

Strategic Data Center Expansion in India



SPECIFICATIONS

Research Objective:

- Evaluate demand, supply, and competitive landscape for data center infrastructure in India, focusing on energy costs, economic indicators, talent availability, and regional dynamics
- Provide actionable insights and recommendations for a leading international data center company to capitalize on market opportunities, including site selection strategies, regulatory considerations, and phased rollout plans

INJ APPROACH

Data requirements:

- Include detailed energy tariffs (INR/kWh by state), GSDP forecasts, talent pools (STEM graduates, IT professionals), infrastructure data (fiber density, latency), regulatory incentives (SEZs, tax holidays), and economic indicators (GDP growth, investment climate)
- Outlook forecasting based on government policies (e.g., Digital India), industry trends (AI/cloud surge), and drivers (900M+ internet users)
- Strategic recommendations on optimizing expansion, with stakeholder details and roadmap

THE RESULT

Integrated research methodology to derive optimum results (1/3)



SPECIFICATIONS

INJ APPROACH

THE RESULT

INJ deployed an integrated geospatial analytics methodology combining

- Projecting future demand and hotspots based on GSDP trends (6.5% GDP growth), energy projections, and policy changes (e.g., renewable mandates)
 - Developing a strategic roadmap with recommendations for site entry, considering stakeholders (e.g., state governments, NASSCOM) and expansion strategies
 - Conducting data synthesis from sources like CEA, MoSPI, and NASSCOM, plus stakeholder insights from public domain
 - Evaluating site potential across layers: energy (tariffs varying 200%), talent (shortages in specialized roles), infrastructure (latency reductions), and risks (seismic/water)
 - Gathering quantitative data on market size (1,500 MW by 2025) and competitiveness
- Findings reveal opportunities in high-growth states and challenges like talent gaps; analyses highlight stable economic trajectory and favorable incentives, aiding targeted expansion

Geospatial Solution Architecture (2/3)



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THE RESULT

The solution architecture mirrors a layered geospatial platform. We **utilized GIS tools to overlay data sources**, starting with **electricity rates** as the base for cost mapping, then adding **economic, talent, infrastructure, and risk layers**. This creates heatmaps and predictive scores for site viability



Government of India
Ministry of Power

Central Electricity Authority



Data
Sources

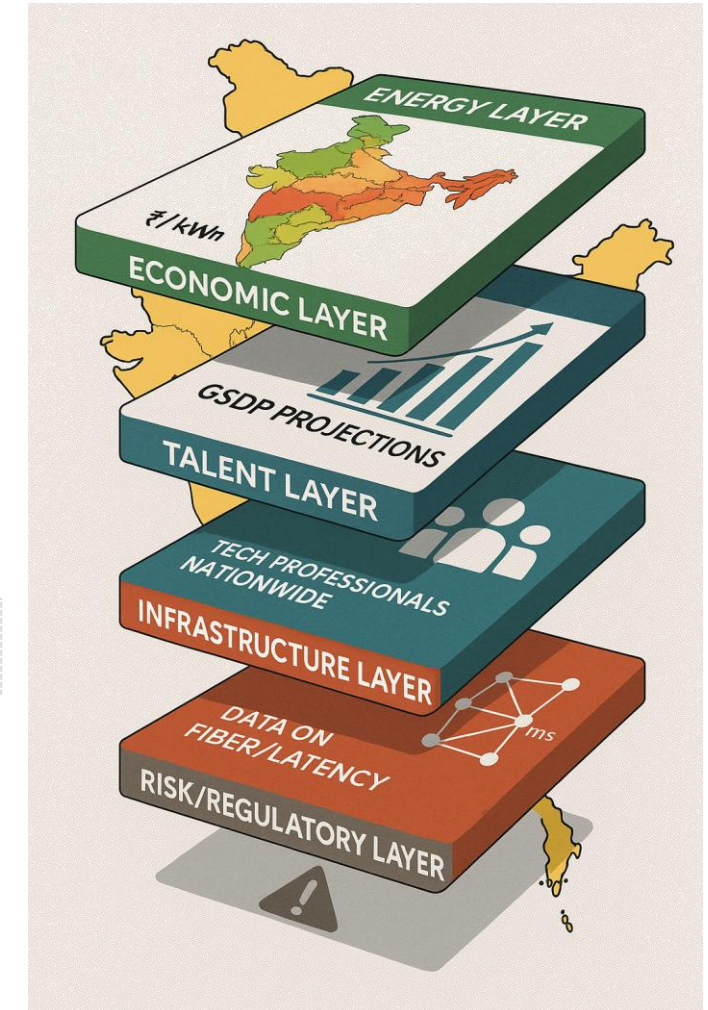
NASSCOM

Proprietary
Databases



Telecom Regulatory
Authority of India

Integrated layers for hotspot identification



Sample Hotspot Analysis Heatmap (3/3)



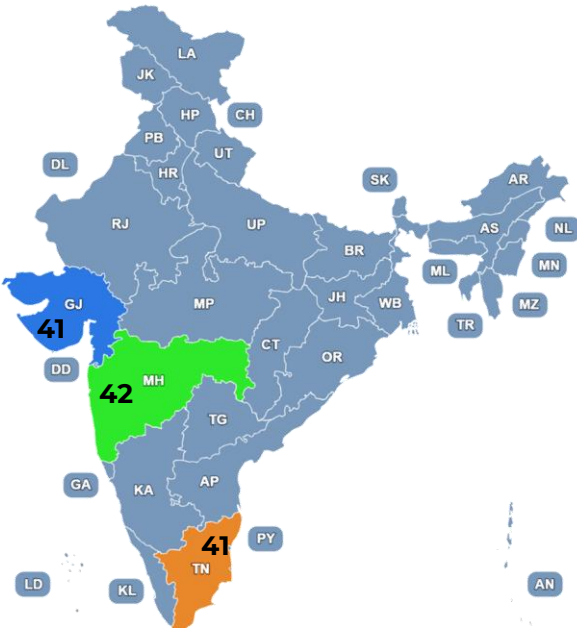
SPECIFICATIONS

INJ APPROACH

THE RESULT

State	Maharashtra	Tamil Nadu	Gujarat
Energy Score	7	8	9
GSDP Score	10	9	8
Talent Score	9	8	7
Infra Score	8	9	8
Risk Score	8	7	9
Total Score	42	41	41

Key insights from analytics



INJ's initiatives enhance client's understanding of the market opportunities



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INJ APPROACH

THE RESULT

- Detailed analysis of site factors and market dynamics improved understanding of demand-supply trends and competitive landscapes
- Meeting regulatory standards is crucial for compliance; e.g., SEZ incentives in Gujarat cut duties by 40%, easing entry
- Competitive energy pricing and duties help strategize costs; e.g., solar PPAs at ₹3.2/kWh in Dholera offer long-term savings
- Insights into risks, like talent shortages (global gap in AI/cybersecurity skills), enable mitigation via local upskilling
- Efficient infrastructure enhances reliability; e.g., Chennai's cables reduce latency by 2ms for edge computing
- Recommendations focus on high-potential zones like Pune (talent-rich) and Dholera (renewables), with projected 20-25% cost savings. INJ's initiatives enhance client's positioning in India's data market