

The great inversion in artificial intelligence

- Amitabh Kant*

Last week, the Paris AI Summit inked an agreement on inclusive and sustainable AI. With 61 nations and organisations signing the agreement, the real success of this summit lies in its ability to align global efforts and reinforce AI's diversity both in terms of geography and perspectives. While the absence of the US and UK has been a talking point, the focus should be on the broader impact of global AI cooperation, disagreements on governance are natural in such transformational discussions.

However, each debate, dialogue and declaration moves the needle forward in shaping AI's future. One of the most pivotal moments of the summit was when Prime Minister Narendra Modi outlined a bold and inclusive vision of AI. He articulated how AI development is deeply interdependent across borders and governed collectively. However governance must not solely focus on managing risks – it should also promote innovation, ensure inclusivity and drive equitable access. He advocated open and ethical AI which resonated with the entire Summit. India's Digital Public Infrastructure (DPI) stands as a model for scalable, open and cost-effective AI deployment.

In recent times, in the corridors of Silicon Valley's most powerful AI labs, an uncomfortable realization has taken hold. The cardinal assumption—*the scaling law*, which dictates that an AI model's performance improves with more computing power, larger data sets, and increased parameters (more capital)—has just been upended. The breakthrough came with DeepSeek, a Chinese AI startup that developed and open-sourced a frontier model – R1 - for just \$6 million— a stark contrast to the over \$100 million reportedly spent on training OpenAI's GPT-4. Sam Altman, OpenAI's CEO publicly reacted by stating that he believes they are on the wrong side of history in the open source debate. The Great AI Inversion has taken root.

Cost efficiency wasn't the only disruption. DeepSeek shattered another long-held assumption: Access to frontier AI models is expensive. It is offering its AI model via an API at 55 cents per 1 million input tokens and \$2.19 per 1 million output tokens. In comparison, OpenAI's pricing for its flagship model O1 stands at \$15 per 1 million input tokens and \$60 per 1 million output tokens. This does more than make AI cheaper—it fundamentally changes who can access and experiment with cutting-edge models.

Beyond cost efficiency and accessibility, this Great AI Inversion is about an alternative AI evolutionary path. The notion that advanced AI requires massive, centralized resources is crumbling. In its place, an alternative path has come through—one where openness, collaboration, and democratization become the driving forces of AI innovation, freeing progress from the monopoly of a few entities. Yann LeCun, the Turing Award-winning scientist behind Meta's LLaMA model, remarked “Open-source models are surpassing proprietary ones.”

The global AI landscape had hitherto been shaped by closed, proprietary ecosystems that limited accessibility, reinforced monopolies and slowed down AI's ability to adapt to real world diversity. India's technology policy had always rejected this model. Instead, it has built digital ecosystems that are open, accessible and scalable – precisely what AI needs.

India's Place in The AI Inversion:

India is uniquely positioned to excel in this new AI landscape. It has consistently demonstrated a unique ability to achieve more with fewer resources—evident in ISRO's landmark Mangalyaan mission, which redefined global standards for resource efficiency. Additionally, India's technological ecosystem is deeply rooted in a culture of openness, as seen in the Digital Public Infrastructure (DPI) societal transformation, fostering innovation and collaboration at every level. As the hon'ble Prime Minister Modi had remarked during India's GPAI presidency, *“the more inclusive, the development journey of AI, the more inclusive will be the results.”*

Scaling Smarter:

The Government has announced that it will deploy 18,693 GPUs across its AI ecosystem—notably this is nine times greater than what DeepSeek utilized for its frontier model and approximately two-thirds of ChatGPT's compute capacity—while also implementing measures to reduce computation costs below ₹100 per hour. Further, the Government has also announced the establishment of a Data Bank for AI, offering researchers, startups, and developers access to high-quality, diverse datasets essential for building scalable and inclusive AI solutions. These interventions come at a pivotal moment, as the world witnessed a compelling demonstration of how optimized resource utilization can unlock transformative possibilities. Finally, India has already built up a strong foundation in the AI realm. With 420,000 employees in AI-related roles and a 14-fold increase in AI-skilled professionals over the past seven years, India now boasts the world's highest enterprise AI adoption rate at 92% and the world's second-largest AI developer community.

Championing Openness:

As importantly, India's technology policy vision has always been rooted in the principles of openness, accessibility, and inclusivity. Unlike the proprietary, closed AI ecosystems emerging in Silicon Valley, India has pursued digital transformation with a commitment to transparency, interoperability, and collective progress. This socio-technical commitment to openness is already evident with DPI—from Aadhaar and UPI to even Bhashini - which is now supporting 22+ languages and has already processed over 100 million inferences. By strategically fostering this same ethos within India's evolving AI ecosystem, we can ensure the design, development, and deployment of cutting-edge AI models while positioning AI as a public good. Crucially, this approach will also aid the technological future of AI worldwide.

A Technological Imperative - AI Needs to Remain Open:

The potential of an open and democratized AI ecosystem is already evident. More than just ensuring accessibility, such an ecosystem is a technical imperative for AI's advancement itself. Progress in AI capabilities itself will depend on its interface with real world complexity and diversity. For AI to remain adaptable and inclusive, it must be built by, engaged with, and utilized for a broad spectrum of aspirations, challenges, and real-world conditions. This requires contributions from a global network of researchers, engineers, multidisciplinary experts, civil society and academia each offering distinct perspectives, lived experiences, and problem-solving approaches.

An open AI ecosystem fosters such sustained engagement with diverse challenges, shaped by the needs of different socio-economic contexts. Through real-world testing across varied applications, industries, and linguistic landscapes, AI systems can undergo iterative refinement—an essential process that no single organization can replicate in isolation. Open ecosystems will allow AI to evolve dynamically, becoming more capable, resilient, and broadly applicable as it interacts with an ever-changing world.

This Great AI Inversion is a reordering of power, access, and possibility. The erroneous belief that AI progress will be dictated by scale and proprietary control has fallen. In its place, a new reality has taken shape—one where openness, collaboration, and democratization will bring the next round of benefits from AI to the world.

For too long, the global AI race has been framed as a binary contest between the United States and China. This narrative is obsolete. AI leadership is no longer about who spends the most, but about who innovates smarter, scales faster and democratizes AI for all citizens.

**Amitabh Kant is India's G20 Sherpa and former CEO, NITI Aayog. Views expressed are personal.*
