Uptime Institute AI Training and Infrastructure Survey 2025

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SUMMARY

Three in ten owner/operators responding to Uptime Institute's 2025 AI Infrastructure Survey (30%) report their organization currently performs AI training, while nearly half (46%) plan to do so in the future.

A majority say their AI training workloads are hosted in on-premises data centers in central locations (53%).

Data sovereignty (42%), *access to dedicated hardware* (40%), and *ability to use existing infrastructure* (38%) have the greatest impact on choice of location for AI training.

Organizations performing AI training on-premises also say the main reasons for doing so are *privacy/ security* (64%) and *performance* (44%).
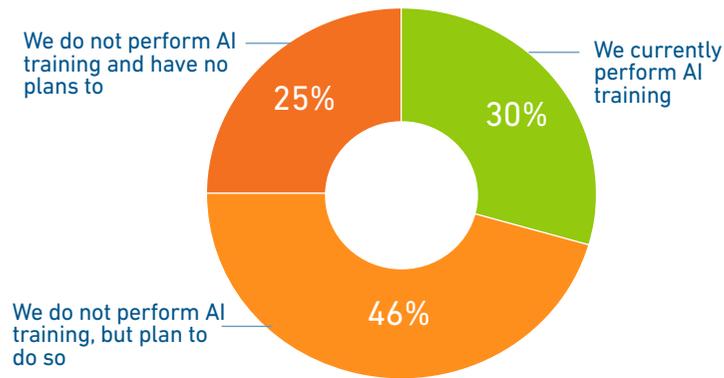
ABOUT THIS SURVEY

Uptime Institute's AI Infrastructure Survey was conducted between January 21, 2025 and February 24, 2025 and had a total of 1,062 data center industry respondents.

This report is based on the results from 519 data center owner/operator respondents.

Currently perform or plan to perform AI training
I. Does your organization currently perform AI training, or does it have plans to perform AI training? (n=426)
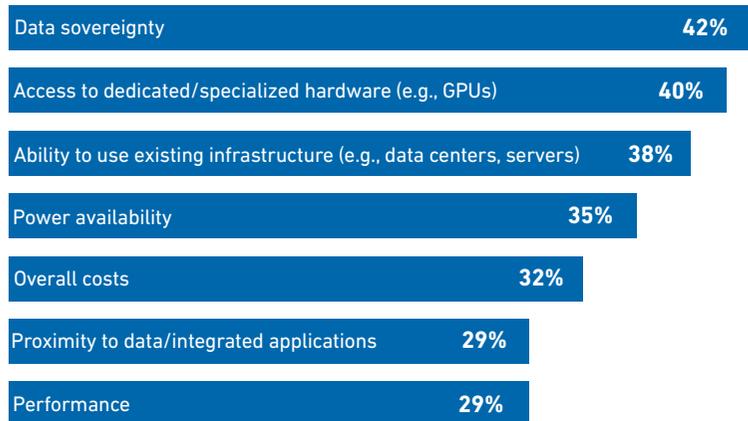

- We do not perform AI training and have no plans to — 25%
- We currently perform AI training — 30%
- We do not perform AI training, but plan to do so — 46%

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Impact of location on AI training
III. Which of these are having the greatest impact on your organization's choice of location for AI training? Choose no more than three. (n=106)*
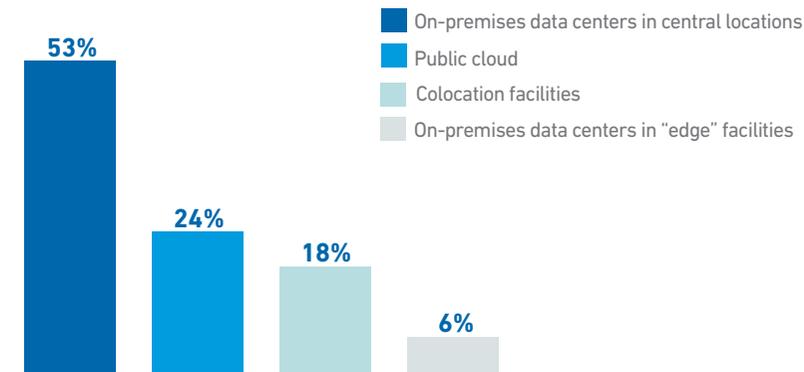
Data sovereignty	42%
Access to dedicated/specialized hardware (e.g., GPUs)	40%
Ability to use existing infrastructure (e.g., data centers, servers)	38%
Power availability	35%
Overall costs	32%
Proximity to data/integrated applications	29%
Performance	29%

* Only answered by respondents who said their organization is performing AI training

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Primary hosting locations for AI training
**II. Where does your organization host the greatest proportion of your AI training? (n=97)***

- On-premises data centers in central locations — 53%
- Public cloud — 24%
- Colocation facilities — 18%
- On-premises data centers in "edge" facilities — 6%

* Only answered by respondents who said their organization is performing AI training

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AI infrastructure for both training and inference
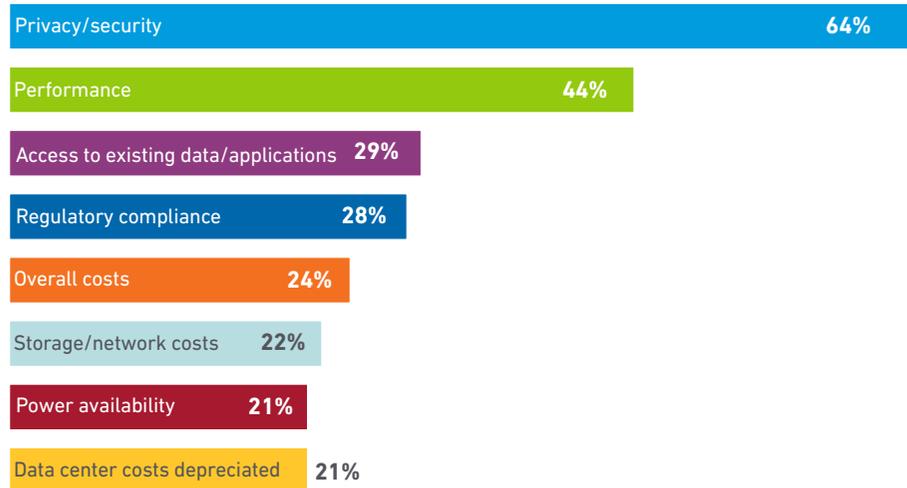**IV. Does your organization use the same AI infrastructure for both training and inference? (n=41)***

- Yes — 71%
- No — 17%
- Don't know — 12%
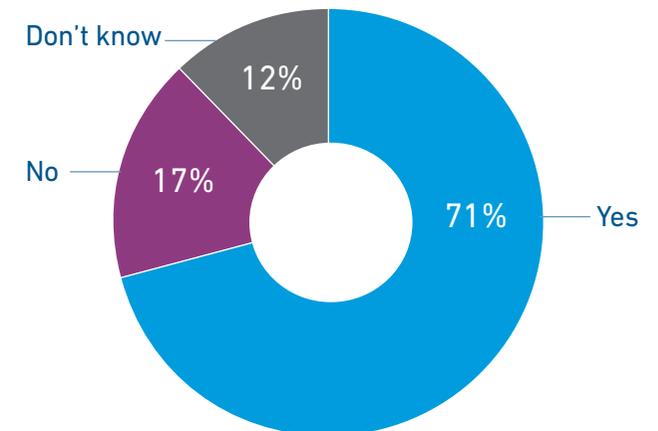
* Answered by respondents who said their organization is performing both AI training and AI inference

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Reasons for performing AI training on-premises

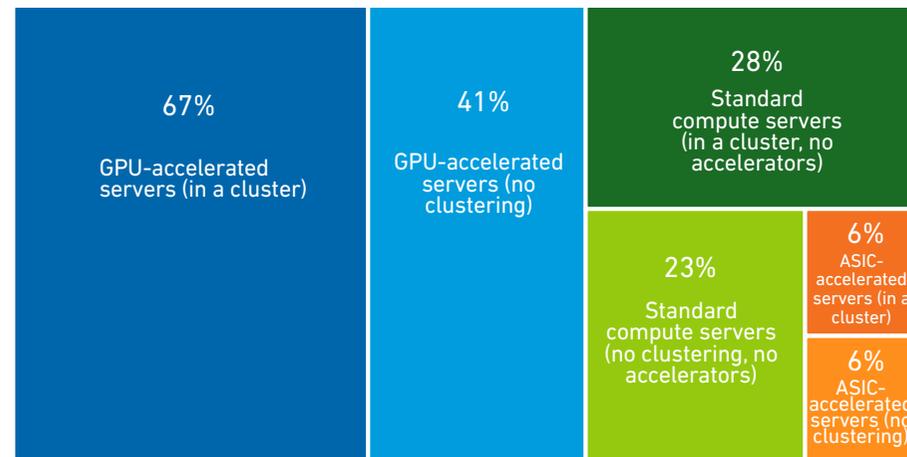**V. What are the main reasons you are training AI on-premises? Choose no more than three. (n=72) ***

Privacy/security	**64%**
Performance	**44%**
Access to existing data/applications	**29%**
Regulatory compliance	**28%**
Overall costs	**24%**
Storage/network costs	**22%**
Power availability	**21%**
Data center costs depreciated	**21%**

* Only answered by respondents who said their organization is performing AI training on-premises

AI training and IT power capacity

VI. Is AI training increasing your organization's overall IT power (MW) capacity demand? (n=72)*

No **12%**
Yes
88%

* Only answered by respondents who said their organization is performing AI training on-premises

Tools and equipment used in AI training

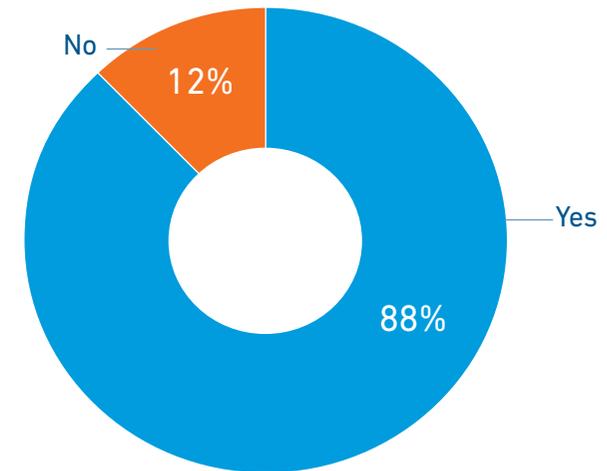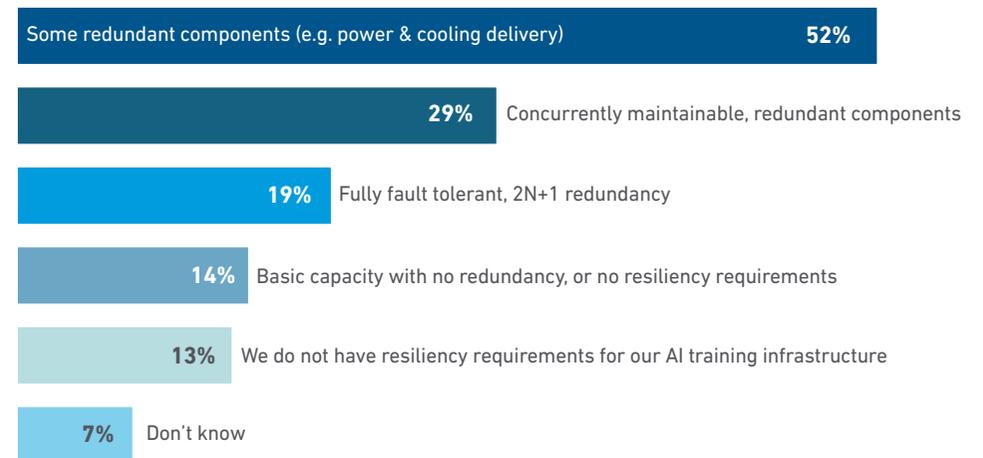**VII. Which of the following are used by your organization for AI training? Choose all that apply. (n=81)***

- **67%** GPU-accelerated servers (in a cluster)
- **41%** GPU-accelerated servers (no clustering)
- **28%** Standard compute servers (in a cluster, no accelerators)
- **23%** Standard compute servers (no clustering, no accelerators)
- **6%** ASIC-accelerated servers (in a cluster)
- **6%** ASIC-accelerated servers (no clustering)

* Only answered by respondents who said their organization is performing AI training on-premises and/ or in colocation facilities

AI training infrastructure resiliency levels

VIII. What level of resiliency do you have for your AI training infrastructure? Choose all that apply. (n=69)*
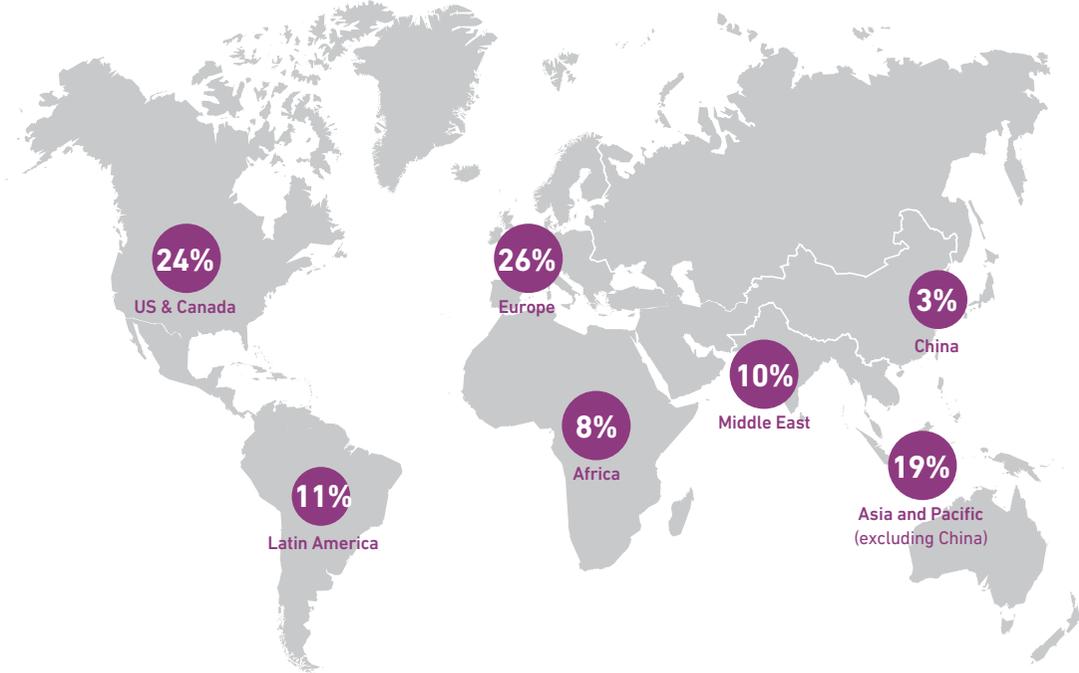
Some redundant components (e.g. power & cooling delivery)	**52%**
Concurrently maintainable, redundant components	**29%**
Fully fault tolerant, 2N+1 redundancy	**19%**
Basic capacity with no redundancy, or no resiliency requirements	**14%**
We do not have resiliency requirements for our AI training infrastructure	**13%**
Don't know	**7%**

* Only answered by respondents who said their organization is performing AI training on-premises and/or colocation facilities
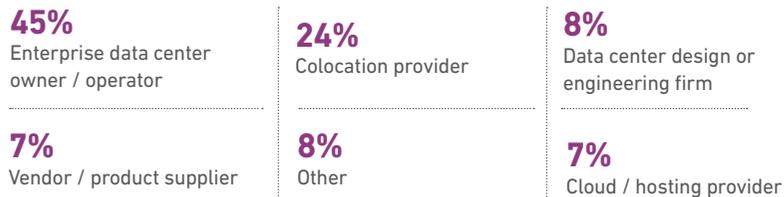
Owner/Operator Respondent Demographics

Respondents' location (n=519)

- **24%** US & Canada
- **26%** Europe
- **3%** China
- **10%** Middle East
- **8%** Africa
- **19%** Asia and Pacific (excluding China)
- **11%** Latin America

Digital infrastructure environment (n=519)

45% Enterprise data center owner / operator

24% Colocation provider

8% Data center design or engineering firm

7% Vendor / product supplier

8% Other

7% Cloud / hosting provider

Verticals (n=360)

Vertical	Percentage
Colocation / multi-tenant data centers	31%
Telecommunications	12%
Information Technology	11%
Financial	9%
Data Center Equipment Supplier	6%
Government	6%
Design and Engineering	5%
Education	4%
Utilities/Energy	4%
Software and/or Cloud Services	4%
Manufacturing	3%
Other	6%

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About Uptime Institute

Uptime Institute is the Global Digital Infrastructure Authority. Its Tier Standard is the IT industry's most trusted and adopted global standard for the proper design, construction, and operation of data centers – the backbone of the digital economy.

For over 25 years, the company has served as the standard for data center reliability, sustainability, and efficiency, providing customers assurance that their digital infrastructure can perform at a level that is consistent with their business needs across a wide array of operating conditions.

With its data center Tier Standard & Certifications, Management & Operations reviews, broad range of related risk and performance assessments, and accredited educational curriculum completed by over 10,000 data center professionals, Uptime Institute has helped thousands of companies, in over 100 countries to optimize critical IT assets while managing costs, resources, and efficiency.

Uptime Institute is headquartered in New York, NY, with offices in Seattle, London, Sao Paulo, Dubai, Singapore, and Taipei. For more information, please visit www.uptimeinstitute.com