

# Accelerating HPC and AI Excellence: Comprehensive Consulting Solutions



A photograph showing a man and a woman in a server room. The man is on the left, wearing a green sweater, and the woman is on the right, wearing a white shirt and a green lanyard. They are both looking at a laptop held by the woman. The background shows rows of server racks.

In today's rapidly evolving technological landscape, High-Performance Computing (HPC) and Artificial Intelligence (AI) have emerged as transformative forces driving innovation and efficiency across industries. Our consulting services cater to both end customers and vendors, providing specialized expertise and guidance to maximize the potential of your HPC and AI investment.

## Consulting Services for End Customers

For end customers, we offer personalized HPC/AI consulting services to enable businesses to make informed decisions and adopt cutting-edge technologies. Our experts collaborate closely with clients to understand their specific needs and challenges, designing tailor-made solutions for enhanced performance, improved efficiency, and sustainable growth.

## Consulting Services for Vendors

As trusted advisors to vendors, we assist in fine-tuning their HPC/AI offerings, ensuring they meet market demands, stand out from the competition, and deliver exceptional value to their clients. Our market insights and state-of-the-art knowledge help vendors stay ahead in this competitive landscape.

## Market Analysis and State of the Art

Our consulting services begin with a comprehensive market analysis, where we closely examine current trends, emerging technologies, and industry benchmarks in HPC and AI. This analysis empowers businesses to gain a competitive advantage by leveraging the latest advancements and best practices.

## Legacy Infrastructure Audit

We conduct thorough audits of existing HPC and non-HPC infrastructure to identify strengths, weaknesses, and opportunities for optimization. Our experts provide detailed assessments, laying the foundation for strategic improvements and cost-effective upgrades.

## Platform Assessment

Choosing the right platform is critical to the success of any HPC/AI initiative. We conduct in-depth assessments of Cloud, On-Premises, and Hybrid deployments, weighing their benefits and limitations against specific business requirements. Our analysis ensures the most suitable platform is selected.

## Cost Analysis

Our cost analysis services offer transparency and predictability for HPC/AI investments. We provide clients with a detailed breakdown of upfront investments, operational expenses, helping them make well-informed financial decisions.

## Solution Design

Our expert consultants work collaboratively with clients to design robust and efficient HPC/AI solutions. The solution design phase includes:



### Architecture

Crafting reliable and scalable architectures that align with business objectives.

### System Optimization

Fine-tuning infrastructure including Operating Systems, BIOS optimization, software stack, and schedulers for optimal performance.



### Applications Tuning and Optimization

Enhancing application performance for increased productivity (Message Passing Interface (MPI) optimization).

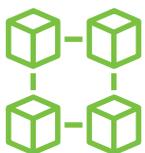
### Monitoring and Reporting

Implementing advanced monitoring and reporting systems for system efficiency, cost control, accounting, and incident alerts.



### HPC/AI Integration

Seamlessly integrating HPC and AI technologies into existing workflows (Containers, Kubernetes, AI frameworks).



### Storage Design

Designing storage solutions, including Parallel File Systems, NAS, and Hot/Cold storage, for efficient data handling.

### Data Management Strategies

Devising effective data management strategies to ensure operational efficiency and data accessibility.



### Energy Management Optimization

Implementing energy-efficient practices to reduce operational costs and environmental impact through scheduler optimization and specific energy management tools.

## Benchmarking

We conduct rigorous benchmarking tests to validate platform choices and ensure they meet performance requirements. Our support during Request for Proposal (RFP) processes enables clients and partners to reach the desired performance from their solution.

## Solution Roadmap Planning

Our roadmap planning services outline a clear path for successful HPC/AI solution implementation. We assist in RFP preparation, setting well-defined objectives, and creating step-by-step plans to achieve technological excellence and alignment with technology evolution.

## Unlock the true potential of HPC and AI

Our comprehensive HPC/AI consulting services empower organizations to unlock the true potential of high-performance computing and artificial intelligence. By providing in-depth market analysis, strategic planning, and optimized solution designs, we enable businesses to stay at the forefront of innovation, achieve operational excellence, and accelerate their journey towards a successful future.



**Discuss your HPC needs today**

Contact us at [info@doit-now.tech](mailto:info@doit-now.tech)



[www.doit-now.tech](http://www.doit-now.tech)