.
Lack of Skills	IBM estimates that around 40% of workers (1.4 of the 3.4 billion in the global workforce) will need to reskill over the next three years. Digital illiteracy will also need to be addressed.
Loss of Traditional Industries	The use of artificial intelligence could lead to the loss of traditional industries. In developing countries with economies reliant on traditional industries, rapid automation driven by generative artificial intelligence could lead to economic instability.
Lack of quality data	The lack of finely tuned and ethically reviewed algorithms, using reliable registries with accurate and representative data, can negatively impact results and increase the risk of bias, possibly leading to new forms of exclusion and discrimination.

04 Risks & Challenges of AI

Economic Disparities & Equity Issues

The lack of access to new technologies in developing countries threatens to increase inequalities between countries. Manufacturing giants equipped with artificial intelligence technologies will experience accelerated growth, leaving behind developing countries without access to such advancements.

Moral & Ethical Issues

Machine learning biases, for example, particularly in terms of racial profiling, can incorrectly identify basic information about users, which can result in unfairly denying access to healthcare and loans or misleading law enforcement in identifying criminal suspects.

Misinformation & Manipulation

Content generated by artificial intelligence, such as deep fakes, increasingly contributes to the spread of false information and the manipulation of public opinion.

Privacy Issues & Security Risks

As generative artificial intelligence systems require vast amounts of data, there are concerns regarding who controls this data as well as potential data monopolies or misuse of data.

Lack of Transparency

There might be distrust and resistance to adopting this technology if people cannot comprehend how an artificial intelligence system comes to conclusions or solutions. In addition, when an algorithm is a “black box”, it is very difficult to oversee it effectively.

05

AI Governance to ensure sustainable development and LNOB

Short-term challenges, if not addressed, could grow into long-term systemic issues. Therefore, there is an immediate need for a comprehensive rethinking and redesigning of policies, social security systems, labor markets and taxation frameworks, while ensuring transparency, accountability, and human oversight as well as the respect of shared norms and values, such as the UN Charter, the Universal Declaration of Human Rights, and international law.



Existing AI Government Practices

National AI Plans

Today, more than 60 countries have a dedicated artificial intelligence strategy and artificial intelligence policy development and consultation procedures are underway in several other countries.

Open Registers of Public Algorithms

Many countries, such as Chile and France, are mandating transparency in the artificial intelligence algorithms used by public sector entities through open registers of public algorithms and enforcing access to information rules on algorithms used by government entities

Government Procurement Rules

Several other countries, including the United Kingdom and the United States, are using government procurement rules to embed core (ethical) principles in the procurement of artificial intelligence solution for public sector entities. By insisting on certain standards for contractors they can set an example that will influence the behavior of the wider marketplace.

Existing AI Government Practices

Policies & Regulations to Adhere for private sector

Several countries in the Asia-Pacific did this to tackle ethical concerns (e.g., Singapore's artificial intelligence governance and ethics initiatives).

Use of Voluntary codes of conduct by the private sector

e.g. the United Kingdom and the United States

Establishing AI agencies

These agencies lead detailed impact assessments, test potential solutions and undertake research on their potential positive and negative impacts before they are being rolled out. Spain, for example, created Europe's first artificial intelligence supervisory agency in 2023.

Initiatives aimed at regulatory convergence on AI

In 2023, for example, a provisional agreement on the European Union Artificial Intelligence Act (EU AI Act) was reached, which is supposed to come into effect in 2026 and classifies different artificial intelligence systems according to the risk they pose to users with different levels of regulation.

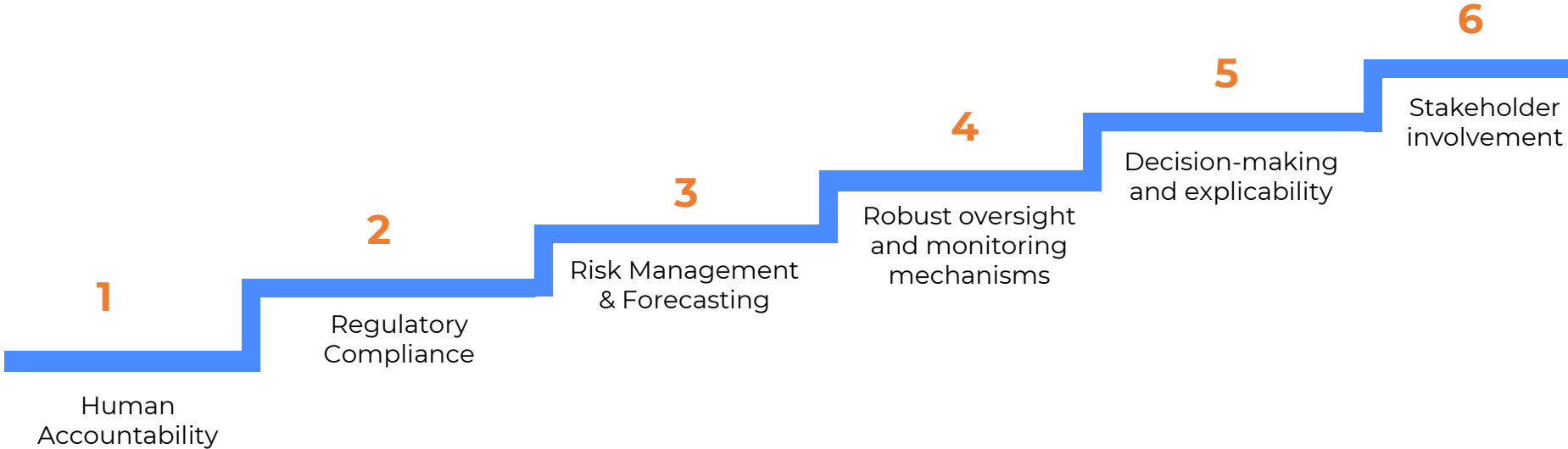
Going Forward: Elements that AI governance should aim for

- Creating **institutional and legal frameworks** for the application of artificial intelligence technology.
- Complying with **data governance rules and privacy regulations**; outlining guidelines for **access to and management of personal data**.
- Addressing **moral, ethical and security issues** linked with artificial intelligence.
- Preventing **misinformation and manipulation**.
- Fostering **safety, trust, and transparency**.
- Ensuring artificial intelligence does **not violate civil liberties and the rule of law**.

Going Forward: Elements that AI governance should aim for

- Foreseeing and preventing **unintended consequences** of artificial intelligence use.
- Using artificial intelligence to **expand equal opportunities**, foster **productivity and sustainable economic growth** and enable **access to new jobs, industries, education, and innovation**.
- Promoting **international collaboration and partnerships** built on evidence-based approaches, analytical research and multi stakeholder engagement.
- Ensuring that research on and development of artificial intelligence are done with the intention of **assisting humanity** in navigating the adoption and usage of these systems in a **morally and responsible manner**.

Going Forward



06 Conclusion & Recommendations

Conclusion

Traditional and generative artificial intelligence are two distinct approaches in the artificial intelligence landscape. While the advantages of generative artificial intelligence lie in creativity, handling of uncertainty, and novel applications, traditional artificial intelligence excels in efficiency, interpretability, and specific task-solving. Both approaches have their strengths and limitations, and their future in the artificial intelligence field holds tremendous potential for groundbreaking advancements and transformative applications.

06 Conclusion & Recommendations

Recommendations

There is an urgent need for **global cooperation, strategic foresight, and an unwavering commitment to ensuring the equitable distribution of the benefits of artificial intelligence**, while addressing its potential negative externalities. Only with a proactive, inclusive policy-making roadmap can the potential of this transformative technology be achieved.

Artificial intelligence governance should aim to **close the gap** between **accountability, transparency, ethics and integrity** in technological advancement.

Ongoing efforts undertaken by governments, the UN system, and other stakeholders, including the possible adoption of a **Global Digital Compact**, to be agreed at the Summit of the Future 2024, should be continued and a **global dialogue fostered** to build the evidence base required to regulate artificial intelligence and ensure that it is aligned with shared global values, contributes to the achievement of the 2030 Agenda and leaves no one behind.

Thank you