

AI and Governance: Navigating Future of Policy and Regulation

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“Modern Technology has become a total phenomenon for civilization, the defining force of new social order in which efficiency is no longer an option but a necessity imposed on all human activity.”

(Jacques Ellul, *The Technological Society*, 1964).

In the contemporary times, technology is shaping the contours of the globe. The world of the past heavily relied on political and military clout. The term **‘multipolarity’** would refer to only few countries such as China, US and Russia, and their ongoing conflict. However, the world of today is becoming more and more technopolar in nature. There are other contenders in the global arena, aiming for technological dominance. Now, the strategic goals of states have changed since the development of AI technology. AI has shown transformative potential across industries such as personalized healthcare, finance and services. **2024 Global AI Index by Tortoise** reported progress in AI capacities of 83 countries based on different

indicators grouped into three pillars of analysis:

Implementation, Innovation and Investment. US

and China have maintained their historical positions

in first and second. Smaller countries like Singapore,

Switzerland, UK and France performed relatively

well too. Developing nations are also finding

themselves ensnared in the AI revolution driven

by their pursuits of national interests, cyber

security, economic self-reliance and technological

innovation. However, AI governance models are

facing regulatory asymmetry, accountability and

ethical dilemmas, and zero-sum mindsets of global

leaders under the facade of technological exchanges.

Therefore, as Artificial Intelligence (AI) outpaces

policy and regulatory efforts, strengthening

cooperative global governance to ensure a future

of responsible AI becomes an urgent necessity.

AI governance refers to the framework

of policies, regulations and practices that guide

AI development, deployment and use. On one

hand, proponents of AI argue that it has the

potential to transform governance by enabling

data-driven decision-making and improving public

service delivery. AI analytics could be used to develop new medicines and treatment of diseases, optimize transportation networks to reduce traffic emissions and help prevent natural disasters by early warning and preparedness systems. For instance, **India's Bangalore-based startup NIRAMAI**, launched in 2016, uses AI-based medical device for early-stage breast cancer detection. In addition, AI can increase efficiency and productivity in manufacturing, finance and legal sectors. In 2023, **Additional District and Sessions Judge (AD&SJ) Amir Munir** used AI tool to ask legal questions about juvenile case in Pakistan. On the other hand, there exists a legitimate concern among policy-makers regarding the possibility of **'AI takeover'**. They raise questions about who has access to the vast amount of data and how it will be used.

Likewise, AI has emerged as the force multiplier and force of disruption, transforming the strategies of conventional warfare. States are continuously strengthening their national defences against the militarization of AI technologies. Modern drone technologies give tactical advantages by transmitting

real-time data to military headquarters and making targeting and surveillance more faster. In 2024, Israel's AI Systems 'Gospel' and 'Lavender' processed intelligence at unprecedented rate, enabling Israeli military to bomb 12000 Palestinians in Gaza. This shows how AI can be used to expand violence and can lead to moral complacency. Hence, one state's advancement in AI capabilities could pose a major threat to its rivals with less advanced AI-assisted weaponry.

Consequently, a clear division between technologically developed states and developing states has increased demands for ethical and responsible use of AI technology. One of the root cause of this 'AI divide' is found in structural limitations as successful adoption of AI requires technical infrastructure. **Government AI Readiness Index 2024** by **Onford Insights** highlights that lowest-scoring regions with regard to preparedness in using AI in public services include much of Global South like some Central, South Asian and Latin American countries. Also, populations in the Global South are generally less aware on topics like data privacy

and algorithm bias. Hence, governance guidelines and policies need to be in place to guide implementations of AI systems.

With recent developments, such as the Covid-19 pandemic, and Russia-Ukraine war, states have made achieving technological self-sufficiency a priority. They are aiming for economic resilience by nurturing indigenous capabilities and reducing dependence on foreign suppliers. Amidst trade tensions with US, China's AI Chip designer, **Cambricon Technology's** shares have climbed 383 percent in 2024. It even outpaced global AI chip leaders Taiwan Semiconductor Manufacturing Company (TSMC) and US company Nvidia. Thus, the ongoing tech war has positioned AI at the forefront of global competition, with states vying for dominance.

Moreover, in the context of cybersecurity, AI is developing novel tools to protect critical infrastructure from cyber attacks and intrusions. It also helps states in retaining control over domestic data flows. In 2024, the signing of 'Framework Convention on Artificial Intelligence' by European Union, United Kingdom, United States,

Israel and other countries represents important landmark in the search for sustainable global governance of AI. The Convention provides set of recommendations for AI development that involves principles of non-interference, data privacy and public consultation. Hence, states can achieve the best with AI if they adopt proper approach for integrating AI in societies.

Conversely, governance of AI is fraught with challenges. To begin with, AI landscape is fueling new era of techno-nationalism as states are competing in AI strategies. In 2022, **United States enacted 'Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act' against China.** The legislation also provided incentives to foreign firms for AI-related research and AI capacity-building programs in US. This global rivalry not only complicates international cooperation but it also intensifies the risk of fragmentation in AI standards.

Similarly, there is growing concerns of digital neo-imperialism among developing countries. Digital neo-imperialism manifests

in various ways, such as reinforcing inequalities, generalizing language and content, and dominating the market. For instance, **2023 Study titled 'Culturally Responsive Artificial Intelligence'** by **Natalia and Szymon Luhasik** demonstrated how AI presented a bias representation in images related to 'wealthy African man and his house' versus 'wealthy European man and his house'. In addition, dependence of developing countries on technology infrastructure provided by Western developed countries limits their domestic capabilities and reinforces technological disparities.

Furthermore, AI's dual-use nature — serving both civilian and military purposes — raises ethical concerns in governance. While AI tool can enhance public safety, they can also be utilized for authoritarian control. For instance,

AI and Big Data Global Surveillance Index 2022

compiles empirical data on 179 countries that are using AI to monitor and track individual or groups. As a result, this dual-use dilemma requires careful oversight to prevent human rights abuses at the hands of national governments.

In addition, regulatory gaps exist in AI governance because the current state of technology and regulation are not aligned. This is evident by comparison between **2018 General Data Protection Regulation (GDPR)** of European Union and **2018 Clarifying Lawful Overseas Use of Data Act (CLOUD Act)** of United States.

GDPR emphasizes protection of personal data and requires consent from individuals concerned for further use. While CLOUD Act grants US authorities unrestricted access to data regardless of the individuals concerned. Hence, diverging national approaches hinder development of global consensus and universal AI standards.

Undoubtedly, development and deployment of AI require well-defined policies to ensure global cooperation and effective AI frameworks. Especially, aligning domestic AI regulation with international norms can mitigate policy fragmentation. European Union's GDPR serves as a model for data protection, influencing **Japan** to formulate **Act on the Protection of Personal Information (APPI)** in 2020 on similar lines.

Thus, harmonized regulations can ease in creating seamless AI integration and collaboration.

Similarly, AI technology requires negotiations among states for bilateral and multi-lateral cooperation. This will facilitate AI access to resource-constrained countries and promote global equity. **United Nations' AI for Good**

Initiative, established in 2017, provides AI tools to low-income countries for disaster response and sustainable development. Therefore, deepening partnerships reduce digital divide and ensure equitable technology sharing.

Additionally, Public-Private partnerships (PPPs) can enhance AI governance by combining governance oversight with private sector innovation.

For instance, Singapore's comprehensive AI strategy include '**triple helix partnership**' between government, industry and academia to ensure collaborative approach towards responsible AI. By uniting diverse stakeholders, public-private partnerships aligns AI advancements with public interests and addresses governance challenges in a balanced manner.

In conclusion, as AI technology evolves in its applications and deployment, the frameworks and mechanisms for its governance are also progressing. In a technologically driven world order, AI is transforming critical governance sectors like finance, judiciary, healthcare and climate change. However, it creates a paradox as great powers exploit AI to reinforce their strategic dominance thus marginalizing weaker states.

The weaponization of AI fuels techno-nationalism as each state is trying to safeguard its national interests.

Concurrently, AI's role in cybersecurity, surveillance and regulatory deficiencies poses significant governance challenges. AI-driven control is shaping state

relations as neo-imperial agenda further undermine the sovereignty of developing states. To manage AI

revolution, policy recommendations include aligning national AI policies with global standards and

encouraging productive government-industry nexus to ensure equitable benefits for all. Moving forward,

future of AI governance will likely hinge on international cooperation.

