

HYP_Link

Microsoft Investment in Germany to Expand European Cloud Infrastructure, AI Capabilities, and Digital Skills Workforce

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RECENT DEVELOPMENT

Addressing multiple challenges facing the global HPC community, [Microsoft has expressed intent to invest US\\$3.46B \(€3.2B\) in Germany](#) over the next two years. Expanding its cloud region in Frankfurt am Main and planning new infrastructure in North Rhine-Westphalia, Microsoft expects the investment to double its existing cloud capacities in Germany, accelerate benefits of AI to German scientists, researchers, and engineers, and train more than 1.2 million individuals in digital skills.

ANALYST COMMENT

Over the last several years, HPC users have been increasingly turning to the cloud to run their HPC workloads, and even more so their AI workloads. With over 85% of HPC users already using the cloud for HPC resources to at least a limited extent, Hyperion Research projects user spending on HPC cloud-based resources to grow at a 18.1% 5-year CAGR. This growth primarily reflects traditional HPC modeling/simulation; once AI-related cloud spending is fully incorporated into the forecast, the CAGR may expand to 25% or more.

The investment addresses several items that recent research has identified as key trends and barriers to expanded adoption of HPC and AI infrastructure capabilities both on-premises and in the cloud:

- **Leveraging cloud for AI workloads.** Recognizing the expense of GPU-based systems, the global supply chain constraints of GPUs, and users' generally as yet unknown utilization levels of GPU-based systems for their AI workloads, Microsoft anticipates European scientists, researchers, and engineers demand increasing for AI training and inferencing in the cloud.
- **Increasing attention to digital sovereignty regulations.** Policy and governance regulations are emerging across the EU and within EU member states. Microsoft's investment in Germany may afford them better capabilities to comply with both EU and German sovereignty polices today and in the future.
- **Lack of skilled HPC and AI expertise.** With the adoption of AI in many facets of everyday life, there is a need for education relative to provisioning and using AI. By enhancing an individual's professional development in these areas, Microsoft is addressing this need head on.

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