

Special Study Results

Professional Services Make Up a Sizable Portion of Overall HPC Budgets

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HYPERION RESEARCH OPINION

Recent study results indicate that a reasonable percentage of respondents' overall annual HPC budget goes toward HPC-related third-party professional services. Overall, about half of all respondents spend somewhere between 10% and 50% of their overall HPC budgets on HPC-related professional services.

- Industry was much more committed to professional services than the other major sectors, with 27% of industry survey respondents reporting commitment of 10% to less than 20% of their budgets to HPC-related professional services and about one-quarter of industry sites committing between 20% and 30%.
- More than one-third of government respondents report spending between 10% to less than 20% for HPC professional services.
- The academia sector was the least dependent on professional services, with 40% reporting less than 5% of their annual budgets going to HPC-related professional services.

This data is from the eighth annual study of Hyperion Research's high-performance computing (HPC) end-user-based tracking of the HPC marketplace. It included 181 HPC end-user sites with 3,830 HPC systems.

STUDY FINDINGS

Table 1 shows the estimated percentage of respondents' overall annual HPC budget that goes toward HPC-related professional services, with a slight overall plurality of sites (26.9% of the sites) committing less than 5% of their overall annual HPC budget, followed by 10% to less than 20% (25% of the sites) and 5% to less than 10% (22.5% of the sites). Overall, about half of all survey respondents spend somewhere between 10% and 50% of their overall HPC budgets on HPC-related professional services.

TABLE 1

HPC Professional Services Budget by Sector

Q: Estimate the percent of your overall annual HPC budget that goes toward HPC-related professional services: funds for third-party professionals who provide services to stand up or operate your HPC center distinct from direct suppliers of HPC hardware or software.

	Overall Percent	Industry Percent	Government Percent	Academia Percent
Less than 5%	26.9%	20.2%	25.0%	40.0%
5% to less than 10%	22.5%	18.1%	25.0%	30.0%
10% to less than 20%	25.0%	26.6%	37.5%	18.0%
20% to less than 30%	16.3%	22.3%	6.3%	8.0%
30% to less than 50%	6.3%	9.6%	-	2.0%
More than 50%	3.1%	3.2%	6.3%	2.0%

n = 160; 94; 16; 50

Note: Overall midpoint average for the sample is 14.4%. The median for the sample is 15.0%.

Source: Hyperion Research, 2023

Industry was much more committed to professional services than the other major sectors, with 26.6% of industry survey respondents reporting commitment of 10% to less than 20% of their budgets to professional services and about one-quarter of industry sites committing between 20% and 30%. More than one third of government respondents report spending between 10% to less than 20% for HPC professional services. The academia sector was the least dependent on professional services, with 40% reporting less than 5% of their annual budgets going to professional services.

FUTURE OUTLOOK

Many HPC sites are interested in offering emerging technology options to their users, including AI/ML/DL and cloud computing, however the time and cost to train the existing workforce in these new areas of study can often prohibit their timely adoption. In the interest of speed, HPC sites are opting to pay a premium for the professional services of third-party experts to establish new technology offerings.

As HPC expands into new industries and new use cases drive the development of innovative ways to use the technology, many HPC engineers and scientists have had to become more specialized. This specialized workforce has drastically changed the staffing processes at HPC sites. HPC sites are frequently opting for third party professionals, often brought in on a contractual work basis, to address the needs of these specialized use cases. This trend is likely to continue as the landscape of HPC workload types continues to expand.

About Hyperion Research, LLC

Hyperion Research provides data-driven research, analysis and recommendations for technologies, applications, and markets in high performance computing and emerging technology areas to help organizations worldwide make effective decisions and seize growth opportunities. Research includes market sizing and forecasting, share tracking, segmentation, technology, and related trend analysis, and both user & vendor analysis for multi-user technical server technology used for HPC and HPDA (high performance data analysis). Hyperion Research provides thought leadership and practical guidance for users, vendors, and other members of the HPC community by focusing on key market and technology trends across government, industry, commerce, and academia.

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