Uptime Institute Al Infrastructure Survey 2025



MAY 2025

SUMMARY

One-third of data center operators (32%) currently host applications that perform Al Inference. Another 45% say that while they currently do not, they plan to do so.

On-premises data centers in central locations are the most common environments for hosting Al inference workloads (46%), along with colocation facilities (34%).

Being able to use existing infrastructure (50%) is the top factor impacting choice of location for AI Inference, Data sovereignty (46%) and power availability (37%) are also important factors.

One in two owner/operators hosting Al applications say they are upgrading their data center systems to support Al workloads (52% power distribution and 51% cooling systems).

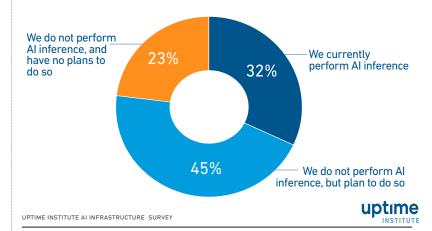
ABOUT THIS SURVEY

Uptime Institute's Al 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 perfom AI inference

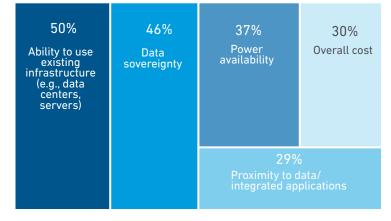
I. Does your organization currently host applications which perform AI inference, or does it have plans to perform AI inference? (n=340)



Top factors influencing AI inference location

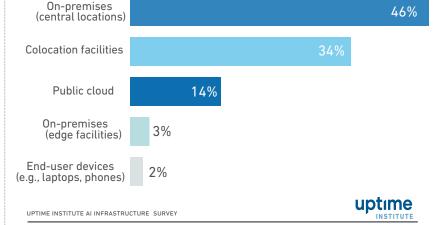
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III. Which of the following are having the greatest impact on your organization's choice of location for Al inference? Choose no more than three. (n=103)



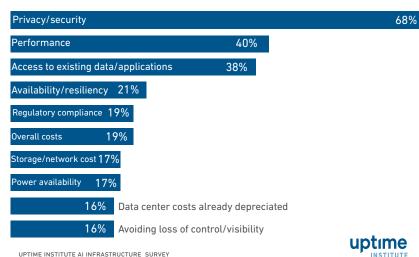
Primary hosting location for AI inference workloads

II. Where does your organization host the greatest proportion of your Al inference? (n=103)



Key drivers for hosting AI inference workloads on-premises

IV. What are the main reasons your AI inference workloads are hosted on-premises? Choose no more than three. (n=63)

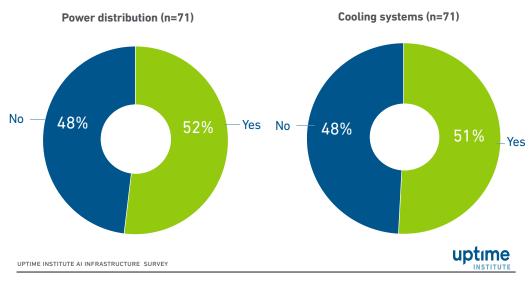


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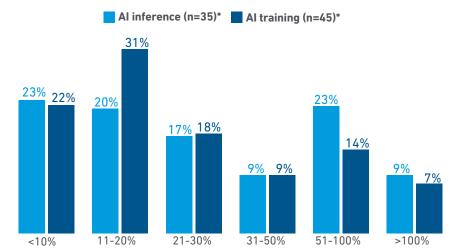
Data center system upgrades to support AI workloads

V. Has your organization upgraded its data center systems to support AI workloads?



Capacity Demand Increases Due to Al Inference/Training

VII. How much would you estimate hosting AI inference/training is increasing your organization's overall IT power (MW) capacity demand?



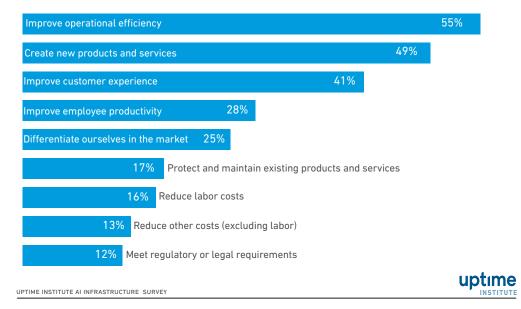
*Don't know responses have been removed.

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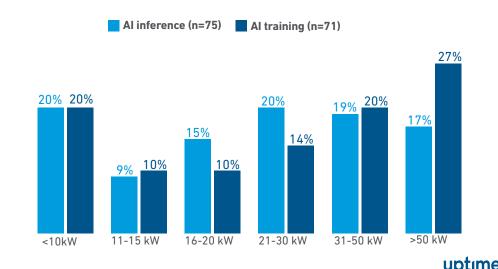
Reasons for implementing AI infrastructure projects

VI. Thinking about your organization's current projects that require AI infrastructure, which of these are the most important reasons for their implementation? Choose no more than three. (n=364)



Estimated average rack density for Al inference and training hardware

VIII. What is your estimated average rack density for AI training and inference hardware?



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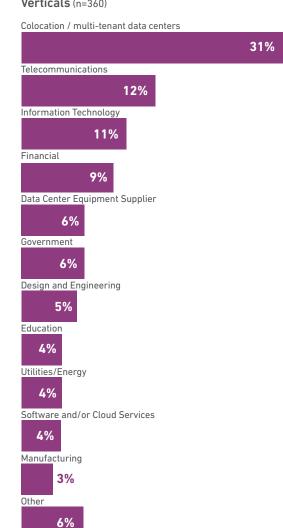


Owner/Operator Respondent Demographics



Digital infrastructure environment (n=519)			
45% Enterprise data center owner / operator	24% Colocation provider	8% Data center design or engineering firm	7% Cloud / hosting provider
7% Vendor / product supplier	8% Other		

Verticals (n=360)



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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

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