



HYPERION RESEARCH

Hyperion Research ISC22 Conclusions

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www.HyperionResearch.com
www.hpcuserforum.com

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Conclusions

- **2021 was a strong year with a 9% increase**
 - 2022 is also expected to be a strong year
 - Exascale systems will drive growth in 2022 to 2024
 - AI, HPDA/big data are hot areas
- **New technologies are showing up large numbers:**
 - Processors, AI hardware & software, memories, new storage approaches, etc.
 - Quantum
- **The cloud has become a viable option for many HPC workloads**
 - HPC in the cloud is lifting the sector writ large
- **Storage will likely see major growth driven by AI, big data and the need for much larger data sets**
- **There are growing concerns about the supply chain and HPC talent availability**

A Concern: HPC Expertise Shortage

The growing scarcity of HPC experts to implement new technologies is the number one roadblock for many HPC sites

- **Two major trends:**
 - 1) A shrinking HPC workforce
 - 2) A massive increase in system complexity
- **HPC experts are an aging workforce**
 - The pipeline of new HPC staff entering the workforce does not adequately match the outflow of retirees
 - Competition for HPC staff will intensify
- **Increasingly complex workloads are more difficult to manage**
 - Increasing HPC systems per site
 - Augmenting traditional modeling/simulation with AI and big data
 - Incorporating multiple processor types, co-processors, accelerators, and other specialized hardware
 - Balancing on-prem and cloud
 - And Enterprise IT users are entering HPC space, and need HPC expertise
- **HPC users will need major improvements in ease-of-use, ease-of-selection, & ease-of-optimization**

2022 HPC User Forum Meetings

Please join in!

- **June 21-22, 2022**
 - In-person at Oak Ridge National Laboratory
- **September 6-8, 2022**
 - In-person in Tucson, Arizona
- **October 3-6, 2022**
 - In-person in Paris (October 3-4)
 - In-person at HLRS, Stuttgart, Germany (October 5-6)

Thanks for joining us today!



**We welcome questions,
comments and suggestions**

**Please contact us at:
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