Before AI window closes build sovereign compute

The country has talent, data, clean energy and public digital rails. What it needs now is the will to build capability at population scale.

- *Amitabh Kant**

Whether you are ready or not, we are in the midst of a civilizational transition. The last of this magnitude was the Industrial Revolution, which took two centuries to play out. This one will take two decades.

According to the Stanford AI Index, the cost of querying a model at GPT-3.5 level performance fell from $20 per million tokens in November 2022 to just $0.07 by October 2024, a 280-fold collapse in cost in only 18 months. On SWE-bench, which measures real-world software engineering ability, AI systems improved from solving 4.4 percent of problems in 2023 to 71.7 percent in 2024. As of 2025, 88% percent of surveyed organisations reported using AI in at least one business function, up from 55 percent just two years ago (McKinsey), while generative AI has reached 53 percent population adoption in only three years, faster than the personal computer and the internet at comparable stages of their lifecycles.

This is what a structural fall in the cost of intelligence looks like. Intelligence is becoming cheaper, more abundant and more widely deployable at a pace no previous general-purpose technology has matched. That should force every government, enterprise and institution to rethink its assumptions.

For India, however, the most important question is not whether AI will reshape the global economy. It already is. The question is whether we can capture value from this transformation or merely supply inputs into someone else's success.

That is the uncomfortable paradox. India contributes a vast share of the world's digital exhaust, linguistic diversity and human context to global AI systems, yet the frontier model layer remains heavily concentrated elsewhere. Nearly 90 percent of notable frontier models in 2024 came from the United States, according to Stanford. In other words, India is helping train the intelligence layer of the future, but without sovereign compute, data architecture and model capacity, much of that value accrues abroad rather than at home.

And yet India is not starting from weakness. In fact, it possesses four advantages that few countries can match: talent, regulatory openness, scale, and renewable energy.

First, talent. India ranks first globally in AI skill penetration at 2.8 times the global average, ahead of both the United States and Germany, and its AI talent concentration has risen sharply over the past decade. India is no longer simply exporting engineers to the world. It is increasingly absorbing talent domestically as global capability centres, startups and major firms build AI teams inside the country. This signals that India is moving from being a back office for the AI age to becoming one of its principal operating theatres.

Second, regulation. While many jurisdictions are moving toward heavy ex ante controls, India's regulatory approach to AI is possibly the most forward-looking in the world. We have chosen feather-touch regulation. The RBI Regulatory Sandbox, the IFSCA innovation frameworks, the IndiaAI Mission's principles-based guidelines are all designed for the same objective. Build first. Govern what emerges. In fast-moving sectors, overly rigid regulation can delay deployment, raise compliance costs and discourage experimentation, especially for smaller firms. India’s relative willingness to let innovation develop before imposing broad restrictions may prove to be a major competitive advantage over time.

Third, infrastructure. India is seeing a major build-out of the physical foundations of the AI economy in the form of data centres, semiconductors, cloud capacity and high-performance computing. In data centres alone, nearly $70 billion of investment is already underway, with an additional $90 billion in announced projects. total committed investment from the private sector has crossed $160 billion. Google’s $15 billion AI hub in Visakhapatnam, Microsoft’s $17.5 billion cloud and AI commitment, and Reliance’s multi-gigawatt data-centre plans in Jamnagar show that private capital is already redrawing India’s place in the global technology map. On the semiconductor side, projects such as Tata’s facility at Dholera, Micron’s investment at Sanand and SiCSem’s compound semiconductor fab in Odisha are laying the first real contours of a domestic chip ecosystem. The IndiaAI Mission, meanwhile, is making compute more accessible to startups, researchers and universities, so that the intelligence economy does not become the preserve of only the largest firms.

Fourth, energy; which is the hidden variable that links all of this together. Data centres require reliable, round-the-clock power, and that makes energy policy central to AI competitiveness. Here too India has a strategic opening. The country added a record 55.3 gigawatts of non-fossil capacity in FY 2025–26, taking total non-fossil installed capacity to 283.46 gigawatts by 31 March 2026. India has also driven solar tariffs down dramatically over the last decade, strengthening its case as a location where AI infrastructure can be powered at scale and, increasingly, with clean energy.

That is why data centres should not be seen only as power-hungry assets. They can also become anchor demand for renewable energy, storage and grid modernization. In India's case, the AI build-out and the clean energy transition are not separate agendas. They feed into each other.

There is another reason India's position is stronger than many assume. Today, no country controls the entire AI value chain. Advanced lithography comes from the Netherlands. Key chip fabrication is concentrated in Taiwan and South Korea. Energy is local. Talent is globally distributed. Data is generated everywhere, and in several domains, India is indispensable because of its scale, linguistic diversity and lived complexity. The idea that one nation will monopolize AI is strategically false. What will matter instead is which countries become indispensable nodes in a deeply interdependent system.

India has a credible claim to being one of those nodes. It combines affordable clean energy potential, world-class technical talent, a massive data universe, a large multilingual user base and a proven model of Digital Public Infrastructure. Aadhaar, UPI, Account Aggregator, and ONDC have already shown that India can build interoperable, population-scale digital rails and then let private innovation flourish on top. The next logical step is to apply the same philosophy to AI through shared sovereign compute, high-quality public datasets, multilingual models and open infrastructure on which startups and researchers can compete.

That is especially important in a country where inclusion for 1.4+ billion people is a central design challenge. An AI system that works only in English, only in metros and only for formally documented consumers is not an Indian AI system. India's opportunity lies in building models that work in Tamil and Marathi, Bengali and Bhojpuri; for farmers as much as for financial analysts; for primary health centres as much as for global corporations. In the end, the real prize is population-scale intelligence.

That is also where enterprise in India must change its mindset. The danger now is not technological unreadiness but strategic hesitation. We cannot remain stuck in endless pilots and isolated proofs of concept with no movement to scaled deployment. The next phase will belong to institutions that combine AI adoption with governance, accountability and execution discipline.

The race has begun, but it is not too late. History suggests first movers do not always win. ARPANET laid the foundations of the internet (1969), but Tim Berners-Lee and CERN made it world-accessible through the World Wide Web (1989); Clive Sinclair built the first mass-market home computer (1980), but IBM, Apple and Microsoft

defined the personal computing era. Winners are usually those who build durable ecosystems at the moment when technology becomes broadly usable. India still has that window, but it will not stay open forever.

To capitalise on this momentum, India must do more than build capacity. It must build sovereign compute, widen access to intelligence, align AI with clean energy, and design for the bottom of the pyramid rather than the top. It must also use AI beyond pilots, and integrate it into credit, agriculture, health and public services, so that the technology moves from demonstration to deployment at population scale.

If India gets this right, it will not be a peripheral player in the AI age. It can be one of the countries that defines it.

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