HCLTech | Supercharging Progress™

HCLTech AI Factory

AI built for scale.
Engineered to run.



The global AI Factory market is projected to reach $780 billion by 2034, growing at an 88% CAGR. At the same time, global AI spending is expected to cross $2.5 trillion in 2026, with AI infrastructure and AI Data Centers emerging as the fastest growing investment areas. But despite this momentum, less than half of AI/GenAI experiments make it to production, and even among high-maturity organizations, only 45% manage to keep AI projects running long-term. The gap is clear: enterprises have learned how to build AI, but they have not learned how to run it at scale with reliability, efficiency and measurable ROI.

HCLTech AI Factory

HCLTech AI Factory is an engineering-led, end-to-end full-stack offering that enables enterprises to design, build, deploy and run AI at scale across cloud, on-premises, hybrid, edge, neo clouds and sovereign environments. Built on validated reference architectures, it brings together AI-ready infrastructure, platforms, data, IPs and managed services to move organizations from AI experimentation to production-grade, reliable and efficient AI-driven business outcomes at scale.

Vendor-agnostic by design, HCLTech AI Factory is powered by deep and extensive partnerships across hyperscalers, technology OEMs, platform providers, neo cloud providers and AI model ecosystems, backed by three decades of experience in managing complex, mission-critical infrastructure at scale. Unlike model or tool-centric approaches, it focuses on running AI in the real world, integrating engineering rigor, ecosystem choice, accelerators and outcome-oriented operations to deliver scalable, affordable and sustainable AI with a clear focus on return on investment.



HCLTech AI Factory offerings

HCLTech AI Factory offerings bring together AI-ready infrastructure, platforms, AI models and operations to help you engineer, run and scale AI with confidence.

Service 1 — AI Data Center Design and Build

Scope

Everything related to building including power, cooling and space, up to the data center raised floor.

Services

- DC consulting & advisory
- DC engineering, design and procurement
- MEPF and control systems build and project management
- Testing, commissioning and ORAT
- Digital twin services

Service 2 — AI Data Center Support

Scope

Everything related to physical management of racks / IT devices.

Services

- DC facility operations
- DC sustainability management
- Technical/operational audits
- Rack assembly and integration
- Break-fix and repair services
- Fiber/optics and OSP support
- 24x7 onsite support
- Inventory management/RMA
- Robotics and physical AI

Service 3 AI Infrastructure & Services

Scope

Everything related to IT infrastructure and platforms for real world AI use cases.

Services

- AI Factory across Private, Public and Neo Cloud
- Edge AI
- Sovereign AI
- AI Lab as a Service
- Developer Workspace as a Service
- FinOps for AI
- Inference as a Service
- Model as a Service Managed AI Platform as a Service



AI Factory services across the lifecycle

1. Advisory & assessment

Strategic alignment to bridge the gap between vision and execution.

Maturity assessments

- Comprehensive use-case feasibility and viability mapping
- Current-to-Target state assessment to identify architectural gaps

Consultation and execution advisory

- Consultative technology selection approach, optimized for intended business outcome
- "Buy vs. Build" decision support
- Business case and ROI analysis to ensure measurable value realization
- Compliance, security and ethical AI consultative services

2. Platform & infrastructure build services

Engineering the foundation for high-performance AI

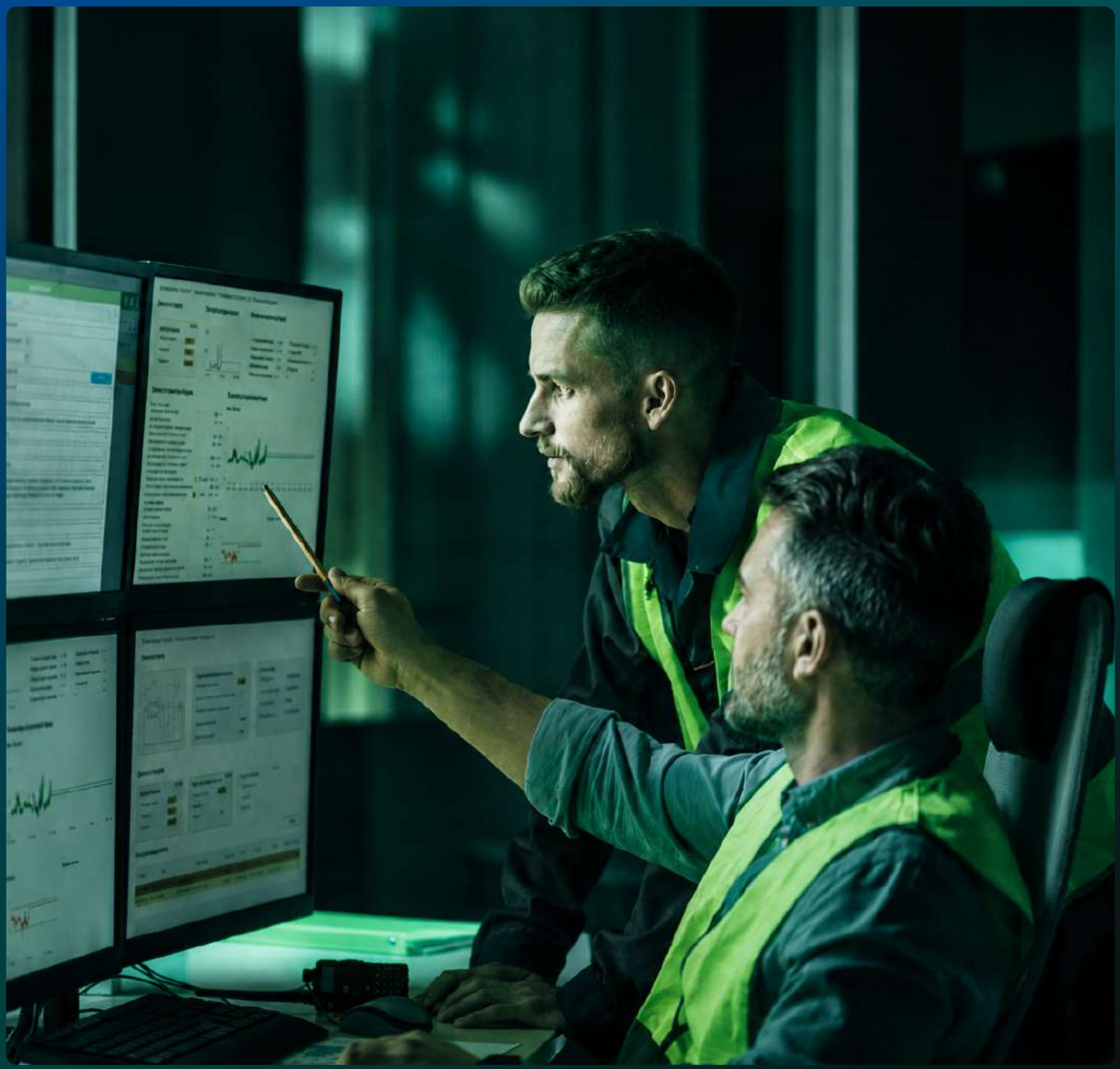
Build & configure

- Implementing and provisioning AI Factory Infrastructure and platform
- Enterprise Data Platform build and implementation services

3. Operations & managed services

Ensuring industrial-grade reliability and continuous evolution

- Managed services for the entire AI Factory lifecycle
- MLOps, LLMOps and FinOps services
- Availability and performance monitoring with unified observability
- Platform operations management including MW, AppOps and Reliability Engineering
- Data engineering services
- Security and compliance services



Why enterprises choose HCLTech AI Factory



Engineering-led, not tool-led. Built on decades of infrastructure expertise

Built on deep engineering heritage and three decades of experience managing complex, mission-critical IT infrastructure, rather than relying on point tools or platforms. HCLTech expertise in orchestrating large-scale, complex environments ensures AI systems are designed, built and operated for real-world performance, reliability and efficiency.



Blueprint-led, validated architectures built for ROI

Follows a blueprint-led operating model, using validated reference architectures and standardized design patterns that balance performance, cost, energy efficiency and scalability. Designs are optimized upfront for ROI and efficiency, not retrofitted later.



Full-stack coverage across the AI lifecycle

Unlike platform or services-only offerings, HCLTech AI Factory delivers full-stack AI lifecycle coverage by combining AI data center design and build, AI data center operations and AI infrastructure services that unify cloud, data, platforms, applications and AI models using HCLTech's IP-led platforms and solutions.



Designed to scale AI safely and sustainably

Accounts for power, cooling, energy efficiency, governance, and compliance as first-class design principles. This includes readiness for high-density GPU environments, liquid cooling, optimize power requirements, sovereignty and regional compliances and responsible AI operations.



Strategic full-stack AI ecosystem partnerships

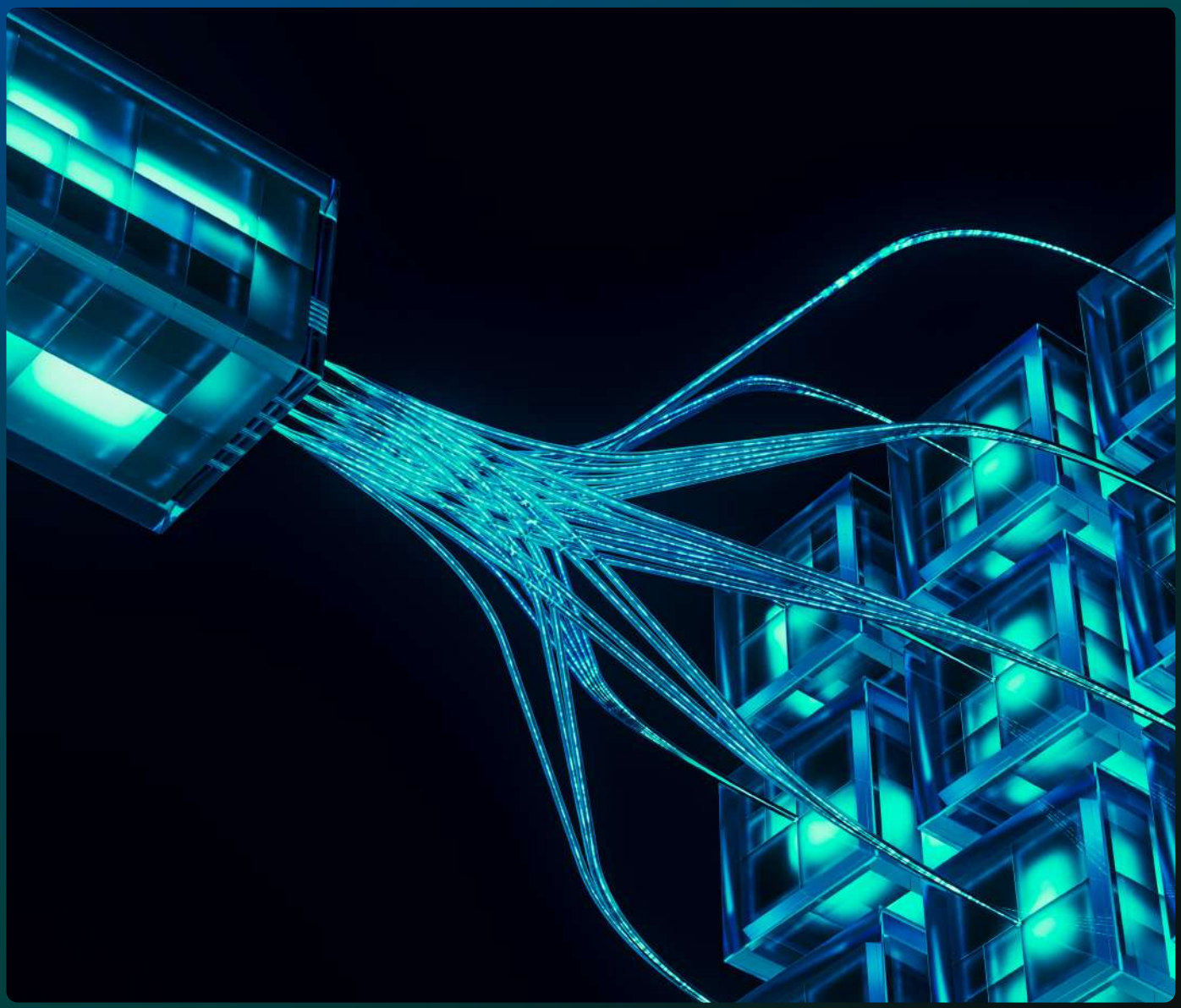
Extensive and deep partnerships and alliances right from research institutions, OEM, infra providers, hyperscalers to platform and AI model providers, helping enterprises in AI readiness and accelerate adoption in the most optimized way.

Production-grade operations with built-in control

Brings industrialized operations to AI environments, including proactive monitoring, rapid remediation, GPU orchestration, observability, security and FinOps. Operations are designed for 24×7 production AI, not just for pilot environments.

Proven at enterprise scale, trusted by analysts

HCLTech AI Factory is backed by enterprisescale delivery, a large pool of trained AI, cloud and infrastructure professionals and a global network of AI and Cloud Native Labs across locations such as Noida, Santa Clara, London, Munich, New Jersey and Singapore, supporting coinnovation and production validation. HCLTech is consistently recognized as a Leader by leading analyst firms including Gartner, IDC, ISG, Everest Group, Avasant and many others, reinforcing its credibility to design, operate and scale mission-critical infrastructure, cloud and AI solutions for global enterprises.



AI Factory enabled use cases

Physical & Industrial AI	• Digital twins and sim to real engineering • Robotics, vision and Edge AI • Smart assets, fleets and infrastructure
Industry specific AI Factories	• Regulated and sovereign environments • Manufacturing, energy and logistics • Retail, healthcare and financial services
AI Force	• AI-driven application modernization & code engineering • Developer productivity & secure code generation • AI-powered IT Operation & Service Management (AIOps) • AI-powered data life cycle management • Code summarization & explanation • Code refactoring & optimization • End-to-end engineering lifecycle optimization
AI Foundry	• Data modernization • Enterprise data readiness for AI • AI-led business insight & decision augmentation
AIoT use cases	• Predictive maintenance • Quality inspection • Safety compliance • Proactive theft and intrusion detection • Accuracy and performance improvement

GenAI

- Knowledge assistants and copilots
- Intelligent automation across functions
- Content creation
- Code generation
- Text to audio
- Video generation
- Customer experience
- Design and data creation
- Synthetic data generation

Agentic AI

- Digital assistants
- Customer facing support
- IT Ops / DevOps agents
- Supply chain automation agents
- Financial/HR workflow agents
- Multi-step enterprise copilots
- Engineering and design

HPC

- Simulation and modeling
- Scientific computing
- Engineering and design
- Rendering and visualization



Your AI Factory journey starts here

Whether you are

- Defining your AI Factory strategy
- Scaling proven AI use cases across the industries, or
- Prepare for the next wave of agentic and Physical AI

HCLTech is ready to partner with you

- Start with an AI Factory assessment
- Build and run AI at scale-with confidence
- Design your enterprise AI operating model



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