Theory of Compounding

Issue #3 (Special): The Data Center Playbook

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The Data Center Market

India's data centre (DC) industry has moved from a niche to a strategic national asset. Installed IT load crossed 1.03 GW in 2024, up nearly 3x from 350 MW in 2019, implying a 24% CAGR.

By 2030, consensus sees 3–5 GW of IT load and USD 20–25 billion in cumulative investments.

Table 1: Forecasted data center capacity in India

Year	Total Capacity (MW)	YoY Growth	Key Drivers
2019	350	–	Early enterprise cloud pilots
2023	854	–	Post-pandemic digital acceleration, 5G rollout begins
2024	1030	21%	CSP expansion, BFSI compliance, early AI workloads
2025F	1,318–1,600	28–55%	Hyperscaler pre-commitments, AI ramp-up
2026F	1,645–1,800	15–24%	First AI-ready facilities live, edge DC growth
2027F	1825	1–11%	Enterprise adoption matures
2030F	3,000–5,100	–	Full-scale AI integration, IoT data deluge

Demand Drivers:

1. Hyperscaler Cloud Expansion (AWS, Azure, Google Cloud)

- Already account for ~54% of absorption (2024).
- Long-term commitments (multi-MW pre-leases) create revenue visibility.

2. BFSI & Regulatory Compliance

- BFSI contributes ~18% of demand
- RBI and DPDP Act 2023 mandate **data localization**, structurally anchoring domestic DC demand

3. AI & High-Performance Computing (HPC)

- Cloud providers in India have already **pre-committed ~800 MW for AI workloads**
- AI racks require **50–150 kW/rack** vs the global legacy average of 12 kW
- By 2030, **40–50% of India's DC capacity will be AI/GPU workloads**
.
- This drives a capex shift toward **liquid cooling, high-density power, and AI-ready campuses**

4. 5G & IoT Adoption

- Over **900m mobile users**, cheapest data globally, and rural internet penetration (~56% of new users) create a surge in data volumes

- 5G + IoT proliferation pushes both **hyperscale campuses (Mumbai/Chennai)** and **edge DCs (tier-2/3 cities)** for low-latency needs

Value Chain & Beneficiaries

India's data centre (DC) expansion is not a monolithic "real estate + servers" story. It is a multi-layered value chain where downstream enablers often capture more durable cash flows than the operators themselves. The ecosystem can be segmented into six critical stages:

Table 2: Listed Players in Value Chain

Stage	Role in Ecosystem	Key Listed Beneficiaries	Investment Angle
1. Real Estate & Land	Acquiring/repurposing land, building specialized shells	Anant Raj (ANANTRAJ)	Direct proxy with visible capacity pipelines; undervalued pivot
2. Power Infrastructure	Transformers, switchgear, UPS, gensets, energy and backup	ABB India (ABB), Schneider Infra (SCHNEIDER), Cummins India (CUMMINSIND), CG Power (CGPOWER), Apar Inds (APAR)	Stable blue-chip exposure; high ROCE; critical non-discretionary capex
3. Cooling & Thermal Mgmt.	Precision air conditioning, liquid cooling	Blue Star (BLUESTARCO), Vertiv (India ops, parent listed in US)	Biggest beneficiary of AI racks (50–150kW/rack); structural EMP order book growth
4. Connectivity & Fiber	Fibre, cables, interconnectivity	Sterlite Tech (STLTECH), HFCL (HFCL)	Cyclical but direct play on hub-to-edge fibre densification
5. IT Hardware	Servers, storage, GPUs	Netweb Tech (NETWEB)	Scarcity premium: only listed AI server/OEM proxy in India; NVIDIA partner
6. End-user service providers	Data center ownership, end-user services	Bharti Airtel (BHARTIARTL); Reliance Industries (RELIANCE)	Scaled players with deep pockets for infra investments

Announced Capex

Near-term investment is estimated at USD 5.7 billion to USD 5.8 billion by 2026-2. USD 1.1 billion is allocated for civil construction (the physical building), while a much larger USD 4.5 billion is required for the complex Mechanical, Electrical, and Plumbing (MEP) systems that form the technical heart of the facility.24 Longer-term capital expenditure forecasts are even more substantial, with estimates ranging from USD 20-25 billion over the next five to six years to as high as USD 30 billion by 2030.

Table 3: Announced Capex by Key Players

Operator	Key Backers	Current Capacity (MW)	Announced Expansion (MW)	Target Capacity (MW & Year)	Announced Capex
STT GDC	ST Telemedia (Temasek)	400	-	-	USD 3.2 Billion
NTT Global DC	NTT Group	268	400	~668 (by 2028)	USD 1.5 Billion
Nxtra by Airtel	Bharti Airtel, Carlyle	230	170	400 (by 2027)	₹5,000 Crore (USD 600M)
CtrlS	-	234	350	584+	USD 2.0 Billion
Sify Tech	-	227	180+	407+ (by 2025)	₹2,500 Crore (USD 300M)
Yotta Infra	Hiranandani Group	33	857	890	-
AdaniConneX	Adani Group, EdgeConneX	33	967	1,000 (by 2032)	USD 10.0 Billion+
Digital Connexion	Reliance, Brookfield, Digital Realty	150	-	-	-

Our Shortlist of Key Stocks

Our list of key enablers in the space with good tailwinds, significant exposure to the space, and high growth potential

Table 4: Shortlist of Key Data Center Stocks

Company	Role in Ecosystem	Investment Thesis	Key Catalysts	Key Risks
Anant Raj Ltd (ANANTRAJ)	Real estate pivot to DC infra	Scaling from IT parks to DC campuses; 28 MW operational with 307 MW targeted by FY32. Revenue guidance of ~₹9,000cr from DC business by FY32. Trades at discount vs global DC REITs.	Commissioning of Noida/NCR campuses; JV/PE partnerships; revenue visibility ramp-up	Execution delays; funding constraints; broader real estate cyclicality
ABB India (ABB)	Power distribution infra	Strong balance sheet; high ROCE (~39%); core supplier of transformers, switchgear, PDUs to hyperscale DCs. Positioned as non-discretionary DC infra enabler.	Multi-MW orders from hyperscalers (Nxtra, Yotta, NTT); AI-ready high-density power solutions	Industrial demand cyclicality; margin compression from input costs
Schneider Electric Infra (SCHNEIDER)	Power management & automation	DC-focused EcoStruxure solutions; strong FY25 growth (+24% YoY revenue). Differentiator: end-to-end automation and monitoring systems tailored for high-density AI DCs.	Policy-driven DC investments; AI GPU power needs; new solution launches	Aggressive competition (ABB, Siemens); imported component dependency
Apar Industries (APARINDS)	Conductors, cables, specialty oils	Market leader in conductors (~23% global share) and specialty cables. Direct play on power evacuation, cabling, and interconnectivity needs of hyperscale DCs.	Rising DC + renewable integration (solar/wind PPAs for DCs); global cable demand; domestic edge DC rollout	Raw material price swings (aluminium, copper); order lumpiness
Cummins India (CUMMINSIND)	Backup power (gensets)	Mission-critical uptime provider; market leader in diesel gensets; redundancy requirements rise for AI DCs. Strong order book; FY25 PAT ₹1,999cr.	Commissioning of AI-ready campuses; large hyperscale orders; shift to gas-based gensets for ESG	Global shift away from diesel; fuel price volatility; regulatory ESG pressure
Netweb Technologies (NETWEB)	AI/HPC server OEM	India's only listed AI/HPC server play; NVIDIA partnership; 40%+ PAT growth YoY. Scarcity premium on AI infra exposure; uniquely levered to GPU demand.	AI GPU rack orders; government HPC projects; enterprise AI adoption	Rich valuation (~130x P/E); customer concentration; competition from global OEMs
Blue Star (BLUESTARCO)	Precision cooling systems	EMP division +36% YoY, directly citing DC demand. Key beneficiary of shift from air to liquid cooling for AI racks (50–150 kW/rack). Strong brand, R&D investments in thermal management.	AI/HPC capex orders; large EMP project wins FY26+; policy-led infra growth	Price competition (Vertiv, Johnson Controls); potential margin volatility

Key Risks and Challenges

Policy execution: Delays in land, power, or state-level clearances could slow project commissioning.

Technology shifts: Rapid move to liquid cooling and GPU-heavy workloads may outpace firms like Blue Star or Netweb if they don't adapt.

Financial stretch: Heavy capex burdens balance sheets (Anant Raj, Apar); Netweb trades at rich valuations (>100x P/E).

ESG headwinds: Diesel gensets (Cummins) face long-term decarbonisation risk.

Competition: Global MNCs (Siemens, Vertiv, Equinix) intensify price and technology competition.

Update on Our Strong Sectors:

Continuing:

Auto – Thesis: GST benefit + festive season could surprise earnings, especially Q3, on the upside. (Read full rationale here)

Hospitals – Thesis: Long-term mega tailwinds. Capacity addition is ongoing. Inorganic growth opportunities are significant. (Read full rationale here)

EPC – Thesis: Many order books at all-time highs with significant runway for growth. Private capex could boost further. (Read full rationale here)

Power T&D – Thesis: Strong push on infrastructure and renewable integration. Order books are at multi-year highs with visibility extending 2–3 years. (Read full rationale here)

New:

None

Update on themes

Is this the best opportunity to accumulate Bank and Financial Services?

Read the thesis here
Update: Looks stronger than before. Might surprise sooner than expected. Trigger remains growth in credit and NIM expansion.

Can China's anti-involution plan change the fortunes of Indian metal cos?

Read the thesis here
Update: Steel prices are slightly up since last month. Theme can play out if Indian players report EBITDA/ton expansion in Q2

Is Silver the next gold?

Read the thesis here
Update: Long-term theme. Remains strong. It could be $50 in a few months.

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