



AI for a Better Tomorrow: India's Path to Global Leadership @Viksit Bharat 2047

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Abstract

In this chapter, we are showcasing and presenting India's journey at a defining moment in the global artificial intelligence (AI) revolution. With its young population, expanding digital backbone, and rapidly growing talent base, India has the potential to evolve from being a technology back-office to a creator of AI-driven solutions. Building on innovations such as Aadhaar, UPI, and the JAM trinity, the country has already proven its ability to design and scale digital platforms that impact millions of lives. The chapter highlights how AI is transforming key sectors. In agriculture, precision farming, soil health monitoring, and smart irrigation are improving yields and sustainability. In healthcare, telemedicine and AI-powered diagnostics are extending quality care to underserved areas. Education is becoming more inclusive through adaptive learning and multilingual AI tutors. Meanwhile, AI in finance is enabling fairer credit access and fraud detection, and in governance, it is driving transparency, efficiency, and citizen-first administration. We also present the opportunities and challenges ahead—strengthening research, building academia-industry partnerships, nurturing a skilled and diverse workforce, and investing in infrastructure like 5G and green computing. At the same time, addressing the digital divide, affordability, multilingual access, and ethical concerns such as bias and privacy will be critical to ensuring inclusive growth. By 2047, aligned with the vision of *Viksit Bharat*, India aspires to be a premier hub for affordable, culturally relevant AI. This chapter presents how success will be measured not only in economic gains but in AI's power to uplift communities and drive equitable, sustainable progress.

Keywords: Artificial Intelligence (AI), Digital Transformation, Inclusive Growth, Viksit Bharat 2047, Innovation.

Introduction

India at the AI Crossroads

- **The Great Opportunity**

India stands at a defining juncture in the global artificial intelligence (AI) revolution. With the convergence of its demographic dividend and accelerated digital transformation, this is India's moment to lead. Boasting one of the youngest populations in the world, India has a vast reservoir of digitally literate, STEM-trained professionals who can drive AI development at scale. This human capital, when empowered with strategic investments and visionary policy, can place India at the forefront of AI innovation.

Globally, China has demonstrated how rapid state-driven AI adoption can reshape economies, while the United States leads through a culture of research, entrepreneurship, and cutting-edge innovation. India must learn from both—building strong public-private collaboration, investing in AI research hubs, and fostering startups that solve local and global problems.

Traditionally seen as the back-office of the tech world, India now has the chance to evolve into a creator of AI-powered solutions—from multilingual conversational AI to precision agriculture, smart governance, and scalable health technologies. By aligning its AI trajectory with the goals of Viksit Bharat 2047, India can leapfrog into a future where it is not just a participant in the AI revolution, but a global leader shaping its course.

- **Our Starting Point**

India's journey into the AI era is built on a strong foundation of digital infrastructure. Flagship initiatives such as Aadhaar (the world's largest biometric ID system), UPI (a revolutionary real-time payment interface), and the JAM trinity (Jan Dhan-Aadhaar-Mobile) have transformed the way millions access banking, identity verification, and public services. These innovations have not only accelerated financial inclusion but also demonstrated India's capability to build and deploy digital systems at scale.

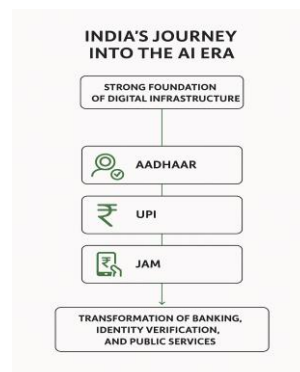


Figure 1: India's journey into the AI era through Aadhaar, UPI, and JAM

India's AI capabilities are growing steadily. The country is home to the third-largest AI talent pool in the world, with a rapidly expanding base of data scientists, machine learning engineers, and AI researchers. Startups leveraging AI in fields like healthcare, agriculture, education, and logistics are flourishing, supported by incubators and innovation hubs. Institutions like IITs, IISc, and IIITs are also stepping up AI-focused research and curriculum development.

The ecosystem is increasingly collaborative. The government, through initiatives like the National AI Mission, is laying down policy and infrastructure frameworks. Industry players are investing in AI R&D, and academia is aligning curricula with emerging technologies. However, India's AI journey is not without challenges. There are gaps in deep-tech research funding, limited access to high-quality datasets, and a shortage of AI-focused PhDs. The translation of academic research into real-world applications remains inconsistent, and ethical frameworks for AI use are still evolving.

To truly lead, India must address these gaps with urgency—strengthening academia-industry linkages, supporting foundational research, and ensuring that AI development aligns with societal needs and national priorities.

- **The Vision Ahead**

For a developing nation like India, AI leadership is not merely about technological supremacy—it is about harnessing intelligence to drive inclusive, equitable growth. True leadership in AI must be rooted in solving India's most pressing challenges: improving crop yields for small farmers, enhancing access to affordable healthcare, personalizing education at scale, managing urban infrastructure, and delivering citizen services efficiently. In doing so, India can also generate scalable, adaptable solutions for the Global South.

AI offers India a historic chance to leapfrog traditional stages of development. Just as mobile phones helped bypass landlines, AI can help circumvent infrastructural and resource constraints in sectors like education, diagnostics, and governance. By embedding AI into public platforms and social services, India can redefine development models that are affordable, accessible, and inclusive.

Success, however, must be defined in Indian terms. It should not be measured solely by patents, unicorns, or global rankings—but by how effectively AI uplifts rural communities, bridges linguistic and economic divides, and empowers every citizen to participate in the digital economy. The vision is clear: an India where AI is not an elite tool, but a transformative force that aligns with the aspirations of Viksit Bharat 2047—a nation that leads with purpose, responsibility, and compassion.

Sector-by-Sector Transformation

• **Agriculture: Feeding the Nation Smartly**

India's 146 million small and marginal farms are seeing real gains from AI-driven tools like satellite imaging, drones, and sensors. Precision farming now guides when to sow, how much to fertilize, and how to control pests—boosting yields, cutting costs, and supporting sustainability. AI-powered weather forecasts give location-specific advice to plan irrigation, adapt to monsoon shifts, and prepare for extreme weather.

AI is also improving market access and resource management. Platforms predicting crop prices and demand help farmers sell at the right time and place, reducing middlemen and ensuring fairer returns. Smart irrigation systems optimize water use in a sector consuming over 80% of India's freshwater. Successful pilots in states like Punjab and Karnataka show AI in agriculture is already transforming farming into a more resilient, tech-enabled enterprise as shown in Table 1.

Table 1: AI Enabled and Assisted Agriculture Sector

State	AI Applications	Description/Impact
Punjab	Crop Planning & Diversification	AI models with satellite/drone imagery + yield/weather data to recommend sustainable crops, reducing paddy dependence.
	Soil Health Monitoring	AI analysis of Soil Health Card data for targeted fertilizer advice, improving soil fertility.
	Agri-Fintech Solutions	AI-based credit profiling via PAU Kisan App for easier loans.
Karnataka	Bhoochetana Project	AI-driven soil nutrient mapping & micronutrient management with SMS-based advice.
	AI for Agri Crop Planning	AI analysis of soil, weather, and market data to recommend crops & harvest timing
	Water & Irrigation Management	AI & IoT for optimal irrigation scheduling in river basin
	Agri-Fintech & Insurance	AI-powered crop loss assessment for faster PMFBY payouts

• **Healthcare: Quality Care for All**

India's healthcare system faces the dual challenge of accessibility and quality, particularly in rural and underserved regions. AI is emerging as a powerful equalizer by enabling solutions that bridge these critical gaps. Telemedicine, powered by AI chatbots and diagnostic tools, is reaching remote areas where specialist doctors are scarce. Through mobile apps and health kiosks, patients can receive consultations, prescriptions, and follow-ups without traveling long distances.

At the primary health centre (PHC) level, AI-based diagnostic systems are being deployed to detect diseases such as tuberculosis, anemia, and diabetic retinopathy with high accuracy. These tools assist frontline health workers in early identification, reducing the burden on tertiary care facilities and improving outcomes.

AI is also accelerating drug discovery by analyzing vast datasets to identify promising compounds and predict drug interactions—cutting down both time and cost. In urban hospitals, personalized medicine is becoming feasible, with AI tailoring treatments based on an individual's genetic and lifestyle data. In the mental health space, AI-driven platforms offer 24/7 support, stress assessment, and mood tracking, enhancing awareness and early intervention. Meanwhile, predictive analytics is playing a vital role in preventive healthcare, flagging potential disease outbreaks and helping shape proactive public health strategies.

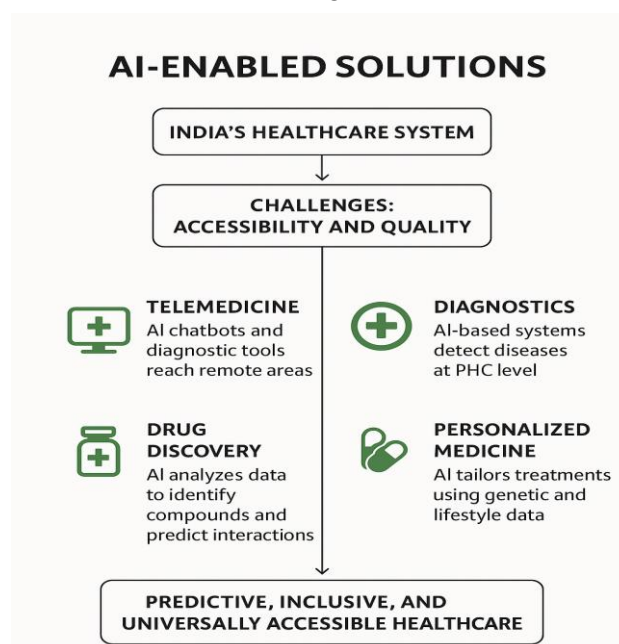


Figure 2: AI-enabled solutions for accessible and quality healthcare in India.

- **Education: Preparing Future Generations**

India's education system, serving over 260 million students, must evolve to meet the diverse learning needs of its vast population. AI has the potential to democratize education by offering personalized learning paths tailored to each student's pace, strengths, and weaknesses. Adaptive learning platforms powered by AI can help students grasp difficult concepts through interactive modules, real-time feedback, and customized assessments. By reducing costs, expanding access, and improving learning outcomes, AI is reshaping education from the ground up. It brings India closer to the goal of affordable, inclusive, and future-ready education—empowering the next generation to thrive in an AI-driven world.

Language is no longer a barrier. Multilingual AI tutors and virtual assistants are enabling students from non-English-speaking backgrounds to access quality content in their native languages—breaking down regional disparities and improving comprehension. These tools are especially valuable in rural and semi-urban schools where teacher shortages persist. AI is also helping align education with the demands of a fast-changing job market. Platforms now use data to forecast emerging skills and recommend training programs, preparing students for careers in AI, robotics, green energy, and beyond. Meanwhile, digital literacy campaigns—supported by AI-curated content—are helping bridge the rural-urban digital divide.

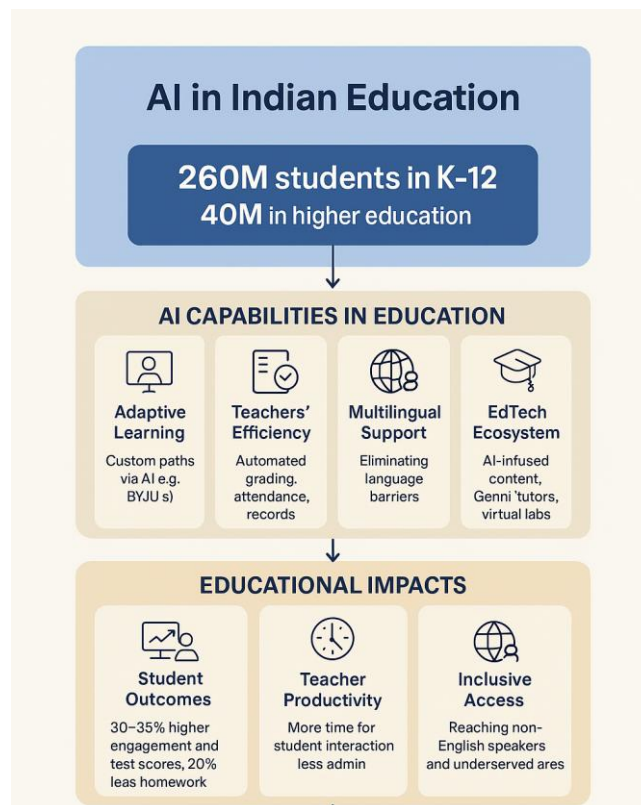


Figure 3: AI in Indian education—enhancing learning, teacher efficiency, and inclusive access

- **Financial Services: Banking the Unbanked**

AI is revolutionizing financial services in India, especially for populations previously excluded from the formal economy. Traditional credit scoring models often exclude those without formal income records or collateral. AI bridges this gap by using alternative data—such as mobile usage, utility payments, and transaction patterns—to assess creditworthiness, enabling micro-lending to small entrepreneurs, daily wage workers, and farmers.

Fraud detection systems powered by AI are enhancing cybersecurity by analyzing transaction anomalies in real time, protecting both consumers and institutions. Insurance providers are using AI to design low-cost, need-based products for the informal sector, with simplified claim processes driven by automated verification and remote sensing. Importantly, insurance for the informal sector—which makes up nearly 90% of India's workforce—is becoming more accessible through AI-driven underwriting, simplified claims using remote sensing, and chatbot-based customer support.

Together, these innovations are advancing financial inclusion, giving millions access to banking, credit, and protection tools. AI is helping build a more secure, responsive, and inclusive financial ecosystem that supports India's broader development goals.

- **Governance: Citizen-First Administration**

AI is transforming governance by making services more transparent, efficient, and citizen-centric. Automated systems speed up welfare disbursements, tax filing, and grievance redressal, reducing delays and boosting accountability. With AI analyzing demographic, health, and economic data, policies are now evidence-based and outcome-driven.

In cities, AI powers smart initiatives like traffic control, waste management, and energy optimization, improving urban life and guiding sustainable infrastructure planning. By limiting human intervention, it curbs corruption and fraud. Overall, AI enhances transparency, responsiveness, and trust, supporting India's vision of inclusive and accountable governance.



Figure 4: AI Applications in Governance—Public Services, Policymaking, Smart Cities, and Accountability

The Innovation Ecosystem

- **Building World-Class Research**

India's ambition to lead in AI depends fundamentally on building world-class research capabilities. Strengthening premier institutions like the IITs, IISc, and central research labs is critical. These institutions must be equipped with cutting-edge infrastructure, high-performance computing resources, and access to diverse datasets to foster breakthrough AI innovations.

Robust industry-academia collaboration models are essential to bridge the gap between theoretical research and practical application. By encouraging joint projects, internships, and knowledge exchange, academia can align curricula with industry needs, while companies gain access to fresh talent and novel ideas.

To elevate India's global standing, it is important to attract international research investments through strategic partnerships, grants, and incentives. This will promote cross-border innovation and help Indian researchers collaborate with global AI leaders.

At the same time, India must focus on creating and protecting indigenous intellectual property. Encouraging patents, startups, and spin-offs will ensure that homegrown AI technologies contribute to economic growth and global competitiveness. Building this vibrant research ecosystem is a cornerstone for realizing India's AI vision by 2047.

- **The Startup Revolution**

India's AI ecosystem is being energized by a vibrant startup revolution that is transforming ideas into scalable businesses. From early-stage ventures to unicorns and aspiring decacorns, Indian AI companies are innovating across sectors—healthcare, agriculture, fintech, education, and more. These startups are not only addressing local challenges but also developing solutions with global relevance.

Innovation is no longer confined to metropolitan hubs like Bengaluru or Hyderabad. Tier-2 and Tier-3 cities are emerging as dynamic innovation centers, fueled by growing digital literacy, improved internet access, and government-backed incubators. This geographical diversification helps tap into local talent and diverse perspectives, fostering inclusive growth.

Government initiatives such as Startup India, increased funding schemes, tax incentives, and policy reforms have provided critical support to this ecosystem. Investments in infrastructure, including AI-focused research parks and accelerators, have further lowered barriers for entrepreneurs.

The export potential of Indian AI solutions is immense, with products tailored for emerging markets and sectors with similar development needs. As these startups scale, India is poised to become a global AI powerhouse—driving innovation, creating jobs, and contributing significantly to the knowledge economy envisioned in Viksit Bharat 2047.

- **Talent Development**

India's AI ambitions hinge on nurturing and retaining a diverse, skilled workforce. While many Indian AI professionals seek global exposure, it is vital to create opportunities that encourage them to return or contribute remotely. Programs promoting international collaborations and research exchanges help blend global best practices with local insights.

Corporate training and reskilling initiatives are rapidly expanding to keep pace with evolving AI technologies. Leading companies and startups offer continuous learning platforms, boot camps, and certification programs to upskill employees and equip the workforce with cutting-edge expertise.

Increasing women's participation in AI careers is critical for an inclusive innovation ecosystem. Efforts to close the gender gap include scholarships, mentorship programs, women-led incubators, and targeted hiring policies, ensuring diverse perspectives drive AI development.

Building a robust talent pipeline requires a seamless transition from school to workplace. Early AI education, coding clubs, and practical workshops introduce students to AI concepts, while partnerships between educational institutions and industry offer internships and apprenticeships. This comprehensive approach aims to empower the next generation of Indian AI professionals, ensuring Viksit Bharat 2047 is powered by talent that is skilled, inclusive, and future-ready.

Infrastructure and Enablers

- **Digital Backbone**

A robust digital backbone is essential for India's AI-driven future, and recent advances signal strong progress. The nationwide 5G rollout promises high-speed, low-latency connectivity, unlocking new possibilities for real-time AI applications—from telemedicine in remote villages to smart agriculture. Expanding rural connectivity ensures that digital services reach every corner of the country, bridging the urban-rural divide.

To support the massive data and computing demands of AI, India is rapidly expanding its network of data centres and investing in scalable cloud infrastructure. These facilities enable businesses and government agencies to access powerful computing resources without prohibitive costs, accelerating innovation and deployment.

As digital ecosystems grow, cybersecurity and data protection become paramount. AI-powered threat detection systems and stringent data privacy frameworks help safeguard citizens' information and maintain trust in digital platforms.

India is also committed to green computing, adopting energy-efficient hardware, cooling technologies, and renewable power for data centres. Sustainable

technology practices not only reduce the environmental footprint but also align with India's broader goals of climate responsibility and sustainable development—making the digital backbone resilient and future-ready.

- **Regulatory Framework**

India's regulatory framework plays a crucial role in fostering AI innovation while safeguarding citizens' rights and interests. Striking the right balance between encouraging technological progress and ensuring consumer protection is key to building public trust. Regulations must enable experimentation and growth, without compromising safety, fairness, or transparency.

Data is the lifeblood of AI, and India's evolving data localization and privacy laws ensure that personal information is handled securely and ethically. The Personal Data Protection Bill and related guidelines mandate strict controls on data usage, consent, and cross-border transfers, reinforcing accountability among organizations.

To navigate complex ethical questions, India has established AI ethics and governance committees comprising experts from academia, industry, and civil society. These bodies set standards on algorithmic fairness, bias mitigation, and transparency, fostering responsible AI development aligned with India's social and cultural values.

India also actively engages in international cooperation, aligning with global AI standards and participating in multilateral forums. Collaboration on cross-border data flows, cybersecurity, and AI norms ensures India remains integrated with the global AI ecosystem while protecting its sovereignty and citizens.

Together, these measures create a regulatory environment that nurtures innovation, protects rights, and promotes ethical AI leadership.

- **Funding and Investment**

Sustained funding is critical to India's AI ambitions. The government has launched initiatives like the National AI Mission with substantial budget allocations aimed at fostering research, startups, and infrastructure development. These public investments create a foundation for innovation and capacity building.

The private sector plays a complementary role, with increasing investments in AI-driven startups, corporate R&D labs, and technology accelerators. Leading Indian and global companies are funding AI projects that address both domestic and international markets, driving commercial viability.

International funding and partnerships are also growing, as global venture capitalists and development agencies recognize India's potential as a key AI hub. These collaborations bring not only capital but also expertise and market access.

Additionally, capital markets are becoming more receptive to AI companies, with growing listings and funding rounds that help scale innovations. Together, these funding streams form a comprehensive ecosystem supporting India's journey to AI leadership.

Challenges and Solutions

- **The Digital Divide**

Despite India's remarkable digital progress, the urban-rural technology gap remains a significant barrier to equitable AI adoption. While cities enjoy high-speed internet and advanced digital tools, many rural areas still struggle with basic connectivity, limiting access to AI-powered services in healthcare, education, and governance.

Language diversity further complicates this divide. India's 22 official languages and hundreds of dialects demand AI systems that can understand, translate, and interact in multiple languages. Without robust localization, millions of non-English speakers remain excluded from digital opportunities.

Affordability is another major hurdle. Many low-income households cannot afford smartphones, data plans, or digital devices, restricting their participation in the AI-driven economy. Even where devices are available, digital literacy gaps limit effective usage.

Lastly, infrastructure limitations—including unreliable electricity, poor network coverage, and lack of data centers—hamper consistent service delivery in remote regions. Addressing these challenges requires targeted investments in connectivity, affordable technology, multilingual AI solutions, and user education. Bridging the digital divide is essential to ensure that AI's benefits reach every citizen, fulfilling the promise of inclusive growth in Viksit Bharat 2047.

- **Skills and Employment**

The rise of AI inevitably sparks concerns around job displacement, particularly in sectors reliant on routine or manual tasks. While automation may reduce certain roles, it also creates opportunities by enhancing productivity and enabling workers to focus on higher-value activities. Understanding the balance between these realities is crucial for managing the transition effectively.

India's vast workforce requires comprehensive reskilling and upskilling programs to adapt to evolving job requirements. Government initiatives, corporate training, and vocational institutes must collaborate to deliver scalable learning platforms focused on AI literacy, digital skills, and emerging technologies. This approach helps workers transition smoothly into new roles and reduces the risk of long-term unemployment.

AI is also creating entirely new categories of employment, from data annotation and AI ethics specialists to AI maintenance technicians and innovation managers. Encouraging entrepreneurship and innovation within these emerging fields will generate diverse job opportunities across urban and rural India.

To support workers during this shift, robust social safety nets—such as unemployment benefits, healthcare access, and income support—are essential. Together, these measures will help India's workforce navigate AI-driven changes with resilience, ensuring economic growth remains inclusive and sustainable.

- **Ethical and Social Concerns**

As India embraces AI, addressing ethical and social concerns is critical to ensuring technology serves all citizens fairly and responsibly. AI systems trained on biased data risk perpetuating existing inequalities—whether related to caste, gender, or region—making fairness and bias mitigation a priority. Algorithms must be designed with sensitivity to India's diverse social fabric to avoid unintended discrimination.

Privacy is another pressing challenge. In an era where AI-enabled surveillance can track individuals extensively, protecting personal data is paramount. India's evolving data protection laws aim to safeguard citizen privacy while balancing national security and innovation, but enforcement and public awareness remain areas for ongoing focus.

AI solutions must also respect cultural sensitivities and values, reflecting India's pluralistic society. From language use to ethical norms, AI should be adapted to local contexts rather than imposing one-size-fits-all frameworks.

Finally, the democratic governance of AI systems is essential. Transparency, accountability, and public participation in policymaking ensure that AI technologies align with societal goals and human rights. By embedding ethical principles into AI's development and deployment, India can build trust and foster equitable progress in its AI journey.

Global Positioning and Partnerships

- **India's Unique Value Proposition**

India's AI journey is distinguished by its tradition of frugal innovation, delivering cost-effective, scalable solutions that address real-world challenges. This ability to innovate under resource constraints gives India a competitive edge in developing affordable AI applications suited for diverse populations.

The country's multilingual landscape is another unique strength. Indian AI developers are pioneering multilingual AI systems capable of understanding and interacting in dozens of languages and dialects, setting a global benchmark for linguistic diversity and inclusion.

Rooted in democratic values, India emphasizes transparency, ethics, and citizen rights in AI governance, fostering responsible technology development aligned with societal needs.

By combining innovation, diversity, and democratic ideals, India is uniquely positioned to serve as a bridge between developed and developing worlds—creating

AI solutions that are not only technologically advanced but also accessible and relevant across socio-economic contexts worldwide. This positions India as a global leader in inclusive AI innovation.

• **Strategic Partnerships**

India's rise in AI is strengthened through technology collaborations with friendly nations, enabling knowledge exchange, joint research, and co-development of AI solutions. Partnerships with countries like the US, Japan, and the EU accelerate innovation while safeguarding strategic interests.

A key focus is South-South cooperation, where India shares its AI expertise with developing nations across Africa, Asia, and Latin America. This knowledge sharing fosters collective growth and addresses shared challenges such as healthcare, agriculture, and digital governance.

India's extensive diaspora networks serve as vital bridges, facilitating global talent circulation, investment, and mentorship. These networks help integrate Indian AI innovations with global ecosystems, enhancing competitiveness and outreach.

Additionally, growing trade and export opportunities for Indian AI products and services expand the country's footprint in international markets. By leveraging strategic partnerships, India is positioning itself as a collaborative, responsible, and influential player in the global AI landscape.

INDIA'S RISE IN AI – GLOBAL DIMENSIONS		
Area	Key Evidence / Examples	Data Highlights
Technology Collaborations with Friendly Nations	• U.S.–India iCET (AI, quantum, semiconductors) • GPAI (India = founding member, 29 countries) • India–Japan R&D (AI in vehicles, IoT) • India–EU AI Office collaboration (LLMs, responsible AI)	• US\$2M joint AI/quantum grants • Strategic R&D partnerships with US, Japan, EU
South-South Cooperation	• Large Indian AI talent abroad • Diaspora investments & mentorship • AI founders in U.S. startups	• 9:8% of global AI jobs linked to India • 11% of U.S. AI founders = Indian-origin
Trade & Export of AI Products & Services	• U.S. hiring of Indian AI talent • Remote GCCs & outsourcing • Novo Nordisk AI hub in Bengaluru	• US\$2.5B diaspora investment (2024) • Reverse brain drain but 44% top AI talent migrated abroad

Figure 5: India’s Global Rise in AI through Collaborations, South-South Cooperation, and Exports

• **Leading Global Conversations**

India is emerging as a key voice in shaping AI governance and international standards, advocating for frameworks that balance innovation with ethics,

transparency, and human rights. By participating actively in global forums, India influences policies that ensure AI technologies serve the common good without compromising fairness or security.

Championing sustainable development through technology is another pillar of India's global role. AI is leveraged to advance the United Nations Sustainable Development Goals—addressing climate change, healthcare access, education, and economic inclusion—demonstrating technology's power to drive equitable progress.

Championing responsible AI for humanity, India emphasizes developing AI systems that prioritize human welfare, dignity, and equity, ensuring technology benefits all sections of society without exacerbating inequalities.

India also emphasizes digital sovereignty and data rights, advocating that nations maintain control over their data and protect citizen privacy amid growing digital globalization. This stance supports a multipolar internet ecosystem where data flows respect national laws and cultural contexts.

Through these efforts, India positions itself as a responsible global leader, fostering international cooperation that harnesses AI for inclusive, sustainable, and ethical development.

The 2047 Roadmap

- **Phase-wise Implementation:** India's AI journey toward 2047 is mapped out through a clear, phased approach as elucidated in Table 2.

Table 2: Phase-wise Implementation of India's AI journey toward 2047

Phase	Timeline	Key Objectives	Focus Areas
Foundation Building	2024–2027	Establish the groundwork for AI growth	• Strengthen digital infrastructure • Pilot AI projects • Develop talent & research • Create regulations • Start public–private partnerships
Adoption	2028–2035	Scale AI use	• Expand pilots nationally • Grow AI startups • Increase exports • Boost global ties • Apply AI in governance
Leadership	2036–2047	Lead in AI	Drive ethical, advanced AI • Set global standards • Export solutions • Achieve Viksit Bharat 2047
Ongoing	2024–2047	Stay on track	Monitor milestones • Adapt to trends • Align with national goals

- **Success Metrics**

Measuring India's AI progress requires a balanced set of economic, social, and innovation indicators. Economically, success will be reflected in AI's contribution to GDP growth, increased exports of AI technologies and services, and the creation of new employment opportunities across sectors.

Social impact is equally critical. Improvements in healthcare outcomes, enhanced education quality through personalized learning, and greater efficiency in governance and public services will demonstrate AI's role in uplifting lives and ensuring inclusive development.

Innovation will be tracked through the number of patents filed, research publications, and the growth in startup valuations and funding rounds, highlighting India's capacity to create cutting-edge AI solutions.

Finally, India's standing in global AI rankings and international forums will indicate its influence and leadership. These metrics together provide a comprehensive framework to assess progress, guide policy, and celebrate milestones on the path to Viksit Bharat 2047.

- **The Vision Realized**

By 2047, India will emerge as the premier AI solutions hub for the Global South, delivering technologies that address shared challenges with affordability and cultural relevance. The nation will exemplify prosperous, inclusive, and sustainable development, where AI empowers all citizens while respecting human dignity and diverse cultural values. India's approach will become a global model for responsible AI leadership, balancing innovation with ethics and social justice. This vision reflects a future where technology is a force for equitable progress, uplifting communities and inspiring nations worldwide to harness AI for humanity's collective good.

Real Stories from Across India's Diverse Landscape

Across India, AI is already transforming lives in powerful and personal ways. In Karnataka's Raichur district, small farmers now use AI-based mobile apps to receive crop recommendations, soil health updates, and weather forecasts in Kannada. Their yield has increased by 30%, with reduced input costs. In Assam, telemedicine kiosks powered by AI diagnostic tools have enabled remote villagers to access timely care, reducing maternal and infant mortality rates.

In Jharkhand, tribal youth are being trained in AI and data annotation through a rural skilling initiative, leading to employment in global tech supply chains. Meanwhile, in Tamil Nadu, AI is helping identify school dropouts and personalize remedial education, drastically improving student retention and performance in government schools.

These real-life stories reflect how AI, when thoughtfully applied, becomes a bridge to opportunity—empowering communities across geography, language, and socio-economic backgrounds.

Table 3: Indicators of AI Impact Across Sectors

Sector	Key AI Application	Success Metric	Notable Example
Agriculture	Precision farming	25–30% increase in crop yield	Punjab & Karnataka smart farming pilots
Healthcare	AI-based diagnosis in PHCs	40% faster detection of TB & anemia	Telangana PHC AI integration
Education	Personalized learning tools	20% improvement in student performance	Tamil Nadu AI-enabled learning analytics
Finance	AI credit scoring for micro-loans	2x loan approvals to previously unbanked	Uttar Pradesh SHG lending platforms
Governance	Automated welfare delivery	60% reduction in grievance resolution time	Rajasthan's e-Mitra and AI grievance system
Urban Planning	AI for traffic and waste optimization	30% improvement in traffic flow	Pune Smart City AI systems

These stories and statistics not only validate India's progress but also inspire greater confidence in AI as a tool for grassroots transformation and national development.

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