KIRTANE & PANDIT

India's Information Technology &
IT-Enabled Services Sector

Navigating the AI Era & Global Transformation

December 2025

Contents

EXECUTIVE SUMMARY

The Indian Information Technology and IT-Enabled Services (IT/ITES) sector is undergoing a profound structural transformation, moving decisively from a reliance on traditional cost arbitrage and staffing models to establishing itself as a global hub for Artificial Intelligence (AI) and innovation. This pivot, accelerating in the fiscal year 2025 (FY25), is critical for sustaining long-term growth and competitiveness amidst geopolitical volatility and rapidly evolving technological demands. The sector's strategic thesis is its structural pivot toward capability arbitrage. This transition is evidenced by sustained momentum in high-value segments, particularly Engineering Research & Development (ER&D) and Global Capability Centers (GCCs), which served as key growth drivers throughout FY25. The industry is now focused on generating Intellectual Property (IP), delivering outcome-based solutions, and embedding AI capability into every client engagement, positioning itself as an architect of global digital transformation rather than merely an executor of services. The successful shift is foundational for realizing the ambitious growth targets set for the coming decade.

The Indian technology sector achieved a significant milestone, with total revenue — including hardware — reaching over US$282.6 billion in FY25 , representing a robust annual growth of 5.1% and adding US$13.8 billion in incremental revenue despite global macroeconomic headwinds. Looking ahead, the industry is projected to achieve the milestone of US$350 billion by 2026. Fueling this growth is the domestic market, where tech revenue grew by 7% in FY25, outpacing export growth. This robust domestic performance provides a critical stabilization layer and financial resilience against fluctuations in global client spending. Furthermore, the Indian software product industry is poised for rapid expansion, projected to hit US$100 billion by 2025, underscoring the successful pivot toward product-led growth.

India's strategic relevance is amplified by its role in the global AI ecosystem. The domestic AI market alone is projected to reach US$28.8 billion by 2025, growing at a 45% Compound Annual Growth Rate (CAGR). This technological shift is forecast to transform 38 million jobs across the country by 2030, delivering a crucial 2.61% productivity boost to the organized sector. This magnitude of workforce change reinforces India's centrality in global AI adoption. Concurrently, the proliferation of Global Capability Centers (GCCs) — over 1,700 operating in the country — cemented India's status as the "GCC Capital of the World, "with centers generating US$64.6 billion in revenue in FY24. These centers are expected to contribute significantly, generating 22–25% of net new white-collar tech jobs in 2025. The long-term vision positions the broader Indian technology industry to reach $500 billion in production value by 2030, a goal supported by NITI Aayog's policy direction.

Achieving the $350 billion target requires proactively addressing critical structural challenges. Firstly, while the total workforce stands at 5.8 million, significant skills gaps persist, particularly in specialized areas like GenAI and cloud architecture, with only 46.1% of graduates found to be job-ready for AI roles. Secondly, geopolitical friction, notably the US decision to impose a substantial one-time fee on new H-1B petitions filed after September 21, 2025, poses an operational cost challenge but simultaneously accelerates the mandatory strategic shift toward sophisticated offshore delivery models. Furthermore, proposed US legislation, such as the Halting International Relocation of Employment (HIRE) Act 2025, which suggests a 25% tax on outsourcing payments made by US businesses, introduces a significant and potentially more disruptive risk to the export model. Thirdly, market competition from alternative destinations like the Philippines and Eastern Europe drives margin pressure for commoditized services, necessitating a decisive move towards premium service differentiation.

The strategic roadmap for the sector is encapsulated in the '4C' Framework: Co-create, Collaborate, Converge, and Catalyze. This framework mandates deep integration with client transformation agendas, robust ecosystem partnerships, organizational convergence of technology and business functions, and aggressive investment in R&D and talent development. Policy support is critical, including the substantial push by the government through the new ₹1 trillion Research, Development and Innovation (RDI) Scheme and the IndiaAI Mission's investment of over ₹10,300 crore and 38,000 GPUs. Policy efforts by NITI Aayog to streamline R&D regulatory frameworks are essential to enable the industry to transition from an implementation partner to an innovation source. Table 1 provides a snapshot of the sector's scale and trajectory.

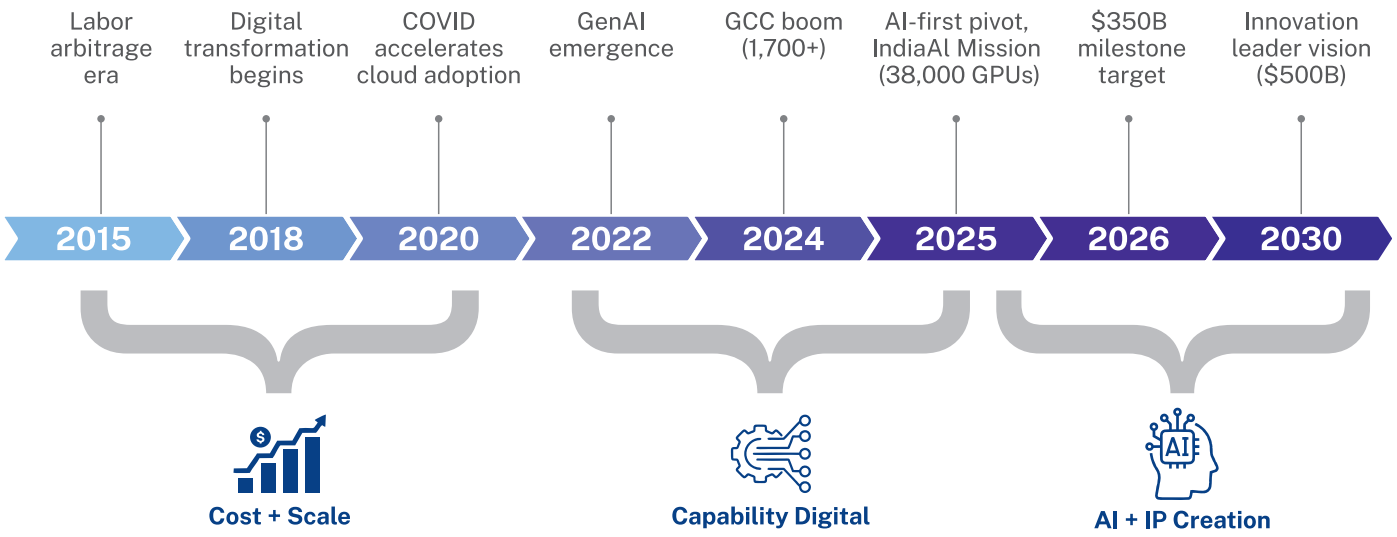
India IT/ITES Sector: Key Metrics and Growth Projections

Metric	FY25 Value	FY26 Projected Value	Growth Driver/Significance
Industry Revenue (Overall)	$282.6 Billion	$350 Billion (Target)	Accelerating shift to high-value digital services and AI adoption
Total Direct Workforce	5.8 Million	N/A	Sustained employment generation, highest in GCC/ER&D segments
Net New Hiring (Annual)	126,000	Accelerated	Strong recovery driven by domestic growth and GCC expansion
AI Market Size (India)	$28.8 Billion	N/A	High growth rate (45% CAGR) indicates massive untapped potential

2. OVERVIEW OF INDIA'S IT/ITES SECTOR

2.1 Economic Significance and Global Standing

The IT/ITES sector remains a cornerstone of India's macroeconomic stability and growth ambitions. Its contribution to the country's Gross Domestic Product (GDP) is substantial, projected to reach 10% by 2025. The sector is one of the largest private-sector employers, directly employing a vast pool of 5.8 million highly skilled professionals, a figure that saw a net addition of 126,000 employees in the first three quarters of FY25, with hiring momentum accelerating significantly in Q4, where the industry recorded 16% YoY growth in April 2025.



Globally, India holds an indispensable position as the leading sourcing destination, accounting for approximately 55-56% of the US$ 185-190 billion global services sourcing market. This sustained global confidence is underpinned by the sector's structural role in India's ongoing digital economy transformation. The broader digital economy now contributes an estimated 12% to India's GDP, with the successful deployment of Digital Public Infrastructure (DPI) adding an additional 1% boost. The reliance on export performance remains high, though key growth drivers in FY25 shifted, with the USA and the Banking, Financial Services, and Insurance (BFSI) sectors resurfacing as dominant markets, complemented by strong momentum in emerging markets across APAC, Telecom, Retail, and Healthcare.

A significant development in FY25 was the robustness of the domestic market. Domestic tech revenue grew by 7% annually, surpassing the total industry growth rate of 5.1%. This growth provides a crucial counterbalance to external pressures, reducing the sector's historical vulnerability to economic slowdowns in traditional export markets (US and Europe). The domestic market now acts as a reliable growth buffer, affording companies the stability to strategically invest resources in long-term, high-risk, high-reward areas such as proprietary GenAI research and platform development.

2.2 Industry Structure and Value Chain Evolution

The industry structure has fundamentally evolved, characterized by a movement from cost arbitrage to a strategic value creation model. Early growth focused on optimizing labor costs; contemporary strategy demands expertise arbitrage — the provision of specialized, outcome-guaranteed services.

The sector has achieved significant service portfolio diversification. While traditional IT services and Business Process Management (BPM) remain core, the highest growth impetus is derived from high-end segments like Engineering Research & Development (ER&D) and product engineering. This segment accounts for a major 55% of GCC growth. This concentration of growth in ER&D confirms that global enterprises are increasingly offshoring complex, IP-centric functions to India, validating the capability-arbitrage model. Concurrently, the Indian software product industry is strategically poised to hit US$100 billion by 2025.

Service providers have ensured deep integration with global technology ecosystems through strategic partnerships with major hyperscalers (AWS, Microsoft Azure, Google Cloud). This integration is orchestrated via proprietary cloud transformation platforms, such as Infosys Cobalt, enabling complex hybrid cloud solutions and the deployment of advanced AI workloads for global clients.

2.3 Revenue Architecture: Sub-Segment Dynamics

Segmentally, the IT/ITES industry comprises four major categories, each exhibiting distinct growth dynamics and strategic importance. IT services, which encompasses application development and maintenance, systems integration, consulting, and infrastructure management, generated revenues of USD 137.1 billion in FY25, growing at 4.3 per cent year-on-year. This segment represents the traditional core of India's technology exports and continues to account for the largest revenue share. Business Process Management (BPM), which includes customer service operations, finance and accounting processes, human resource management, and knowledge process outsourcing, contributed USD 54.6 billion in revenues with a growth rate of 4.7 per cent. The BPM segment has matured significantly over the past two decades, with Indian companies now managing complex, high-value business processes involving analytics, decision support, and strategic advisory services rather than merely transactional activities. Engineering Research and Development (ER&D) services emerged as the fastest-growing segment at 7.0 per cent, reaching revenues of USD 55.6 billion. This segment, which involves product engineering, embedded systems development, digital engineering, and research support for manufacturing companies, reflects the industry's evolution towards higher-value, innovation-intensive work. Software products and platforms, whilst still smaller than services segments, are growing rapidly as Indian companies increasingly develop intellectual property-based offerings rather than purely service-delivery models. The convergence of these segments — with many leading companies now offering integrated services spanning IT, BPM, and ER&D — is creating comprehensive value propositions that address entire enterprise transformation journeys rather than discrete technology needs.

India's IT/ITES Industry Revenue by Segment (FY 2024-25)

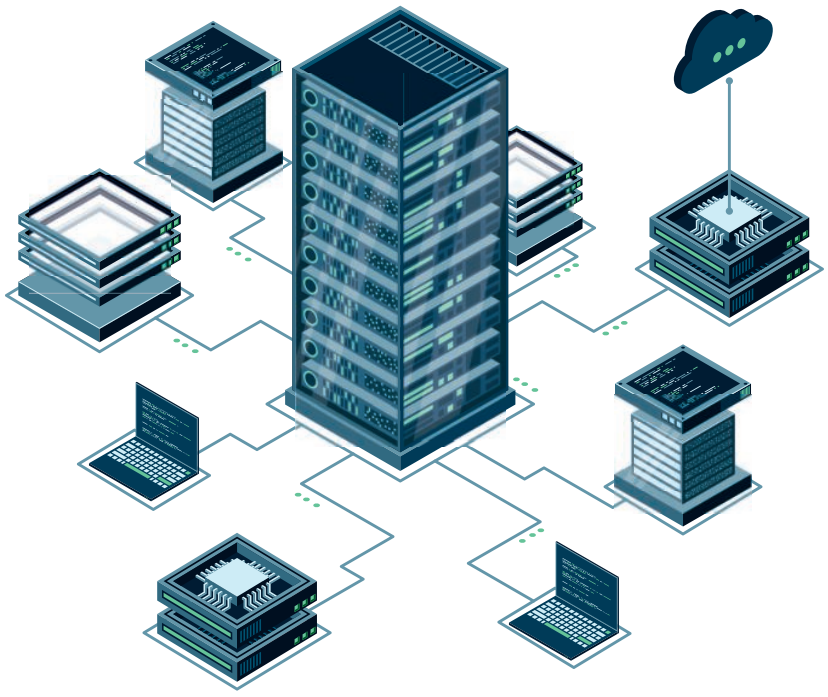
Segment	Revenue FY25 (USD Bn)	YoY Growth (%)
IT Services	137.1	4.3
Business Process Management	54.6	4.7
Engineering R&D Services	55.6	7.0
Software Products	35.7	8.0
Total Industry Revenue	**283.0**	**5.1**

Source: NASSCOM Technology Sector Strategic Review 2025, IBEF Industry Reports

2.4 Digital Infrastructure: India's Competitive Edge

India's digital infrastructure has emerged as a formidable competitive advantage, positioning the nation as a global technology powerhouse. With over 76 crore (760 million) citizens now connected to the internet, India hosts one of the world's largest online populations, creating an unprecedented foundation for digital services and innovation. This massive connectivity has been achieved while maintaining the world's lowest data costs at ₹10 per GB (US$ 0.12/GB), significantly below global benchmarks, enabling widespread digital adoption across all socio-economic segments. The Digital India Program has been instrumental in this transformation, systematically expanding digital infrastructure and improving accessibility across urban and rural landscapes alike. According to estimates, the government's increased focus on creating a digitally empowered economy is forecast to benefit all sectors, with core digital sectors such as IT-BPM, digital communication services, and electronics manufacturing likely to double their GDPs to ₹30,42,350–37,27,950 crore (US$ 355-435 billion) by 2025. This democratization of digital access has catalyzed India's transition into the next phase of its IT revolution, with growing private sector innovation and widespread adoption of digital applications reinforcing the country's leadership position in the global technology landscape.

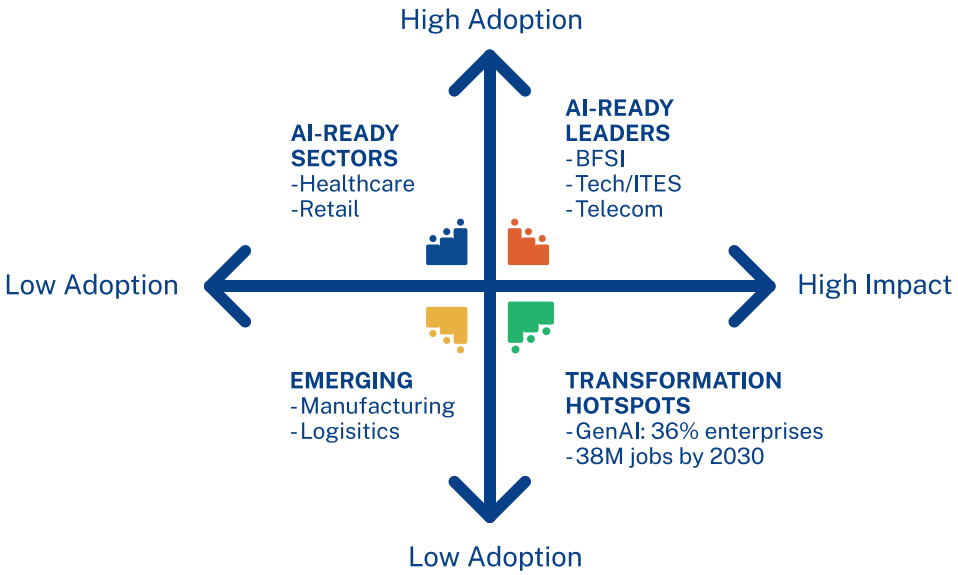
The data center sector has emerged as a critical pillar of India's digital infrastructure expansion, experiencing unprecedented growth driven by cloud computing, artificial intelligence, and digital transformation initiatives. India's data center market demonstrates robust momentum, with a projected demand exceeding 450 MW of IT capacity in 2025 and supply additions reaching 600 MW, reflecting the sector's ability to stay ahead of surging requirements from hyperscalers, BFSI institutions, IT-ITeS companies, and emerging technology deployments. India has positioned itself as the second fastest-growing data center market in the Asia-Pacific region, with capacity increasing by 28% as the nation strategically emerges as a worldwide epicenter for data centers specializing in cloud computing. The sector's expansion has been particularly concentrated in tier-one cities, with Mumbai-MMR leading at 47% of total colocation capacity, followed by Chennai at 20%, reflecting the clustering of digital infrastructure around established technology hubs. According to Cushman & Wakefield projections, India's current data center capacity across the top seven cities stands at 977 MW, with under-construction capacity additions estimated to reach 1.03 GW by 2028, and further planned expansion of 1.29 GW bringing total projected capacity to 3.29 GW by 2028. This infrastructure buildout is being catalyzed by major investments from global technology companies and domestic conglomerates alike, positioning India as an indispensable node in the global digital infrastructure network and creating substantial opportunities for sovereign cloud deployments, AI workload management, and data sovereignty compliance for both domestic and international enterprises.



3. TECHNOLOGY TRANSFORMATION & DIGITAL REVOLUTION

The current decade is defined by rapid technological absorption, with AI, Cloud, and 5G acting as the primary accelerators reshaping both service offerings and operational models.

AI Adoption Matrix & Impact



3.1 Artificial Intelligence, GenAI Adoption & Indigenous Innovation

Market Dynamics and Workforce Impact Generative AI: GenAI has evolved from an emerging trend to a structural necessity for the Indian IT sector. The domestic AI market is projected to reach **US$28.8 billion by 2025,** growing at an aggressive **45% CAGR**. This shift is expected to transform **38 million jobs by 2030**, automating 24% of tasks and enhancing 42% of knowledge worker activities, thereby delivering a **2.61% productivity boost** to the organized sector. However, a "pilot-to-production" paradox persists: while **82%** of enterprises are testing GenAI, only **15%** have deployed it in production, highlighting an urgent need for scalable governance frameworks.

Government Support and Infrastructure: The IndiaAI Mission To bridge this gap and ensure technological sovereignty, the government launched the **IndiaAI Mission** with a budget of **₹10,372 crore (US$1.25 billion)**. A cornerstone achievement of this mission was securing 3**8,000 GPUs** in September 2025 — tripling the original target — to democratize compute access.

- **Subsidized Access:** These GPUs are available to startups and researchers at ₹100–150 per hour, a 40–50% cost advantage over global rates (₹213–256/hour), leveling the playing field for Indian innovation.
- **Fiscal Backing:** The Union Budget FY26 further sanctioned ₹2,000 crore (US$232 million) specifically to accelerate AI adoption and infrastructure development.

Indigenous Innovation: Sovereign Models and Hardware India is building a "sovereign AI" ecosystem designed for cultural and linguistic diversity, reducing dependence on foreign platforms:

- **Foundational Models:** BharatGen, the world's first government-funded multimodal LLM, targets public service delivery, while Hanooman's Everest 1.0 currently supports 35 languages with plans to scale to 90. These are complemented by Digital India BHASHINI, which facilitates real-time language translation to bridge the digital divide.
- **Indigenous Hardware:** In a major strategic stride, India is developing its own GPUs for advanced AI and scientific workloads. The first indigenous GPUs are scheduled for demonstration by late 2025, with full-scale production targeted for 2029, marking a critical step toward semiconductor self-reliance.

3.2 Emerging Technology Stack Integration

Cloud adoption remains the foundational element of digital strategy. A majority of Indian companies, **62%, are planning to implement hybrid cloud strategies**. The preference for hybrid models is a reflection of the need to optimize for cost, operational flexibility, data residency requirements, and regulatory compliance. Widespread cloud adoption could generate **14 million jobs** and add nearly **US$380 billion** to India's GDP by 2026.

The ongoing rollout of **5G networks** enhances connectivity, creating an enabling environment for advanced Internet of Things (IoT) applications and Edge Computing. The convergence of these technologies has propelled the global edge computing market to **$61.14 billion in 2025**, with Indian firms capturing a substantial **42% market share.** GenAI workloads are proving to be the single largest driver of infrastructure change , pushing for the increased deployment of Edge IT and regional data centers, particularly in Tier-2/3 cities, driven by demand from OTT players and e-commerce.

Increased digitalization has commensurately amplified the threat landscape. Consequently, spending on cybersecurity is projected to **surpass US$3.5 billion by 2025** in India. The government is also proactively setting up a high-level expert committee to craft 'Aadhaar Vision 2032', which explicitly leverages advanced technologies such as **Blockchain, Quantum Computing, and Advanced Encryption** to ensure long-term security and scalability.

3.3 Digital-First Service Delivery Models

The transformation of service delivery is characterized by a focus on high-speed, scalable, and customized solutions. Major IT service providers are pivoting toward platform-based service architectures. This is exemplified by the launch of proprietary AI platforms, such as Infosys Topaz and HCLTech's comprehensive AI suite, which includes AI Force and AI Foundry. These platforms allow companies to transition from traditional time-and-material models to outcome-based contracts, significantly improving margins and standardizing the delivery of complex transformations.

The industry is moving beyond simple process automation to implementing **Agentic AI**, where autonomous systems and sophisticated automation disrupt existing client business models. NASSCOM's focus on the Agentic AI Confluence in 2025 highlights the industry-wide commitment to architecting autonomous, trustworthy AI systems . Concurrently, widespread adoption of API-first and microservices is crucial. The rise of microservices architecture, often tied to containerization, is a key driver for the API-first approach, making systems highly modular, easier to manage, scale, and ensuring cross-platform compatibility . This approach is essential for building the "muscle" (the execution layer) of internal developer platforms (IDPs), which is necessary to deliver consistent, auditable, and reliable workflows.

3.4 Innovation Ecosystem and R&D Investments

Corporate Research and Development (R&D) spending is robust, indicating a strategic shift towards innovation capacity building. Analyst predictions point to stronger growth momentum for the current calendar year (CY25), primarily driven by higher technology spend, particularly earmarked for AI-led digital initiatives. Large technology providers anticipate greater technology spending in FY26, with 77% of providers expecting higher business growth compared to the previous year, driven by growing foundational digital scope, emerging markets, and strategic AI demand.

India's dynamic startup ecosystem acts as a critical innovation engine. The country hosts over **31,000 tech start-ups** that have cumulatively secured over **$70 billion in funding** since 2019. The government is actively bolstering R&D investment, with the Prime Minister inaugurating the new **₹1 trillion Research, Development and Innovation (RDI) Scheme** in 2025, aimed at fostering a private sector–driven R&D ecosystem . India's R&D expenditure has already doubled in the past decade, and patent filings have risen 17-fold, cementing the country's status as the world's third-largest startup hub.

The AI Imperative: Potential vs. Reality in FY25

Metric	Value/Projection	Implication for Service Providers (FY26)
AI Market Size (India, 2025)	US$28.8 Billion (45% CAGR)	Large revenue opportunity, but requires specialized platform services.
Enterprises with GenAI in Production	15%	Highlights a severe gap between pilot and mass deployment.
Enterprises in Testing/Pilot Stage	82%	Massive, immediate demand for GenAI integration, governance, and scaling.
Jobs Transformed by AI (by 2030)	38 Million	Focus must shift to large-scale reskilling and change management solutions.
Graduates Job-Ready for AI (2025)	46.1%	Urgency of collaboration with academia and continuous, deep reskilling.

4. GLOBAL CAPABILITY CENTERS (GCCs): INDIA'S STRATEGIC ADVANTAGE

Global Capability Centers (GCCs) are arguably India's most potent strategic asset, symbolizing the successful execution of the national strategy to move up the value chain. Their evolution confirms India's ability to offer capability arbitrage rather than mere cost savings.

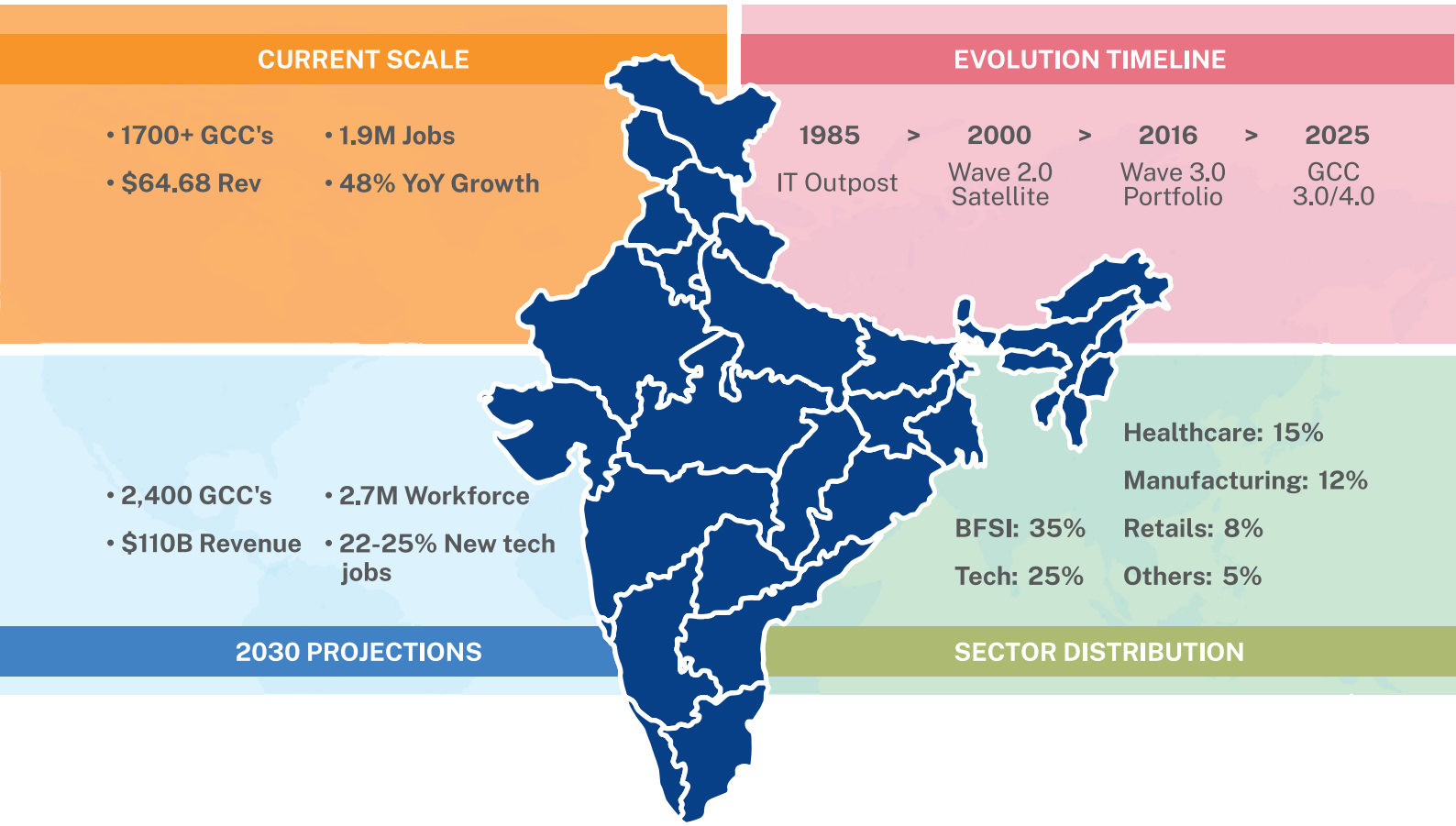
4.1 Global Capability Centers: Strategic Evolution and Market Leadership

The evolution of Global Capability Centers (GCCs) represents one of the most significant structural transformations in India's technology landscape. From modest beginnings as captive back-office operations established primarily for cost arbitrage, GCCs have metamorphosed into strategic innovation powerhouses that drive technology agendas, own product lifecycles, and house senior global leadership roles.

Market Scale and Economic Impact

India maintains its undisputed leadership as the "GCC Capital of the World," hosting over 1,700 centers operating through nearly 3,000 distinct units as of FY 2024-25. These centers employ approximately 1.9 million professionals and generated estimated revenues of US$64.6 billion in FY24—a robust 40% increase from US$46 billion in FY23. This ecosystem has become so integral to the economy that it now contributes approximately 2% to India's GDP directly and 4% to the services sector GDP.

INDIA : GCC Capital of the World



Future Trajectory and Geographic Expansion

The growth trajectory remains steep, with the market projected to reach US$100–110 billion by 2030. The number of centers is expected to exceed 2,400, with the annual pace of new setups jumping from 70 to 115 by 2030. Consequently, the workforce is projected to grow to between 2.5 and 2.8 million, with GCCs expected to generate 22–25% of net new white-collar tech jobs in 2025 alone.

Geographically, the sector is diversifying beyond major metros like Bengaluru and Hyderabad. Tier-2 and Tier-3 locations — such as Visakhapatnam, Coimbatore, and Jaipur — are increasingly capturing attention due to deep talent availability, lower operational costs, and state-backed policies improving infrastructure.

Evolutionary Stages of Global Capability Centers (GCCs) in India

Phase	Timeline	Primary Focus	Mandate / Value Proposition	Key Technologies
GCC 1.0 (Outpost)	Pre-2000	Cost Arbitrage & Support	Basic IT/BPO Services, Helpdesk	Legacy IT, Telecom
GCC 2.0 (GIC/Satellite)	2000–2010	Innovation & Strategy	Shared Services, Process Standardization	ERP, Traditional Outsourcing
GCC 3.0 (Portfolio Hub)	2010–2022	Complex Capabilities	R&D, Product Engineering, Analytics	Cloud, Data Analytics, Mobility
GCC 4.0 (Transformation Hub/Digital Twin)	**2023 Onwards**	**Talent & Efficiency**	**Global Leadership, End-to-End Digital Transformation**	**Generative AI, Quantum Computing, Cybersecurity, ER&D**

4.2 Sector-wise GCC Expansion Trends

GCC expansion has diversified across sectors, leveraging India's deep domain expertise. While the sector originated primarily in IT and Digital Services, BFSI GCCs are now highly mature, focusing on complex regulatory compliance, risk management, and fintech innovation. This BFSI leasing activity is poised for rapid growth in the coming years. Other sectors actively contributing to the diverse GCC landscape include Automotive and Engineering, as well as Healthcare and Life Sciences. Companies across BFSI, Tech, Healthcare, and Manufacturing are leveraging India for strategic innovation, talent, and scalability, moving beyond simple cost advantages.

4.3 UK, US, & European GCC Investment Patterns

Investment patterns from key destination markets are increasingly sensitive to geopolitical and regulatory shifts. The most immediate factor influencing US investment strategy is the landmark change in skilled migration policy. The US has announced a one-time fee of US$100,000 on all new H-1B petitions filed after September 21, 2025. Given that Indian nationals accounted for approximately 71% of approvals in US FY24, this cost barrier creates a geopolitical arbitrage that strongly incentivizes US corporations to accelerate the expansion of their Indian GCCs.

A parallel geopolitical risk is the proposed US Halting International Relocation of Employment (HIRE) Act 2025, which proposes a 25% excise tax on outsourcing payments made by US businesses to foreign workers . This proposal, considered a potentially greater threat than the visa hike, aims to incentivize reshoring by increasing the cost of offshore services.

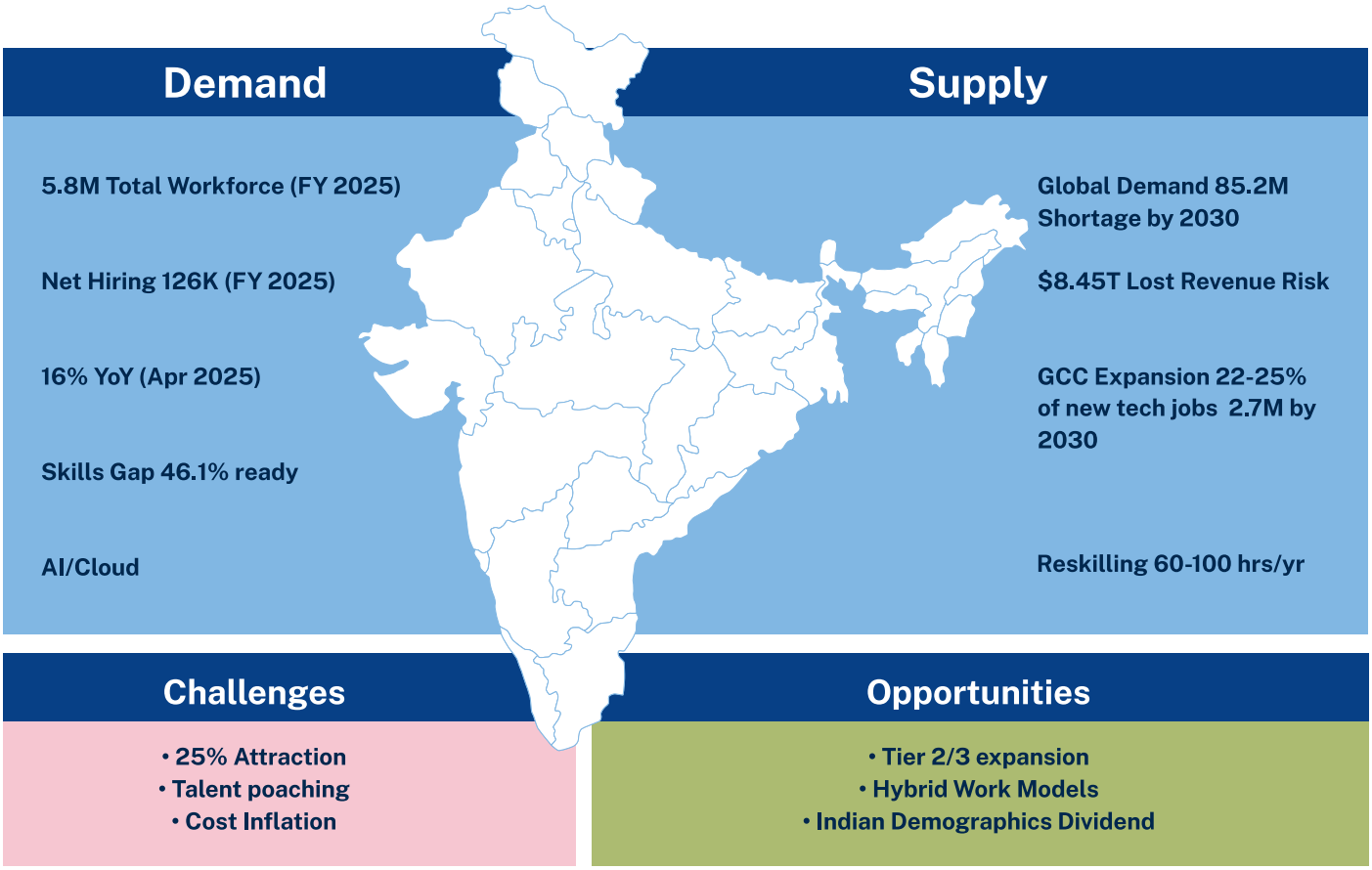
European and UK investment trends place significant emphasis on capability and cost-effectiveness. Over 130 UK firms have established more than 250 GCC units in India, generating US$6.5 billion in revenue in FY24. Notably, 95% of UK GCC talent focuses on high-value IT, Engineering, and R&D roles, leveraging India's advantage of offering 2–5X talent density and 50% lower costs compared to the UK for setting up tech teams. GCCs operating for European entities must demonstrate robust adherence to complex regulatory compliance and operational frameworks, particularly concerning data privacy, IP protection, and tax implications, making strong local governance a prerequisite for high-value investment.

4.4 GCC's job creation impact

Employment dynamics within the GCC sector reflect both scale and quality considerations. The industry is projected to create between 4.25 to 4.5 lakh new jobs during calendar year 2025, contributing significantly to high-value knowledge economy employment generation. Approximately one-third of GCCs are planning workforce expansions of 50-100 per cent, indicating robust growth intentions, whilst 42 per cent forecast at least 50 per cent workforce increases by 2030. Average GCC size has grown by 24 per cent since FY 2018-19, with centres now employing over 1,130 professionals on average compared to approximately 900 five years ago. This scaling reflects the evolution towards multi-functional centres that simultaneously deliver IT services, business process management, and engineering R&D capabilities under integrated operating models. Talent profiles within GCCs have become increasingly sophisticated, with growing demand for specialists in artificial intelligence, machine learning, cloud architecture, cybersecurity, data science, full-stack development, DevOps engineering, and user experience design. Cost per full-time equivalent employee, currently at approximately USD 29,100, is projected to increase to USD 37,760 by 2030, reflecting wage inflation, skill premiums for emerging technologies, and the higher value of work being performed. Interestingly, there is significant focus on diversity and inclusion, with 61 per cent of GCCs planning to increase their female workforce by over 50 per cent by 2030 — a dramatic increase from just 7 per cent expecting similar growth in the current year — indicating strategic recognition of the importance of diverse talent pools and perspectives for innovation.

5. TALENT ECOSYSTEM: OPPORTUNITIES & TRANSFORMATION

The depth and transformability of India's talent pool are the fundamental competitive differentiators for the IT/ITES sector.



5.1 Employment Landscape and Hiring Trends

The Indian technology sector employs a massive pool of 5.8 million skilled professionals. Despite global uncertainties, the industry demonstrated strategic resilience in FY25, reporting a recovery in hiring with a net addition of 126,000 employees. This net hiring recovery is a key signal of strategic resilience, concentrated in high-skill, R&D-centric roles within the GCC and ER&D segments, which is being driven by strong growth in BFSI, APAC, Telecom, Retail, and Healthcare markets . Fresher intake strategies are shifting from high-volume recruitment to prioritizing specialized skills in data science, cloud engineering, and foundational AI/ML concepts.

5.2 Skills Evolution and Future-Ready Capabilities

The integration of advanced technologies has transformed skill requirements, making capabilities once considered "niche" now a basic necessity. Expertise in AI, Machine Learning (ML), and data science is paramount. However, a significant gap persists only **46.1% of Indian graduates** assessed are found to be job-ready for AI roles.

To address this, industry commitment to **continuous learning and reskilling** is intense. Leading firms are implementing programs that often require **60–100 hours of training per employee annually** in new-age technologies. Currently, **52% of organizations** spend 60-100 hours a year on digital learning. This urgency is driven by the fact that the shelf life of digital skills has reduced to just **5 years**, and as little as 2.5 years for certain technologies, mandating agile skilling approaches. The skills in high demand — AI/ML, Data Analytics, Cloud, IoT, Intelligent Automation, and Cybersecurity- are now seen as a basic requirement for digitally-proficient talent.

5.3 Global Talent Mobility and Brain Circulation

India is uniquely positioned to act as a crucial provider of solutions to the projected **global talent shortage of over 85.2 million people by 2030.** This shortage could result in **$8.45 trillion in unrealized annual revenue** worldwide. Advanced economies, such as the United States, Germany, and Japan, face severe workforce shortages due to aging populations and declining birth rates, further amplifying India's role as a supplier of highly educated, cost-effective talent.

Geopolitical shifts, such as the US visa fee hike, will lead to greater talent rotation and necessitate sophisticated management of global mobility, which is strategically viewed by GCC leaders as adding further impetus to offshore expansion. GCC leaders forecast at least a **25% workforce growth by 2030** in the Indian GCC ecosystem. The expansion of remote work models and the hybrid workforce is strategically important, allowing firms to tap into the talent pool across Tier-2 and Tier-3 cities, mitigating pressure points like high attrition and cost inflation often seen in Tier-1 metros.

5.4 Educational Infrastructure and Industry Collaboration

Bridging the persistent skill gap requires fundamental changes in educational infrastructure and deep industry-academia collaboration. The misalignment between engineering education output and industry needs, highlighted by the low AI job-readiness rate, requires intervention.

Corporate-academic partnerships are expanding, with tech giants moving beyond training their own staff to training clients and campuses. This embedding of practical, industry-relevant skills early in the pipeline is essential. Government initiatives, including **Skill India** and the broader **Digital India** program, provide structural support necessary for developing vocational training and certifications crucial for sustained, decentralized talent development. The Digital India program aims to develop a secure digital infrastructure, provide government services digitally, and achieve universal digital literacy, with a key focus on enhancing skills and employment opportunities.

6. CHALLENGES AND STRATEGIC IMPERATIVES

While the trajectory is positive, several structural and competitive challenges must be managed strategically to ensure India remains globally competitive.

6.1 Geopolitical and Macroeconomic Headwinds

Global geopolitical volatility introduces complexity and cost. The most immediate regulatory challenge is the US H-1B visa policy, which imposes a one-time fee of **US$100,000 on new petitions** after September 21, 2025. This policy will necessitate firms to strategically deploy talent and maximize offshore delivery capabilities. Furthermore, the proposed US **HIRE Act 2025** is considered a significant threat, proposing a **25% excise tax** on payments made by US businesses to foreign workers for services directed to US consumers, and removing tax deductions for these payments.

The **China+1 strategy** presents both opportunities and competitive threats. While global supply chain diversification benefits India, the country faces tough competition from alternative locations like Vietnam and Malaysia, which offer lower wages, simpler tax rules, and faster regulatory approvals. Global economic uncertainty, compounded by issues like energy price volatility, continues to temper optimism and requires robust risk management strategies.

6.2 Market Competition and Margin Pressures

Indian IT firms face intense competition, particularly for commoditized services. Emerging competition from established outsourcing hubs like the **Philippines**, which is strong in BPO and customer services, as well as rapidly growing centers in **Eastern Europe** (specialized in cybersecurity and fintech) and **Latin America**, is capturing an increasing share of new GCC investments. This pressure forces service commoditization and leads to pricing erosion, threatening long-term profit margins.

The strategic imperative is clear: the sector must escape low-margin competition by achieving premium service differentiation. This requires pivoting away from traditional staffing augmentation toward offering outcome-based solutions leveraging proprietary AI platforms and deep domain expertise. Clients demand faster, customized solutions, and differentiation must be built around high-end ER&D and strategic consulting capabilities to justify premium pricing.

6.3 Technology Disruption and Adaptation Challenges

The speed of technological disruption, particularly the emergence of Agentic AI, presents a profound challenge to workforce adaptation. The pace of AI adoption risks outpacing the speed of human reskilling, creating a potential for functional obsolescence within legacy workforce segments.

Furthermore, the modernization of client systems is hindered by technical debt, making the integration of advanced cloud-native and GenAI solutions complex and expensive. Cybersecurity, already a concern due to rising spending ($3.5 Bn by 2025), is now compounded by the increasing sophistication of attacks that leverage AI.

6.4 Talent Acquisition and Retention Challenges

The skill gaps in critical areas — AI, cybersecurity, and cloud technologies — are persistent and intensify competition. This leads to high attrition rates and aggressive talent poaching, driving up the cost inflation for specialized technology skills. India's average attrition rate is approximately **17%** across industries, with the IT sector average hovering around **25%**. Reports indicate that up to **one-third** of the workforce in India's IT sector leaves within a year. The high turnover is primarily driven by inadequate compensation, limited growth opportunities, and aggressive talent poaching by multinational corporations. Managing geographic dispersion and the complexities of hybrid work models further complicates the challenges of maintaining quality standardization, culture, and data security across disparate operational units.

6.5 Infrastructure and Operational Constraints

The strategic push towards decentralized growth, driven by the expansion of GCCs into Tier-2/3 cities, requires sustained development of foundational infrastructure. NITI Aayog policy discussions emphasize the need for prioritizing foundational infrastructure — including power, connectivity, and digital platforms — to enable advanced digital services in these regional clusters and support the technical demands of Edge Computing.

ESG compliance and sustainability are now non-negotiable requirements for securing major international contracts. Global clients increasingly demand adherence to **ESG compliance and sustainability requirements**. New data center projects, for instance, are being executed with enhanced specifications and adherence to high-quality environmental, health, and safety (EHS) standards, integrating sustainability into their core value proposition.

7. POLICY MOMENTUM & INVESTMENT CATALYSTS

The Union Budget for FY 2025-26 represents a watershed moment for India's technology sector, with the government demonstrating unprecedented commitment to artificial intelligence infrastructure and digital capability building. The budget has sanctioned ₹2,000 crore (US$ 232 million) specifically to accelerate AI adoption and infrastructure development, signaling strategic recognition of AI as a transformative economic multiplier. Additionally, the government has allocated ₹500 crore (US$ 58 million) for establishing a Centre of Excellence in AI for Education, aimed at enhancing skills, personalizing learning experiences, and fundamentally transforming India's educational landscape to prepare the workforce for an AI-driven economy. The Production Linked Incentive (PLI) scheme for IT Hardware and its 2.0 iteration have already begun delivering tangible results, demonstrating the efficacy of India's manufacturing-focused policy interventions. As of December 2024, the PLI schemes have generated ₹10,014 crore (US$ 1.14 billion) in production value, attracted ₹522 crore (US$ 59.3 million) in fresh investment, and created 3,879 direct jobs, laying the groundwork for India's ambitions to become a significant player in global IT hardware manufacturing alongside its established dominance in software and services.

International investment commitments secured during 2025 underscore growing global confidence in India's technology ecosystem and policy environment. During Prime Minister Narendra Modi's visit to Japan on August 29-30, 2025, India secured investment pledges totaling ₹5,96,564 crore (US$ 68 billion) and signed an economic security pact specifically focused on semiconductors, critical minerals, and artificial intelligence — three strategic technology domains where India seeks to build sovereign capabilities and reduce import dependencies. This landmark agreement represents one of the largest bilateral technology investment commitments in India's history and reflects Japan's strategic recognition of India as a critical partner in resilient technology supply chains. On the private sector front, strategic collaborations are accelerating AI commercialization and enterprise adoption. Reliance Industries and Meta have formed REIL, a joint venture valued at US$ 97.18 million dedicated to developing and marketing enterprise AI solutions tailored for the Indian market, with Reliance holding a 70% stake and Meta retaining 30%. This partnership exemplifies the confluence of domestic digital infrastructure prowess with global AI capabilities, creating platforms specifically designed to address India's unique market requirements across multiple industry verticals. Collectively, these policy interventions and investment commitments are establishing India as a comprehensive technology hub spanning hardware manufacturing, software innovation, AI development, and semiconductor ecosystem building — moving decisively beyond the country's traditional services-centric positioning.

8. FUTURE OUTLOOK AND STRATEGIC ROADMAP

India's IT/ITES sector is positioned at a crucial inflection point. The strategies deployed in FY25 will determine whether the sector solidifies its position as a global leader or succumbs to competitive and technological pressures.

Growth and Market Opportunities

The immediate goal is achieving the $350 billion mark by 2026. The long-term vision projects the sector to reach $500 billion by 2030. This trajectory requires sustained double-digit growth in high-value segments, with the GCC market alone projected to reach $110 billion by 2030. Exponential growth is anticipated in AI integration and platform services. Emerging market penetration strategies, focusing on expanding the footprint into APAC and the Middle East, are crucial for diversifying revenue streams and mitigating dependency on US/EU macroeconomic stability. Furthermore, the Indian software product industry is poised to hit US$100 billion by 2025.

Strategic Transformation Imperatives

The NASSCOM-recommended 4C Framework provides the strategic blueprint for sustained growth: Co-create personalized growth journeys with customers; Collaborate with the ecosystem to drive IP creation; Converge technology and business functions for unified transformation; and Catalyze Tech R&D and skilled talent to build next-generation solutions. The future business model must be AI-first, moving beyond incremental automation toward the adoption of Agentic AI systems. Concurrently, the reliance on high-volume staffing must be strategically reduced in favor of platform and product-led growth strategies, licensing proprietary technology to achieve superior scale and margins.

Policy Recommendations and Industry Enablers

Government support is essential to enable the 'Catalyze' imperative. NITI Aayog is actively working to streamline the regulatory environment for R&D. Policy efforts must prioritize government support for R&D and innovation through targeted incentives and simplification of compliance procedures, which will transform research institutions into globally competitive entities. Fiscal support is already underway, with the Union Budget FY26 sanctioning ₹2,000 crore (US$232 million) for AI adoption and infrastructure, and ₹500 crore (US$58 million) for a Centre of Excellence in AI for Education. This is complemented by the launch of the new ₹1 trillion RDI Scheme in 2025. Infrastructure development priorities must align with the sector's decentralized growth strategy, emphasizing the urgent need to develop Tier-2/3 cities by integrating core infrastructure — especially power, connectivity, and digital platforms — to support the expansion of GCCs and the technical demands of Edge Computing.

Industry Leadership in Global Technology Ecosystem

The sector's vision for 2030 is to transition definitively from a service provider to an innovation leader. This requires India to use its scale and success with Digital Public Infrastructure (DPI) and indigenous AI efforts (IndiaAI) to influence and shape global technology standards, particularly concerning ethical AI, data governance, and inclusive technology. India must prioritize contributions to global digital transformation by delivering advanced solutions in critical global domains, such as AI-enabled drug discovery and software-defined vehicles. By focusing on proprietary IP generation and exporting strategic technological solutions, the Indian IT/ITES sector can firmly cement its role as a key leader in the global technology ecosystem, ensuring sustained competitiveness well beyond the $350 billion target.

References / Sources

- DD News (Government)
- Economic Times
- Press Information Bureau (PIB)
- Niti Aayog
- India Brand Equity Foundation (IBEF) – Advantage India
- NASSCOM
- Acara Solutions India
- Wikipedia
- The Geostrata
- Pillsbury
- InsightsIAS
- BharatGen
- The Conference Board
- Consulting Quest

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