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NEW INDIA INTELLIGENT FUTURE

BUILDING AI BHARAT

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AI is writing the code for humanity in this century."

Prime Minister
Shri Narendra Modi

Remarks of the **Prime Minister Shri Narendra Modi** at India AI Impact Summit 2026

In human history, every few centuries a turning point arrives - one that resets the direction of civilisation, changes the pace of development, and transforms the paradigms of how we think, understand, and work. The fascinating part is that when we are living through such a transformation, we rarely grasp its true impact. When sparks were first struck from stone, no one imagined that this would become the foundation of civilisation. When speech was first turned into script, no one foresaw that written knowledge would become the backbone of future systems. When signals were first transmitted wirelessly, no one could have imagined that one day the entire world would be connected in real time.

Artificial Intelligence is such a transformation in human history. What we see today, what we predict today, are only the early signs of its impact. AI is making machines intelligent, but more importantly, it is multiplying human capability many times over. The difference this time is that both the speed and the scale are unprecedented. Earlier, it took decades for technology to show its impact. Today, the journey from machine learning to learning machines is faster, deeper, and broader. Therefore, our vision must be equally expansive, and our responsibility equally profound. Alongside the present generation, we must also consider what form of AI we will hand over to future generations.

The real question is not what Artificial Intelligence can do in the future, but what we choose to do with it today. Humanity has faced such questions before. The most powerful example is nuclear power - we have seen its destructive force, and we have seen its positive contributions. AI too is a transformative power: if directionless, it leads to disruption; if guided rightly, it becomes a solution. How to make AI human-centric rather than machine-centric, sensitive and responsible rather than reckless - this is the core purpose of the Global AI Impact Summit.

"Sunlight is the best disinfectant," which means Transparency is the greatest safeguard. Some countries and companies believe AI is a "strategic asset" and must be developed confidentially

India's perspective on AI is clearly reflected in the theme of this summit: Sarvajan Hitaya, Sarvajan Sukhaya - Welfare for all, Happiness for all. This is our benchmark. AI must not reduce human beings to mere data points or raw material. Therefore, AI must be democratised. It must become a medium of inclusion and empowerment, especially across the Global South.

We must give AI the open sky, but keep the command in our own hands. Just like GPS - it suggests the route, but the final decision of direction is ours. The path we choose for AI today will determine the future we create tomorrow.

At the New Delhi AI Impact Summit, I present India's vision for AI - M.A.N.A.V. (MANAV), meaning human.

The MANAV vision stands for: M – Moral and Ethical Systems: means AI must be built on ethical guidelines. A – Accountable Governance: means Transparent rules and robust oversight. N – National Sovereignty: means that data belongs to those who generate it. A – means Accessible and Inclusive: AI must not be a monopoly, but a multiplier. V – means Valid and Legitimate: AI must be lawful and verifiable. India's MANAV Vision will be a vital link for human welfare in the AI-driven world of the 21st century.

Decades ago, when the internet began, no one imagined how many jobs it would create. The same is true for AI. Today, it is difficult to predict what kinds of jobs will emerge in this field. The future of work is not pre-defined; it will depend on our decisions and our course of action. I believe the future of work is a new opportunity. This is the era of humans and intelligent systems working together. "We are entering an era where humans and intelligent systems co-create, co-work, and co-evolve." AI will make our work smarter, more efficient, and more impactful. We will design better, build faster, and make stronger decisions. More people will find higher-value, creative, and meaningful roles. This is a great opportunity for innovation, entrepreneurship, and new industries. Therefore, skilling, reskilling, and lifelong learning must become a mass movement.

The future of work will be inclusive, trusted, and human-centric. If we move forward together, Artificial Intelligence will elevate the capacity of humanity to new heights.

It is said, "Sunlight is the best disinfectant," which means Transparency is the greatest safeguard. Some countries and companies believe AI is a "strategic asset" and must be developed confidentially. But India thinks differently. We believe AI will benefit the world only when it is shared. When codes are open and shared, millions of young minds can make them safer and better.

Therefore, let us resolve to develop AI as a Global Common Good.

Another urgent need today is to establish global standards. Deepfakes and fabricated content are destabilising open societies. In the physical world, we see nutrition labels on food so we know what we are consuming. Similarly, in the digital world, content must carry authenticity labels so people know what is real and what is AI-generated. As AI produces more text, images, and videos, the need for watermarking and clear source standards grows. That is why trust must be built into technology from the very beginning.

We must become even more vigilant about children's safety. Just as a school syllabus is carefully curated, the AI space too must be child-safe and family-guided.

Today, the world is divided into two kinds of people: those who see fear in AI - and speak only of that fear - and those who see fortune in AI.

I say this with responsibility and pride: India does not fear AI. India sees fortune in AI. India sees the future in AI. We have the talent, we have the energy and capacity, and we have policy clarity. I am delighted to share that during this summit, three Indian companies have launched their own AI models and apps. These models showcase the talent of our youth and reflect the depth and diversity of the solutions India is offering.

India is building a resilient ecosystem - from semiconductors and chip-making to quantum computing. Secure data centres, a strong IT backbone, and a dynamic startup ecosystem make India a natural hub for affordable, scalable, and secure AI solutions. India has diversity, demography, and democracy. Any AI model that succeeds in India can be deployed globally. Therefore, I invite all of you: Design and Develop in India. Deliver to the World. Deliver to Humanity. Once again, I extend my warmest wishes to all of you.

Source: narendramodi.in

Remarks of the BJP President

Shri Nitin Nabin

Through the ‘AI Summit,’ the Hon’ble Prime Minister Shri Narendra Modi Ji has provided India not only with global leadership but also with a forward-looking model that is shaping the country’s role in the field of artificial intelligence. The participation of several global companies in the summit conveyed a clear message that they wish to move forward in alignment with India’s AI model, reflecting India’s leadership-driven vision.

Source: Speech at Young Voice Summit in Gandhinagar

Message from the BJYM National President **Shri Tejasvi Surya**

India stands at the threshold of a historic transformation. Just as earlier eras were defined by industrial and digital revolutions, our times are being shaped by Artificial Intelligence. The difference, however, is that India is not a passive participant in this revolution; we are emerging as one of its principal architects under the visionary leadership of Prime Minister Shri Narendra Modi.

Over the past decade, the Modi government has laid a powerful digital foundation that is now enabling India's rapid transition into an AI-ready nation. Initiatives such as Digital India, Aadhaar, UPI, and India Stack have not only transformed governance but have created a scalable and inclusive digital ecosystem unparalleled in the world. This digital public infrastructure is today powering India's AI ambitions, ensuring that innovation is not confined to a few but reaches every citizen.

The launch of the IndiaAI Mission marks a decisive step in this journey. It reflects a clear national vision to build indigenous AI capabilities, strengthen data sovereignty, and ensure that the benefits of artificial intelligence reach every section of society. From enhancing agricultural productivity and improving healthcare outcomes to transforming governance and strengthening national security, AI is becoming a force multiplier across sectors.

What makes India's AI journey unique is its commitment to inclusion. Unlike models that concentrate technological power in a few hands, India's approach is rooted in the philosophy of Antyodaya, empowering the last person in the queue. Today, a farmer accessing real-time advisory, a student learning digital skills in a small town, or a street vendor accepting digital payments is part of this transformation. This is not merely technological progress; it is social and economic empowerment at scale.

Equally important is the role of India's youth in this transformation. With one of the youngest populations in the world, India possesses an unmatched demographic advantage. Our youth are no longer just job seekers; they are innovators, entrepreneurs, and creators of the future. The Modi government's focus on skilling, digital education, and startup ecosystems is ensuring that young Indians are equipped to lead in the AI-driven global economy.

As karyakartas of the Bharatiya Janata Yuva Morcha, we have a critical role to play. We must act as catalysts of this transformation, spreading digital awareness, encouraging skill development, and ensuring that government initiatives reach the grassroots. Every effort to connect a citizen to digital services, every step taken to promote innovation, contributes to building a stronger, more capable India.

The journey from Digital India to Intelligent India is not just about adopting new technologies. It is about shaping the future with confidence, self-reliance, and a clear sense of national purpose. As we move towards the vision of Viksit Bharat 2047, artificial intelligence will be one of the defining pillars of India's growth story.

The message is clear: India will not merely adapt to the AI revolution, India will lead!

Vande Mataram!

Tejasvi Surya
MP Lok Sabha,
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EDITORIAL

The global conversation around artificial intelligence has, for some time now, been framed by a familiar binary: technological acceleration versus social disruption. For India, however, the question is not whether AI will transform the economy and society; it already is, but whether the country can shape that transformation on its own terms. In that sense, the story of India's AI trajectory is less about adoption and more about architecture.

Over the past decade, India has quietly built what is arguably the most consequential digital public infrastructure in the world. Platforms such as Aadhaar, UPI, DigiLocker, and India Stack have not merely digitised services; they have redefined the relationship between the state, the market, and the citizen. This architecture matters because artificial intelligence does not emerge in a vacuum. It depends on data, scale, interoperability, and trust. India, unlike many other countries, possesses these ingredients in a uniquely integrated form.

This is where the policy shift under the government led by Prime Minister Shri Narendra Modi becomes significant. The emphasis has moved beyond digitisation as an administrative reform to technology as a structural driver of economic and strategic capacity. The IndiaAI Mission is emblematic of this shift. It signals an understanding that AI is not just another sectoral intervention, but

a horizontal capability that will define competitiveness across agriculture, manufacturing, healthcare, governance, and defence.

Yet the significance of India's approach lies not only in its scale but in its stated intent. In contrast to models in which technological capability is concentrated within a few corporations or geographies, India's framework seeks to anchor AI within a broader developmental logic. The idea that digital infrastructure should function as a public good, accessible, interoperable, and innovation-enabling, creates the possibility of a more distributed technological ecosystem. Startups, research institutions, and state agencies can build on common digital rails rather than operate in silos.

This has important implications for the nature of economic transformation. Artificial intelligence, if left to purely market-driven forces, tends to reinforce existing inequalities, concentrating data, capital, and computational power. India's experiment seeks to mitigate this tendency by lowering entry barriers. The availability of digital identity, payments infrastructure, and increasingly, open datasets create a base upon which smaller actors can innovate. Whether this model can sustain itself in the face of global competition remains an open question, but it represents a distinct alternative to dominant paradigms.

At the same time, India's AI journey is inseparable from the question of sovereignty. In a world where data flows, algorithms, and cloud infrastructure are often controlled by a handful of global entities, dependence can quickly translate into vulnerability. The push towards indigenous AI capabilities, whether through compute infrastructure, domestic datasets, or startup ecosystems, must be understood in this context. Technological self-reliance is not merely an economic aspiration; it is increasingly a strategic necessity.

There are, however, structural challenges that cannot be overlooked. India's institutional capacity to absorb and deploy advanced technologies remains uneven, though improving. Public systems often lag behind private-sector innovation, and regulatory frameworks are still evolving to keep pace with the complexities of AI. Questions of data governance, accountability, algorithmic transparency, and market concentration will become more pressing as AI systems become embedded in decision-making processes. The risk is not only technological lag but regulatory asymmetry, where innovation outpaces the ability to govern it effectively.

Equally critical is the question of human capital. India's demographic advantage will translate into an AI advantage only if skilling, education, and research ecosystems evolve at the required pace. The scale of the challenge is considerable: preparing millions of young Indians not just to use technology, but to build and shape it. Without this transition, the promise of AI-led growth may remain concentrated rather than inclusive.

Despite these constraints, the broader direction is clear. India is attempting to move from being a large digital market to becoming a producer of digital and AI systems. This transition from consumption to creation will determine the country's position in the emerging global order. The success of this shift will depend not only on policy intent but on execution: the ability to align infrastructure, regulation, talent, and capital within a coherent framework.

Artificial intelligence is often described as a general-purpose technology, comparable to electricity or the internet. Its effects will be diffuse, uneven, and long-term. For India, the stakes are correspondingly high. The country has, for perhaps the first time in its post-independence history, the opportunity to shape a technological wave at scale rather than adapt to it after the fact.

Whether this opportunity translates into durable leadership will depend on choices made now. The architecture has been built. The next phase will determine whether it can sustain innovation, distribute its gains, and anchor India's rise in a world increasingly defined by intelligent systems.

The Sovereignty of Intelligence and the Cognitive Republic

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The defining geopolitical divide of the coming decade will not separate nations that adopt AI from those that do not, but those that merely consume algorithmic outputs from those that shape the underlying architectures of intelligence itself. This distinction is already visible in the concentration of advanced model development, semiconductor supply chains, and cloud infrastructure within a small set of countries and firms. It reframes sovereignty from territorial control to computational and cognitive sovereignty, the ability not only to deploy AI systems, but to design, train, audit, and govern them across the full technological stack. Nations that fail to internalise this shift risk becoming dependent not just on imported technologies, but on externally produced knowledge systems that subtly shape economic choices, security doctrines, and even public discourse. India occupies a uniquely consequential position within this transformation. Its demographic scale generates vast data ecosystems; its experience with population-scale digital public infrastructure demonstrates an ability to deploy technology inclusively; and its growing pool of engineers and researchers provides a strong base for innovation.

At the same time, India's expanding digital economy, spanning financial systems, governance platforms, and consumer markets, creates both the demand and the testing ground for AI at scale. Yet structural advantages do not automatically translate into systemic power. Much of India's AI ecosystem remains dependent on imported compute, foreign foundation models, and globally integrated supply chains. The central challenge, therefore, is one of capability orchestration: aligning fragmented strengths across academia, industry, and the state into a coherent, strategically directed technological doctrine.

The Government of India's response, articulated through initiatives such as the IndiaAI Mission and the National Quantum Mission, reflects an explicit move away from a linear innovation model toward a stack-based strategy. This approach seeks to build simultaneous capacity across multiple layers: foundational research, compute infrastructure, datasets, governance frameworks, and human capital. The emphasis on public digital infrastructure, indigenous compute development, and regulatory principles such as transparency and accountability suggests an attempt to avoid the path dependencies that have historically locked developing economies into downstream positions within global value chains. However, this strategy also surfaces a set of structural tensions that are not easily resolved. The commitment to explainability and accountability, for instance, becomes increasingly difficult to operationalise as frontier AI systems grow more complex and less interpretable, raising questions about the limits of regulatory oversight. Similarly, the pursuit of quantum-AI convergence while essential for long-term competitiveness risks intensifying global technological asymmetries, as access to advanced computing and research ecosystems remains unevenly distributed. The sustainability dimension introduces a further contradiction: while AI is positioned as a tool for optimising energy systems and climate responses, the rapid expansion of data centres and high-performance computing infrastructures carries significant energy and resource costs.

Artificial intelligence, in this context, emerges not merely as a tool of efficiency but as a coordinating mechanism capable of managing trade-offs across complex, interdependent systems.

These challenges are not discrete policy issues but interconnected manifestations of what may be described as a polycrisis of intelligence, a condition in which technological acceleration, ecological constraints, and geopolitical fragmentation reinforce one another. Managing this polycrisis requires more than technological capability; it demands institutional agility, regulatory innovation, and sustained public investment. For India, the question is not simply whether it can build advanced systems, but whether it can govern their evolution in a way that preserves autonomy, ensures inclusion, and aligns technological power with long-term developmental goals.

Algorithmic Transparency and Transcending Epistemic Asymmetries

As algorithmic systems become embedded within the core machinery of governance, shaping welfare eligibility, credit allocation, tax compliance, and even judicial risk assessment, the question of opacity moves from the technical to the constitutional domain. In such contexts, decisions are no longer abstract outputs; they carry distributive consequences that affect rights, entitlements, and life opportunities. When these decisions cannot be interrogated, explained, or contested in intelligible terms, the very basis of accountability begins to erode. This creates what may be termed an epistemic asymmetry between the state and the citizen, where authority is exercised through systems that are not fully knowable to those subject to them. Explainable AI, therefore, is not simply a technical refinement; it is a democratic necessity. It restores the possibility of reason-giving in governance, ensuring that algorithmic decisions remain open to scrutiny, appeal, and correction. India's policy response reflects a growing recognition that legitimacy in

the age of AI must be engineered rather than assumed. The IndiaAI Mission, launched in 2024 with a substantial public investment and expanded in subsequent fiscal allocations, positions artificial intelligence as core national infrastructure on par with earlier strategic sectors such as telecommunications, finance, and energy. This framing is significant because it shifts the focus from isolated innovation to systemic integration. AI is not treated as an optional efficiency layer, but as a foundational capability that must be governed with the same rigour as other critical infrastructures. Within this architecture, the proposed AI Safety Institute represents an institutional innovation that embeds standards of transparency, auditability, and fairness directly into the lifecycle of AI systems. The emphasis here is on ex ante governance, ensuring that systems are designed to be accountable from the outset, rather than attempting to regulate opaque outcomes after deployment.

The articulation of governance principles through the Ministry of Electronics and Information Technology's "seven sutras" further signals an effort to ground technological advancement within a normative framework that is both context-sensitive and forward-looking. These principles collectively assert that trust must be cultivated across the entire AI value chain from data collection and model development to deployment and oversight, and that human agency must remain central, particularly in high-stakes decision-making contexts. The insistence on maintaining human oversight reflects an awareness of the risks of automation bias and the gradual erosion of responsibility in highly automated systems. At the same time, the framework's emphasis on innovation alongside accountability distinguishes India's approach from more precautionary regulatory models, suggesting a willingness to accept calibrated risk in pursuit of developmental gains. The commitment to fairness and inclusion introduces an additional layer of complexity. In a society characterised by linguistic, regional, and socio-economic diversity, ensuring that AI systems do not reproduce or amplify existing inequalities is a non-trivial challenge. This requires not only technical interventions such as bias detection and representative datasets but also institutional mechanisms for continuous monitoring and redress. The principle that systems must be "understandable by design" extends beyond technical explainability to include communicative clarity, ensuring that users are aware when they are interacting with AI and can meaningfully interpret its outputs. In this sense, explainability becomes both a technical and a civic requirement.

India's decision to avoid a single, omnibus AI law in favour of sector-specific regulation reflects a pragmatic recognition of the heterogeneous nature of AI risks. The implications of algorithmic

decision-making differ significantly across domains such as finance, healthcare, agriculture, and public administration. By empowering sectoral regulators to develop context-specific frameworks while maintaining coherence through overarching national principles, the state is attempting to balance regulatory depth with flexibility. This federated approach to governance also allows for iterative learning, as regulatory practices evolve in response to technological change and domain-specific experience. At the international level, India's advocacy for explainable and trustworthy AI has begun to shape its role in global norm-setting. During its leadership in multilateral forums, it has emphasised principles such as safety, transparency, accountability, and human oversight as foundational to the responsible development and deployment of AI. This positioning reflects a broader strategic intent: to ensure that the governance of emerging technologies is not monopolised by a narrow set of technologically advanced nations, but reflects a more inclusive set of perspectives, particularly from the Global South. By serving as a bridge between advanced economies and developing countries, India is seeking to shape the evolving global consensus on AI governance in a way that balances innovation with equity. Taken together, these developments suggest that explainable AI in the Indian context is being framed not merely as a technical challenge, but as a cornerstone of democratic statecraft in the digital age. As algorithmic systems increasingly mediate the relationship between the state and the citizen, the durability of democratic institutions will depend on their ability to remain transparent, contestable, and accountable. Explainability, in this sense, is not just about making machines understandable—it is about ensuring that power, even when exercised through code, remains subject to reason.

AI, Sustainability, and the Ethics of Developmental Statecraft

India's developmental trajectory in the twenty-first century is defined by what may be termed a simultaneity constraint: the need to industrialise at scale, decarbonise its energy and production systems, and democratise access to resources across a vast and unequal population all at once. Historically, these objectives have been pursued sequentially, with environmental correction following industrial expansion and social inclusion lagging behind both. India, however, is attempting to collapse this sequence into a single policy horizon. Artificial intelligence, in this context, emerges not merely as a tool of efficiency but as a coordinating mechanism capable of managing trade-offs across complex, interdependent systems. By enabling predictive modelling, real-time optimisation, and adaptive decision-making, AI allows sustainability to be embedded within the logic of growth rather than treated as a constraint upon it.

This is particularly evident in the energy sector, where the transition toward large-scale renewable integration introduces new forms of systemic complexity. Renewable sources such as solar and wind are inherently variable, requiring continuous balancing to maintain grid stability. Machine learning systems can forecast generation patterns, optimise storage utilisation, and dynamically adjust distribution networks, thereby reducing reliance on fossil fuel-based backup capacity. The significance of this lies not only in emissions reduction but also in the ability to sustain reliable, affordable energy access, a critical concern in a developing economy. In this sense, AI transforms the energy transition from a capacity-expansion challenge into an optimisation problem, where efficiency gains directly translate into environmental and social benefits. A similar transformation is underway in agriculture, where AI-driven advisory systems are redefining how knowledge is generated and disseminated. By integrating weather data, soil health indicators, crop patterns, and market signals, these systems can deliver hyper-local, context-specific recommendations on crop selection, irrigation, and pest management. For a sector characterised by high uncertainty and climate vulnerability, such precision has the potential to significantly enhance productivity and resilience. Yet the effectiveness of these interventions depends fundamentally on the inclusiveness of the underlying data ecosystems. In a landscape dominated by small and marginal

farmers, uneven digital access and incomplete data capture can introduce systemic biases into algorithmic outputs. If data infrastructures disproportionately represent larger or more technologically connected actors, AI systems may inadvertently reinforce existing inequalities rather than mitigate them.

This raises a deeper ethical question at the heart of AI-driven sustainability: optimisation for whom, and under what conditions? The deployment of AI in critical sectors redistributes decision-making power, often embedding it within opaque technical systems. Ensuring that this redistribution does not undermine equity requires deliberate design choices, representative datasets, continuous bias auditing, and mechanisms for feedback and redress. It also requires recognising that data itself is a site of governance. As India builds integrated digital platforms that combine identity, geospatial, and sectoral data, questions of data sovereignty become central. Who owns and controls this data, how consent is obtained and maintained, and what institutional safeguards exist against misuse are not peripheral concerns; they are foundational to the legitimacy of the entire system. The paradox of AI-driven sustainability becomes even more pronounced when one considers the technology's environmental footprint. Large-scale machine learning models and data centres consume significant amounts of energy and resources, potentially offsetting some of the environmental gains they are designed to achieve. In a country pursuing both digital expansion and climate commitments, this creates a tension between computational growth and ecological responsibility. Addressing this requires a shift toward computational sustainability: the development of energy-efficient algorithms, the adoption of lightweight models tailored to specific use cases, and the integration of renewable energy into digital infrastructure. The objective is not merely to use AI for sustainability, but to ensure that the technological systems themselves adhere to sustainability principles.

These ethical and operational challenges underscore the importance of robust institutional frameworks capable of governing AI's integration into sustainability strategies. India's approach reflects an emerging multi-layered model of governance that combines national-level principles with sector-specific regulation. Rather than imposing a uniform regulatory regime, the state has signalled that different sectors, such as energy, agriculture, finance, and environmental management, require tailored oversight mechanisms that account for their unique risk profiles and operational dynamics. This allows for regulatory depth while maintaining flexibility, enabling institutions to adapt to rapidly evolving technological

conditions. At the same time, standard-setting bodies and technical institutions play a critical role in translating ethical principles into operational norms. The development of benchmarks for data quality, algorithmic transparency, and environmental performance provides a basis for both compliance and innovation. Voluntary frameworks and industry-led guidelines complement formal regulation by encouraging proactive adoption of responsible practices, while regulatory sandboxes create controlled environments for experimentation. This hybrid governance model, combining state oversight, technical standardisation, and industry participation, reflects an understanding that effective regulation of AI cannot rely solely on legislation but must be embedded within a broader ecosystem of norms, incentives, and institutional capacities.

Equally important is the role of monitoring and adaptive governance. The deployment of data-driven platforms to track outcomes, evaluate programme effectiveness, and incorporate feedback into policy design enables a continuous learning and adjustment process. In the context of sustainability, where environmental and socio-economic conditions are dynamic and often unpredictable, such adaptability is essential. It ensures that policies remain responsive to emerging challenges and that unintended consequences can be identified and addressed in a timely manner. Ultimately, the intersection of AI, sustainability, and ethics in India represents a complex experiment in developmental statecraft. It is an effort to harness advanced technological capabilities while remaining attentive to their distributive and ecological implications. The success of this endeavour will depend not only on the sophistication of AI systems but also on the strength of the institutions that govern them. Ensuring that optimisation serves equity, that efficiency does not come at the cost of inclusion, and that technological progress remains aligned with ecological limits will be central to determining whether AI can truly enable a sustainable and just developmental pathway.

Towards an Intelligent Economy

These strands, explainable AI, quantum capability, sustainable deployment, and institutional governance, are not isolated policy domains but mutually reinforcing elements of a single strategic design. Explainability anchors legitimacy. Quantum capability expands what can be computed. Sustainability directs that capability toward urgent developmental challenges. Together, they constitute an intelligent economy: one where data, computation, and governance are integrated into a coherent system aligned with national priorities. India's trajectory frames technological advancement as statecraft rather than merely market-driven innovation. Technological sovereignty, in this formulation, is not isolation; it is the capacity to develop indigenous capabilities, shape global norms, and deploy technology reflecting domestic values. The ultimate test lies in execution: translating vision into outcomes, principles into practice, and potential into enduring capability. India is not merely adapting to a generation-defining technological shift. It is attempting to shape the terms on which that shift occurs. And in that, it is attempting to rise as a cognitive republic with sovereignty of intelligence.

From Antyodaya to Algorithm

From Antyodaya to Algorithm

Aastha Gupta
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Every epoch of human civilisation is a story of successive revolutions. Stone evolved into iron, iron into steam, steam into electricity, electricity into silicon. Each carrying its own transformative force, reforming lives, work and governance. Artificial-Intelligence is the next point on this arc and perhaps the most consequential one yet. The nations that master it will not only gain economic advantage but also the power to shape the course of the future. The world stands at a critical juncture, where harnessing the potential of AI is no longer a choice but a security necessity for safeguarding national sovereignty. India, under the visionary leadership of Prime Minister Shri Narendra Modi, has chosen to be an active architect rather than a passive recipient of this revolution.

For a nation of 1.4 billion, where development must reach the last citizen in the last village, it is imperative that AI's application fulfils the promise of 'Sabka Saath, Sabka Vikas, Sabka Vishwas and Sabka Prayas.' Thus, anchored in the pivotal vision of "Making AI in India and Making AI Work for India," the IndiaAI Mission exemplifies the resolute pursuit of this goal. A ₹10,372 crore initiative (2024) to construct a sovereign AI ecosystem alongside the Digital India Programme (2015) has laid the architecture for inclusive and responsible AI development. Nowhere is this more consequential than in the three sectors that define the lived reality of most Indians, namely agriculture, healthcare and public services, the very arteries through which India's developmental story flows.

AI in Agriculture

'When the farmer gets data, he gets dignity. When he gets intelligence, he gets independence.'

As a fundamentally agrarian civilisation, with over 140 million households dependent on agriculture, and the sector contributing approximately 18% to GDP, the stakes of modernising this sector could not be higher. Yet, farmers remain ensnared in a structural paradox of producing the nation's sustenance while remaining among its most economically precarious citizens. Unpredictable weather, pest attacks, information gaps and volatile market prices continue to diminish this sector's potential. Under the Modi Government, the deployment of AI in agriculture aims to dismantle this structural malaise by empowering farmers with data, precision and market intelligence.

As India strides towards a Viksit and Atmanirbhar Bharat, embedding AI across critical sectors is not merely a policy aspiration; it is a strategic imperative.

Digital Agriculture Mission

Aligned with the vision of Viksit Bharat@2047, the Digital Agriculture Mission, launched in 2024 with an outlay of ₹2,817 crore, marks a watershed moment in India's agricultural transformation. Designed as an umbrella scheme, it supports initiatives focused on Digital Public Infrastructure (DPI) for agriculture, building a farmer-centric digital ecosystem for innovation and efficiency.

At its core lies AgriStack, a DPI designed to be the Aadhaar for farmers. It incorporates the concept of a 'Farmer ID,' a digital identity created and maintained by State Governments, linked to various farmer-related data such as land records, livestock ownership and benefits availed. With already 7.63 crore unique IDs created, this mission aims to create 11 crore IDs by 2026-2027. Complementing this system is the Krishi Decision Support System and Comprehensive Soil Profile Mapping, enabling data-driven agricultural decisions, alongside the Kisan e-Mitra AI chatbot, offering personalised assistance on government schemes, weather advisory and market information.

Pest Surveillance, Crop Insurance and Yield Intelligence

Strengthening crop protection by monitoring 66 crops across 432 pest species, the National Pest Surveillance System mitigates historical crop losses caused by pest threats, thereby increasing yield and benefiting the farmers. Similarly, under the Pradhan Mantri Fasal Bima Yojana, with nearly 78 crore beneficiaries claiming over ₹1 lakh crore, India recorded an unprecedented amount of crop insurance. Tools like YES-TECH & CROPIC use satellite imagery and data for preventing crop damage more efficiently, thus, reducing delays and corruption that once plagued insurance claims. Further, by integrating 1,522 APMC mandis, e-NAM has emerged as a major reform in agricultural marketing, enabling fair trade with overall trade reaching ₹4.39 lakh crore.

AI in Healthcare

'Ayushman Bharat gave India's poorest the right to treatment. AI will give them the right to timely & accurate diagnosis.'

With a doctor-to-patient ratio of 1:811, India has significantly improved its healthcare landscape. Yet a vast rural-urban divide persists reflecting a lack of equitable healthcare. The conventional solution for addressing these issues requires large-scale infrastructure, capital-intensive equipment and specialists. Thus, AI offers an asymmetric alternative through multiplying diagnostic capability without proportionally rising costs. This logic animates the centre's AI-in-Healthcare strategy, anchored in the Ayushman Bharat Digital Mission (ABDM).

Under ABDM, the government is augmenting

AI-assisted diagnostic tools with community health centres and Ayushman Arogya Mandirs, enabling frontline health workers to conduct preliminary screening for tuberculosis, diabetic retinopathy and cervical cancer, technologies which were previously unavailable in rural India. The National TB Elimination Programme integrated AI-based chest X-ray analysis to detect suspected TB cases, reducing diagnostic lag and helping make India TB-free.

Central to this transformation is the Pradhan Mantri Jan Arogya Yojana (PM-JAY), the world's largest publicly funded health insurance scheme, providing coverage of ₹5 lakh per family to over 12 crore poor families with over 36.9 crore Ayushman Cards. Recent amendments extended coverage to all citizens aged 70 or older, regardless of income. To safeguard the integrity of this scheme, the National Health Authority has integrated AI-powered fraud detection and analytics into PM-JAY's claims processes, rendering the system free of anomalies.

Tele-MANAS

Mental health, in the past, has been shrouded in silence and stigma. The Modi government's Tele-MANAS marks a profound shift by reaching out to more than 20 lakh callers. Launched in 2022 under the National Tele Mental Health Programme, it leverages an AI-enabled triage system to prioritise cases and match individuals with appropriate counselling resources, making mental healthcare as accessible as a phone call.
AI in Public Services

'The soul of India lives in the last citizen in the last village. AI in the hands of a visionary government ensures the dividends of development reach that soul.'

Bolstering the vision of 'Minimum Government, Maximum Governance,' the transformation of governance architecture is perhaps the most palpable success of the Modi administration, which has found its most powerful technological expression in the application of AI to transform the citizen-state interface, defined by transparency and inclusivity. Harnessing AI not merely as a tool for efficiency but as an instrument of Antyodaya, many governance reforms have been implemented over the last decade.

Direct Benefit Transfer

India's DBT ecosystem, relying on AI-powered deduplication and identity verification through Aadhaar authentication, has transferred over ₹44 lakh crore to beneficiaries. Boosting the savings upto ₹3.48 lakh crore, by eliminating ghost beneficiaries and plugging leakage, DBT represents one of the largest digital welfare architectures in the world.

Policing, Judiciary & Preparedness

Grappling with the challenge of judicial pendency, the Supreme Court's SUPACE The platform employs AI to process case facts and extract relevant information, aiding professionals in their work. Similarly, CPGRAMS also integrated AI-based complaint categorisation, reducing grievance redressal times.

Urban governance is also benefiting from the deployment of AI. For instance, predictive policing models, such as AI-powered surveillance systems, are deployed under the Smart Cities Mission. The UMANG app, which consolidates over 2,000 services, provides personalised service delivery to citizens. Meanwhile, NDMA uses AI-enabled early warning systems for predicting natural disasters, a capability that proved instrumental in saving lives during Cyclone Biparjoy in 2023.

As India strides towards a Viksit and Atmanirbhar Bharat, embedding AI across critical sectors is not merely a policy aspiration; it is a strategic imperative. For a nation whose civilisation has always sought to harmonise progress with dharma, ethics and responsibility, AI becomes a powerful revolutionising vehicle for Antyodaya. An instrument purposefully wielded by Prime Minister Modi's government to ensure that the dividends of this revolution reach every farmer in the field, every patient in the last clinic and every citizen at the last mile.

From Factory to Farm

AI Driving India's Economic Leap

Awanish Kumar
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In 2026, artificial intelligence (AI) is a necessity for economic prosperity, transforming traditional sectors into engines of productivity and enabling rapid innovation and decision-making. From smart factories revolutionising manufacturing to precision tools uplifting farmers and streamlining welfare, AI bridges fast decision-making with better results that were once seen as inversely proportional in traditional techniques. For India, aiming to become a $5 trillion economy, these applications promise not just global competitiveness but technology-led development that leaves no one behind.

AI-driven automation is redefining manufacturing, ushering in Industry 4.0, where interconnected systems optimise every process. Predictive maintenance, powered by machine learning algorithms analysing sensor data, anticipates equipment failures, slashing downtime by up to 50%.

Robotic process automation and collaborative robots (cobots) handle repetitive tasks, allowing human workers to focus on innovation. Bolstered by the Indian government's ambitious AI push through initiatives like the IndiaAI Mission and SAMARTH Udyog Bharat 4.0, private companies have taken bold steps towards AI in manufacturing. Tech Mahindra drives Industry 4.0 transformation through AI-powered Smart Factory Services that integrate IoT, robotics, and cloud computing to enhance efficiency and safety. These gains enhance global competitiveness. India's manufacturing sector, contributing 17% to GDP, could add $500 billion by 2025 through AI.

Also, Tata Steel has deployed over 550 AI models in the last 5-6 years, achieving enhanced yield, energy efficiency, throughput, quality, productivity, safety, and sustainability. Maruti Suzuki implemented AI-powered supply chain and production systems, resulting in a 14% cost reduction and a 30% reduction in downtime. Cipla India used an AI scheduler to reduce changeover durations by 22% in pharmaceutical production while complying with cGMP standards.

Global supply chains, battered by pandemics and human limitations, now rely on AI for resilience. Machine learning models forecast demand with 85-90% accuracy, optimising inventory to prevent shortages. Flipkart's AI-driven warehouses process 1 million orders daily, while startups like BlackBuck use AI for truck matching, empowering 2 million drivers. Amid disruptions in 2026, such tech has stabilised India's $1 trillion import-export trade.

Agriculture employs 43% of India's workforce yet contributes just 18% to GDP. AI changes that, in totality, as precision farming leverages drones and satellite imagery to effectively monitor crop health. Microsoft's FarmBeats project in Maharashtra boosted yields by up to 30% through AI-driven soil analytics.

India's government has shown foresight by signing MoUs with Microsoft for AI pilots in agriculture, such as the 2021 agreement covering 100 villages across six states, fostering digital ecosystems that draw big tech investments. This supportive policy environment enables apps like Plantix, which diagnose pests from smartphone photos and aid millions of smallholder farmers worldwide.

AI fosters technology-led development, bridges urban-rural gaps, empowers women through skill-matching platforms, and scales services to India's 1.4 billion citizens

AI-driven irrigation systems, like those from CropIn, save 40% water in water-stressed regions. Predictive analytics forecast monsoons and prices, as seen in the government's e-NAM platform, stabilising incomes. In 2026, amid climate volatility, these tools have boosted India's foodgrain production to 350 million tonnes, fostering inclusive growth for rural economies.

The Kisan e-Mitra AI chatbot embodies the Indian government's vision to transform agriculture through technology, aligning directly with Prime Minister Narendra Modi's emphasis on leveraging AI to improve farmers' lives and enhance governance. This initiative seeks to drive agricultural transformation by enhancing crop productivity, ensuring sustainability, and boosting farmer incomes via AI, IoT, and data-driven tools. It empowers smallholder farmers, especially in multilingual, underserved regions, with accessible information on schemes, pest alerts, crop advice, and forecasts to optimise decisions like sowing. CropIn's AI platforms enable precision farming, with Microsoft-backed pilots in Karnataka using ML for sowing advice and price forecasting, boosting productivity for small landholders.

India's Ayushman Bharat Digital Mission (2026 rollout) uses AI for predictive epidemiology and

curbing outbreaks. These innovations enhance outcomes while cutting costs. AI could save India's healthcare system $25 billion annually.

AI streamlines public services, ensuring efficient welfare delivery. Aadhaar-enabled DBT with AI anomaly detection has saved ₹2.23 lakh crore since 2013 by plugging leakages in PDS, MGNREGA, and LPG subsidies, and eliminating 4 crore ghost beneficiaries, such as fake ration cards. UMANG's AI chatbots and predictive tools resolve 70% of citizen queries instantly, enhancing welfare delivery in schemes like PM-JAY.

In urban planning, the Indian government's vision leverages AI models to optimise traffic management and reduce congestion, aligning with broader goals for smart cities. For inclusivity, voice AI in regional languages aids illiterate users, exemplified by Google's Bolo app, which teaches reading to millions under government-backed digital literacy initiatives. AI fosters technology-led development, bridges urban-rural gaps, empowers women through skill-matching platforms, and scales services to India's 1.4 billion citizens, with ethical AI governance emphasised to prevent bias.

AI's sectoral integrations promise exponential gains: 20-30% productivity surges, resilient economies, and inclusive growth. India, with its 1,000+ AI startups and $10 billion investments, leads via initiatives like INDIAai. Through data privacy laws, ethical frameworks, and upskilling 400 million workers. By 2030, AI could propel India to the world's third-largest economy, proving technology as the great equaliser.

Digital Public Infrastructure

Powering India's AI-Driven Future

Divya Singh
Journalist and
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Over the past decade, India has witnessed one of the most decisive phases of digital transformation since its independence. What has emerged is not merely the expansion of technology, but the creation of a new governance architecture built on scale, efficiency, and inclusion. We have transitioned from a largely fragmented, offline administrative ecosystem to a deeply integrated digital society in which millions of transactions, public services, and welfare programmes operate through technology every day. However, what distinguishes this transformation is not merely its scale, but the architecture on which it is built. At the centre of this transformation lies the Digital Public Infrastructure (DPI), a framework that treats digital systems as a necessary public good and enables secure, seamless, and scalable interaction between citizens, businesses, and the government. By integrating identity platforms, payment networks, and data-sharing frameworks, DPI represents an architecture that empowers our digital economy.

Importantly, India's digital transformation has not been driven by isolated technological experiments. Instead, it has been built through interoperable citizen-centric platforms such as Aadhaar, UPI, DigiLocker, and India Stack, which together form the backbone of India's digital governance model. Today, as artificial intelligence begins to reshape sectors such as healthcare, agriculture, finance, and education, India's DPI ecosystem provides a strong foundation for innovation. Artificial intelligence depends heavily on reliable digital identity systems, interoperable data infrastructure, and robust connectivity.

And India's digital architecture brings precisely these elements together in a structured way, thereby making it one of the few countries where technology can operate at a population scale.

The Architecture of India's Digital Backbone

Digital Public Infrastructure represents a foundational shift in how governance systems are designed. These systems enable citizens to prove identity, conduct financial transactions, access government services, and share information securely. Instead of a fragmented application, India has created a layered and comprehensive architecture that functions as a public utility. Likewise, India's DPI ecosystem is anchored by India Stack, a set of open application programming interfaces that allow different digital services to connect and function seamlessly. The architecture of India Stack is built on four core layers.

1. **Identity Layer:** This platform provides secure and instant verification of individuals.
2. **Payments Layer:** These systems allow frictionless transactions between individuals, businesses and institutions.
3. **Paperless Layer:** Digital documentation enables citizens to store and share official records electronically, reducing dependence on physical processes.
4. **Consent and Data Layer:** Frameworks allow individuals to control how their personal data is shared with institutions.

This structure empowers two important facets: autonomy and interoperability. Each component can function independently while remaining integrated within a broader ecosystem. The result is a flexible and scalable digital ecosystem that supports both governance and innovation.

The JAM Trinity: From Inclusion to Integration

India's digital transformation began with a policy convergence known as the JAM trinity, which integrates Jan Dhan bank accounts, Aadhaar identity, and mobile connectivity. This lays the foundation for India's digital transformation. Further, the Pradhan Mantri Jan Dhan Yojana significantly expanded financial inclusion by providing millions of citizens with bank accounts. By March 2026, the programme had opened 57.71 crore accounts, with deposits reaching ₹2.94 lakh crore.

At the same time, Aadhaar created the world's largest biometric identity system, which allows secure digital verification. By 2026, more than 144 crore Aadhaar numbers had been issued, enabling secure and instant identity verification across services. Mobile connectivity completed this framework. With over 125 crore wireless subscribers and near universal 5G coverage across districts, digital access has expanded to even the most remote regions of the country. Together, these three pillars have connected identity, banking, and digital communication. This integration laid the groundwork for the expansion of Digital Public Infrastructure.

AI Ready Platforms: Aadhaar, UPI, DigiLocker, and India Stack

A defining feature of India's digital ecosystem is that its platforms are built to enable easy integration with future technologies. Systems such as Aadhaar, UPI, DigiLocker, and India Stack are increasingly viewed as AI-ready platforms, facilitating integration of emerging technologies. For instance, Aadhaar provides reliable digital identity verification across sectors, thus making it easier for financial institutions, healthcare providers, and government agencies to deliver services digitally. Unified Payments Interface (UPI) has revolutionised digital payments by enabling instant money transfers through mobile devices. In January 2026 alone, UPI processed 21.7 billion transactions worth ₹28.33 lakh crore. The platform now handles around 81 % of retail payment transactions in India.

DigiLocker functions as a secure digital vault where citizens can store official documents such as academic certificates and government records. By March 2026, the platform had 67.63 crore users and had issued more than 950 crore digital documents. Together, these platforms generate structured, reliable data ecosystems that are essential for deploying AI systems. In this sense, India's DPI is not only supporting the present but actively enabling the future.

Innovation at Population Scale

One of the most remarkable features of India's digital architecture is its ability to enable innovation at scale. For example, the India Stack operates through open APIs, enabling developers, private enterprises, and startups to build new digital services on top of existing infrastructure. Platforms such as API Setu, which hosts more than 8,000 government APIs, allow secure exchange of data between government departments and private innovators.

Resultably, this ecosystem has encouraged the growth of thousands of startups across fintech, health technology, and education technology sectors. Instead of building new infrastructure from scratch, innovators can focus on creating new services that operate on top of existing digital rails. Thus, India's DPI framework has emerged as a national innovation platform, where public investment enables private sector creativity and entrepreneurial growth.

Digital Platforms Transforming Public Services

The most tangible impact of DPI is visible in the transformation of public service delivery. During the COVID-19 pandemic, the CoWIN platform coordinated one of the world's largest vaccination campaigns and recorded more than 220 crore vaccine doses. Telemedicine services such as eSanjeevani have expanded access to health care in remote regions and delivered consultations to over 45 crore patients. Similarly, in education, the DIKSHA platform has facilitated access for over 566 crore learners, including students, parents, and teachers, thereby expanding access to quality learning resources.

These examples illustrate how digital infrastructure can strengthen essential public services, expand access for citizens, and empower their digital capacity.

Digital Public Infrastructure as a Global Model

India's DPI ecosystem is now gaining recognition internationally. Many countries are exploring similar digital frameworks to expand financial inclusion and improve governance. By 2026, India had signed Digital Public Infrastructure cooperation agreements with 24 countries, including countries in Africa, Latin America, and Asia. India's payment infrastructure has also crossed national borders. UPI is operational in 8 countries, including Singapore, France, the United Arab Emirates, Nepal, and Sri Lanka.

During India's G20 Presidency in 2023, New Delhi launched the Global Digital Public Infrastructure Repository, a platform to share knowledge and digital solutions with countries worldwide. This international engagement reflects a broader principle in India's digital diplomacy. Technology is viewed not merely as a commercial asset but as a public good that can support inclusive and equitable development globally.

Conclusion

India's DPI beautifully brings economy, polity and society together in one silos and lays down an architecture that has marked our transformation towards digital governance. By combining identity systems, payment networks, and data exchange frameworks into a unified interface, India has created a digital ecosystem capable of serving more than 1.4 billion people. Platforms such as Aadhaar, UPI, DigiLocker, and India Stack demonstrate how public digital infrastructure can enable innovation while strengthening governance.

As artificial intelligence becomes a defining force in the global economy, countries will increasingly require digital systems that are secure, interoperable, and scalable. India's experience shows that when digital infrastructure is built as a public good, it can expand access, stimulate innovation, and strengthen democratic institutions. The architecture has already been built. As India advances toward the vision of Viksit Bharat, the challenge is no longer building systems but fully leveraging them. And thus, the next phase will determine how this digital foundation supports the emerging AI-driven economy.

'Empowerment through technology is the foundation of New India'

Data Governance

The New Frontier of India's AI Governance

Kunal Ralhan
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In a little over a decade, the country has moved from legal silence on data to a dense framework governing privacy, consent, localisation, cybersecurity, and fiduciary obligations. The Digital Personal Data Protection Act, 2023, stands as the centrepiece of this transformation. This policy approach increasingly recognises data as a strategic national resource, with the state's emphasis on data localisation reflecting a broader effort to safeguard digital sovereignty while ensuring that critical datasets remain accessible for domestic innovation and the development of indigenous AI capabilities. At the same time, India's emergence as a major player in artificial intelligence depends on effective governance and the mobilisation of its vast and diverse data resources. By reconciling robust privacy protections with responsible data-sharing frameworks, India can foster a digital ecosystem in which data serves as a strategic asset for technological innovation and economic development. Yet this progress conceals a deeper regulatory gap. While Indian law has become adept at managing how data is collected and processed, it remains largely indifferent to a more consequential question: who accumulates data at scale, and what power that accumulation creates. This distinction is not semantic. It goes to the heart of how digital markets function, how political influence is exercised, and how economic power is accumulated in the twenty-first century.

Much of this transformation has unfolded within the broader vision of Prime Minister Narendra Modi's Digital India initiative, which seeks to position technology as a central pillar of governance, economic growth, and social inclusion. From expanding digital public infrastructure to the growing focus on artificial intelligence through initiatives such as the IndiaAI Mission, the government has articulated a clear ambition: to make India a leading global digital power. As this vision continues to evolve, the next phase of regulatory thinking must address not only how data is protected, but also how power emerges from the accumulation and control of data itself.

From Individual Privacy to Structural Data Power in the Age of AI

Indian data regulation is overwhelmingly individual-centric. The DPDP Act focuses on protecting the personal data of the "Data Principal" from misuse by "Data Fiduciaries." Consent, purpose limitation, and data minimisation form the backbone of the framework. These are necessary safeguards, but they are not sufficient to address the structural realities of data concentration. Data today is not merely information about individuals. It is a strategic asset. When aggregated at scale, data enables predictive analytics, market control, behavioural nudging, and algorithmic gatekeeping. The power lies not in a single data point, but in who controls the datasets, the infrastructure, and the analytical capacity to exploit them.

India has rightly focused on protecting citizens from data misuse. But protection without power analysis is incomplete. In the digital age, the real risk lies not only in data breaches but in data monopolies.

India's legal regime remains largely silent on this question of concentration. This silence is particularly significant in the context of growing global competition in artificial intelligence development, where the demand for massive training datasets further incentivises the centralisation of data. As AI increasingly shapes the digital economy, the absence of structural oversight risks reinforcing patterns of data concentration and market power that existing regulatory frameworks struggle to address.

The Myth of Neutral Markets

Indian competition law, particularly under the Competition Act, 2002, is ill-equipped to deal with data dominance. Traditional metrics—market share, pricing power, and consumer harm—struggle to capture the realities of zero-price markets, platform ecosystems, and cross-market leveraging. A platform may offer services for free while consolidating immense informational advantage across sectors such as search, advertising, payments, health, mobility, and governance. Data collected in one domain strengthens dominance in another, creating self-reinforcing monopolies without overt price manipulation.

The Competition Commission of India has made incremental progress in recognising data as a source of market power, particularly in cases involving digital platforms. However, these interventions remain ex post, fragmented, and slow, often arriving after aftermarket structures have already ossified.

The Political Economy of Data Power

The implications of data concentration go far beyond markets. Data power reshapes the relationship between citizens, corporations, and the State. Private entities that control large datasets increasingly influence public discourse, electoral behaviour, and access to essential services. At the same time, the State's expanding reliance on digital infrastructure, identity systems, welfare databases, and surveillance tools raises uncomfortable questions about informational asymmetry and accountability.

Yet Indian law treats private and public data accumulation in silos. Surveillance concerns are discussed separately from corporate data hoarding. Welfare databases are debated in isolation from platform monopolies. What is missing is a unified theory of data power.

Why Privacy Law Cannot Do This Job Alone

Privacy law, by design, protects individuals, not markets or democracy. Consent does not meaningfully check asymmetry when services are indispensable. Transparency notices do little when algorithms remain opaque. Even anonymisation fails when re-identification becomes technologically trivial at scale. By framing data harms primarily as violations of individual rights, Indian regulation overlooks collective and systemic risks such as market foreclosure, political manipulation, and technological dependency. This is not a failure of intent, but of regulatory imagination.

Learning Without Imitating

The European Union has begun to recognise data concentration through instruments such as the Digital Markets Act, which treats certain platforms as gatekeepers based on their structural position rather than on proven harm. However, India cannot simply import these models. Our digital economy, state capacity, and developmental priorities are distinct.

What India needs is not heavier regulation, but smarter calibration, one that identifies data concentration as a source of power requiring sector-agnostic oversight.

Towards a Data Power Framework

First, India must explicitly recognise data accumulation as a competition concern, independent of price effects. This requires updating competition analysis to include access to datasets, interoperability barriers, and cross-platform data leverage. As artificial intelligence systems increasingly rely on large, diverse datasets for training and advancement, ensuring fair and competitive access to data becomes essential to sustain innovation while preventing entrenched digital monopolies.

Second, regulatory coordination is essential. Data protection authorities, competition regulators, and sectoral bodies cannot function in isolation when the same datasets influence markets, governance, and speech. Third, transparency must extend beyond consent to structural visibility. This means clarity on who holds what data, for how long, and what downstream impact it has. Finally, democratic accountability demands that both State and corporate data power be subject to proportional limits, judicial oversight, and public scrutiny.

Conclusion

India has rightly focused on protecting citizens from data misuse. But protection without power analysis is incomplete. In the digital age, the real risk lies not only in data breaches but in data monopolies. Until Indian law confronts data concentration as a form of economic, political, and social power, our regulatory framework will remain one step behind the realities it seeks to govern. Prime Minister Narendra Modi has repeatedly emphasised that India's digital transformation must remain inclusive, innovative, and rooted in democratic values. Ensuring that the benefits of data-driven innovation are widely distributed, rather than concentrated in the hands of a few powerful actors, will be essential to fulfilling that vision. As India advances its ambitions through initiatives such as Digital India and the IndiaAI Mission, developing a governance framework that addresses data concentration will be critical to sustaining both technological leadership and democratic accountability.

The Algorithmic State

How AI is Reshaping Governance and Global Power Governance

Kushika Madan
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Artificial Intelligence is no longer confined to theory in governance; it is increasingly shaping how states function in practice. What was once limited to experimentation is now steadily entering everyday administrative systems, marking a fundamental shift as AI moves from private-sector innovation into the core of public administration.

Governments worldwide are exploring their potential to improve institutional efficiency, enhance service delivery, and enable data-driven policymaking. Thus, AI is no longer merely a tool of efficiency but a structural necessity in an increasingly dynamic global order. This momentum has accelerated in recent years, with global platforms like the AI Impact Summit 2026 bringing together policymakers and experts to shape the future of AI-led governance.

Despite this growing enthusiasm, AI integration remains at a nascent stage. Public institutions are still experimenting while grappling with long-term implications for accountability, policy effectiveness, and institutional capacity. The transition toward AI-enabled governance, thus, is not merely a technological transition; it represents a deeper structural shift in how governments function, make decisions, and engage with citizens.

Global Governments go AI

Across the world, governments are moving beyond discussions to real-world use of AI. What began as pilot projects is now becoming part of everyday governance, from managing traffic in Singapore to powering seamless digital services in Estonia. Healthcare systems like the National Health Service are using AI for faster diagnostics, while Japan is deploying it to support elderly care. In the United States, agencies such as the Internal Revenue Service are also using AI for fraud detection and compliance.

In India, platforms like MyGov are used to analyse citizen feedback at scale; the National Health Authority has explored AI under Ayushman Bharat for fraud detection; and the Supreme Court of India has experimented with tools like SUPACE for legal research and case management. In healthcare governance, tools like the Aarogya Setu used AI for contact tracing and reached over 240 million users, while platforms like eSanjeevani have enabled over 100 million teleconsultations, expanding access to healthcare.

Similarly, in agriculture, AI-enabled platforms such as Kisan Suvidha provide real-time weather updates and market information to farmers, while initiatives like eNAM connect over 1.7 crore farmers and 2.3 lakh traders, improving price discovery and transparency. In financial governance, systems like Aadhaar have leveraged AI to reduce leakages in welfare delivery, contributing to significant savings by ensuring benefits reach intended recipients.

Together, these examples reflect a broader shift from reactive governance to systems that can anticipate and respond in real time.

At the strategic level, AI is simultaneously becoming integral to national security and defence architecture. Systems developed by Anthropic, like Claude AI, have reportedly been explored by the United States Department of Defence, while countries like China are scaling up their use in surveillance and security.

However, this extension of AI use is not without contestation. The European Union, through regulatory frameworks such as the AI Act, is seeking to ensure that AI systems remain transparent, accountable, and aligned with democratic principles, particularly in politically sensitive domains such as welfare, policing, and public service delivery. These efforts are essential as they try to strike a balance between innovation and rights-based, ethical use of AI and other technologies.

Catching up with Innovation

Notably, the integration of AI into governance is a relatively recent phenomenon, with states often lagging behind private-sector actors in adopting and deploying these technologies. Private firms have moved faster in embedding AI into decision-making, customer engagement, and operational efficiency, driven by flexibility, resources, and competition. Governments, by contrast, operate within regulatory frameworks and institutional constraints that tend to slow experimentation.

If used thoughtfully, AI has the potential to make governance more responsive, inclusive, and efficient, ultimately bridging gaps that traditional systems have long struggled to address.

Even so, AI is increasingly being deployed in areas with high transaction volumes and direct citizen interaction. Globally, systems are being used to streamline public services, improve compliance, and enhance administrative efficiency. At the same time, there are several areas where AI adoption remains limited but holds strong potential, particularly in policy evaluation, tax administration, and civil service management. However, these domains involve complex decision-making, high accuracy requirements, and strong accountability norms, which has naturally slowed the pace of AI integration.

It's a reminder that AI in governance is no longer just about better services, it's also about power, control, and geopolitical positioning.

Can AI Ensure Transparency or Deepen Opacity?

A key question in the debate over AI-driven governance is whether these technologies can enhance transparency or risk creating new forms of opacity in public decision-making. On one hand, AI systems can strengthen transparency by enabling governments to analyse vast amounts of administrative data, track financial transactions, and detect irregularities more efficiently than traditional systems. In India, this shift is already evident in the Income Tax Department's use of data analytics. Systems such as Annual Information Statements have been generated for over 46.7 crore PAN holders, creating a detailed and traceable record of financial transactions. AI-driven compliance efforts have also resulted in additional tax revenue of over ₹11,000 crore, along with disclosures of foreign assets exceeding ₹29,000 crore. Together, these developments highlight how data-led governance can significantly strengthen compliance and enhance transparency at scale.

However, the very complexity that makes AI powerful can also make it harder to understand. Many systems operate through highly sophisticated algorithms, often described as “black box”, where even experts struggle to fully interpret how decisions are actually made. When government decisions rely on such systems, the reasoning behind those decisions may not always be easily explainable to citizens or policymakers. This limitation is also acknowledged within Indian governance systems. While AI tools have helped flag suspicious transactions worth over ₹1.3 lakh crore and identify thousands of non-filers, these systems still rely on pattern recognition rather than fully explainable reasoning, making it difficult to clearly interpret how specific conclusions are reached.

This raises concerns about algorithmic opacity and accountability. As governance processes increasingly depend on automated systems, ensuring that these systems remain auditable, explainable, and subject to human oversight becomes essential to maintaining public trust.

Opportunities for India

The growing role of AI in governance exposes a clear skills and institutional capacity gap. Many public systems lack expertise in data science, machine learning, and digital policy, making it difficult to scale AI solutions, especially given the rapid pace of technological change.

At the same time, India faces a steady outflow of AI talent to global hubs for better opportunities, advanced research environments, and access to cutting-edge tools. This “brain drain” limits the country’s ability to build strong, homegrown AI ecosystems.

Yet, this challenge also presents an opportunity. With its strong IT base and experience in building large-scale digital infrastructure, India is well-positioned to develop AI solutions for both domestic and global use. This is already visible in indigenous innovations such as Bhashini, which aims to break language barriers through AI-driven translation and speech tools, and IndiaAI Mission, which is building a national ecosystem for AI research, compute capacity, and startups. Platforms like DigiLocker and Unified Payments Interface demonstrate how India has already created a scalable digital public infrastructure that can integrate AI for smarter governance.

Realising this opportunity will require deeper collaboration with the private sector. Integrating startups, tech firms, and research institutions into governance can help governments keep pace with innovation and turn current challenges into long-term strategic advantage.

Aligned with PM Modi’s vision of “Atmanirbhar Bharat” and “Make in India for the World,” AI in governance can become a key pillar of self-reliance and global leadership. Platforms like the AI Impact Summit 2026 have further accelerated this momentum, providing India with a global stage to engage with policymakers, industry leaders, and researchers. Such forums not only shape international discourse on responsible AI but also help align domestic priorities with global standards, effectively fast-forwarding India’s journey toward becoming a leader in the evolving AI landscape.

Challenges

Despite its potential, the path to widespread AI adoption in governance remains challenging. A key obstacle is the persistence of legacy systems, as integrating modern AI tools into outdated infrastructure requires not just technical upgrades but deep institutional reform and sustained investment. At the same time, data governance frameworks are still evolving, with many countries struggling to clearly define rules for privacy, cybersecurity, and the ethical use of AI.

Beyond infrastructure, deeper concerns persist. Growing reliance on data-driven systems has intensified privacy risks, particularly for vulnerable groups such as women and children, where misuse can have serious real-world consequences. Alongside this, the lack of clear redressal mechanisms and the ambiguity around accountability often leave citizens unsure of who is responsible when AI-driven decisions go wrong.

Institutional culture also plays a role. Bureaucratic systems tend to prioritise caution and procedural stability, which can slow down experimentation. Concerns about algorithmic bias, misuse of personal data, and the erosion of human accountability make governments hesitant to fully rely on automated systems.

Moving forward, what becomes essential is not just adoption, but clarity. Governments must establish robust legal frameworks, define institutional responsibilities, and build strong grievance-redressal systems for AI. Without this, the promise of AI in governance risks being overshadowed by concerns of trust, safety, and accountability.

Looking Ahead

AI in governance is still finding its footing, but the direction is clear. This is not just about adopting new technology, but a deeper shift in how states function and serve citizens. If used thoughtfully, AI has the potential to make governance more responsive, inclusive, and efficient, ultimately bridging gaps that traditional systems have long struggled to address.

The real challenge is not whether to adopt AI, but how to do so responsibly. Building trust through transparency, strong institutions, and alignment with public interest will be crucial. Countries that are able to strike this balance will not only improve governance outcomes but also shape global norms around the use of AI in public systems.

For India, this moment holds particular promise. With the right mix of policy vision, talent development, and public-private collaboration, the country can move from being a participant to a leader in AI-driven governance. In doing so, it has the opportunity to create systems that are not only efficient but also equitable, setting an example of how technology can be harnessed to serve people at scale.

In the end, the true test of AI in governance will not be its sophistication, but its ability to strengthen trust, expand access, and deliver outcomes that genuinely improve everyday lives.

Securing the Future

AI, Sovereignty and Strategic Power

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From autonomous drones patrolling borders to intelligent algorithms defending cyberspace, Artificial Intelligence is rapidly redefining national security worldwide. In this new technological era, power is increasingly determined not only by military strength but also by data, algorithms, and digital infrastructure. Nations that lead in AI will shape the geopolitical order of the 21st century.

Recognising this shift early, the government led by Narendra Modi has placed Artificial Intelligence at the core of India's national security and technological strategy. Through defence modernisation, cybersecurity innovation, and global leadership in responsible AI governance, India is steadily advancing toward the vision of becoming an AI-ready nation and an intelligent economy.

India's approach is clear: secure the nation, strengthen technological sovereignty, and harness AI for strategic advantage.

AI: The New Battlefield of the 21st Century

The nature of warfare and national security is evolving rapidly. Modern conflicts now extend far beyond traditional battlefields into cyberspace, data networks, and algorithm-driven decision systems. Artificial Intelligence enables rapid analysis of massive datasets, real-time threat detection, and predictive intelligence assessments. This allows governments and defence forces to anticipate risks and respond with unprecedented speed and accuracy. Global powers have already embraced this shift. The United States has integrated AI into its defence innovation ecosystem, while China's doctrine of military-civil fusion aggressively promotes AI integration across civilian industries and military capabilities. In this changing strategic landscape, India recognises that technological preparedness is national preparedness.

AI in Defence: Building the Military of the Future

India's defence modernisation is increasingly powered by AI-enabled innovation. Institutions such as the Defence Research and Development Organisation are actively developing advanced technologies that integrate artificial intelligence into surveillance systems, unmanned platforms, and battlefield management.

AI is transforming defence operations in several ways:

Smart Surveillance and Border Security

AI-enabled drones, satellite analytics, and intelligent monitoring systems are enhancing India's border surveillance capabilities. These systems can identify suspicious activities and detect infiltration attempts even in remote or challenging terrains.

Autonomous and Unmanned Systems

Robotic platforms and unmanned aerial vehicles equipped with AI can perform reconnaissance missions, mine detection, and logistical operations, reducing risks to soldiers while improving operational efficiency.

Data-Driven Military Strategy

AI algorithms can process satellite imagery, signals intelligence, and battlefield data in real time, enabling faster and more accurate decision-making by commanders.

Through these technologies, India is steadily building a smart, agile, and technology-driven defence ecosystem capable of addressing emerging threats.

Key Statistic

- India has launched over 75 AI-based defence research projects under various defence innovation initiatives.
- The global AI in defence market is expected to exceed $60 billion by 2030, highlighting the scale of the technological race.

Artificial Intelligence is rapidly transforming the foundations of national security. Nations that harness AI effectively will lead the geopolitical order of the future.

Cybersecurity: Protecting India's Digital Frontiers

As India rapidly digitises its economy and governance systems, cyberspace has become a critical domain of national security. Attacks on financial systems, communication networks, and strategic infrastructure can disrupt national stability.

Artificial Intelligence is playing a crucial role in strengthening cybersecurity. AI-powered systems can monitor network traffic, detect anomalies, and automatically respond to cyber threats before they escalate.

However, adversaries are also leveraging AI for malicious activities, such as automated cyberattacks, disinformation campaigns, and deepfake technologies.

India's cybersecurity strategy, therefore,

emphasises AI-driven threat detection, resilient digital architecture, and secure data ecosystems, ensuring that the country's digital transformation remains both innovative and secure.

Strategic Technologies and Technological Sovereignty

Artificial Intelligence is also a key enabler of broader strategic technologies including quantum computing, space systems, robotics, and semiconductor manufacturing.Countries that dominate these technologies will shape the global balance of power in the coming decades.

The Modi government's vision of Atmanirbhar Bharat recognises this reality. By encouraging indigenous research, strengthening startup ecosystems, and investing in advanced technological infrastructure, India is building the foundations of technological self-reliance. This approach ensures that India remains both globally competitive and strategically independent in the rapidly evolving technological landscape.

Key Statistic

- India currently has over 4,000 AI startups, making it one of the fastest-growing AI innovation ecosystems in the world.
- India's digital economy is projected to reach $1 trillion by 2030, further strengthening the need for AI-driven security frameworks.

India's Global Leadership in Responsible AI

India is not only integrating AI domestically but also shaping global discussions on ethical and responsible AI governance.

The Impact AI Summit, held in New Delhi, highlighted India's growing leadership in developing collaborative global frameworks for artificial intelligence. The summit brought together policymakers, researchers, and technology leaders to explore how AI can serve humanity while respecting democratic values.

Under the vision articulated by Narendra Modi, India promotes the principle of "AI for All", ensuring that technological progress remains inclusive and beneficial for society. This approach positions India as a trusted global leader advocating human-centric and democratic AI development.

Conclusion: Securing the Future with Intelligent Power

Artificial Intelligence is rapidly transforming the foundations of national security. Nations that harness AI effectively will lead the geopolitical order of the future. India's proactive strategy combining defence nnovation, cybersecurity resilience, and technological sovereignty demonstrates a clear understanding of this new reality.

Through institutions such as the Defence Research and Development Organisation, visionary leadership from Narendra Modi, and global engagement through platforms like the Impact AI Summit, India is steadily building the architecture of an AI-powered national security framework.

As the Modi government advances its mission to make India AI-ready, the country is not merely adapting to technological change; it is emerging as a global leader in shaping the future of intelligent, secure innovation.

India AI Mission

Building a Sovereign, Innovative & Ethical AI Ecosystem

Sayanth Sivan
Pursuing Masters in International Relations from Nalanda University

India stands at a pivotal moment in its technological evolution. With a billion-scale digital infrastructure already in place, ranging from Aadhaar-based identity to the UPI payments revolution, the country has already built the foundational architecture for an AI-powered future. Building upon what was already established through this visionary leadership, the Government of India launched the IndiaAI Mission on March 7th, 2024, to harness AI's transformative potential with a strong focus on strengthening India's global AI leadership and ensuring its benefits reach all segments of society.

India's AI journey did not begin in 2024; the foundations of India's AI have been in place for over a decade, with Aadhaar-based biometric authentication establishing a scalable and inclusive digital identity framework, while the UPI payments revolution set global benchmarks. This deep digital infrastructure gave India a unique competitive

advantage: vast, diverse, multilingual datasets, a large and growing technology workforce, and a proven ability to deploy digital solutions at scale. The IndiaAI Mission builds on this legacy to propel India into the forefront of global AI leadership.
With the vision of "Making AI in India and Making AI Work for India," the Cabinet approved the IndiaAI Mission with a budget outlay of ₹10,371.92 crore and is driven by a vision to position India as a global leader in artificial intelligence by focusing on seven foundational pillars: India AI Compute Capacity, India AI Future Skills, India AI Startup Financing, India AI Innovation Centre, India AI Datasets Platform, India AI Applications Development Initiative, and Safe & Trusted AI. The Indian government has launched several initiatives to develop and enhance India's AI capacities:

The bedrock of any AI ecosystem is computational power. The India AI Compute pillar will build a high-end, scalable AI computing ecosystem to meet the growing demands of India's rapidly expanding AI startups and research ecosystem. The ecosystem will comprise an AI compute infrastructure of 10,000 or more Graphics Processing Units (GPUs), built through a public-private partnership. Since its launch, the mission has made significant progress, surpassing its initial target of 10,000 GPUs. India has now achieved 38,000 GPUs, providing affordable access to world-class AI resources. An AI marketplace will also offer AI-as-a-service and pre-trained models, functioning as a one-stop hub for AI innovation resources. The government has allotted Rs. 4,563.36 crore for the AI India Compute Capacity initiative.

The IndiaAI Innovation Centre will develop and deploy indigenous Large Multimodal Models (LMMs) and domain-specific foundational models across critical sectors. With over Rs. 1,971.37 crore invested, this pillar develops India's own Large Multimodal Models using Indian data and languages, ensuring sovereign capability and global competitiveness in generative AI. IndiaAI received over 500 proposals, and in the first and second phases, 12 startups were selected, including Sarvam AI, Soket AI, Gnani AI, and IIT Bombay's consortium, BharatGen.

Data is the fuel of AI. The India AI Datasets Platform will streamline access to quality non-personal datasets for AI innovation. A unified data platform will provide a one-stop solution for seamless access to non-personal datasets for Indian startups and researchers. The platform has over 5,500 datasets and 251 AI models across 20 sectors, helping developers focus on AI solutions rather than building basic modules. By December 2025, it had recorded over 385,000 visits and 26,000 downloads. Such unprecedented growth is being fueled by the Indian government's efforts, as evidenced by its approximately Rs. 199.55 investment in the platform.

India AI Application Development Initiative will promote AI applications across critical sectors by drawing on problem statements from Central Ministries, State Departments, and other institutions. With an allocated budget of Rs. 689.05 crore, the main focus is on developing, scaling, and promoting the adoption of impactful AI solutions with the potential for large-scale socio-economic transformation. Sectors include healthcare, agriculture, climate change, governance, and assistive learning technologies. Sector-specific hackathons are organized with ministries and institutions.

No technology mission succeeds without skilled human capital. IndiaAI FutureSkills is conceptualised to mitigate barriers to entry into AI programs and to increase AI courses in undergraduate, master 's-level, and PhD programs. Data and AI Labs will be set up in Tier 2 and Tier 3 cities across India to impart foundational-level courses. With an investment of Rs. 882.94 crore, support is being provided to 500 PhD fellows, 5,000 postgraduates, and 8,000 undergraduates, with 73 institutes onboarding PhD students and 31 Data and AI Labs launched with NIELIT and industry partners.

The India AI Startup Financing pillar is designed to support and accelerate deep-tech AI startups by providing streamlined access to funding to enable futuristic AI projects. The IndiaAI Startups Global program, launched in March 2025, helps Indian

startups expand into international markets in collaboration with Station F and HEC Paris. With over Rs. 1,942.50 crore invested, India's Generative AI startup landscape has seen rapid expansion, including over 17% growth in sector-specific AI models, a 4.6% surge in GenAI services startups, and $760 million in funding raised in the first half of 2024.

The Safe & Trusted AI pillar emphasises the need for a balanced, technology-enabled, and India-specific approach to AI governance. This involves developing indigenous technical tools, guidelines, frameworks, and standards that are contextualised to India's unique challenges and opportunities, as well as its social, cultural, linguistic, and economic diversity. IndiaAI has selected eight Responsible AI projects through an Expression of Interest, covering AI risk assessment, stress-testing tools, and deepfake detection tools.

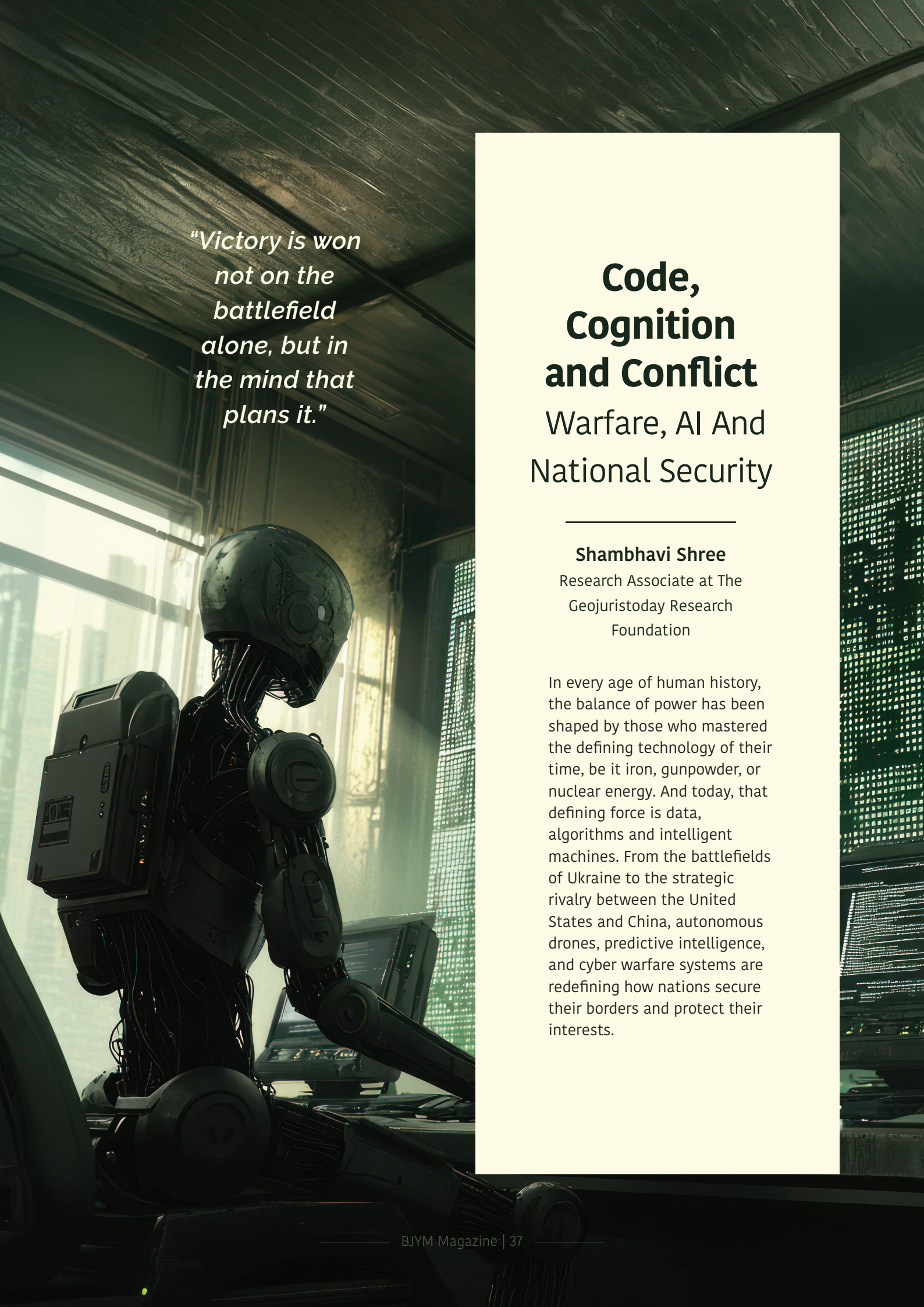
India's AI research ambition extends beyond the government into academia, industry, and the startup ecosystem. IndiaAI, in collaboration with Meta, has announced the establishment of the Centre for Generative AI, Srijan, at IIT Jodhpur, along with the launch of the "Yuv AI initiative" for Skilling and Capacity Building with AICTE to advance open-source AI in India. Multiple Centres of Excellence (CoEs) in emerging technologies have been established, alongside the National Mission on Interdisciplinary Cyber-Physical Systems, led by the Department of Science and Technology, to promote R&D, human resource development, technology, entrepreneurship, and international collaboration.

The Union Budget 2025 has allocated Rs 500 crore to establish Centres of Excellence in AI for Education, focusing on sectors like agriculture, healthcare, and smart cities.

India's approach to AI governance is not merely regulatory; it is values-driven. The Safe & Trusted AI pillar will enable the development of indigenous tools and frameworks, self-assessment checklists for innovators, and guidelines and governance frameworks to advance the responsible development, deployment, and adoption of AI. India has also taken its ethical AI commitment to the global stage. As Lead Chair of the Global Partnership on Artificial Intelligence (GPAI), India hosted GPAI member countries and experts to advance GPAI's commitment to safe, secure, and trustworthy AI. The Global IndiaAI Summit, held in July 2024, brought together international AI experts from science, industry, civil society, and governments to share insights on key AI challenges, underscoring India's aspiration to shape global AI norms rather than just follow them.

The stakes are enormous. AI is expected to contribute $1.7 trillion to India's GDP by 2035 (NASSCOM), with over 6 million professionals in India's AI tech ecosystem, and 1.25 million more expected by 2027. By 2035, the mission envisions India as a global leader in inclusive AI deployment, ensuring that technology not only drives growth but also strengthens livelihoods, opens access to opportunities, and supports the nation's journey towards an equitable and empowered digital economy.

The India AI Mission is more than a government program; under the visionary leadership of Prime Minister Narendra Modi, it is a national commitment that ensures India does not merely witness the AI revolution go by but rather leads and shapes it with its own hands. By investing in computer infrastructure, indigenous foundational models, diverse datasets, skilled talent, ethical governance, and startup financing, India is building an AI ecosystem that is sovereign, inclusive, and globally competitive. The mission's seven pillars and the recently concluded India AI summit together represent a holistic blueprint, one that balances technological ambition with social responsibility and positions India as a model for how developing nations can harness AI, a model deeply rooted in India's moral Philosophy of the greater good, a Philosophy that the “Vishwaguru” embodies.



"Victory is won not on the battlefield alone, but in the mind that plans it."

Code, Cognition and Conflict

Warfare, AI And National Security

Shambhavi Shree
Research Associate at The Geojuristoday Research Foundation

In every age of human history, the balance of power has been shaped by those who mastered the defining technology of their time, be it iron, gunpowder, or nuclear energy. And today, that defining force is data, algorithms and intelligent machines. From the battlefields of Ukraine to the strategic rivalry between the United States and China, autonomous drones, predictive intelligence, and cyber warfare systems are redefining how nations secure their borders and protect their interests.

Thus, for India, which is surrounded by persistent cross-border terrorism and increasingly assertive China, AI is not merely a technological opportunity. It is a strategic necessity. Therefore, AI adoption by Indian defence companies is transforming the nation's military capabilities. From PSUs like BEL and HAL to private innovators such as Zen Technologies and Paras Defence, these listed companies are driving self-reliance and ensuring India's preparedness for future warfare. AI is being integrated into command, control, communication, computer, intelligence, surveillance, and reconnaissance (C2ISR) operations, making India ready not only to secure its future but to shape the technological destiny of the world.

AI and Transformation of Warfare

War is no longer announced by the roar of tanks or thunder of missiles; it now begins silently, in lines of code and streams of data. Military leaders globally acknowledge that AI will fundamentally reshape future conflicts. Recently, India's Chief of Defence Staff, General Anil Chauhan, remarked that the use of AI will increase, there will be a huge requirement for energy, arguing that nuclear power and AI "complement each other" when it comes to powering data centres. According to CDS, adding automated systems powered by AI can help militaries make faster, more effective decisions in combat.

AI In Defence

Worldwide AI expenditure reached $118 billion in 2022 and is expected to exceed $300 billion by 2026. Like other sectors, the influence of AI has resulted in a growing trend of global militaries using AI in their combat systems. Rajnath Singh, the Indian Defence Minister, unveiled 75 recently created AI technologies.

Furthermore, the minister emphasised the importance of promptly integrating advanced technologies such as AI and Big Data into the defence sector. Such technologies are used in border monitoring by integrating radar feeds, sensors and unmanned aerial vehicles, outfitted with AI-based aircraft technology.

In addition to this, with Op Sindoor, highlighting the importance of securing critical infrastructure, Hyderabad-based autonomous anti-drone tech player Indrajal has introduced its specialised AI-powered solution to protect high-value assets such as nuclear power plants, power grids, refineries, ports and airports.

AI-Powered Drone Warfare

One of the most transformative developments in modern warfare is Autonomous Drone Technology. Indian defence startups have begun developing AI-enabled combat drones capable of swarm operations. The Kaala Bhairav AI combat drone, officially called the E2A2 (Economic and Efficient Autonomous Aircraft), demonstrates how indigenous innovation can deliver strategic autonomy in aerial warfare, with swarm strike capability and long endurance. It carries a 91 kg payload, including electro-optical sensors, guided rockets and fuel. The company revealed it has secured a $25 million export order from a South Asian country, part of a $30 million strategic deal. According to FWDA, the order underlines international trust in Indian-made autonomous aircraft and demonstrates India's emergence as a credible supplier of advanced defence systems.

Systems demonstrated by the Indian armed forces, including Swarm Drone Operations during Army Day showcased a future where dozens of drones can function as a single intelligent entity. Together, these advancements reflect a broader strategic shift, where India is not merely acquiring drone technology, but building an intelligent, self-reliant aerial defence ecosystem powered by data, autonomy, and precision.

Cybersecurity

In the 21st century, a nation's sovereignty is no longer defended only at its borders; it is guarded within its networks. India's rise as a digital civilisation, powered by platforms like Aadhaar, UPI, and large-scale e-governance systems, has created unprecedented connectivity but also a vast new frontier of vulnerability. In this Shadow War, Artificial Intelligence has emerged as India's most force multiplier. AI-driven cybersecurity systems can monitor millions of network events in real time,

detect anomalies before they escalate, and neutralise threats at a speed far beyond human capability.

Cyberattacks targeting Indian websites, apps, and digital platforms are becoming more frequent and targeted, with security systems blocking more than 9 billion malicious requests in 2025. The report suggests that attackers are increasingly using automated tools and artificial intelligence-assisted techniques to identify vulnerabilities in digital systems. Recognising this, India is strengthening its cyber defence architecture through AI-enabled threat intelligence and indigenous security platforms. In doing so, the nation is not merely protecting data, it is safeguarding trust, economic stability and the digital backbone of billions of lives.

Why India must build its own AI

"He who depends on others for his security, loses it" - Kautilya

In the age of AI, this ancient warning acquires new and urgent meaning. AI systems are not neutral tools, they are shaped by the data they are trained on, the values they encode, and the interests they ultimately serve. For India, with its unique security challenges, civilisational ethos, and geopolitical realities, dependence on external AI platforms is a vulnerability that cannot be afforded.

Recognising this, Director General of Defence Research and Development Organisation (DRDO) Chandrika Kaushik made it clear in the AI Impact Summit that India cannot afford to rely on AI models built by foreign companies. She underscored the urgent need for indigenous AI solutions in the defence sector. Talking about DRDO's initiatives, she said that the organisation has already developed two key frameworks. The first, the ETAI (Evaluating Trustworthy Artificial Intelligence) framework, focuses on building resilience into AI-enabled systems. The second provides guidelines for validating and verifying AI solutions, offering a structured approach for developers in the domain, and thus, she calls for Desi AI Solutions.

As the Mahabharata reminds us, "Self-reliance is the highest form of strength". In the emerging world order, the nations that design their own intelligence will define their own destiny, and for India, building its own AI is the path to securing both.

Way Forward

For India, this is not merely a moment of adaptation; it is a moment of leadership. The foundation has been laid, but the future will belong to those who move faster, think deeper, and innovate bolder. India must now transition from adoption to domination in AI-driven security. This demands the creation of:

Predictive Threat Intelligence System - Instead of reacting to threats, India can predict them before they happen, using AI to analyse troop movements, social media signals, financial transactions, and cyber patterns. This can help forecast terror attacks, border tensions, and cyber warfare attempts

AI-powered Counter Propaganda System - Use AI to detect fake news and misinformation, track hostile narratives and respond with accurate information quickly, thus protecting public opinion and national morale.

AI soldier Assistance Systems - Equip soldiers with AI tools such as smart helmets with real-time data, AI navigation in unknown terrain, automatic threat alerts; these can make every soldier more aware, safer and effective.

As India advances towards the vision of Viksit Bharat 2047, the fusion of civilizational wisdom and cutting-edge technology will define the nation's strategic future. AI is the shield that will defend India's digital civilisation, the engine that will power its defence innovation and the strategic force that will secure Bharat's place among the leading nations of the world.

AI and National Security

AI, Defence and Sovereignty

Siddhant Chouhan
B-tech student in the field of AI and Data science

बलं बुद्धिश्च संयुज्य
कार्याणि साधयेत् नरः।
न केवलं बलं शक्तं न च
बुद्धिर्विना बलम्॥

"Success is achieved through the combination of strength and intelligence; power alone or intelligence alone cannot achieve victory."

In modern warfare, artificial intelligence plays a crucial role in enhancing surveillance, decision-making, and operational efficiency. AI-powered systems can analyse vast amounts of battlefield data in real time, allowing armed forces to detect threats, predict enemy movements, and conduct autonomous operations.

The Government of India has increasingly integrated AI into the defence sector. The Ministry of Defence launched 75 AI-enabled defence products at the “AI in Defence” symposium, demonstrating the country’s commitment to integrating AI into military systems. These technologies include intelligent surveillance systems, predictive maintenance for military equipment, autonomous vehicles, and cyber defence tools.

The Defence Research and Development Organisation (DRDO) is also working on advanced AI-based defence systems, including autonomous drones, swarm drone technologies, and intelligent command-and-control platforms. One major example is the HAL Combat Air Teaming System (CATS), which integrates manned fighter aircraft with autonomous drones capable of surveillance and precision strikes.

Technologies such as NETRA by DRDO, a world-class lightweight UAV with VTOL capabilities, are taking the world by storm. With no moving parts other than the rotors, motors, and transmissions, it requires very low maintenance. The use of carbon fibre makes the Netra extremely lightweight (1.5 kg), making it extremely portable. It comes with an independent Flight and navigation system, controlled by an onboard autopilot with anti-collision sensors.

Furthermore, the Innovations for Defence Excellence (iDEX) initiative encourages startups and private companies to develop cutting-edge defence technologies. By creating a collaborative ecosystem involving academia, industry, and the armed forces, the government is fostering indigenous innovation in strategic sectors.

These initiatives strengthen India's defence capabilities while supporting the broader vision of Aatmanirbhar Bharat (Self-Reliant India). As digital technologies expand, cybersecurity has become a vital aspect of national security. Cyberattacks on critical infrastructure such as power grids, banking systems, defence networks, and government databases can have severe consequences for national stability.

Therefore, major initiatives such as the National Intelligence Grid (NATGRID) have become a necessity, containing an integrated intelligence master database structure for counter-terrorism purposes, as it connects databases of various core security agencies under the Government of India. It collects and analyses comprehensive patterns derived from 21 different organisations, which can be readily accessed by security agencies, round the clock. It links crime information, including First Information Reports, across 14,000 police stations in India. This combined data is made available to 11 central agencies. Through advanced data analytics and AI tools, NATGRID helps agencies identify suspicious patterns across large volumes of information, helping make our spaces, both physical and digital, safer..

Artificial intelligence is also central to strengthening India’s digital ecosystem. The government recognises that technological leadership is essential for economic growth, national security, and global competitiveness, and thus launched the IndiaAI Mission to build a comprehensive AI ecosystem in the country. The mission focuses on developing high-performance computing infrastructure, supporting AI startups, encouraging research and development, and promoting collaboration between government institutions, academia, and industry.

Another key initiative is BHASHINI, an AI-powered language translation platform designed to make digital services accessible in multiple Indian languages and promote inclusive digital governance.

India is also investing in indigenous AI development at an unprecedented level through programs such as BharatGen, which is sustained by ₹235 Crore

under NM-ICPS and further strengthened by the ₹10,585 Crore India AI Mission Outlay, helping build foundational AI models for Indian languages, speech processing, and computer vision. These initiatives are crucial for ensuring data sovereignty and reducing dependence on foreign AI platforms. Visionary programs launched years ago, such as Digital India, Startup India, and Make in India, are supporting this transformation by fostering a favourable environment for innovation and technological development, a testament to the Prime Minister's visionary leadership.

A key element of this vision is youth-led technological leadership. With one of the largest youth populations in the world, India is investing in skill development initiatives, such as Skill India and digital education programs, to prepare young professionals for careers in emerging technologies. By empowering youth and strengthening the innovation ecosystem, India aims to become a global AI powerhouse while advancing the Viksit Bharat vision, an aim that nears fulfilment with each passing day.

The long-term vision of the Government of India is to transform the country into a global technology leader by the centenary of independence in 2047. Under Vision 2047, artificial intelligence is indeed playing a central role in building an innovation-driven and knowledge-based economy. Artificial intelligence has become a cornerstone of modern national security and economic development strategies. These initiatives demonstrate India’s commitment to innovation, digital sovereignty, and technological self-reliance. As the country moves toward Vision 2047, continued investment in AI, cybersecurity, and youth-driven innovation will be critical to ensuring a secure, resilient, and technologically advanced future.

Sovereign AI

India Writing Its Own Technological Future

Srinavya
SEC BJYM,
Andhara Pradesh

A few years ago, if someone said India would be leading the global conversation on Artificial Intelligence, many would have raised an eyebrow. Today, not only is India part of that conversation, but we are helping shape its direction. That is not an accident. It is the result of deliberate, bold, and visionary governance under Prime Minister Narendra Modi.

As a young Indian, I find this moment genuinely exciting. But I also believe excitement is not enough. We need to understand what is happening, why it matters, and how India's youth must rise to the occasion.

I draw inspiration here from Sridhar Vembu, founder of Zoho Corporation, one of India's most respected tech leaders, who has consistently argued that India must build AI on its own terms: lean, sovereign, and rooted in Indian realities. That philosophy, I believe, is perfectly aligned with what the Modi government is actually doing.

We Started From the Right Place

Before you can build AI, you need a strong digital foundation. India recognised this early. The Digital India initiative laid the groundwork for broadband across villages, smartphones in the hands of farmers and students, and a government that chose to go digital rather than remain paper-bound.

But the real masterstroke was India's Digital Public Infrastructure UPI, Aadhaar, DigiLocker, and ONDC. These are not just apps or platforms. They are India's AI-ready spine. Every UPI transaction, every Aadhaar-linked service, every crop insurance claim processed digitally, this is data, scale, and reach that no foreign tech company can replicate for India.

"No other country of India's size and diversity has built a digital backbone like ours. This is our hidden AI superpower."

When AI systems are trained on this data from real Indian lives, Indian markets, and Indian languages, they become genuinely useful for India. Not just useful for English-speaking urban professionals, but for the farmer in Vidarbha, the ASHA worker in Odisha, and the small trader in Rajkot. That is inclusive technology. That is real Viksit Bharat.

The IndiaAI Mission: Putting Policy Into Action

The Modi government did not stop at infrastructure. Recognising that AI is the next frontier of economic power, it launched the IndiaAI Mission, a comprehensive framework to build India's AI capability from the ground up.

What makes this mission special is its scope. It covers computing infrastructure, so our researchers and startups don't have to depend entirely on expensive foreign cloud services. It covers AI datasets so models trained in India reflect Indian diversity. It covers skilling so young Indians can participate in the AI economy, not just consume it. And it covers safety and ethics, so India's AI development is responsible and trustworthy.

This is not a policy made to sound good on paper. It is a policy designed to make India genuinely self-reliant in the technology that will define the next 50 years.

Build Smart, Not Just Big

Here is where I think Sridhar Vembu's wisdom is most relevant. There is a temptation in AI circles to chase the biggest model, the most powerful GPU cluster, the highest benchmark score. The US and China are spending hundreds of billions of dollars in this race.

India does not need to and probably should not play that exact game. What India needs is to be smart about AI. Build efficient, energy-conscious models. Build models that work in Hindi, Tamil, Telugu, Kannada, Bengali, and Odia, not just English. Build AI that solves Indian problems: crop disease detection, multilingual healthcare guidance, and fraud detection in rural banking.

Indian startups like Sarvam AI are already showing that this is possible, building world-class language models at a fraction of the cost that Western companies spend. The government's job is to back these efforts boldly and consistently.

"India's constraint is not a weakness. It is a creative challenge and we have always risen to those."

Sovereignty Is Not Optional

One of the most important things PM Modi's government has stood for is technological sovereignty. In a world where powerful nations are openly saying they want the world to run on their technology stack, India's refusal to simply become a consumer of foreign AI is both brave and necessary. Think about what it would mean if India's governance, agriculture, healthcare, and national security systems all depended on AI systems built, owned, and controlled by foreign companies. That would be a new form of dependence, not physical occupation, but technological dependence. Our founding leaders fought to end one kind of dependence. This generation must ensure we do not sleepwalk into another.

The Semiconductor Mission, the push for domestic chip design capabilities, and the investment in homegrown AI research are not just economic decisions. They are strategic sovereignty decisions.

And they reflect a government that thinks long-term about India's place in the world.

Youth: Our Biggest Asset in the AI Age

India has something no other nation has at this scale: a young population. Over 65% of India's population is under 35. In the age of AI, this is not just a demographic fact it is a strategic opportunity. But this opportunity will only be realised if we prepare our youth for the AI economy. And preparation does not mean adding one AI chapter to a textbook. It means rethinking how we teach, what we teach, and who gets access to quality education. PM Modi's focus on digital education from DIKSHA to PM eVIDYA, from skill development missions to IIT expansions, is building the pipeline. But as young people ourselves, we must also take personal responsibility. Learn the basics of AI. Understand how it works. Think about how it applies to problems in your field, your village, your industry.
The AI revolution will not wait for us to be ready. We must get ready for it.

The Road to 2047

By the time India celebrates 100 years of Independence in 2047, the vision is clear: a developed, knowledge-driven, self-reliant India, Viksit Bharat. AI is not just one tool in that journey. It is the engine.

An India where AI helps doctors diagnose diseases in remote areas. Where AI helps farmers get real-time advice in their own language. Where AI makes government services faster, fairer, and fraud-free. Where Indian companies build AI products that the world buys, not the other way around.

That India is within reach. The foundation has been laid. The mission is clear. The government has shown the will. Now it is our turn, the youth of India, to build on it.

"We did not come this far to stop here. The AI century belongs to those who build — and India will build."

From Data to Destiny

India's AI Roadmap to 2047

Suryakanth S Nayak
Medical Student, Researcher
& AI Expert

In the history of nations, there are moments when technology changes and reshapes the destiny of the civilisation. Today, the world is standing at a turning point as artificial intelligence (AI) begins to redefine economies, governance, industry, and global power structures. For India, this moment is not merely the technological transition but a historic opportunity. Over the past decade, under the leadership of PM Narendra Modi, initiatives such as Digital India have created one of the most powerful digital foundations in the world. As India moves toward the vision of Viksit Bharat 2047, the next national transformation lies in moving from Digital India to Intelligent India.

The Global AI Power Shift

Artificial intelligence is becoming a defining force shaping the 21st century. Countries across the world are investing massively in AI research, semiconductor manufacturing, and advanced computing infrastructure. In this global race, leadership in AI will decide not only economic growth but also geopolitical influences. A nation that can control data, computing power and intelligent systems would shape the future of global order. For India, this presents both a challenge and an unprecedented opportunity.

India's growing role in global AI governance is reflected in frameworks such as the Delhi Declaration, emphasising inclusive and human-centric AI. Coupled with rising global partnerships and investments, this could position India not merely as a participant but as the shaper of the emerging AI-led world order.

India's Digital Foundation

India's AI journey will be built on the strong foundation of Digital India. Platforms such as Aadhaar, UPI, Digilocker and India Stack have enabled seamless governance and large-scale digital participation.

Most importantly, they have created a dynamic data ecosystem that is crucial for building effective AI systems. India's success in digital public infrastructure has positioned it as a global model for inclusive and scalable technological development.

From Consumption to Creation Economy

To become an AI superpower, India cannot remain just a consumer of AI technologies; it must be a creator and manufacturer of AI systems. This means a shift from importing intelligence to building it within the country.

India needs to develop its own AI models, platforms and hardware capabilities supported by strong research institutions and a thriving ecosystem of startups. India has long been the back office of the digital world, but now it has a real chance to become the innovation engine of the AI era. Recent collaborations between global AI leaders such as OpenAI and Antropic with major Indian conglomerates like Reliance Industries and the Tata Group reflect growing global confidence in the Indian AI ecosystem. These partnerships are speeding innovation and helping India to position itself as a key hub in the global AI value chain. By 2047, India should aim not only to adopt AI technologies but also to define the global AI standards and innovation pathways.

Finally, India has the rare opportunity to become a global leader through AI diplomacy, exporting digital public goods and shaping inclusive global AI frameworks.

Building the Foundations of Intelligent India

Multiple initiatives are needed for this complex transformation. A key step is creating a National AI Commons (a secure ecosystem of datasets, computing infrastructure, and research platforms accessible to innovators across the country). India must prioritise data sovereignty, ensuring that critical national data is governed securely while enabling responsible innovation. With one of the most diverse populations in the world. We can build AI that is inclusive of all these different populations and also global and relevant. Also, given how AI is developing, we will need high-capacity data centres. We also need grid resources in the form of power plants, and we will need increasingly more renewable energy to power those grid resources.

Youth: The Driving Force

India's demographic dividend is its greatest strength. With the right skills and opportunities, India's youth can lead the global AI revolution. It is important to develop education in Artificial Intelligence, data science, and emerging technologies, as well as to ensure access to data, computing resources, and supporting infrastructure. The innovators of 2047 are sitting in India's classrooms today and empowering them will decide the nation's future.

AI and National Security

Artificial Intelligence is revolutionising national security in multiple ways, from cybersecurity and intelligence to autonomous systems. Strengthening AI capabilities for the defence of the country is necessary to safeguard India's sovereignty. Collaboration among the government, defence organisations, and private players in this space will be important for building a robust, secure technology in the days to come.

Technological Sovereignty and National Strength

It is challenging to separate AI leadership from technological sovereignty. Countries that control semiconductors, computing systems, and digital infrastructure will define the future. India's push towards semiconductor manufacturing and deep tech innovation is therefore both an economic and strategic necessity.

A Roadmap to Intelligent India: Strategic

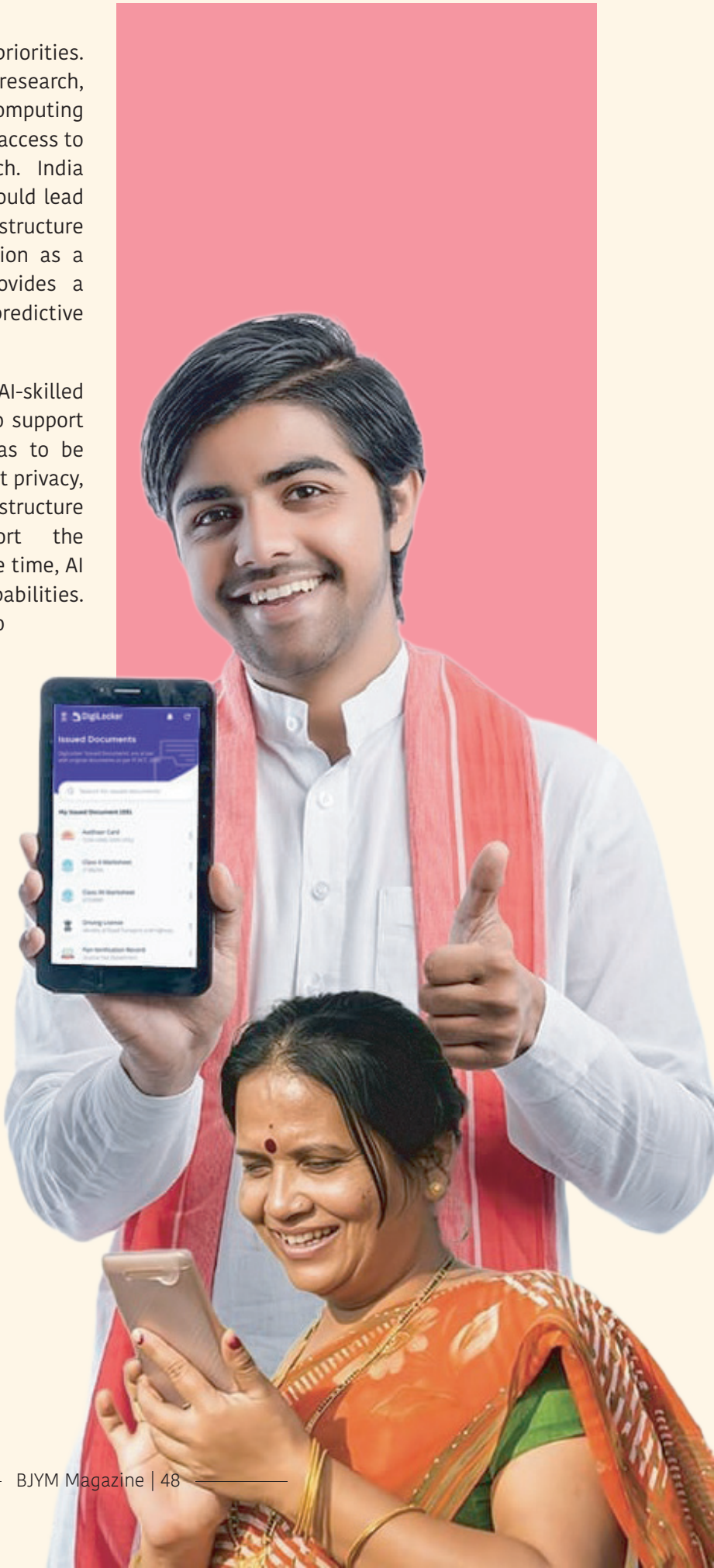
Priorities for 2047

India's journey towards AI needs clear priorities. Large investments are needed in AI research, indigenous innovation, and advanced computing infrastructure. A startup needs deep tech, access to capital, infrastructure, and global reach. India should be a global hub for AI, and we should lead the world by 2047. Digital Public Infrastructure needs a radical transformation to function as a high-tech, intelligent platform that provides a foundation for real-time governance and predictive public services.

India must build an equally large cadre of AI-skilled workers through education and skilling to support the growth of this sector. A balance has to be achieved in data governance, ensuring that privacy, security, and innovation coexist. The infrastructure and energy systems must support the computational demands of AI. At the same time, AI must strengthen national security capabilities. Finally, India has the rare opportunity to become a global leader through AI diplomacy, exporting digital public goods and shaping inclusive global AI frameworks.

The journey toward AI-ready India is not only about adopting technology, but it is also about shaping the future before it arrives. Nations that lead in AI will define the 21st century, and for India, this is a defining moment. As India moves towards2047, it stands ready not just to take part in the AI revolution, but to lead it with vision and responsibility.

India will not just adapt to the future. India will define, design, and lead it.



Modi Model

From Governance Reform to AI Leadership

Venu Gopaal Vemula
Social Media Executive
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India is not merely witnessing a technological transition; it is leading a civilisational transformation. Artificial Intelligence today is redefining global power structures, and nations that control technology will shape the future world order.

Under the decisive and visionary leadership of Prime Minister Narendra Modi, India has moved from being a passive consumer of technology to becoming a global architect of digital and AI-driven governance.

For decades, India lagged behind due to policy paralysis, corruption, and a lack of technological vision. But in the last decade, the Modi government has fundamentally altered this trajectory, laying a strong digital foundation and now propelling India towards becoming an AI superpower.

From Policy Paralysis to Digital Revolution: The Modi Model

Before 2014, governance in India was synonymous with inefficiency, middlemen, and delay. Technology was limited, fragmented, and inaccessible to the common citizen. The launch of Digital India marked a turning point. It was not just a government scheme; it was a systemic overhaul of governance.

Through platforms like UPI, Aadhaar, and DigiLocker, India has built a transparent, corruption-resistant, and citizen-centric digital ecosystem. Let us be clear, this transformation did not happen by accident. It required: Strong political will, Clear vision and Corruption-free governance.

Today, India processes billions of digital transactions monthly. Benefits reach directly into bank accounts without leakage. The poor, who were once excluded, are now digitally empowered. This is the Modi Model of governance, minimum government, maximum governance, powered by technology.

AI Revolution: India Refuses to be Left Behind

Globally, AI is becoming the new battlefield of dominance, whether in the economy, defence, or governance. Unlike previous governments that reacted late to global trends, the Modi government is anticipating the future and preparing India in advance.

With the IndiaAI Mission, India is building:Indigenous AI capabilities, Data sovereignty and Ethical AI frameworks.This is crucial because data is the new oil, and AI is the engine that runs on it. India's digital public infrastructure has already created one of the world's largest data ecosystems giving India a strategic advantage over many developed nations.

Empowering Youth: From Job Seekers to Job Creators

The biggest difference between previous regimes and the present government lies in how India views its youth. Earlier, young people were largely seen as beneficiaries of welfare. Today, under the leadership of PM Modi, they are seen as nation-builders, innovators, and drivers of India's future.

In the age of AI and digital expansion, this shift is becoming even more visible. Youth are no longer only looking for jobs; they are becoming entrepreneurs and job creators. Start-ups are not merely businesses they are solving real-world problems. At the same time, Tier-2 and Tier-3 cities are emerging as powerful new centres of innovation and enterprise.

Through focused initiatives in skilling, digital education, and entrepreneurship, the government is ensuring that India's demographic dividend becomes its greatest strength, not a liability. AI is not taking away opportunities; it is creating a new economy in which skilled, confident, and innovative youth will lead globally.

As BJP karyakartas, we can see this transformation clearly on the ground: small-town youth building technology start-ups, students learning coding and AI tools, and farmers' children entering digital professions that were once beyond imagination. This is a silent revolution, a historic shift from aspiration to achievement.

Inclusive AI reflects the spirit of our larger national vision: Sabka Saath, Sabka Vikas, Sabka Vishwas, Sabka Prayas.

Addressing Inequality: The Indian Model

One of the biggest criticisms globally is that AI increases inequality. But India's model is fundamentally different. Because of Digital India, technology is no longer confined to metros; it has reached the villages. Internet access is expanding at an unprecedented pace, and government services are now accessible to even the poorest citizens. AI in India is not elitist; it is inclusive.

From farmers using predictive analytics to improve crop decisions to small vendors seamlessly accepting digital payments, technology is empowering the last mile. This reflects the core philosophy of this government, Antyodaya, and its

commitment to uplifting the last person in the queue.

A Clear Contrast: Vision vs Vote-Bank Politics

The contrast today is stark and undeniable. While the Modi government is building:

- AI ecosystems
- World-class digital infrastructure
- Future-ready, skilled youth

The opposition remains trapped in:

- Freebie politics
- Short-term appeasement
- Outdated governance models

They talk about poverty—we are eliminating it through empowerment. They distribute promises—we deliver systems. They look at the past—we are building the future.

India's AI journey is not just a technological shift; it is a political transformation—from entitlement to empowerment.

Role of BJP Karykartas: Warriors of Digital Transformation

As BJP karyakartas, we are not mere spectators; we are active participants in this historic transformation.

Our role is clear:

- Take digital awareness to every household
- Encourage youth to adopt AI and digital skills
- Counter misinformation with facts and clarity
- Showcase the success of government initiatives

Every time we help someone make a UPI payment, access an online service, or learn a digital skill, we are strengthening India's digital and AI ecosystem. We are not just political workers, we are the foot soldiers of Digital India and the torchbearers of AI Bharat.

India's March Towards Technological Leadership

India today is no longer following global trends; it is setting them. The journey from Digital India to an AI-driven economy reflects decisive leadership, a clear vision, and an unwavering commitment to national development. Under the leadership of PM Modi, India is emerging as a global AI powerhouse, a hub of innovation, and a model for inclusive technological growth. This is not just Digital India—this is Intelligent India; not just development, but transformation; not just governance, but a rising New India. As karykartas and citizens, our responsibility is to ensure that every Indian becomes part of this journey, taking technology and opportunity to the last mile. The goal is not merely to adopt AI, but to position India at the forefront of the global AI revolution.

This transformation is also redefining India's place in the global order. From leading digital public infrastructure to shaping conversations on ethical and inclusive AI, India is emerging as a voice of balance between innovation and equity. The world is beginning to look at India not just as a market, but as a model. This momentum must now be sustained and deepened by empowering every section of society, especially the youth, to participate, innovate, and lead. Because when India's talent meets opportunity at scale, it does not just change our future, it reshapes the future of the world.

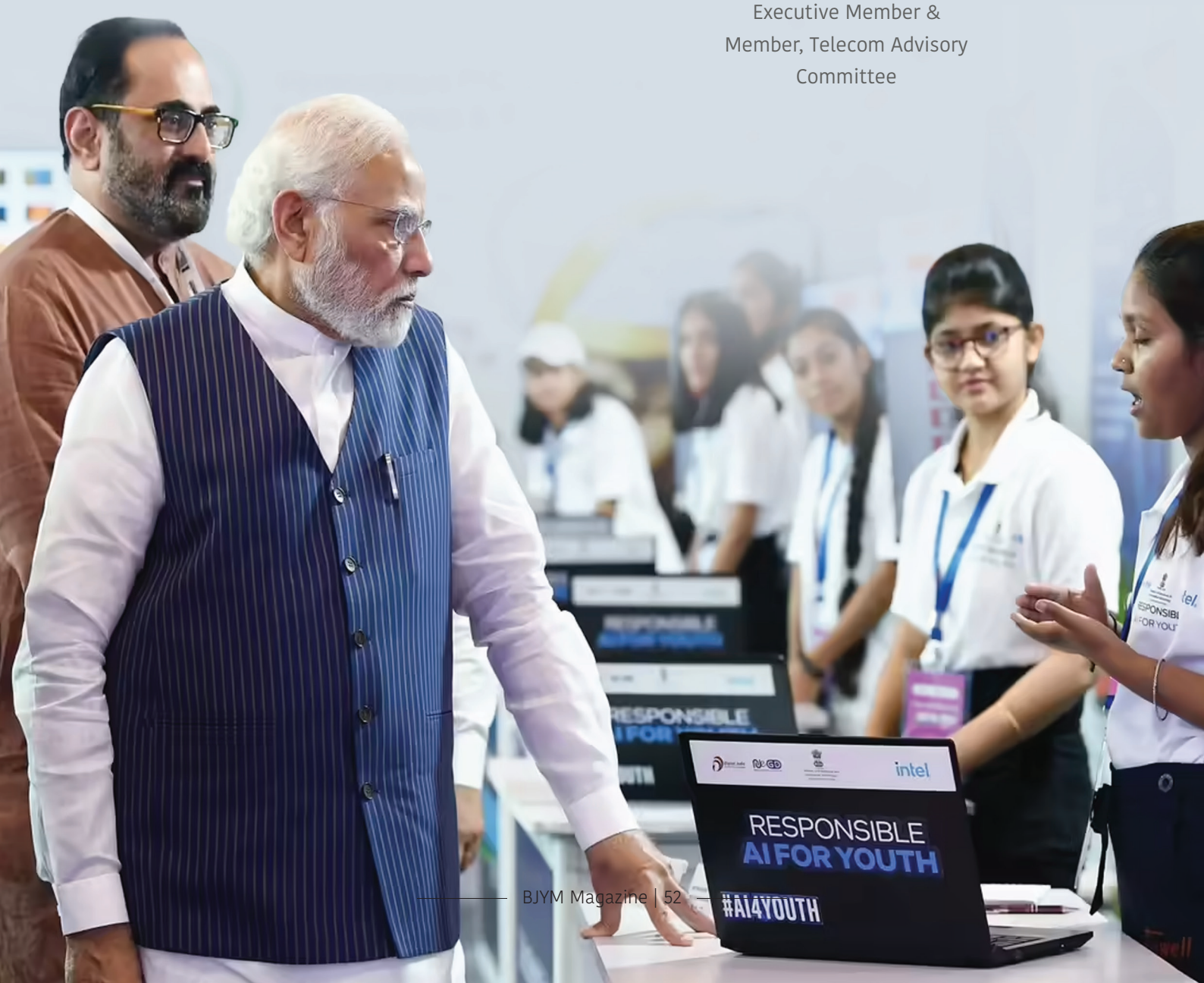
From Digital India to Intelligent India

How Modi's Vision is Building an AI-Ready Nation Future

Nihal Sharma
Former BJYM State Executive Member & Member, Telecom Advisory Committee

When Prime Minister Narendra Modi declared that artificial intelligence (AI) is not just a technology but a "transformative force" for humanity, he outlined a bold vision for India's technological future. As the world moves towards an AI-driven economic revolution, India is no longer a passive observer.

A decade of decisive initiatives from Jan-Dhan accounts and village broadband to GPU computing and indigenous language AI has steadily laid the foundation for India to emerge as a global AI leader.



The Moment Is Now — And India Is Ready

Artificial intelligence is rewriting the rules of economic competition. Nations that lead in AI will lead in industry, governance, healthcare, agriculture, and defence. As AI adds trillions to the global economy, India's young demographic, vast digital base, and tradition of frugal innovation position it to capture a major share of this opportunity.

India today ranks third globally in AI competitiveness and ecosystem vibrancy, as per the Stanford Global AI Vibrancy 2025 report. The country is also the second-largest contributor to AI projects on GitHub. These are not gifts of geography or fortune, they are the direct result of policy choices made boldly and implemented consistently.

The Foundation: Digital India as the Launchpad

No AI economy can be built on an analogue foundation. Before India could dream of intelligent systems, it needed connected citizens, verified identities, and frictionless digital infrastructure. That is precisely what the Digital India programme launched in 2015 set out to build.

Consider what India has constructed. Aadhaar has enrolled over 140 crore citizens, creating the world's largest biometric identity system. The Unified Payments Interface (UPI) is now recognised by the International Monetary Fund as the world's largest retail real-time payment system by transaction volume. India accounts for nearly 49 per cent of all real-time payment transactions globally. DigiLocker manages over 950+ core documents. 5G services now cover 99.9 percent of India's districts.

These are not just statistics. They represent a digital infrastructure of extraordinary scale, one that is inherently AI-ready.

The IndiaAI Mission: A Commitment to the Future

In March 2024, the Cabinet chaired by Prime Minister Modi approved the IndiaAI Mission, a comprehensive, nationally coordinated AI strategy backed by an outlay of ₹10,371.92 crore over five years. Guided by the vision of 'Making AI in India and Making AI Work for India', the mission signals that India intends to build, own, and export AI.

The Mission is built around seven key pillars that aim to strengthen India's entire AI ecosystem. One major initiative is IndiaAI Compute Capacity, which expands access to powerful computing infrastructure. While the initial target was 10,000 GPUs, India has already secured access to around 38,000 GPUs, making high-end computing more affordable. The IndiaAI Innovation Centre is developing indigenous large AI models trained on India-specific data, while the IndiaAI Datasets Platform is creating a national repository of high-quality non-personal datasets for research and innovation. At the same time, the IndiaAI FutureSkills programme is strengthening AI education across universities, supporting scholars through fellowship programmes.

Another important aspect of the mission is its focus on responsible innovation. Through the Safe and Trusted AI pillar, India is working to ensure that AI development remains ethical, transparent, and citizen-centric.

Youth, Skills, and India's Demographic Dividend

India is witnessing a steady rise in AI professionals across sectors, driven largely by its youth. With over 65 per cent of the population below 35, India holds a powerful demographic advantage. The true potential lies in equipping young Indians with the right tools, skills, and platforms to innovate, create, and lead the next wave of technological advancement.

The government has recognised this with targeted investments in AI skilling. PM-SHRI schools, the National Education Policy 2020, and the IndiaAI FutureSkills initiative are together creating a pipeline of AI-literate citizens who are not merely consumers of technology but creators of it.

AI in Governance: Smarter Services for Every Citizen

Perhaps the most tangible impact of India's AI push is in governance. The government has systematically deployed AI where it matters most: in the delivery of public services to citizens who historically had to navigate bureaucratic complexity.

AI-powered translation across 22 Indian languages through the Bhashini platform has made digital services accessible to 500 million non-English speakers. The POSHAN Tracker uses AI to monitor nutrition outcomes for children across India in real time. AI is being deployed in Direct Benefit Transfer systems to detect fraud and ensure that welfare reaches its intended beneficiaries. Court judgments are being translated into regional languages using AI, making justice more accessible. Telemedicine platforms powered by AI are connecting rural patients with urban specialists, transforming healthcare delivery in underserved regions.

This is AI not as an elite tool for the privileged, but as an equaliser — a force for inclusion. It embodies Prime Minister Modi's insistence that technology must work for the last mile.

Start-ups, Deep-Tech, and India's Innovation Economy

India's start-up ecosystem is the third largest in the world, and AI is now its fastest-growing segment. India's deep-tech sector, which includes AI ventures, saw a 78 per cent surge in funding in 2024 from the previous year. From health-tech to agri-tech, from edtech to logistics, young Indian entrepreneurs are building AI-powered solutions to address the unique challenges of a 140-crore-person economy.

The government has been a deliberate enabler of this ecosystem, not just a cheerleader. The IndiaAI Startup Financing pillar provides risk capital to deep-tech ventures that traditional investors often overlook. The India Semiconductor Mission is building the hardware sovereignty that long-term AI leadership requires because a nation that cannot make chips will always be dependent on those who can.

The message is clear: India intends to be the nation that creates the technology the world uses.

Viksit Bharat 2047: The Destination

All of this, the digital infrastructure, the IndiaAI Mission, the skilling programmes, the start-up ecosystem, the semiconductor mission, is in service of a larger vision: Viksit Bharat 2047. By the centenary of India's independence, Prime Minister Modi has set the ambition of making India a fully developed nation. An intelligent economy, powered by indigenous AI, is not a luxury in that vision. It is a necessity.

For India's youth, the window to shape this future is open right now. The infrastructure is being built. What is needed is human energy, entrepreneurial spirit, and patriotic conviction to channel all of this into solutions that serve India and inspire the world.

Conclusion: India's Tryst with the Intelligent Future
India's journey from a largely offline economy to a digital powerhouse and an emerging AI leader has happened in barely a decade. It did not happen by accident. It happened because a government chose to treat digital infrastructure as a public good, AI capability as a national priority, and youth empowerment as its defining purpose.

The work is far from finished. Challenges of data quality, digital literacy, equitable access, and ethical governance remain real and must be addressed with the same urgency as the opportunities. But the foundation has been laid, the direction is clear, and the momentum is real.

अगली सदी AI की
अगली सदी भारत की

शिवम शर्मा
AI में शोधार्थी, IIM इंदौर

आज जब पूरा विश्व आर्थिक अस्थिरता, तकनीकी प्रतिस्पर्धा और बदलते वैश्विक समीकरणों से जूझ रहा है, ऐसे समय में भारत एक नई ऊर्जा और आत्मविश्वास के साथ आगे बढ़ रहा है। इस परिवर्तन के केंद्र में है, कृत्रिम बुद्धिमत्ता (AI) और इसके साथ जुड़ी भारत की युवा शक्ति।

प्रधानमंत्री नरेंद्र मोदी के दूरदर्शी नेतृत्व में भारत ने यह स्पष्ट कर दिया है कि 21वीं सदी केवल उपभोक्ता बनने की नहीं, बल्कि नेतृत्व करने की सदी है। जहाँ कई देश अभी एआई के प्रभाव को समझने में लगे हैं, वहीं भारत ने इसे विकास और सुशासन का सशक्त माध्यम बना लिया है।

भारत की युवा आबादी आज केवल संख्या नहीं, बल्कि एक निर्णायक शक्ति है। देश का युवा आज "रोज़गार खोजने वाला" नहीं, बल्कि "रोज़गार देने वाला" बन रहा है। सरकार की नीतियों ने युवाओं को केवल अवसर ही नहीं दिए, बल्कि उन्हें वैश्विक स्तर पर प्रतिस्पर्धा करने का आत्मविश्वास भी दिया है। यही कारण है कि आज भारतीय युवा एआई, डेटा साइंस और नवाचार के क्षेत्र में दुनिया में अपनी पहचान बना रहे हैं।

जहाँ एक ओर सरकार एआई और डिजिटल क्रांति के माध्यम से देश को आगे ले जाने में जुटी है, वहीं विपक्ष आज भी नकारात्मक राजनीति में उलझा हुआ दिखाई देता है। तकनीक, नवाचार और भविष्य की अर्थव्यवस्था जैसे गंभीर विषयों पर सार्थक सुझाव देने के बजाय, विपक्ष अक्सर केवल आलोचना तक सीमित रह जाता है। यह दुर्भाग्यपूर्ण है कि जब देश एक बड़े परिवर्तन के दौर से गुजर रहा है, तब कुछ लोग राजनीति को प्रगति से ऊपर रख रहे हैं।

पिछले कुछ वर्षों में केंद्र सरकार ने कई ऐतिहासिक कदम उठाए हैं

- डिजिटल इंडिया ने देश को तकनीकी रूप से सशक्त बनाया
- स्किल इंडिया मिशन ने युवाओं को भविष्य के कौशल दिए
- स्टार्टअप इंडिया ने नवाचार को नई ऊँचाइयों तक पहुँचाया
- इंडिया एआई मिशन के माध्यम से भारत को एआई महाशक्ति बनाने की दिशा में ठोस निवेश किया गया

ये पहलें केवल योजनाएँ नहीं, बल्कि एक समग्र दृष्टिकोण का हिस्सा हैं, जिसका उद्देश्य भारत को आत्मनिर्भर और विकसित राष्ट्र बनाना है।

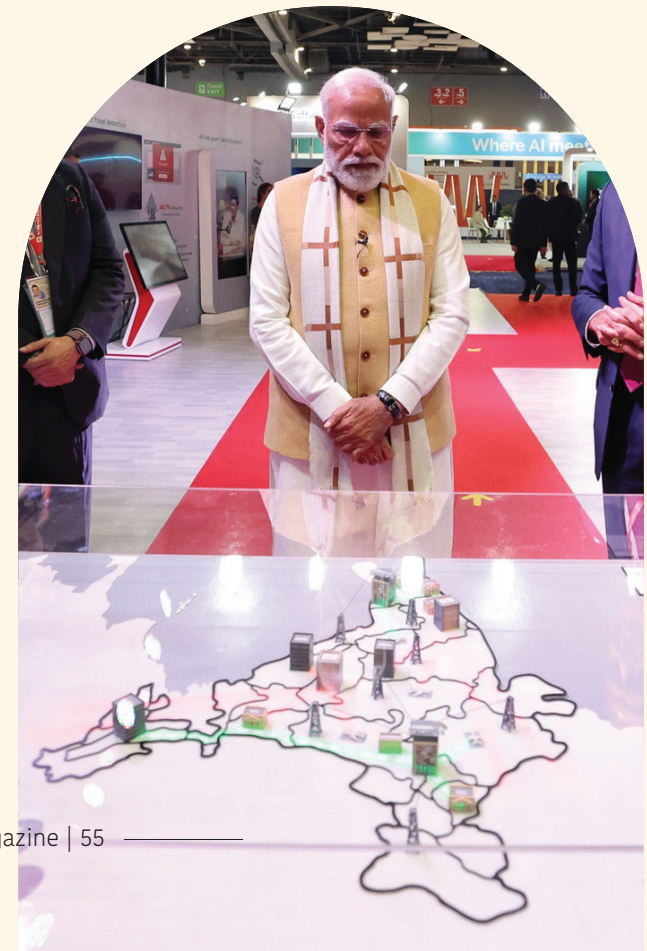
आज भारत का स्टार्टअप इकोसिस्टम दुनिया में सबसे तेज़ी से बढ़ने वाले इकोसिस्टम में शामिल है। हजारों युवा एआई आधारित समाधान विकसित कर रहे हैं, जो न केवल देश की समस्याओं का समाधान कर रहे हैं, बल्कि वैश्विक स्तर पर भी प्रभाव डाल रहे हैं। यह वही भारत है, जहाँ युवा अब "समस्या" नहीं, बल्कि "समाधान" का हिस्सा बन चुके हैं।

भारत का एआई मॉडल केवल तकनीकी प्रगति तक सीमित नहीं है। यह "सबका साथ, सबका विकास" की भावना से प्रेरित है। सरकार का स्पष्ट लक्ष्य है कि एआई का लाभ समाज के अंतिम व्यक्ति तक पहुँचे, चाहे वह किसान हो, छात्र हो या छोटे उद्यमी। यही समावेशी दृष्टिकोण भारत को अन्य देशों से अलग बनाता है।

"विकसित भारत-2047" केवल एक लक्ष्य नहीं, बल्कि 140 करोड़ भारतीयों का सामूहिक संकल्प है। प्रधानमंत्री नरेंद्र मोदी के नेतृत्व में भारत जिस गति से आगे बढ़ रहा है, वह यह दर्शाता है कि आने वाले वर्षों में भारत एआई और तकनीक के क्षेत्र में वैश्विक नेतृत्व करेगा।

आज भारत केवल बदल नहीं रहा, बल्कि बदलते विश्व का नेतृत्व करने की दिशा में अग्रसर है। युवा शक्ति, आधुनिक तकनीक और मजबूत नेतृत्व, इन तीनों का संगम भारत को एक नई ऊँचाई पर ले जा रहा है।

अब समय आ गया है कि हम केवल संभावनाओं की बात न करें, बल्कि उन्हें वास्तविकता में बदलते हुए देखें और यह कार्य आज का युवा, सरकार के साथ मिलकर पूरी क्षमता से कर रहा है।



आर्टिफिशियल इंटेलिजेंस में भारत के नवाचारों को स्वीकार रही दुनिया

सुदर्शन व्यास
शोधार्थी

मानव इतिहास में हर कुछ शताब्दियों में एक ऐसा मोड़ आता है जो सभ्यता की दिशा बदल देता है। ऐसे क्षण विकास की गति को बदल देते हैं और सोचने, समझने और काम करने के तरीकों को बदलाव लाते हैं। परिवर्तन के ऐसे दौर में अक्सर वास्तविक प्रभाव तुरंत समझ में नहीं आता। जब पत्थरों से पहली बार चिंगारी निकली थी, तब किसी ने कल्पना भी नहीं की थी कि वही चिंगारी सभ्यता की नींव बनेगी। जब बोली जाने वाली भाषा को पहली बार लिपि में बदला गया था, तब किसी को यह एहसास नहीं था कि लिखित ज्ञान, भविष्य की प्रणालियों की रीढ़ बनेगा। जब पहली बार वायरलेस तरीके से सिग्नल भेजे गए थे, तब किसी ने कल्पना भी नहीं की थी कि एक दिन पूरी दुनिया एक-दूसरे से जुड़ जाएगी। इसी तरह नई सदी की नई तकनीक आर्टिफिशियल इंटेलिजेंस मानव सभ्यता के ऐतिहासिक मोड़ के समान ही व्यापक परिवर्तन का प्रतिनिधित्व करती है।

हमारा भारत आर्टिफिशियल इंटेलिजेंस द्वारा संचालित एक नये युग की कगार पर खड़ा हुआ है, जहाँ प्रौद्योगिकी ज़िन्दगियां बदल रही है और देश की प्रगति को आकार दे बना रही है। एआई अब केवल शोध प्रयोगशालाओं या बड़ी कंपनियों तक ही सीमित नहीं है। यह हर स्तर पर नागरिकों तक पहुँच रहा है। दूरदराज़ के क्षेत्रों में स्वास्थ्य सेवा तक पहुँच को बेहतर बनाने से लेकर किसानों को फसल के बारे में पूरी जानकारी के साथ निर्णय लेने में मदद करने तक, एआई दैनिक जीवन को सरल, स्मार्ट और अधिक कनेक्टेड बना रहा है। यह व्यक्तिगत शिक्षा के माध्यम से कक्षाओं में क्रांति ला रहा है, शहरों को साफ और सुरक्षित बना रहा है, और तेज, डेटा-आधारित शासन के माध्यम से सार्वजनिक सेवाओं को बेहतर बना रहा है। इंडिया एआई मिशन और एआई उत्कृष्टता केंद्र जैसी पहलें इस परिवर्तन के केंद्र में हैं। ये कंप्यूटिंग पॉवर तक पहुँच का विस्तार कर रही हैं, अनुसंधान का समर्थन कर रही हैं, और स्टार्टअप्स तथा संस्थानों को ऐसे समाधान तैयार करने में मदद कर रही हैं, जिनसे लोगों को सीधे लाभ पहुँचे। एआई वह क्षमता है जो मशीनों को ऐसे कार्य करने में सक्षम बनाती है जिनके लिए सामान्यतः मानव बुद्धिमत्ता की आवश्यकता होती है। यह सिस्टम्स को अनुभव से सीखने, नई परिस्थितियों के अनुकूल ढलने और जटिल समस्याओं को स्वतंत्र रूप से हल करने में सक्षम बनाती है। एआई डेटा सेट, एल्गोरिदम और बड़े भाषा मॉडल का उपयोग करके जानकारी का विश्लेषण करता है, पैटर्न पहचानता है, और प्रतिक्रियाएँ उत्पन्न करता है। समय के साथ, ये सिस्टम्स अपनी प्रदर्शन क्षमता में सुधार करती हैं, जिससे वे मनुष्यों के समान तर्क कर सकें, निर्णय ले सकें और संवाद कर सकें।

नीति आयोग की रिपोर्ट बताती है कि प्रधानमंत्री नरेन्द्र मोदी जी के नेतृत्व में कैसे एआई भारत के 49 करोड़ अनौपचारिक श्रमिकों को स्वास्थ्य सेवा, शिक्षा, कौशल विकास, और वित्तीय समावेशन तक पहुँच प्रदान करके सशक्त बना सकता है। यह रेखांकित करती है कि एआई-आधारित उपकरण लाखों ऐसे लोगों की उत्पादकता और लचीलेपन को बढ़ा सकते हैं, जो भारत की अर्थव्यवस्था की रीढ़ हैं। रिपोर्ट इस बात पर भी जोर देती है कि प्रौद्योगिकी गहरी सामाजिक और आर्थिक खाइयों को पाट सकती है, यह सुनिश्चित करते हुए कि एआई के लाभ हर नागरिक तक पहुँचें। इंडिया एआई इम्पैक्ट समिट 2026 (India AI Impact Summit 2026) का आयोजन 16-20 फरवरी 2026 तक नई दिल्ली के भारत मंडपम में किया गया, जिसमें 100 से अधिक देशों ने भाग लिया। प्रधानमंत्री नरेन्द्र मोदी द्वारा उद्घाटित यह शिखर सम्मेलन ग्लोबल साउथ में आयोजित होने वाला अपनी तरह का पहला प्रमुख एआई सम्मेलन था, जिसका मुख्य उद्देश्य जिम्मेदार एआई विकास और उसके सामाजिक प्रभाव पर चर्चा करना था। इसमें कोई संदेह नहीं की इस सम्मेलन की गूंज लंबे समय तक वैश्विक परिदृश्य में सुनाई देगी। आर्टिफिशियल इंटेलिजेंस (एआई) के प्रति भारत का दृष्टिकोण इस शिखर सम्मेलन के विषय 'सर्वजन हिताय, सर्वजन सुखाय' में स्पष्ट रूप से झलकता है और यही भारत के लिए आदर्श भी है।

भारत में एआई इकोसिस्टम:-

- भारत का प्रौद्योगिकी क्षेत्र तेजी से विस्तार कर रहा है, इस वर्ष इसके वार्षिक राजस्व के 280 बिलियन अमेरिकी डॉलर का आंकड़ा पार कर जाने का अनुमान है।
- प्रौद्योगिकी और एआई इकोसिस्टम में 60 लाख से अधिक लोग काम कर रहे हैं।
- देश में 1,800 से अधिक वैश्विक क्षमता केंद्र हैं, जिनमें 500 से अधिक एआई पर केंद्रित हैं।
- भारत में लगभग 1.8 लाख स्टार्टअप्स हैं, और पिछले वर्ष लॉन्च हुए नए स्टार्टअप्स में से लगभग 89% ने अपने उत्पादों या सेवाओं में एआई का उपयोग किया।
- नैसकॉम (NASSCOM) एआई एडॉप्शन इंडैक्स पर, भारत ने 4 में से 2.45 अंक प्राप्त किए हैं, जिससे पता चलता है कि 87% उद्यम सक्रिय रूप से एआई समाधान का उपयोग कर रहे हैं।
- एआई अपनाने में अग्रणी क्षेत्र हैं: औद्योगिक और ऑटोमोटिव, उपभोक्ता वस्तुएँ और खुदरा क्षेत्र, बैंकिंग, वित्तीय सेवाएँ तथा बीमा और स्वास्थ्य सेवा। ये मिलकर एआई के कुल मूल्य का लगभग 60 प्रतिशत का योगदान करते हैं।
- हाल ही में किए गए एक बीसीजी सर्वेक्षण के अनुसार, लगभग 26% भारतीय कंपनियों ने बड़े पैमाने पर एआई परिपक्वता हासिल कर ली है।

जैसे-जैसे भारत एक समावेशी एआई इकोसिस्टम का निर्माण कर रहा है, इसकी बढ़ती वैश्विक मान्यता इस प्रगति को दर्शाती है। स्टैनफोर्ड एआई सूचकांक जैसी रैंकिंग भारत को एआई कौशल, क्षमताओं और नीतियों में शीर्ष चार देशों में स्थान देती है। देश गिटहब पर एआई परियोजनाओं में दूसरा सबसे बड़ा योगदानकर्ता भी है, जो इसके डेवलपर समुदाय की ताकत को बताता है। एक मजबूत STEM (विज्ञान, प्रौद्योगिकी, अभियांत्रिकी, गणित) कार्यबल, विस्तृत अनुसंधान इकोसिस्टम, और बढ़ती डिजिटल अवसंरचना के साथ, भारत आर्थिक विकास, सामाजिक प्रगति, और 2047 तक विकसित भारत के दीर्घकालिक विज़न को साकार करने हेतु एआई का उपयोग करने के लिए खुद को तैयार कर रहा है।

भारत का एआई दृष्टिकोण केवल प्रौद्योगिकी तक सीमित नहीं है, यह समावेशन और सशक्तिकरण पर केंद्रित है। राष्ट्रीय पहलों और वैश्विक सहयोग के माध्यम से, एआई का उपयोग वास्तविक दुनिया की चुनौतियों को हल करने, सार्वजनिक सेवाओं को बेहतर बनाने, और हर नागरिक के लिए अवसरों को अधिक सुलभ बनाने में किया जा रहा है। ग्रामीण स्वास्थ्य सेवाओं में सुधार करने और मौसम पैटर्न की भविष्यवाणी करने से लेकर न्यायालय के निर्णयों का क्षेत्रीय भाषाओं में अनुवाद करने तक, एआई प्रगति हेतु एक ऐसे सशक्त सहयोगी के रूप में उभर रहा है, जो एक डिजिटली सशक्त और न्यायसंगत भारत के निर्माण में मदद करता है। कुछ प्रमुख क्षेत्र जहाँ एआई दैनिक जीवन को बेहतर बना रहा है, वे हैं:

स्वास्थ्य सेवा:

एआई स्वास्थ्य सेवा प्रदायगी को बदल रहा है। यह चिकित्सकों को बीमारियों का जल्दी पता लगाने, चिकित्सा स्कैन का विश्लेषण करने, और व्यक्तिगत उपचार की सिफारिश करने में मदद करता है। एआई-संचालित टेलीमेडिसिन प्लेटफ़ॉर्म ग्रामीण क्षेत्रों के मरीजों को शीर्ष अस्पतालों के विशेषज्ञों से जोड़ते हैं, जिससे समय और लागत बचती है और उपचार की गुणवत्ता बेहतर होती है। भारत की हेल्थएआई, जो स्वास्थ्य सेवा में सुरक्षित और नैतिक एआई को बढ़ावा देने वाली वैश्विक संस्था है, में भागीदारी और आईसीएमआर तथा इंडियाएआई के संयुक्त प्रयासों के साथ यूनाइटेड किंगडम तथा सिंगापुर जैसे देशों के साथ सहयोग, जिम्मेदार नवाचार और वैश्विक सर्वोत्तम पद्धतियां सुनिश्चित कर रहे हैं।

कृषि:

किसानों के लिए एआई एक विश्वसनीय डिजिटल साथी है। यह मौसम की भविष्यवाणी करता है, कीट हमलों का पता लगाता है, और सिंचाई व बुआई के लिए उपयुक्त समय सुझाता है। कृषि और किसान कल्याण मंत्रालय एआई का उपयोग किसान ई-मित्र जैसी पहलों के माध्यम से कर रहा है। यह एक वर्चुअल असिस्टेंट है, जो किसानों को प्रधानमंत्री किसान सम्मान निधि जैसी सरकारी योजनाओं तक पहुँचने में मदद करता है। राष्ट्रीय कीट निगरानी प्रणाली और फसल स्वास्थ्य निगरानी, उपग्रह डेटा, मौसम इनपुट और मृदा विश्लेषण को मिलाकर रिअल-टाइम में परामर्श प्रदान करते हैं जो उपज और आय सुरक्षा में सुधार करती हैं।

शिक्षा और कौशल विकास:

एआई को भारत की शिक्षा प्रणाली में शामिल किया जा रहा है, जिससे ज्ञानार्जन अधिक समावेशी, आकर्षक, और भविष्य के अनुकूल हो सके। राष्ट्रीय शिक्षा नीति (एनईपी) 2020 के तहत, केंद्रीय माध्यमिक शिक्षा बोर्ड (सीबीएसई) कक्षा VI से 15 घंटे का एआई कौशल मॉड्यूल और कक्षा IX से XII तक वैकल्पिक एआई विषय प्रदान करता है। एनसीईआरटी का दीक्षा डिजिटल लर्निंग प्लेटफ़ॉर्म एआई उपकरणों का उपयोग करता है, जैसे वीडियो में कीवर्ड सर्च और रीड-अलाउड फीचर्स, जिससे एआई की पहुँच (एक्सेस) विशेषकर दृष्टिबाधित विद्यार्थियों के लिए लगातार बढ़ रही है।

"सर्वजनहिताय-सर्वजन सुखाय" के ध्येय को आत्मसात करते हुए प्रधानमंत्री नरेन्द्र मोदी जी के नेतृत्व में भारत आर्टिफिशियल इंटेलिजेंसी में अब वैश्विक नेतृत्व के रूप में उभर रहा है। एआई में देश की उपलब्धियाँ और नवाचार इस बात के प्रमाण हैं कि वर्ष-2047 तक देश की तीन प्रमुख एआई महाशक्तियों में भारत को शामिल कराने का प्रधानमंत्री नरेन्द्र मोदी का स्वप्न निश्चित रूप से साकार होगा।

भारत का "डिजिटल पब्लिक इन्फ्रास्ट्रक्चर" बना दुनिया का मार्गदर्शक

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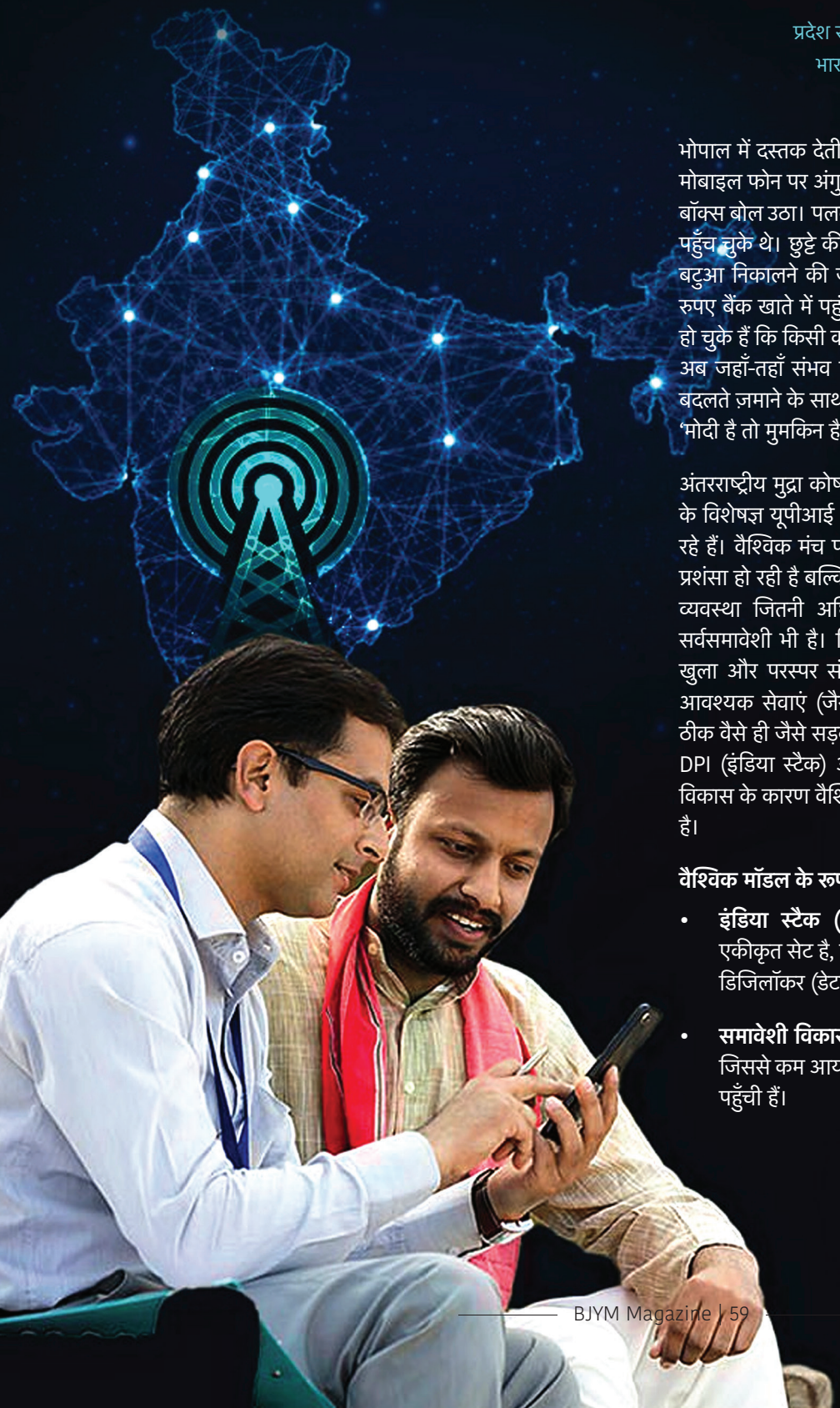
भारतीय जनता पार्टी, मध्य प्रदेश



भोपाल में दस्तक देती गर्मियों की खुशनुमा शाम। एक ग्राहक ने अपने मोबाइल फोन पर अंगुली फेरी और चाट वाले के खोमचे पर रखा साउंड बॉक्स बोल उठा। पलक झपकते ही चाट वाले के बैंक खाते में 20 रुपए पहुँच चुके थे। छुट्टे की कोई झिकझिक नहीं। ग्राहक को सहूलियत कि बटुआ निकालने की जरूरत नहीं पड़ी। खोमचे वाले को तसल्ली कि रुपए बैंक खाते में पहुंच गए। इस तरह के वाकये भारत में इतना आम हो चुके हैं कि किसी को हैरानी नहीं होती। कभी से सपना लगने वाकया अब जहाँ-तहाँ संभव होता देखा जा सकता है, यही कारण भी है कि बदलते ज़माने के साथ बदलती व्यवस्थाएँ और नवाचार ये बताते हैं कि 'मोदी है तो मुमकिन है।'

अंतरराष्ट्रीय मुद्रा कोष (आईएमएफ) के अर्थशास्त्रियों समेत विश्व भर के विशेषज्ञ यूपीआई की इस कामयाबी की कहानी का अध्ययन कर रहे हैं। वैश्विक मंच पर भारत की डिजिटल पेमेन्ट सर्विस की न सिर्फ प्रशंसा हो रही है बल्कि कई देश इसे अपनाने के लिए उत्सुक भी है। ये व्यवस्था जितनी अधिक लचीली है, उतनी ही सुविधाजनक और सर्वसमावेशी भी है। डिजिटल पब्लिक इंफ्रास्ट्रक्चर (DPI) एक ऐसा खुला और परस्पर संवादात्मक डिजिटल ढांचा है, जो नागरिकों को आवश्यक सेवाएं (जैसे- बैंकिंग, पहचान, स्वास्थ्य) सुलभ कराता है, ठीक वैसे ही जैसे सड़कें भौतिक रूप से लोगों को जोड़ती हैं। भारत का DPI (इंडिया स्टैक) अपनी प्रभावशीलता, कम लागत और समावेशी विकास के कारण वैश्विक स्तर पर एक 'आदर्श मॉडल' के रूप में उभरा है।

वैश्विक मॉडल के रूप में DPI की मुख्य विशेषताएं:

- **इंडिया स्टैक (India Stack):** यह प्रौद्योगिकियों का एक एकीकृत सेट है, जिसमें आधार (पहचान), यूपीआई (भुगतान) और डिजिलॉकर (डेटा प्रबंधन) शामिल है।
- **समावेशी विकास:** DPI ने वित्तीय समावेशन को बढ़ावा दिया है, जिससे कम आय वाले और दूरदराज के क्षेत्रों तक डिजिटल सेवाएं पहुँची हैं।

- **खुला और सुरक्षित ढांचा:** इसमें ओपन एपीआई (Open API) और 'प्राइवेसी बाय डिज़ाइन' (Privacy by Design) सिद्धांतों का उपयोग किया गया है, जो नवाचार और डेटा सुरक्षा सुनिश्चित करते हैं।

- **डिजिलॉकर (DigiLocker) :** भारत सरकार की एक सुरक्षित क्लाउड-आधारित डिजिटल सेवा है, जो नागरिकों को आधार, पैन, ड्राइविंग लाइसेंस और मार्कशीट जैसे महत्वपूर्ण दस्तावेजों को डिजिटल रूप में रखने (स्टोर), एक्सेस करने और साझा करने की सुविधा देती है। यह नवाचार प्रमुख रूप से डिजिटल इंडिया पहल का हिस्सा है, जो पेपरलेस गवर्नेंस को बढ़ावा देता है।

- **इंडिया स्टैक (India Stack):** ये व्यवस्था अब आर्टिफिशियल इंटेलिजेंस (AI)-रेडी प्लेटफॉर्म के रूप में तेजी से विकसित किया जा रहा है, जो भारत की एआई-आधारित विकास रणनीति (India AI Mission) का आधार है। यह सार्वजनिक डिजिटल अवसंरचना (Public Digital Infrastructure) का एक समूह है, जिसका उद्देश्य AI के माध्यम से बड़े पैमाने पर जन-केंद्रित समाधान प्रदान करना है। यह मूल रूप से आधार, यूपीआई, और डिजिलॉकर जैसी प्रौद्योगिकियों के माध्यम से पहचान, भुगतान, और डेटा साझाकरण को डिजिटल बनाकर नागरिकों के जीवन को सरल और समावेशी बनाने के लिए डिज़ाइन किया गया है।

- **वैश्विक अपनापन:** भारत ने अपने DPI को साझा करने के लिए कई देशों के साथ समझौते किए हैं, जिससे यह दुनिया के लिए एक 'ओपन-सोर्स' सफलता की कहानी बन गया है।

- **क्षेत्रीय विस्तार:** इसका उपयोग स्वास्थ्य (आयुष्मान भारत डिजिटल मिशन) और कृषि जैसे क्षेत्रों में भी किया जा रहा है।

पिछले 11 वर्षों में मोदी सरकार में हमारा भारत न केवल अपनी डिजिटल जरूरतों को पूरा कर रहा है, बल्कि अन्य विकासशील देशों के लिए एक मॉडल (DPI) प्रदान करके डिजिटल शासन में वैश्विक नेतृत्व की भूमिका निभा रहा है। भारत सरकार के आँकड़ें बताते हैं कि भारत का प्रौद्योगिकी क्षेत्र तेजी से विस्तार कर रहा है, इस वर्ष में इसके वार्षिक राजस्व के 280 बिलियन अमेरिकी डॉलर का आंकड़ा पार कर जाने का अनुमान है। प्रौद्योगिकी और एआई इकोसिस्टम में 60 लाख से अधिक लोग काम कर रहे हैं, जिसके अंतर्गत देश में 1,800 से अधिक वैश्विक क्षमता केंद्र हैं, जिनमें 500 से अधिक एआई पर केंद्रित हैं। भारत में लगभग 1.8 लाख स्टार्टअप्स हैं और पिछले वर्ष लॉन्च हुए नए स्टार्टअप्स में से लगभग 89% ने अपने उत्पादों या सेवाओं में एआई का उपयोग किया है। वहीं, नैसकॉम (NASSCOM) एआई एडॉप्शन इंडैक्स पर भारत ने 4 में से 2.45 अंक प्राप्त किए हैं, जिससे पता चलता है कि 87% उद्यम सक्रिय रूप से एआई समाधान का उपयोग कर रहे हैं। इतना ही नहीं एआई अपनाने में देश के औद्योगिक और ऑटोमोटिव, उपभोक्ता वस्तुएँ और खुदरा क्षेत्र, बैंकिंग, वित्तीय सेवाएँ तथा बीमा और स्वास्थ्य सेवाएँ प्रमुख रूप से अग्रणी क्षेत्र है। ये मिलकर एआई के कुल मूल्य का लगभग 60 प्रतिशत का योगदान करते हैं। हाल ही में किए गए एक बीसीजी सर्वेक्षण के अनुसार लगभग 26% भारतीय कंपनियों ने बड़े पैमाने पर एआई परिपक्वता हासिल कर ली है।

भारत दुनिया का तीसरा सबसे एआई-प्रतिस्पर्धी देश है: स्टैनफोर्ड विश्वविद्यालय के 2025 ग्लोबल एआई वाइब्रेंसी टूल की रिपोर्ट के अनुसार भारत ने कृत्रिम बुद्धिमत्ता प्रतिस्पर्धात्मकता में वैश्विक स्तर पर तीसरा स्थान हासिल किया है। यह रैंकिंग वैश्विक एआई परिदृश्य में भारत के तेज़ विकास को प्रमाणित करती है। रिपोर्ट 2017 से 2024 तक एआई विकास और नवाचार को मापती है। यह हालिया उपलब्धि भारत की तेजी से बढ़ती एआई प्रतिभा, मजबूत अनुसंधान क्षमताओं, जीवंत स्टार्टअप इकोसिस्टम, निवेश और आर्थिक प्रभाव, अवसंरचना, और नीति तथा शासन को रेखांकित करती है।

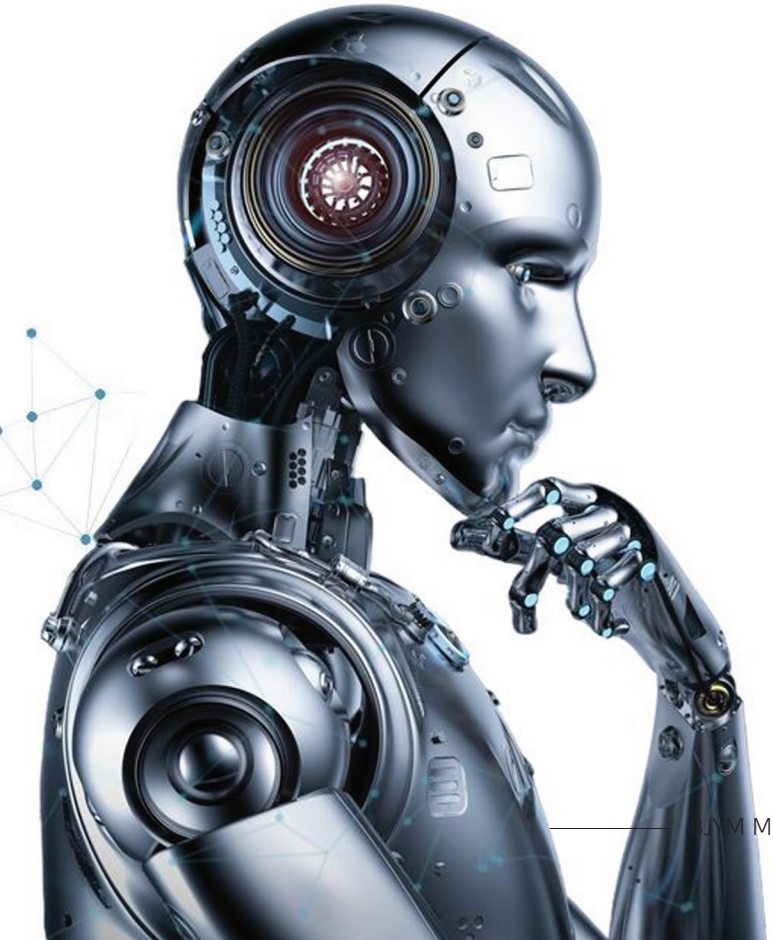
पिछले 11 वर्षों में प्रधानमंत्री मोदी जी के नेतृत्व में केन्द्र सरकार के प्रयासों से 1.39 अरब से अधिक लोगों को बायोमेट्रिक डिजिटल पहचान प्रदान की गई है, जो प्रमाणीकरण की आधारशिला है। यूपीआई के माध्यम से देश में वर्ष 2024-25 में 181 अरब से अधिक डिजिटल लेनदेन हुए हैं। डिजी लॉकर के माध्यम से लोगों के दस्तावेज अब पूर्णरूपेश सुरक्षित एवं संरक्षित हैं। देश की डिजिटल रीढ़ को और मजबूत करने के उद्देश्य से तेजी से बढ़ती डिजिटल अर्थव्यवस्था के साथ क्लाउड कंप्यूटिंग, आर्टिफिशियल इंटेलिजेंस (एआई), मशीन लर्निंग (एमएल) और डिजिटल गवर्नेंस में नवाचारों के माध्यम से सार्वजनिक और निजी क्षेत्रों की बढ़ती जरूरतों को पूरा करने के लिए भारत का बुनियादी ढांचा लगातार विकसित हो रहा है। डिजिटल बुनियादी ढांचे में भारत की परिवर्तनकारी यात्रा नवाचार, समावेशिता और कार्यकुशलता के प्रति इसकी प्रतिबद्धता को रेखांकित करती है। क्लाउड कंप्यूटिंग, एआई जैसी अत्याधुनिक तकनीकों का लाभ उठाकर और आधार, यूपीआई और डिजीलॉकर जैसे उपक्रमों के माध्यम से भारत डिजिटलीकरण में एक वैश्विक लीडर के रूप में उभरा है। सरकारी मंचों के सहयोगात्मक प्रयास और निर्बाध नागरिक भागीदारी एक ऐसे डिजिटल भविष्य का मार्ग प्रशस्त कर रहे हैं जो प्रत्येक नागरिक को सशक्त बनाता है, सामाजिक-आर्थिक विकास को बढ़ावा देता है और शासन को मजबूत करता है। यह डिजिटल क्रांति न केवल भारत की घरेलू क्षमताओं को बढ़ाती है बल्कि राष्ट्र को वैश्विक दक्षिण (ग्लोबल साउथ) के लिए ठोस डिजिटल समाधान प्रदान करने में अग्रणी के रूप में भी स्थापित करती है। जैसे-जैसे भारत इस गति को आगे बढ़ा रहा है यह शासन, सार्वजनिक सेवा वितरण और आर्थिक विकास में संभावनाओं को फिर से परिभाषित करने के लिए तैयार है।

प्रधानमंत्री मोदी जी के नेतृत्व में लगातार किये जा रहे तकनीकी नवाचारों के फलस्वरूप डीपीआई प्रणाली भारत के लेनदेन के परिदृश्य का कायाकल्प करते हुए विश्व की सबसे बड़ी तुरंत भुगतान प्रणाली बन गयी है। इसके जरिए हर महीने औसतन 19 अरब से ज्यादा लेनदेन किए जाते हैं।' मोदी सरकार में आज का नया भारत अंतरसंचालनीयता उपभोक्ताओं के सशक्तीकरण के साथ ही नकदी रहित लेनदेन अपनाए जाने की गति बढ़ाते हुए वित्तीय क्षेत्र में नवोन्मेष को प्रोत्साहित करती है। एक समय ज्यादातर नकदी पर ही चलने वाले देश के लिए आईएमएफ के ये विचार डिजिटल भुगतानों की क्रांति में भारत की कामयाबी का प्रमाण हैं।

AI का 'मानव' विज़न और विकसित भारत का संकल्प

कृष्णमुरारी त्रिपाठी अटल
साहित्यकार, स्तंभकार एवं पत्रकार

भारत नई सांस्कृतिक प्रभा के साथ आगे बढ़ चला है। अपने सांस्कृतिक उन्मेष के साथ ज्ञान-विज्ञान और तकनीकी के क्षेत्र में उन्नति की राह पर अग्रसर है। इसी दिशा में कृत्रिम बुद्धिमत्ता (Artificial Intelligence) नए अवसरों के साथ नई चुनौतियां लेकर आया है। भारत ने इन चुनौतियों को अवसर में बदलने में देरी नहीं की। बल्कि वर्ष 2024 से ही 'इंडिया एआई मिशन' के ज़रिए नवाचारों के साथ इस क्षेत्र में मज़बूत आधारशिला रखी। उसी का प्रकट रूप फरवरी 2026 में नई दिल्ली में आयोजित 'इंडिया AI इम्पैक्ट समिट 2026' में दिखाई दिया। जहां प्रधानमंत्री नरेन्द्र मोदी ने एआई को लेकर भारत की 'सर्वजन हिताय-सर्वजन सुखाय' की संकल्पना को नए रूप में प्रस्तुत किया। प्रधानमंत्री नरेन्द्र मोदी का ये संदेश “Design in India, Develop in India, Deliver to the World, Deliver to Humanity” भारत के भविष्य का स्पष्ट संकेत है। जो 'विकसित भारत @2047' की दिशा का महत्वपूर्ण दिशाबोध है। उद्घाटन कार्यक्रम के ही मंच से उन्होंने AI के लिए M.A.N.A.V (मानव) विजन प्रस्तुत किया, जो तकनीकी विकास को मानवीय मूल्यों से जोड़ता है। नैतिकता, जवाबदेही, डिजिटल संप्रभुता, समावेशिता और वैधता के मनुष्य केन्द्रित बोध को पुनर्परिभाषित करता है। यह दृष्टिकोण बताता है कि भारत केवल AI के क्षेत्र में नई क्रान्ति का महत्वपूर्ण केंद्र ही नहीं बनना चाहता है। बल्कि विकास की दिशा किस ओर होगी? ये भी बता रहा है एम.ए.एन.ए.वी. यानी 'मानव' की संकल्पना का भाव इस बात को सुस्पष्ट करता है कि कोई भी तकनीक मनुष्य कीमत पर नहीं हो सकती।



M.A.N.A.V अर्थात्:

M- नैतिक और नीतिगत प्रणाली (Moral & Ethical Systems)
A- जवाबदेह शासन (Accountable Governance)
N- राष्ट्रीय संप्रभुता (National Sovereignty)
A- सुलभ और समावेशी एआई (Accessible & Inclusive AI)
V-वैध और न्यायसंगत प्रणाली (Valid & Legitimate Systems)

प्रधानमंत्री मोदी द्वारा एआई को लेकर प्रस्तुत ये विचार भारत की समग्र और एकात्म मानवदर्शन की सर्वोच्च अभिव्यक्ति हैं। जो समस्त क्षेत्रों का दिग्दर्शन कराते हैं। इसी दिशा में इंडिया एआई मिशन और एआई उत्कृष्टता केंद्रों के रूप में जो महत्वपूर्ण परिवर्तन और नवाचार दिखाई दे रहे हैं। साथ ही जो नवाचार आगे दिखाई देंगे। वो भारत की वैश्विक साख पर पुनः मुहर लगाने वाले सिद्ध होंगे। इन सारे परिवर्तनों को लागू करने, नवाचार को गति देने के केंद्र में भारत की युवा शक्ति की महत्वपूर्ण भूमिका है। भारत की एआई नीति कंप्यूटिंग शक्ति तक पहुंच का विस्तार, अनुसंधान में निरंतर उत्कृष्टता, स्टार्टअप्स और संस्थानों को ऐसे समाधान विकसित करने में मदद कर रही है जो लोगों को प्रत्यक्ष लाभ पहुंचा सके। साथ ही भारत एआई को ओपेन, सस्ता और सर्वसुलभ बनाने पर कार्य कर रहा है। वर्तमान में अगर भारत के एआई इकोसिस्टम की बात करें तो

तकनीक और एआई इकोसिस्टम में 60 लाख से अधिक लोग कार्यरत हैं। भारत में 1,800 से अधिक ग्लोबल कैपेबिलिटी सेंटर हैं, जिनमें से 500 से अधिक एआई पर केंद्रित हैं। वहीं देश के लगभग 1.8 लाख स्टार्टअप के साथ-साथ नए लॉन्च हो रहे स्टार्टअप में से लगभग 89% न अपने उत्पादों या सेवाओं में एआई का उपयोग कर रहे हैं। नैसकॉम एआई एडॉप्शन इंडेक्स में भारत ने 4 में से 2.45 अंक प्राप्त किए हैं। जो ये बतलाता है कि 87% उद्यम सक्रिय रूप से एआई केंद्रित समाधानों का उपयोग कर रहे हैं। बीसीजी के सर्वेक्षण के अनुसार लगभग 26% भारतीय कंपनियों ने बड़े पैमाने पर एआई परिपक्वता हासिल कर ली है। इससे ये सुस्पष्ट होता है कि एआई को समस्त क्षेत्रों स्वीकार कर, गुणवत्ता और उत्कृष्टता के प्रयास किए जा रहे हैं।

इसके साथ ही घातक चुनौतियां भी समाज के सामने हैं। जहां एक ओर AI का विस्तार जितनी तेजी से हो रहा है, उतनी ही तेजी से डिजिटल विश्वास की आवश्यकता भी बढ़ रही है।

'डीप-फेक और फर्जी कंटेंट' की बाढ़ सी आ रही है। ये पूरे सामाजिक वातावरण को छिन्न-भिन्न करने वाले हो सकते हैं। इस संदर्भ में प्रधानमंत्री नरेन्द्र मोदी कहते हैं कि "जैसे खाद्य पदार्थों पर न्यूट्रिशन लेबल होते हैं, वैसे ही डिजिटल कंटेंट पर भी ऑथेंटिसिटी लेबल्स होने चाहिए, ताकि लोगों को वास्तविक और AI-निर्मित सामग्री के बीच अंतर स्पष्ट हो सके। वॉटरमार्किंग और स्रोत की पारदर्शिता अब AI युग की अनिवार्यता बन चुकी है।"

उल्लेखनीय है कि प्रधानमंत्री मोदी देश और दुनिया के भविष्य यानी बच्चों के लिए AI स्पेस को सुरक्षित और परिवार-मार्गदर्शित बनाने की आवश्यकता को रेखांकित करते हैं। साथ ही बदलते हुए नवीन भारत की नई दिशा का लोहा सारी दुनिया ने माना। जब इंडिया एआई समिट के दौरान 18 फरवरी 2026 को भारत ने तीन स्वदेशी AI मॉडल लॉन्च किए, जो देश की तकनीकी आत्मनिर्भरता की दिशा में महत्वपूर्ण कदम हैं। इन मॉडलों को भारतीय स्टार्टअप्स और शोध संस्थानों ने मिलकर विकसित किया है, ताकि भारत विदेशी तकनीकी की निर्भरता से मुक्त होकर अपने डेटा और आवश्यकताओं के अनुरूप समाधान विकसित कर सके।

इस दिशा में बेंगलुरु की सरवम AI ने अपने स्वदेशी 'सरवम-30 बिलियन और सरवम-105 बिलियन पैरामीटर' वाले लैंग्वेज मॉडल को वैश्विक प्रतिस्पर्धा के बीच ला दिया है। सरवम का उन्नत मॉडल कुछ परीक्षणों में DeepSeek और Google Gemini जैसे वैश्विक सिस्टम बेहतर बताया जा रहा है। वहीं Mixture of Experts तकनीक के उपयोग से इस मॉडल की लागत भी कम होती है, जो इसे व्यावहारिक और व्यापक उपयोग के लिए उपयुक्त बनाता है।

दूसरी ओर Gnani.ai का "वाचना" मॉडल AI की भाषाई और संचार क्षमता को नई ऊँचाई देता है। भारत का यह स्वदेशी मॉडल मात्र 10 सेकंड की आवाज़ सुनकर किसी भी व्यक्ति की आवाज़ को क्लोन कर सकता है । जो 12 भारतीय भाषाओं में उसी शैली, टोन और पिच के साथ बोल सकता है। विशेष बात ये है कि इसे भारतीय भाषा केंद्रित ही रखा गया है। यह मॉडल 12 भाषाओं को सपोर्ट करता है, जिनमें हिंदी, बंगाली, तमिल, तेलुगु, कन्नड़, मलयालम, गुजराती, मराठी, पंजाबी, ओडिया, असमिया और भारतीय अंग्रेजी शामिल हैं। जो आगामी समय में विश्व के लिए भी मानक के तौर पर उभरेगा।इसके साथ ही कम इंटरनेट स्पीड में भी काम करने की इसकी क्षमता भी महत्वपूर्ण है। साथ ही इससे सिस्टम के उपयोग के माध्यम से प्राप्त होने वाला डाटा भारत में ही सुरक्षित रहेगा। यह क़दम देश की नियामक नीति का उदाहरण प्रस्तुत करता है। साथ ही कम इंटरनेट स्पीड में काम करने के चलते ये भारत की भौगोलिक स्थिति को देखते हुए भी अनुकरणीय है। यही कारण है कि 'वाचना' मॉडल सरकारी सेवाओं, कस्टमर सपोर्ट और बड़े व्यावसायिक तंत्रों के लिए कारगर सिद्ध हो सकता है।

इसी क्रम में IIT बॉम्बे के नेतृत्व में विकसित 'भारतजेन परम 2 (17B)' भी एक महत्वपूर्ण मल्टीलिंगुअल AI मॉडल है, जिसे भारतीय भाषाओं और स्थानीय संदर्भों के अनुरूप तैयार किया गया है। इसका उपयोग शासन, शिक्षा, स्वास्थ्य, कृषि और व्यवसाय जैसे विविध क्षेत्रों में किया जा सकेगा। वहीं इसे 'ओपन-सोर्स' करने की योजना भारतीय स्टार्टअप्स और डेवलपर्स को नवाचार के नए अवसर प्रदान करेगी। इस परियोजना को 900 करोड़ रुपये की फंडिंग मिली है। जो इसे देश की सबसे महत्वपूर्ण स्वदेशी AI पहलों में से एक बनाती है। यद्यपि एआई को लेकर भारत में निरन्तर नवाचार चल रहे हैं। किन्तु ये कुछ विशेष उल्लेखनीय उदाहरण हैं। जो भारत की गति और प्रगति के साथ 'स्वदेशी', 'आत्मनिर्भरता' के साथ विश्व कल्याण की दिशा की ओर संकेत करते हैं।

वस्तुत: ये नवाचार जो सामने आए उसके पीछे महत्वपूर्ण भूमिका उस दूर दृष्टि की है जिसे प्रधानमंत्री नरेंद्र मोदी ने साकार रूप में उतारा। साल 2024 से शुरू हुए 'इंडिया AI मिशन' के लिए भारत सरकार ने 10,371

करोड़ रुपए का बजट आवंटित किया। एआई को लेकर भारत की शक्ति, सामर्थ्य और दक्षता को लेकर रणनीति बनाने और उसे साकार करने की दिशा में क़दम बढ़ाए। इसका सुफल ये हुआ कि भारत एआई के क्षेत्र में भी विश्व समुदाय के समक्ष अपनी महत्वपूर्ण भूमिका के साथ खड़ा है।'इंडिया AI मिशन' के अंतर्गत 38,000 से अधिक GPU उपलब्ध कराए जा रहे हैं, जिससे किफायती AI कंप्यूट संभव हो सका है। 'AI कोश' के माध्यम से 3,000 से अधिक डेटासेट और 243 मॉडल उपलब्ध कराए गए हैं। साथ ही, स्वास्थ्य, कृषि, शासन और साइबर सुरक्षा जैसे क्षेत्रों में AI आधारित अनुप्रयोगों को निरन्तर बढ़ावा दिया जा रहा है। फ्यूचर स्किल्स, स्टार्टअप फंडिंग और सुरक्षित AI जैसे स्तंभ इस इकोसिस्टम को व्यापक और संतुलित बनाते हैं। अगर हम कहें कि इंडिया एआई मिशन भविष्य के भारत को गढ़ने वाली रीढ़ के रूप में उभरा है तो ये अतिशयोक्ति नहीं होगी।

वहीं एआई की दिशा में अगर हम कुछ महत्वपूर्ण नवाचारों, उद्यमों और उनके व्यापक सकारात्मक परिवर्तनों की बात करें तो भारत वर्तमान स्थिति में संभावनाओं के नित नए द्वार खोल रहा है।

इसी दिशा में जनहित के क्षेत्र में AI की बात करें तो ग्रामीण स्वास्थ्य सेवाओं में Qure.ai जैसे टूल्स के माध्यम से उन्नत डायग्नोस्टिक्स प्रदान कर रहा है। DIKSHA प्लेटफॉर्म और Ai अनुकूलनशील शिक्षा प्रणाली छात्रों को उनकी गति के अनुसार सीखने का अवसर देती है। जबकि 'भाषिणी' 22 भारतीय भाषाओं में रियल-टाइम अनुवाद कर डिजिटल समावेशन को बढ़ाती है। इसी प्रकार 'YUVAi' कार्यक्रम कक्षा 8 से 12 तक के छात्रों को AI और सामाजिक कौशल से सशक्त बना रहा है। राष्ट्रीय शिक्षा नीति-2020 इन सभी नवाचारों को केवल बढ़ावा ही नहीं देती है बल्कि उन्हें मूर्तरूप देने में महत्वपूर्ण भूमिका निभा रही है।

भारत की विविधतापूर्ण जलवायु, भौगौलिक स्थिति और पर्यावरण को लेकर भी एआई कैसे लाभदायक हो सकता है। इस दिशा में महत्वपूर्ण काम हो रहे हैं। पर्यावरणीय दृष्टि से AI का उपयोग प्रिसीजन और सस्टेनेबिलिटी को बढ़ावा देता है। वहीं 'Kisan E-Mitra' किसानों को उर्वरकों के उपयोग को अनुकूलित करने में सहायता करता है। इससे किसानों की लागत और पर्यावरणीय प्रभाव दोनों कम होते हैं। 'MausamGPT' जैसे एआई निर्माणाधीन मॉडल जिस दिन मूर्तरूप लेंगे उसके बाद से किसानों को स्थानीय भाषा में मौसम आधारित सलाह आसानी से मिलने लगेगी। अभी भी मौसम संबंधी भविष्यवाणियों और दूसरे विश्लेषणों में एआई का पर्याप्त प्रभाव देखा जा रहा है। इसी तरह ऊर्जा प्रबंधन के क्षेत्र में AI स्मार्ट ग्रिड के साथ मिलकर अक्षय ऊर्जा के उपयोग को अधिक प्रभावी बनाता है। साथ ही AI 'क्लाइमेट-स्मार्ट' विकास के लिए एक उपकरण के तौर पर काम करता है। जबकि BrahmaSATARK जैसी Ai से कनेक्टेड प्रणालियाँ बाढ़ के पूर्वानुमान में सहायक सिद्ध हो रही हैं। इतना ही नहीं एआई को जिस मिशन मोड के साथ मोदी सरकार ने अपनाया है। उसके सुखद परिणाम आर्थिक और प्रशासनिक प्रगति के क्षेत्र में भी देखने को मिल रहे हैं। ऐसा अनुमान है कि 2030 तक AI भारत की GDP में 500 से 600 अरब डॉलर का योगदान देगा। ये अपने आप में एक बड़ी बात है।

MuleHunter.AI जैसी तकनीकें बैंकिंग धोखाधड़ी को रोकने में सहायक हैं, जबकि न्यायिक अनुवाद प्रणाली कानूनी प्रक्रियाओं को अधिक सुलभ बना रही है। Aadhaar, UPI और DigiLocker जैसे डिजिटल पब्लिक इंफ्रास्ट्रक्चर में AI का एकीकरण शासन को अधिक प्रभावी और पारदर्शी बना रहा है। इससे न केवल व्यवस्थागत काम आसान हो रहे हैं। बल्कि जन-सामान्य को सरल और पारदर्शी व्यवस्था के चलते 'गुड गवर्नेंस' की अनुभूति हो रही है।

उपर्युक्त समस्त तथ्यों, विवरणों के आधार पर ये कहा जा सकता है कि भारत एक समावेशी एआई इकोसिस्टम का निर्माण कर रहा है। जो ज्ञान आधारित संकल्पना का विश्व पटल पर खाका खींच रहा है। इन सबको मूर्तरूप देने में देश का युवा तकनीकी दक्षता, नवाचारी दृष्टि, अथक श्रम, दूरदर्शितापूर्ण निर्णय और समावेशन के साथ डटा है। जो न केवल नए स्वदेशी मॉडल का विकास कर रहा है बल्कि वैश्विक नेतृत्वकर्ता की भूमिका भी अग्रसर हो रहा है। एआई इनोवेशन में भारत की बढ़ती वैश्विक पहचान इस प्रगति पर मुहर लगाती है। सशक्त और दूरदर्शी नेतृत्व के चलते भारत वैश्विक रैंकिंग में शीर्ष पर है। 'स्टैनफोर्ड एआई इंडेक्स' जैसी रैंकिंग में भारत एआई कौशल, क्षमताओं और नीतियों के मामले में शीर्ष चार देशों में शामिल है। इसी प्रकार 'गिटहब' पर एआई परियोजनाओं में योगदान देने वाला दूसरा सबसे बड़ा देश भी भारत है। जो भारत के डेवलपर समुदाय की शक्ति को उजागर करता है। मजबूत विज्ञान, प्रौद्योगिकी, इंजीनियरिंग और गणित (एसटीईएम) कार्यबल, विस्तारित अनुसंधान इकोसिस्टम और बढ़ते डिजिटल बुनियादी ढांचे के साथ, भारत आर्थिक विकास, सामाजिक प्रगति और 2047 तक विकसित भारत के दीर्घकालिक लक्ष्य के लिए एआई का उपयोग करने के लिए खुद को तैयार कर रहा है। नई खोज, नए नवाचार, नई दृष्टि, नई ऊर्जा के साथ नवोन्मेष की ओर राष्ट्र सतत बढ़ता जा रहा है।नए मानक बना रहा है और आम जनजीवन की खुशहाली के लिए अपनी प्रतिबद्धता दर्ज करा रहा है। AI भारत के लिए केवल एक तकनीक नहीं, बल्कि विकास, समावेशन और वैश्विक नेतृत्व का माध्यम है। यही वह दिशा है, जो भारत को आने वाले वर्षों में न केवल एक AI सुपरपावर बनाएगी, बल्कि उसे विश्व के लिए एक विश्वसनीय और जिम्मेदार तकनीकी मार्गदर्शक के रूप में स्थापित करेगी। भारत अगर बढ़ रहा है नेतृत्व कर रहा है तो वो किसी पर अधिपत्य स्थापित करने के लिए नहीं। बल्कि विश्वबंधु के तौर पर दुनिया को 'मानव', 'मानवता' के सर्वोच्च आदर्श को कार्य और व्यवहार से प्रकट करने के लिए बढ़ रहा है। फिर वो दिन दूर नहीं होगा जब भारत अपने सांस्कृतिक गौरव, इनोवेशन और ज्ञान-विज्ञान-अनुसंधान आधारित उस लक्ष्य को प्राप्त करेगा। जो विकसित भारत की दिशा में मील का पत्थर सिद्ध होगा। भारत समस्त क्षेत्रों में केवल AI महाशक्ति के तौर पर ही नहीं होगा बल्कि सन् 2047 में समूची दुनिया को मानवता के आदर्श के साथ 'महाशक्ति' के वास्तविक अर्थ से साक्षात्कार कराएगा। ये सब केवल सरकार पर केंद्रित छोड़ने से नहीं होगा। बल्कि इसके लिए देश के युवाओं, उद्यमियों और संस्थानों को सामूहिक प्रयास के लिए कृतसंकल्पित होना पड़ेगा। ये हम करके ही दिखाएंगे।

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