

Since late 2022, generative artificial intelligence (AI) has rapidly reshaped the global technological landscape. Although AI is not a novel concept—its foundations date back to the mid-20th century—the advent of powerful generative models such as ChatGPT, DALL·E, and Stable Diffusion has raised new questions concerning the governance, accountability, and ethical development of AI systems (Correa et al, 2023). While AI's resurgence over the past few decades has been marked by steady progress, the acceleration observed in recent years has revealed critical gaps in current governance frameworks. This reflection draws on the work of Correa et al. (2023) and Deckard (2023) to evaluate the global policy responses to generative AI, assess the associated legal, social and professional implications, and propose suitable actions to support responsible innovation.

Fragmentation in Global AI Governance

Correa et al. (2023) highlight the fragmented nature of global AI governance efforts. While there is a growing body of policy documentation and national AI strategies, the absence of a shared normative framework poses significant challenges. Countries differ widely in their priorities: the European Union has taken a rights-based, precautionary approach through the proposed AI Act; the United States has emphasised innovation-led, market-based strategies; and China has pursued centralised, state-controlled AI development policies that reflect socio-political priorities (Correa et al., 2023).

Despite these differences, Correa et al. (2023) note a broad agreement on certain normative values such as fairness, transparency, and accountability. However, these terms are often operationalised in divergent ways, leading to inconsistency in legal instruments and ethical frameworks.

Toward a Modular and International Framework

In light of these challenges, I argue that a modular, internationally coordinated governance framework would provide a pragmatic and effective solution. Rather than imposing a one-size-fits-all approach, such a framework would define shared ethical principles—such as non-maleficence, autonomy, and human dignity—and allow for local adaptation based on legal, cultural, and socio-economic contexts (Floridi et al., 2018). This would reduce fragmentation while preserving national sovereignty and innovation potential.

As Correa et al. (2023) recommend, international cooperation could be enhanced through the creation of tools to systematically catalogue and compare AI policy documents from around the world. A publicly accessible repository—possibly overseen

by intergovernmental organisations such as the OECD or UNESCO—could aid policymakers and researchers in identifying best practices, areas of convergence, and policy gaps. This would also support efforts to harmonise standards and avoid regulatory arbitrage.

The Role of Standards and Third-Party Audits

Where national regulation is absent or insufficient, industry-led self-regulation has emerged as an interim solution. However, such efforts are often inconsistent, non-transparent, and lack enforceability. For instance, although OpenAI has committed to developing safe and aligned AI, critics argue that the opacity of its models and the lack of third-party oversight undermine these assurances.

To address this, it is essential to strengthen the role of **independent standards organisations** such as ISO, IEEE, and the Partnership on AI. These bodies can define technical benchmarks for algorithmic fairness, explainability, and data protection. Moreover, AI systems should be subject to **external audits and certification schemes**, similar to those used in cybersecurity and data privacy (Jobin, Ienca and Vayena, 2019). Public procurement policies could further incentivise compliance by giving preference to AI vendors who adhere to recognised standards.

Legal and Social Implications

Adopting a harmonised yet flexible governance structure carries significant legal and social implications. Legally, generative AI challenges existing frameworks in areas such as copyright (e.g., training on copyrighted datasets), liability (e.g., deepfakes or misinformation), and data protection (e.g., privacy violations through synthetic data). Harmonised frameworks would help reduce jurisdictional ambiguity and support more consistent adjudication of AI-related disputes (Vincent, 2023).

Socially, effective governance can foster public trust and reduce algorithmic harm—particularly for vulnerable and marginalised communities. Discriminatory outcomes in algorithmic decision-making, such as in facial recognition or automated hiring, have already demonstrated the real-world consequences of poorly governed AI (Buolamwini and Gebru, 2018). A shared framework could mandate **bias assessments, human oversight, and public engagement** as core design principles.

Professional Responsibility and Ethical Practice

From a professional standpoint, computing practitioners play a crucial role in embedding ethical considerations into the AI lifecycle. As a future professional, I believe developers and researchers should be actively involved in **algorithmic impact assessments**,

ensure **transparent documentation**, and advocate for **ethical review processes**. The inclusion of ethical reasoning in technical education—alongside professional codes of conduct such as the ACM Code of Ethics (ACM, 2018)—is essential for preparing practitioners to handle the complex moral and legal dilemmas they may face.

Deckard (2023) stresses the importance of **AI ethicists** within organisations, where it can be chosen as a career path. With such a career in organizations, it establishes clear channels for whistleblowing and promotes ethical leadership which serves as strong components of a responsible AI ecosystem.

Conclusion and Recommendations

In conclusion, the rapid growth of generative AI demands an equally agile and comprehensive governance response. The global patchwork of AI strategies, as identified by Correa et al. (2023), underscores the need for a shared yet adaptable governance architecture. I recommend pursuing a **modular international governance framework**, supported by policy comparison tools, enforceable technical standards, and multi-stakeholder cooperation.

Such a model would offer flexibility without sacrificing accountability and would enable computing professionals to operate within a clearer ethical and legal landscape. By bridging national divides and aligning professional practice with societal values, this approach can help ensure that the AI revolution benefits all of humanity—safely, fairly, and sustainably.

References

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