Harnessing the power of AI

**Indian AI ecosystem can postion itself not just as a
participant but as a trailblazer, driving inclusive
economic growth and innovation**

- **By Amitabh Kant**

As the world adapts to the rapid ascendancy of artificial intelligence (AI), Indian industry stands at the brink of a transformative era. With robust economic growth on the horizon, India is poised for unprecedented progress and innovation. Nomura projects the Indian economy to surge at an impressive average rate of 7% over the next five years, significantly outpacing the International Monetary Fund's modest global growth forecast of 3.2% for 2024. Hosting the G20 and Global Partnership on AI annual meetings in 2023 has solidified a favourable geopolitical climate, uniquely positioning India to navigate the unsustainable global AI arms race, currently dealing with concentrating capital and compute in a few countries and corporations. India Inc. stands in an exceptionally advantageous position.

India's AI market is projected to reach $17 billion by 2027, growing at an annualized rate of 25%-35% between 2024 and 2027, according to NASSCOM. Deloitte's report, "Generative AI in Asia Pacific: Young Employees Lead as Employers Play Catch-Up," underscores India's exceptional response to Generative AI (GenAI). With 93% of students and 83% of employees actively engaging with GenAI, India leads among 13 Asia Pacific countries in both use and adoption. Surveying 11,900 individuals, the report positions India as a frontrunner in embracing the GenAI wave. Recognizing this wave, the Government of India has commendably committed a substantial five-year budget of Rs 10,372 crore for the India AI Mission.

This pivotal moment calls for strategic vision, robust investment, and a proactive approach to adopting Trustworthy AI. Just as General Electric led the transformation of the electricity and power industry in the early 20th century, revolutionizing daily life and industrial processes across the United States, and companies like Ford and General Motors spearheaded the automobile industry's revolution, fundamentally changing transportation and economies worldwide, India Inc. holds the potential to drive significant transformation across sectors. By embracing these imperatives, the Indian AI ecosystem can position itself not just as a participant but as a trailblazer in the global AI landscape, driving inclusive economic growth and innovation for the benefit of its domestic economy and the world.

Strategic Vision:

To effectively harness AI's potential, Indian industries require a tailored approach that aligns AI capabilities with specific sectoral goals. India Inc. should iteratively map out sectoral challenges, opportunities, and ambitions, complemented by staying abreast of global AI advancements and developing capabilities to drive AI innovation. By strategically interfacing with AI capabilities, firms can leverage its unprecedented opportunities to drive innovation and enhance efficiencies across diverse sectors. The transformative sparks of this journey are already visible in multiple domains.

Logistics: The Supply Chain Backbone

Consider the logistics sector, which was plagued by inefficiencies in India just a decade ago. Traditional AI brought in efficiencies from automation, optimization, and basic forecasting based on historical data. Consider the roaring success of PandoAI which has successfully consolidated supply chain data residing in multiple silos within and outside the enterprise to offer valuable analytics and services utilized by several Fortune 500 companies. According to the National Council of Applied Economic Research, logistics costs constitute 7.8% - 8.9% of GDP in 2021/22. Now, with the strategic integration of generative AI, the logistics sector could also uncover hidden but valuable patterns, predict disruptions, and design innovative solutions, making it an efficient fluid facilitating smooth functioning of the economic machinery. This can potentially propel the Indian economy towards setting a global benchmark for the logistics sector. As seen in the logistics domain, the key to unlocking AI's transformative potential lies in tailored solutions mapped to each industry's unique needs.

Robust Investment

Indian businesses must prioritize R&D to remain at the forefront of AI innovation. Substantial investment in core compute capabilities and talent will be the cornerstones for developing a successful AI ecosystem in India. Despite generating 20% of the world's data, India hosts only 2% of the world's data centres, with current computing infrastructure representing less than 2% of global capacity, posing a critical bottleneck to technological advancement.

The central government is enhancing computational capabilities, with plans to procure 10,000 graphics processing units (GPUs) within the next 18 to 24 months. Additionally, India's National Semiconductor Mission aims to build a domestic chip industry, supported by over $10 billion in production-linked incentives. While these investments will boost processing power, they are not sufficient. The industry must also invest in this domain to meet the growing AI demands.

Investment must extend beyond infrastructure to encompass talent development and skilling. In 2023, hiring AI talent in India increased by 16.8%, highlighting a growing emphasis on AI capabilities within the workforce. Despite a significant number of Indian-origin leaders in the global AI workforce, the majority work for international companies. Initiatives like FutureSkills PRIME, a partnership between industry leaders and the government, are essential and should be actively supported and expanded to address the evolving needs of the workforce amid rapid technological advancements.

Trustworthy AI

Establishing and adhering to Trustworthy AI standards is crucial for building trust and ensuring sustainability. This commitment will lay the foundation for AI's widespread acceptance and safe operation. The AI era introduces challenges such as bias, data security, and ethical use, which are analogous to issues of cybersecurity and data privacy in the digital age. Addressing these challenges through robust AI governance and clear regulatory frameworks via responsible and trustworthy AI practices will foster trust among consumers, partners, and stakeholders. Moreover, with its economic and geopolitical position, India Inc. has the very likely potential to influence global standards and policies, aligning AI development with social good.

To operationalize this ambition, several essential steps must be undertaken. First, it is imperative to develop robust AI governance frameworks within companies that address ethical concerns, data security, and bias. Second, transparency in AI algorithms and decision-making processes must remain an operational priority for each firm. Third, promoting inclusive AI development by engaging diverse perspectives should be prioritized. Finally, investing in ethical AI research through collaborations with academic and research institutions should be institutionalized.

As India Inc. stands on the precipice of an AI-driven revolution, a commitment to strategic vision, robust investment, and trustworthy AI practices is imperative. The convergence of government support and industry participation has set the stage for India to not just participate but lead in the global AI arena. This is India's moment to harness the transformative power of AI, inspiring a new era of economic prosperity.

- *The author is G20 Sherpa for India. Views Expressed are personal.*