

High performance computing (HPC)

Fast track innovation and reduce time-to-value



In today's competitive business landscape, High performance computing (HPC) has emerged as a game-changer for enterprises, empowering them to process large data sets and complex simulations faster. The result is accelerated innovation cycles with improved efficiency.

The HPC market for cloud is expected to grow at a five-year CAGR of 17.6% till 2026, whereas HPC as a whole is likely to grow at 9.44% CAGR.

Source: [Hyperion Research](#)



Challenges with HPC

The adoption of HPC solutions in a restricted environment may come with certain challenges such as:



Lack of automation and scalability in the HPC environment



Higher time-to-value and innovation due to unoptimized clusters and inefficient cluster utilization



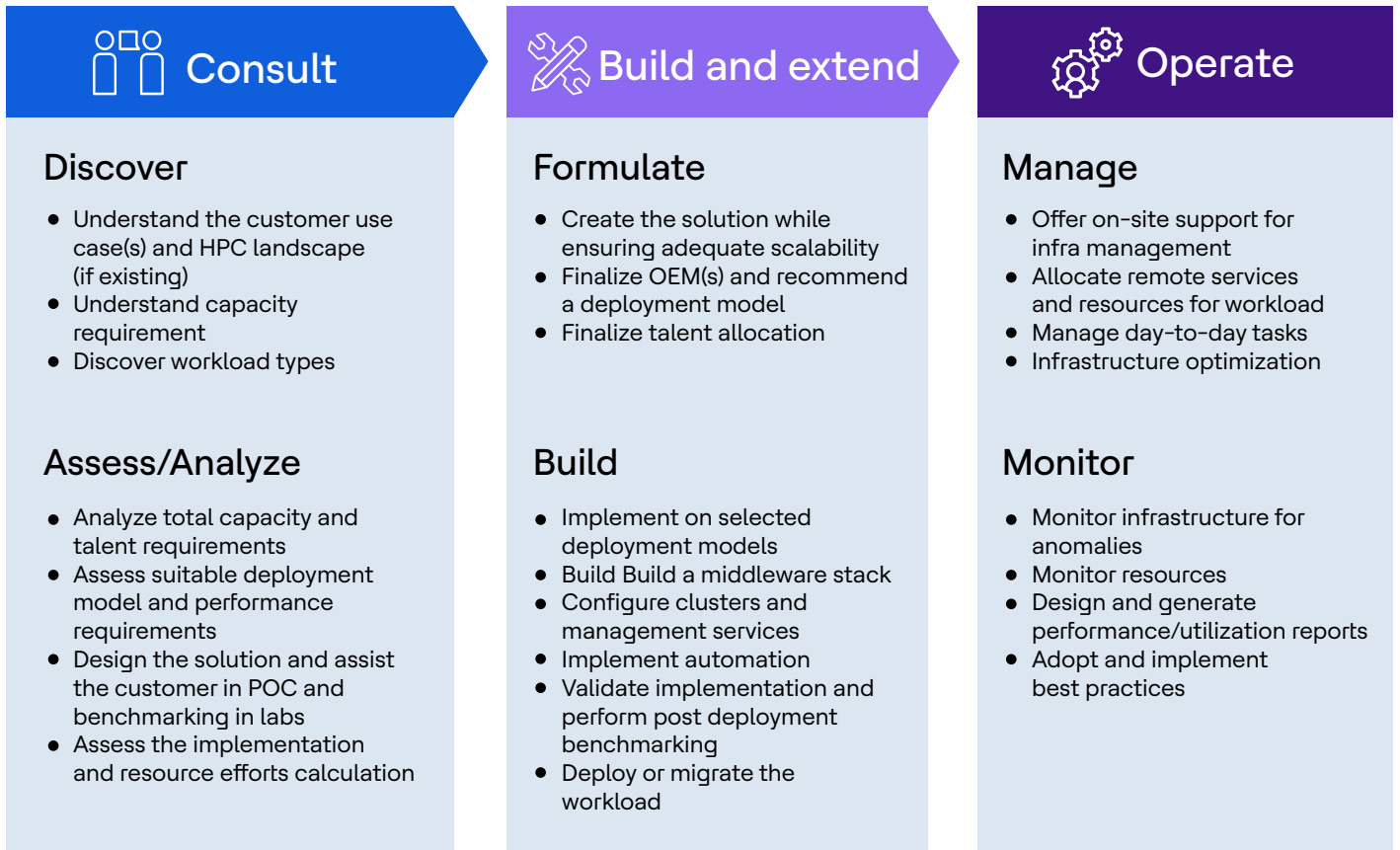
Infrastructure complexity and reduced performance due to non-adherence to best practices

HCLTech's HPC offering: Accelerating innovation, value and performance

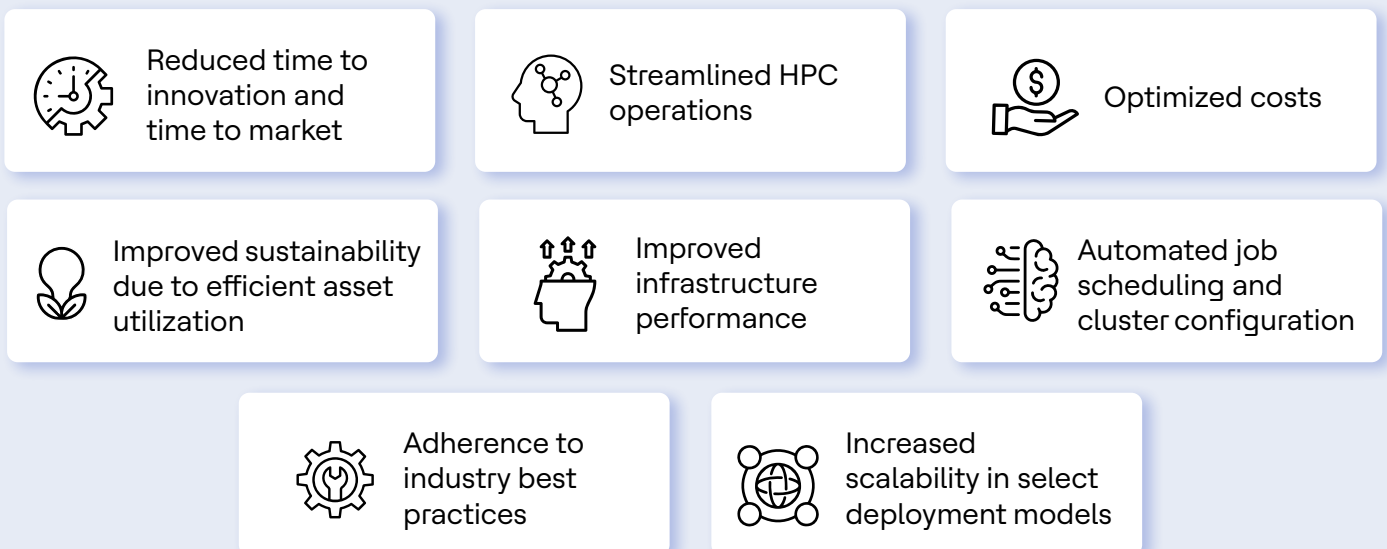
HPC is a one-stop solution that helps to accelerate implementation, modernization, optimization and operations for large HPC environments in any deployment model such as on-premise, on cloud or hybrid.

The offering is stitched around HCLTech's consulting and infrastructure managed services and the expertise of leading Original equipment manufacturers to provide scalable and flexible end-to-end solutions. It helps customers to increase performance, manage their day-to-day operations, consult on best practices and create processes for proper HPC utilization and operations.

HPC: Solution overview



Benefits



Success stories



Major EDA firm in Europe moves EDA workload to cloud

- Helped to meet their high resource demands of running EDA jobs without any Capex
- This resulted in a substantial performance improvement from on-prem, leading to accelerated innovation and business transformation
- Faster job execution for all simulation workloads



Major automobile firm in Europe moves HPC to Azure cloud

- Helped the customer achieve a scalable infrastructure with optimized performance and cost control
- Enabled significant performance improvement from AWS and other hyperscalers?
- Ensured same performance of the HPC application on Azure as that of on-prem
- Achieved considerable reduction in overall operational costs

Why HCLTech

- Leader in all analyst reports for cloud (IDC, Everest Group, ISG, Avasant and Gartner)
- Strategic engagements with leading OEMs, cloud and storage providers
- Large-scale integrated center of excellence (CoE) with tested use cases and reference architectures
- Strong expertise in infrastructure tuning and optimization and high-performance data analytics (HPDA), along with substantive domain and technology expertise in cloud





For further information, please reach out to us at contact.hyc@hcl.com

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Progress™

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HCLTech is a global technology company, home to more than 224,000 people across 60 countries, delivering industry-leading capabilities centered around digital, engineering, cloud and AI, powered by a broad portfolio of technology services and products. We work with clients across all major verticals, providing industry solutions for Financial Services, Manufacturing, Life Sciences and Healthcare, Technology and Services, Telecom and Media, Retail and CPG, and Public Services. Consolidated revenues as of 12 months ending December 2023 totaled \$13.1 billion. To learn how we can supercharge progress for you, visit hcltech.com.

