

6. Technology Service Sectors – Economy

NITI Aayog's 10-year roadmap projects India's technology services sector to triple to \$750–850 billion by 2035, driving the Viksit Bharat 2047 vision. To achieve this, the sector must pivot from traditional labor-arbitrage models to AI-led innovation, IP creation, and robust digital infrastructure.

Roadmap Release – A 10-year roadmap released by NITI Aayog projects significant expansion for India's technology services sector.

Growth Projection – The sector is expected to grow from the current \$265 billion to \$750–850 billion by 2035.

Vision Alignment – This expansion aims to contribute directly to the Viksit Bharat 2047 vision.

5 Priority Growth Levers Identified

1. Agentic AI.
2. Software and Products.
3. Digital Infrastructure.
4. Innovation-led Engineering.
5. India-for-India solutions.

About the Technology Services Sector

Scope – The sector encompasses a wide range of services delivered to global and domestic clients, including –

6. IT Services and Business Process Management (BPM).
7. Digital Engineering and Cloud Services.
8. Cybersecurity and AI Solutions.
9. Enterprise Modernization.

Key Activities – It includes software development, Enterprise Resource Planning (ERP) implementation, cloud migration, data analytics, AI model deployment, and digital transformation consulting.

Key Features

Export-Oriented Growth Model – The sector derives a significant share of its revenue from exports, with a heavy reliance on the United States. It contributes nearly 7% to India's GDP.

Talent-Driven Advantage – Competitiveness is driven by India's large pool of skilled, cost-effective engineers, enabling global scalability.

Transition in Delivery Models – Shift Observed – The industry is moving away from traditional labour-arbitrage models.

New Focus – It is adopting IP-led, AI-enabled, and outcome-based service delivery frameworks.

Global Landscape – The global market is valued at approximately \$1.3 trillion.

Evolution Phases – Rapid digital adoption (2015–2020) → COVID-driven acceleration (2020–2022) → Post-pandemic AI-led disruption (2022–2024).

Current Status of the Sector in India

Market Position –

Generates approximately \$265 billion annually.

Commands nearly 20% of the global market share.

Growth Trends

Previous Growth – Witnessed 11–13% CAGR during the COVID surge.

Current Moderation – Growth has moderated to 7–8% CAGR due to macroeconomic uncertainty, geopolitical tensions, visa restrictions, and early-stage AI disruption.

Export Concentration – Nearly 60% of exports are concentrated in the US market. This high dependence makes the industry sensitive to American regulatory and economic changes.

Data Infrastructure – India generates about 20% of global data.

Capacity – Current data center capacity stands at 1.4 GW, with significant expansion expected over the next decade.

India's Potential in the Sector

AI-Led Transformation – Generative AI and Agentic AI are redefining service delivery.

India has the potential to become a global hub for AI integration, governance, and model engineering.

Expansion into Adjacent Markets – Opportunity to tap into global spend pools with a combined Total Addressable Market (TAM) of nearly \$14 trillion.

Target Areas – Enterprise operations automation, SaaS products, digital infrastructure, AI-native platforms, and R&D engineering.

Infrastructure and Data Advantage – Goal – Position India as a global AI infrastructure hub.

Targets – Expand data center capacity from 1.4 GW to 10–12 GW by 2035 and increase GPU-enabled infrastructure for AI workloads.

Domestic Market Leverage (India-for-India) – Strong growth opportunities exist in domestic sectors due to rapid digital adoption.

Key Drivers – Governance, UPI-based payments, health-tech, and multilingual AI platforms.

Innovation and IP Creation – Firms can transition toward defensible intellectual property (IP) and higher value capture.

Requirement – Increasing R&D spending to 1–2% of revenues.

Government Initiatives to Boost the Sector

Initiative	Key Objectives & Details
IndiaAI Mission (2024)	• Build indigenous foundational AI models. • Create computer infrastructure. • Establish an inclusive AI innovation ecosystem via the IndiaAI Innovation Centre.
RDI Fund (under ANRF)	• ₹1 lakh crore fund. • Provides concessional financing for high-risk deep-tech sectors like semiconductors, quantum computing, and AI.
National Deep Tech Startup Policy	• Addresses bottlenecks in funding, IP, and regulations. • Provides extended benefits to commercialize deep-tech innovations.
Digital India FutureLABS (2024)	• Promotes next-gen electronics system design. • Fosters collaboration among academia, startups, and government for indigenous IP.
BharatGen (2024)	• Focuses on developing multimodal Large Language Models (LLMs) in Indian languages. • Aims to enhance public service delivery and multilingual access.

Recommendations to Achieve Potential

Invest in Defensible IP – Firms must allocate 1–2% of revenues to R&D. Focus on converting repeatable services into scalable, AI-native platforms.

Reimagine Delivery Models – Transition to “human + agent + platform” models driven by Agentic AI. Shift commercial contracts from effort-based to outcome-linked models.

Diversify Markets and Verticals

New Geographies – Expand beyond the US to Japan, the Middle East, and the domestic market.

New Sectors – Focus on healthcare, defense, semiconductors, and cybersecurity.

Scale AI-Focused Reskilling – Prioritize workforce transformation in AI literacy, problem-solving, governance skills, and adaptive learning capabilities.

Conclusion

India's technology services sector is at an AI-driven inflection point. By leveraging strategic innovation, infrastructure expansion, and IP-led growth, the sector can transform into a \$750–850 billion global leader by 2035.

Source – <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2227308®=3&lang=1>