5. Google's Data Centre

Google has announced a historic investment of USD 15 billion (₹87,520 crore) to build its largest-ever AI hub in Visakhapatnam, Andhra Pradesh. This gigawatt-scale project, planned over five years (2026–2030), aligns with India's Viksit Bharat Vision and supports the goals of the India AI Mission

Google Al Hub in Visakhapatnam

Key Features

- **A. Purpose-Built Data Centre Campus -** The hub will integrate advanced AI infrastructure, large-scale data centre capacity, renewable energy sources, and a high-speed fibre-optic network, all consolidated on a single campus. The campus will be designed to support AI workloads, cloud computing, and next-generation digital services.
- **B. International Subsea Gateway -** Construction of new subsea cables landing at Visakhapatnam on India's eastern coast. This will enhance global digital connectivity, reduce latency, and improve internet speed, positioning India as a critical node in global AI and cloud networks.

Al-Powered Data Centres in India

A. Overview

Function - Specialized facilities housing servers, storage systems, and networking equipment to store, process, and manage digital data.

Importance - Backbone of cloud computing, AI, e-Governance, fintech, and other digital services.

B. Requirements for AI Workloads

High-Performance Computing (HPC) - Essential for AI model training and large-scale computations. **GPU Clusters** - Required for massive parallel processing of deep learning and generative AI models. **Low-Latency Data Access** - Critical for real-time decision-making and AI inference.

C. Market Potential - India's data centre market projected to attract \$100 billion in investments by 2027, with a CAGR of 24.68%, driven by AI adoption and digital transformation.

Strategic and Economic Impact

Global Al Hub - Positions Visakhapatnam as a global technology and Al powerhouse.

Enhanced AI Capabilities - Supports next-generation AI applications, cloud computing, and data-intensive services.

Integration into Global Network - Forms a critical node in Google's worldwide Al infrastructure, spanning 12 countries.

Digital Infrastructure Leadership - Contributes to India's technology sovereignty and AI readiness.

Government Push and Policy Support

A. IndiaAl Mission (2024)

Objective - Establish public AI compute infrastructure, develop indigenous AI foundational models, and fund AI startups from idea to commercialization.

Planned Initiatives - Setting up 500 data labs across India to support AI research and model development.

Seven Pillars of IndiaAl Mission -

- 1. Foundational model development
- 2. Public AI compute infrastructure
- 3. Startup incubation and funding
- 4. Skilling and research support
- 5. Data infrastructure and labs
- 6. Policy and governance framework
- 7. Al ethics and responsible deployment

B. National Informatics Centre (NIC) - Established National Data Centres in Delhi, Pune, Hyderabad, and Bhubaneswar; 37 smaller centres across state capitals.

Functions -

- 1. Support e-Governance platforms
- 2. Provide digital services for ministries and departments
- 3. Ensure secure hosting for government applications

C. National Program on Artificial Intelligence (MeitY) - Promotes AI ethics and governance, skill development, and research. Supports creation of a National Centre for AI to coordinate AI strategy and policy.

Significance for India

- 1. Enhances AI research and innovation capabilities.
- 2. Supports indigenous model development, reducing reliance on foreign Al infrastructure.
- 3. Aligns with Digital India and Make in India initiatives.
- 4. Encourages public-private partnerships in Al infrastructure and data-driven services.

Source - https-//www.livemint.com/companies/ai-ambitions-google-15-billion-data-centre-microsoft-investment-meta-adani-reliance-l-t-big-tech-renewable-energy-11760451512639.html

