

4. Roadmap for Job Creation in The AI Economy

NITI Aayog released a Roadmap for Job Creation in the AI Economy.

About the Roadmap

The “Roadmap for Job Creation in the AI Economy” is a strategic policy framework developed by NITI Aayog’s Frontier Tech Hub in partnership with NASSCOM (National Association of Software and Service Companies) and Boston Consulting Group (BCG). The roadmap received guidance from an Expert Council composed of industry leaders and technology specialists from major companies such as IBM, Infosys, Tech Mahindra, LTI Mindtree, and Teleperformance, among others. The document envisions India as a trusted global AI workforce and innovation partner by 2035, emphasizing the country’s comparative advantage in human capital, digital infrastructure, and innovation potential. It highlights how Artificial Intelligence (AI) is fundamentally transforming the technology and service sectors in India—especially software development, customer experience (CX), and business process outsourcing (BPO)—and outlines ways to turn automation-driven job disruptions into new employment opportunities.

Objectives and Vision – The roadmap aims to position India at the forefront of the global AI economy, both as a supplier of AI-ready talent and as a centre for responsible AI innovation. It envisions a future where AI-driven growth complements human capabilities, ensuring inclusive job creation rather than displacement. The overarching goal is to safeguard jobs, retrain the workforce, and stimulate innovation—ensuring that India’s \$245 billion technology and CX sectors remain globally competitive and future-ready.

Key Features

1. National AI Talent Mission – A proposed nationally coordinated mission to make India the AI workforce capital of the world by 2035. Focuses on large-scale skilling and reskilling programs, integrating AI-related skills into national education and employment strategies. Seeks to create a robust AI talent pool capable of fulfilling global demand in data science, machine learning, generative AI, and AI ethics.

2. Core Pillars of the Roadmap

AI in Education –

1. Integrate AI literacy and digital fluency across schools, universities, and vocational training institutions.
2. Promote interdisciplinary learning that merges computer science with social sciences and ethics to ensure responsible AI development.

National Reskilling Engine –

1. Develop a centralized reskilling ecosystem that equips millions of professionals—especially in IT and CX sectors—for AI-augmented roles.
2. Includes certification programs, micro-credential courses, and industry-led learning pathways.

Global AI Talent Magnet –

1. Create incentives to retain top domestic talent and attract global AI experts to India’s growing AI ecosystem.
2. Strengthen collaborations with global universities and corporations to make India a preferred destination for AI innovation and deployment.

Importance of the Roadmap

Tripartite Collaboration – Calls for government–industry–academia partnerships to accelerate India’s AI readiness. Aligns with the India AI Mission, focusing on creating enabling infrastructure, ethical frameworks, and research capabilities.

Economic Transformation – Recognizes AI as a key economic multiplier, expected to add \$450–500 billion to India’s GDP by 2030 through productivity gains and new market creation.

Job Protection and Creation – Emphasizes that AI adoption need not lead to net job loss, provided India acts swiftly on upskilling and innovation. Aims to safeguard existing employment while promoting new, high-value AI jobs across sectors like healthcare, manufacturing, finance, and education.

Concerns and Challenges

Potential Job Displacement – AI could disrupt millions of jobs in routine or repetitive roles within India's tech and customer experience (CX) sectors by 2031. Positions such as QA engineers, LI support staff, and basic data analysts are particularly vulnerable to automation.

Need for Timely Intervention – Without early investment in training, India risks a skills mismatch crisis, where displaced workers may not be equipped for new AI-driven roles.

Workforce Adaptability – A major challenge lies in reskilling mid-career professionals and redesigning curricula to match evolving AI job requirements.

Opportunities for Job Creation

The roadmap estimates that up to 4 million new AI-driven jobs could emerge in the next five years with proactive skilling initiatives. Potential areas of job creation include –

1. **AI Model Development and Deployment** – data scientists, ML engineers, and AI product managers.
2. **AI Governance and Ethics** – roles in policy, compliance, and algorithmic fairness.
3. **AI-Augmented Services** – hybrid roles where human oversight enhances AI performance in fields like healthcare diagnostics, CX management, and fintech services.

India's youthful demographic dividend and growing digital infrastructure (like Digital India and BharatNet) provide a strategic advantage in scaling these opportunities.

Way Ahead

Holistic Skill Development – Accelerate AI literacy at all levels—from school curricula to professional training. Encourage microlearning platforms, industry apprenticeships, and AI bootcamps to reach large-scale participation.

Innovation Ecosystem Strengthening – Support AI startups, research labs, and innovation hubs through fiscal incentives and ease-of-doing-business reforms.

Ethical and Responsible AI – Ensure that AI systems deployed in India adhere to transparency, accountability, and fairness principles.

Global Collaboration – Partner with global tech giants, universities, and international organizations to position India as a trusted partner in the global AI value chain.

Monitoring and Evaluation – Establish periodic progress reviews to measure outcomes in employment generation, skill transformation, and inclusion.

About NITI Aayog's Frontier Tech Hub

The Frontier Tech Hub serves as NITI Aayog's action-oriented policy innovation unit for achieving Viksit Bharat@2047 (Developed India by 2047). It collaborates with over 100 experts across government, academia, and industry to design a 10-year strategic roadmap for harnessing frontier technologies such as AI, quantum computing, blockchain, and synthetic biology.

The Hub's mission is to –

1. Empower stakeholders nationwide through data-driven insights and capacity-building.
2. Drive collective action toward technology-led transformation across 20+ critical sectors.
3. Instil urgency in adopting next-generation technologies to secure a prosperous, resilient, and technologically advanced India by 2047.

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