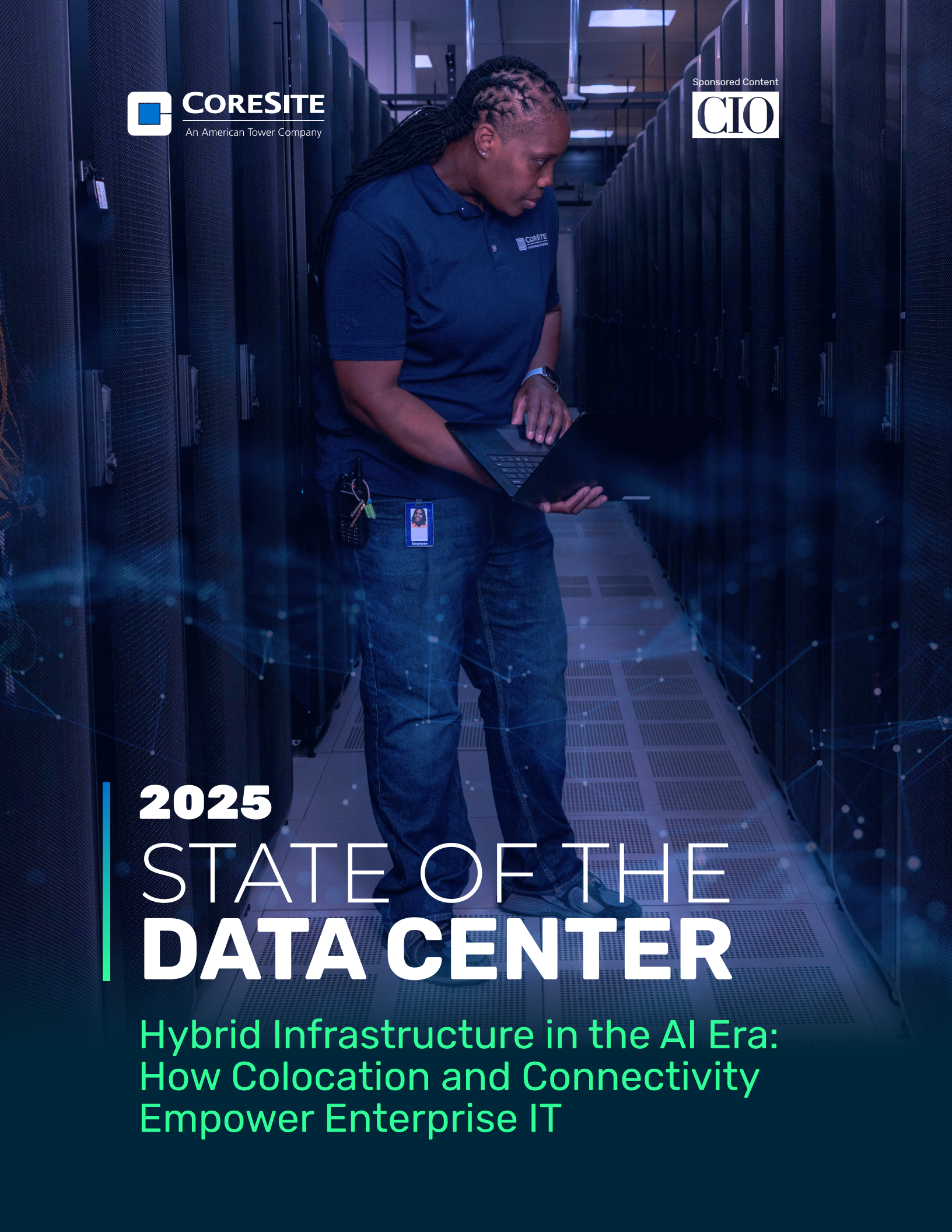

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2025 STATE OF THE DATA CENTER

Hybrid Infrastructure in the AI Era: How Colocation and Connectivity Empower Enterprise IT

Introduction

Business and IT leaders are walking a tightrope: They need to explore new ways to innovate, generate revenue and modernize their organization to take advantage of emerging technologies, all while closely managing costs in an uncertain economic environment.

The hectic pace of artificial intelligence (AI) development is putting greater pressure on CIOs to reassess their IT infrastructure to ensure that they are balancing cost and performance — without compromising security and compliance requirements.

Despite the uncertainty, IT leaders remain committed to a foundational component of their enterprise IT strategy: colocation. Colocation data centers provide a stable, secure, resilient and scalable environment for workloads. As the 2025 State of the Data Center research reveals, colocation data centers are taking on an expanding role in hosting AI and other critical workloads and applications.

"The colocation data center has taken center stage as cloud environments mature and workloads evolve and scale," says Anthony Hatzenbuehler, senior vice president of operations at CoreSite. "The infrastructure, expertise and operational experience that an established colocation data center provider offers are critical for organizations looking to balance their IT operations and workload distribution across on-prem, colocation and public cloud environments."

One critical gap remains with many colocation providers, however. Although the surveyed IT leaders cited the importance of their colocation provider offering connectivity between on-premises and public cloud infrastructure, just one in five respondents said their provider offers interconnect services.

About the research

Now in its sixth year, the 2025 State of the Data Center research, conducted by Foundry, surveyed 300 CIOs, CTOs and other IT decision-makers representing a variety of industry sectors. In addition to completing the online survey, Foundry conducted in-depth interviews with seven senior technology executives from enterprise organizations in the financial services, healthcare, retail and software-as-a-service (SaaS) sectors. Quotes from those interviews are included throughout the report, with the understanding that subjects would not be identified by name or company so they could speak freely about their data center strategies.

Balancing act: Optimizing workloads across hybrid IT environments

The ongoing shift from "cloud-only" to "cloud-smart" IT architectures underscores that CIOs and their teams have become more comfortable, and more adept at, optimizing workloads across different environments as their needs and priorities evolve. In fact, data from this year's State of the Data Center research shows that **98% of IT leaders have adopted or plan to adopt a hybrid IT model** (See Figure 3).

Figure 1: The escalating workload shift to colocation

Workloads currently deployed in colocation data center vs. on-premises or public cloud	2024	2025
Internet of Things Connectivity and Management	37%	51%
BI/DW/Data Analytics	47%	47%
Collaboration and Communications	42%	47%
Recommender Systems	36%	47%
Security/Cybersecurity	38%	46%
HRMS	37%	46%
Other LOB Apps	32%	46%
Generative AI Applications	42%	45%
Robotics and Automation	37%	45%
Augmented AI Applications	41%	44%
Storage/Archive/Backup/File Server	47%	44%
Core Business Apps	41%	44%
Predictive Analytics	41%	43%
CRM	39%	43%
Development/Test	43%	42%
Content Delivery/Media Processing	42%	41%
Natural Language Processing (NLP) Applications	36%	41%
Website/Web App	33%	41%
Chatbots and Virtual Assistants	42%	40%
Disaster Recovery/High Availability	41%	40%
ERP	39%	38%
Mobile Apps	35%	38%

Key: Blue indicates increased workload movement to colocation. Source: Foundry

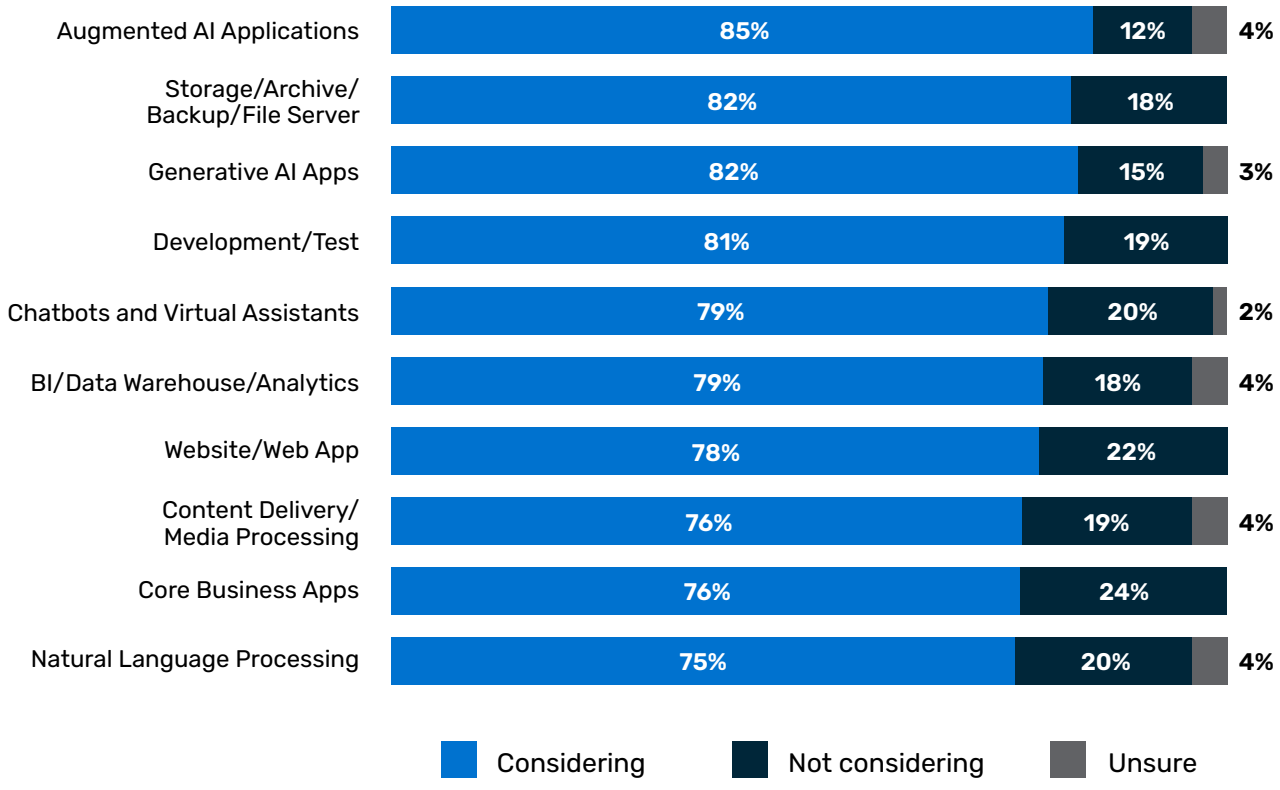
An emphasis on cloud cost management has led organizations to move some workloads from the public cloud back into the data center: In Foundry's 2024 Cloud Computing Study,[1] 37% of the surveyed IT decision-makers said their organization has repatriated apps or workloads, including databases, storage and AI/machine learning (ML) applications, from the cloud back to an on-premises location.

Many of these workloads are finding their way into colocation data centers, with IT leaders seeing the value in colocation's blend of control, costs and connectivity. This year's research found that colocation facilities are hosting a greater percentage of workload types than they did in 2024 — ranging from cybersecurity and core business apps to AI and the Internet of Things (See Figure 1).

98% of IT leaders have adopted or plan to adopt a hybrid IT model.

This shift is likely to continue, as most organizations are considering moving selected public cloud workloads to a colocation data center over the next 12 months (See Figure 2).

Figure 2: The top 10 workloads moving to colocation



Source: Foundry

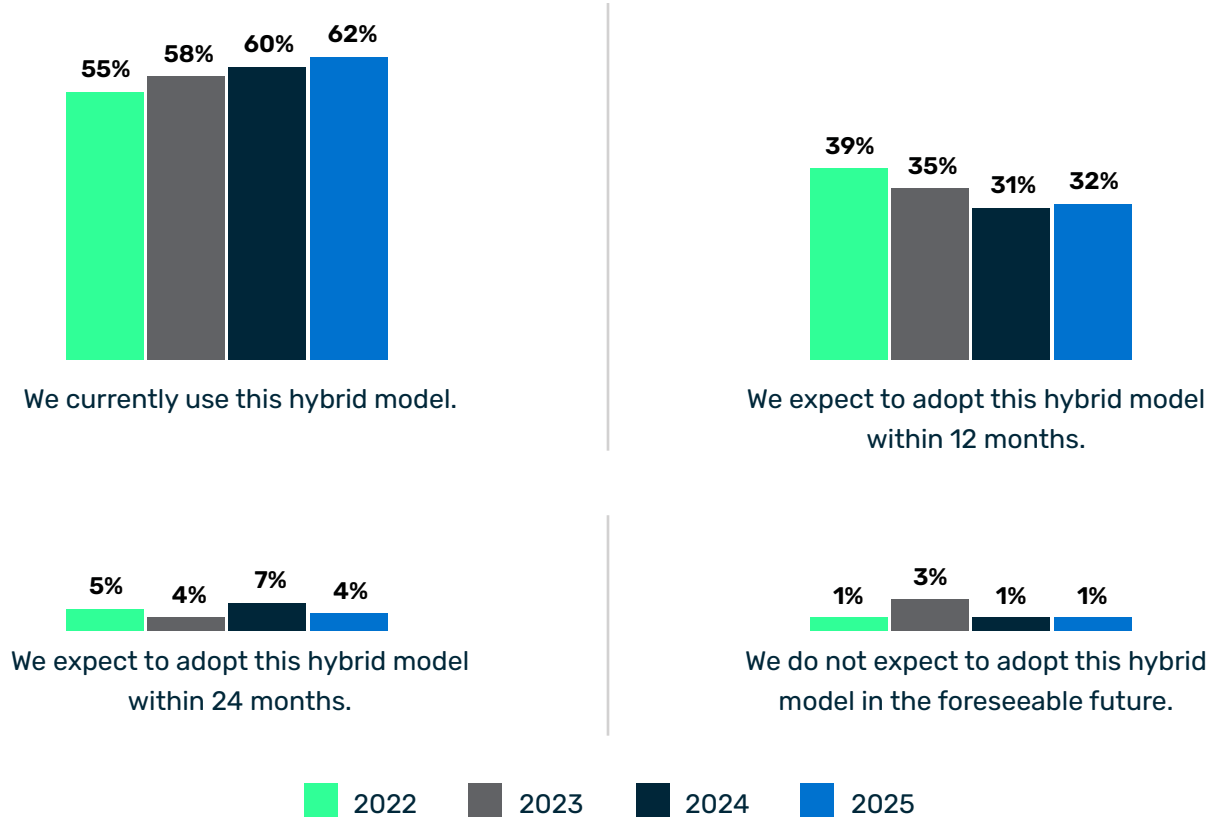
Key drivers for moving workloads to colocation focus on performance and cost, particularly for AI-related use cases. For example:

"We have AI/ML work that is easily but not cheaply done at a cloud provider," says the vice president of IT operations for an enterprise organization in the healthcare industry. "For things that require a lot of GPUs [graphics processing units], the expense has built up so quickly, it's now better to purchase gear than to try to lease cloud time."

Increased use of colocation data centers does not signal a full exodus of applications and workloads from public cloud providers, however. After a dip in public cloud usage from 2023 to 2024, this year's research showed a rebound of cloud-hosted workloads, with the biggest gains found in content delivery, enterprise resource planning and business intelligence (BI)/data analytics applications.

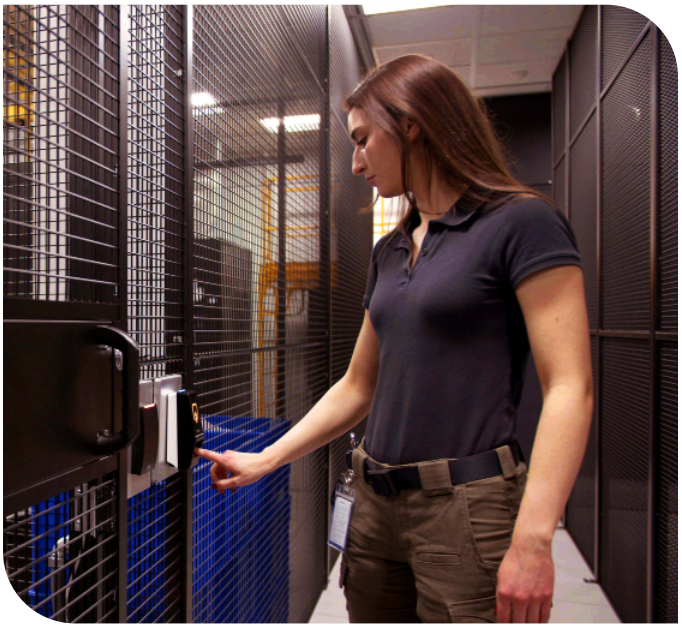
From an IT infrastructure perspective, organizations have fully embraced a hybrid model, mixing on-premises, colocation and public cloud environments to get the best blend of performance, cost and reliability. Hybrid cloud usage has steadily grown over the past four studies, **from 55% in 2022 to 62% in 2025**, signaling a long-term shift in infrastructure strategy (See Figure 3).

Figure 3: The continued growth of hybrid cloud models



Source: Foundry

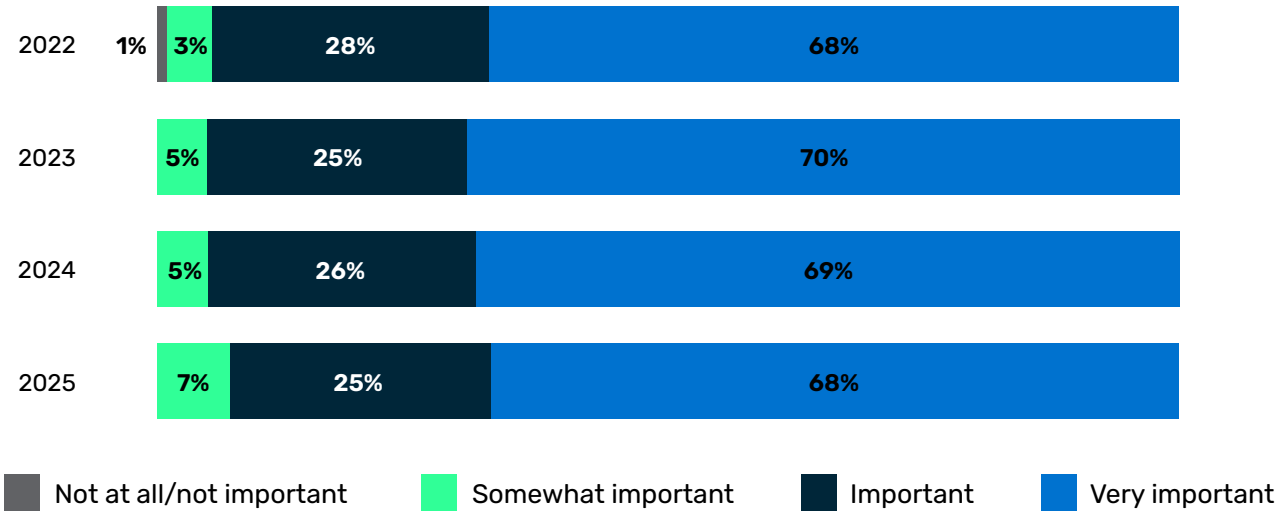
"How CIOs think about the cloud has certainly changed over the years," says Hatzenbuehler. "Instead of replacing on-prem data center or colocation environments, it's really about determining the best use cases across a hybrid environment. Even the cloud providers see the value in colocation data centers for connecting to other cloud operators that offer their customers complementary capabilities."



Closing the interconnection gap

A successful hybrid IT environment requires seamless integration and connectivity among myriad applications and services that fuel modern business. CIOs and their IT teams are increasingly looking to colocation providers to interconnect cloud environments. Seamless low-latency data exchange with assorted cloud services from different providers requires a private connection between dedicated infrastructure and a cloud provider, enabled by a cross connect within a data center. This direct cloud interconnect is an important consideration criterion for most survey respondents (See Figure 4).

Figure 4: Colocation's ability to provide direct cloud interconnection remains critically important



Source: Foundry

"[Colocation providers] are the waypoint, the enabler, in my transition to the cloud," says the vice president of IT services for an 1,800-employee organization in the banking industry. "If they do not have hybrid connectivity, then they are not able to make connections between on-prem, the colo and the cloud."

However, although most survey respondents consider direct connectivity through a colocation provider a "must have," **only 19% said their colocation provider offers interconnection to a variety of cloud providers.** That's a significant drop from 31% in 2024 and 36% in 2023.

One possible explanation for this "disconnect" is that some organizations are using colocation services from their primary cloud provider, which generally don't offer native connections to third-party cloud services.

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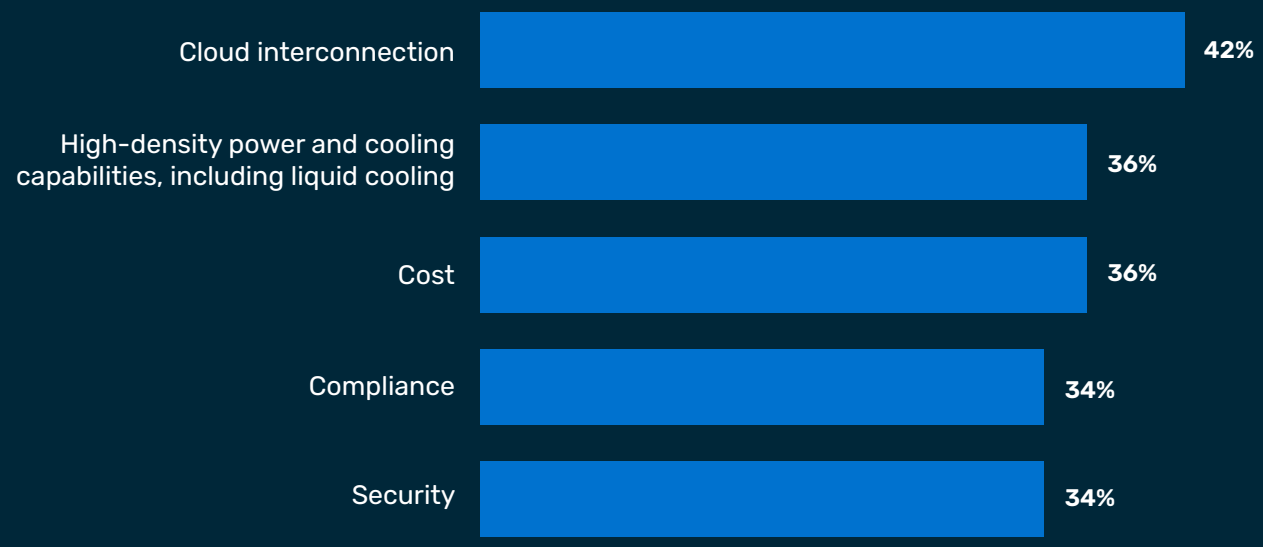
"There has been an explosion of data center companies on the hyperscale front," says Hatzenbuehler. "They're not really thinking about the interconnect piece — they're leaving that up to their customers. But that piece has to exist for a colocation provider."

IT teams need colocation providers that can bridge the interconnection divide, particularly if they hope to scale an increasingly important workload: generative AI (genAI). Respondents cited cloud interconnection as the top reason to use colocation for genAI workloads (See Figure 5).

Figure 5: Top reasons to run genAI workloads in colocation



Source: Foundry

Unlike general-purpose workloads, genAI workloads require hybrid infrastructure orchestration, making colocation's direct cloud interconnects a critical enabler.

For IT teams overseeing large data sets for genAI training, BI/analytics or other data-intensive workloads, direct interconnection reduces egress costs and transfer time, enabling use cases such as cloud bursting or temporary compute expansion.

"BI and AI share infrastructure," says the enterprise IT architect for a company in the healthcare industry. "Colo lets us manage data locally and then burst to the cloud for compute when needed." The organization relies on a mix of colocation and public cloud services for AI/ML as well as BI/data warehouse/analytics workloads.

Using a colocation provider as a cloud interconnect also plays a critical role in ongoing digital transformation efforts, ranking No. 1 among respondents as a digital transformation accelerator for the third year in a row.

"Colocation doesn't have the same competing priorities as our on-premises data center … because it's located in a data center which directly connects to most public clouds," says the senior director of IT for a $3 billion retailer that hosts about 40% of its IT infrastructure services in colocation data centers. "You're one hop to the internet, so you definitely see a performance increase."

Cloud interconnect capabilities are also more cost-effective, because they can lead to substantial savings on data egress costs — up to 70% — compared to transferring data over the public internet.[2]

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AI shifts the balance of where to host workloads for maximum value

These days just about every conversation about IT infrastructure or business transformation inevitably turns to AI. In Foundry's 2025 State of the CIO survey, IT leaders cited testing and deploying AI products or projects as their top priority for the coming year and 68% said AI is already reshaping IT operations.

The movement to AI correlates with this year's State of the Data Center findings, which also show that more AI workloads are transitioning to colocation data centers, including recommendation systems (47% in 2025 vs. 36% in 2024), genAI applications (45% vs. 42%) and augmented AI applications (44% vs. 41%). There are three primary drivers behind this shift:

- **Performance requirements.** AI/ML workloads demand high-compute density, low latency and specialized hardware such as GPUs and tensor processing units (TPUs). Colocation data centers offer greater control over infrastructure placement, network paths and hardware configuration — helping organizations meet the performance needs of advanced AI models that may be difficult or expensive to achieve in the public cloud.

- **Cost management.** Although cloud platforms offer scalability, long-term AI deployments can result in high ongoing costs, especially for training and inference at scale. Colocation provides a more predictable cost structure and enables organizations to amortize hardware investments, making it a compelling choice for organizations managing growing AI footprints.

- **Hybrid flexibility.** Adopting a hybrid approach that leverages both cloud and colocation enables organizations to run AI workloads wherever they perform best — balancing innovation and agility with control and compliance. Colocation acts as an anchor for core infrastructure while enabling cloud-native services to extend capability where needed.

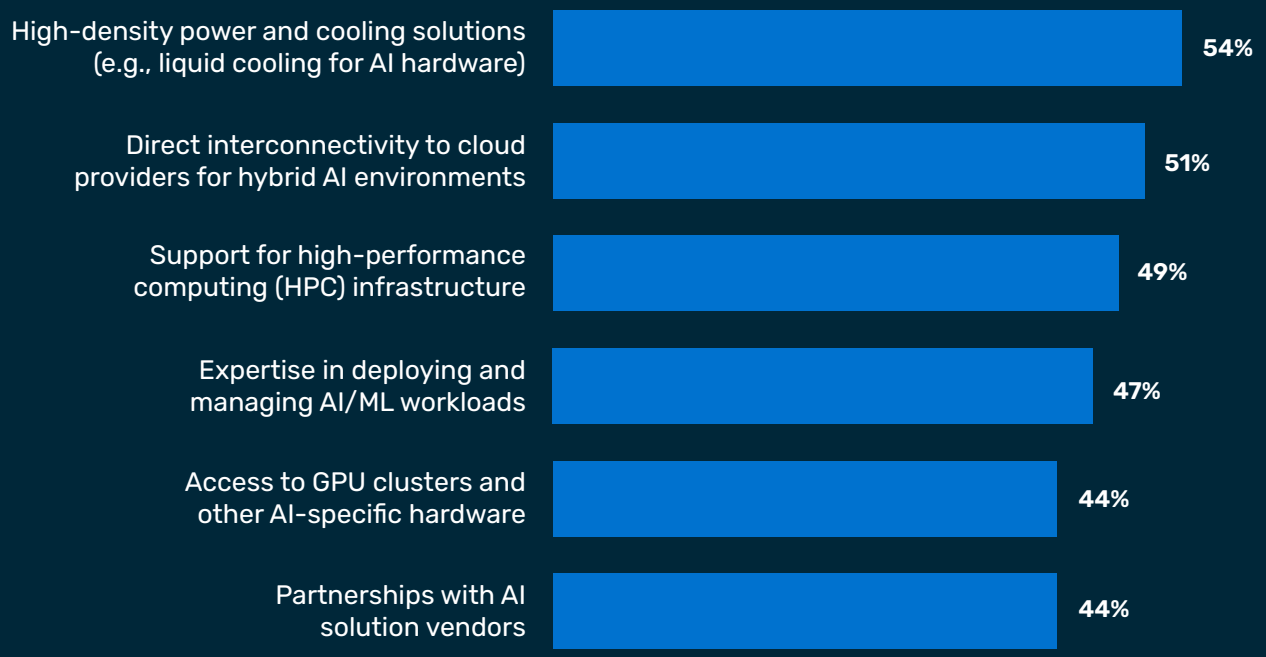
"Things that take a lot of GPU [capacity] — and take a lot of it all the time — aren't good cloud targets," says the healthcare IT operations VP. "It's better to manage it ourselves."

To support advanced AI workloads, organizations are looking for more than just space and power. They need high-density cooling solutions, hybrid-ready interconnects to cloud providers and access to AI-optimized hardware such as GPUs. They also are looking for partners with deep AI/ML deployment expertise (See Figure 6).

"We have a certain level of knowledge, but we're by far not the de facto AI experts and we're not AI scientists," says the senior IT director for the retail organization. "You have to look for partners who are able to assist in those areas."

AI-ready colocation providers that deliver on these requirements will be best positioned to support the growing complexity and scale of enterprise AI strategies.

Figure 6: The AI capabilities enterprises are seeking from colocation providers



Source: Foundry

Compliance plays a critical role in data center decisions

As IT teams implement AI technologies across virtually all parts of their organization, IT leaders must rethink traditional approaches to risk management, data governance and regulatory alignment. With growing pressure from regulatory bodies and evolving data protection laws, CIOs must ensure that sensitive workloads remain in environments where they can demonstrate full oversight and auditability.

Colocation facilities provide the physical security, geographic specificity and certifications required to meet stringent compliance mandates — often more directly than public cloud platforms. In this year's State of the Data Center research, compliance/security emerged as a Top 3 business driver for moving workloads to a colocation data center.

"[In a colocation data center], we have ownership and control over all our AI hardware, including GPUs and TPUs," says the healthcare IT operations VP. "Contrast that to the public cloud, where we would have to rely on someone else's infrastructure. Why do we care about control? It's about security and compliance."

Colocation also offers a level of transparency and hands-on management that is difficult to achieve in public cloud environments, the VP notes. "Data compliance and sensitive data requiring strict control drive the decision of where these apps will

run. We're not going to necessarily put this highly sensitive, business-critical data on public cloud."

Meet in the middle: Choosing the right colo provider

With colocation data centers playing an increasingly important role in hybrid IT models, the criteria for choosing the right provider are expanding and evolving. There's one constant, however: physical security. For the past four years, **security has ranked No. 1** on the list of attributes that IT leaders look for in a colocation provider (See Figure 7).

"Security is always a factor," says the enterprise IT architect for a large enterprise in the healthcare industry, referring to both physical security and cybersecurity. "What do your certifications look like? Do you have SOC 2 [Systems and Organization Control 2]? What's your physical security?

Will we have cages full of gear that are shared between multiple tenants?"

Other capabilities, including total cost of ownership (TCO), have risen in the rankings since 2023, edging out traditional criteria such as service-level agreement (SLA) performance and scalability — which nevertheless remain important.

Figure 7: Top attributes sought in a colocation provider (ranked)

	2025	2024	2023	2022
Security	#1	#1	#1	#1
Support and service quality	2	3	4	4
Total cost of ownership (TCO)	3	6	9	3
Performance on SLAs	4	4	2	6
Scalability and flexibility	5	2	3	8
Expertise in enabling AI applications	6	5	N/A	N/A
Compliance	7	11	8	5
Resilience of facility	8	12	10	14
Accessibility	9	7	5	9
Available managed services	10	10	7	2

Source: Foundry

The colocation provider's partner ecosystem also remains table stakes for consideration. Nine out of 10 respondents to the 2025 State of the Data Center survey said their colocation provider offers a robust ecosystem of partners, a majority that has remained consistent since 2022.

"The attributes [we look for] in a colo provider are points of presence," says the senior retail IT director. "Can they connect to the different cloud providers that we operate with? Do they have the breadth of services to support AI workloads or multicloud?"

Differentiation among colocation providers comes from the makeup of those ecosystems and the ease with which customers can connect to services and collaborate. For example, as organizations scale their AI initiatives, the ability to connect with specialist providers for both AI infrastructure and expertise will be increasingly important.

"We not only have direct connections into colo providers but we also have access to AI and ML components, which gives us a faster point of entry," the retail director says. "You're able to ride that colocation's private link to get into systems like Salesforce that will give you a better level of performance. They also have partnerships that allow you to build out things to a specific scale that's directly supported by the AI/ML vendor, and you're going to get a certain SLA on that that you may not receive if we attempted to do that internally."

Summary

As the requirements for different workloads become increasingly complex, IT leaders are shifting toward hybrid environments, with a greater reliance on colocation providers that can meet requirements such as interconnectivity, cost optimization and expertise in deploying, managing and scaling workloads, including demanding AI capabilities.

This year's State of the Data Center survey underscores that the right mix of on-premises, colocation and public cloud infrastructure will drive successful business outcomes and help organizations get maximum value from their IT investments.

Wherever you are on your IT transformation journey, it's important to build a flexible environment defined by scalable resources and seamless connectivity into an enterprise-relevant digital ecosystem. A more connected infrastructure will help you reach new markets, accelerate business and innovate for tomorrow.

GET IN TOUCH TO EMPOWER YOUR HYBRID IT CONNECTIVITY

1. **Foundry**, 2024 Cloud Computing Study, https://foundryco.com/research/cloud-computing/
2. **CoreSite**, "Direct Cloud Connection vs. Public Internet: What Is Best for Your Use Case?", https://www.coresite.com/blog/direct-cloud-connection-vs-public-internet-what-is-best-for-your-use-case
3. **Foundry**, 2025 State of the CIO, https://foundryco.com/research/state-of-the-cio/

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