Public Cloud Providers Delivering Strategic Private Clouds

Scott Sinclair, Practice Director

Abstract: As hybrid cloud environments become the de facto standard for IT, businesses focus on modernizing their on-premises infrastructure to make it more "cloud-like" in experience. To accomplish this goal, IT decision-makers are increasingly turning to public cloud providers to help them modernize their on-premises infrastructure.

The Need to Simplify Data Center Operations Fuels Demand for Public Cloud Options on Premises

Key Highlights

- 84% agreed: "Data center modernization is a top IT priority."[1]

- 83% agreed: "We need to (or are actively working to) increase or improve self-service, on-premises storage provisioning for application teams and developers."

- 84% agreed: "Consistency of experience across data center and cloud environments delivers significant operational benefits."

In a recent research study, the Enterprise Strategy Group surveyed 380 organizations in North America on their plans regarding their IT infrastructure. As IT organizations race to accelerate operations and scale infrastructure to support increased demands from the business, the cost and complexity of legacy infrastructure hinders their progress. While public cloud adoption can reduce the administrative burden, multiple factors—such as cloud cost concerns, a need for increased control, or data locality and sovereignty requirements—fuel a need for data center operations.

The need to accelerate operations while keeping certain workloads and data sets on premises has increased the prioritization of data center modernization, as 84% of organizations agreed that data center modernization is a top IT priority. Modernization, though, can take many forms, including deploying the latest and higher-performing hardware and the most recent software. Specifically, IT decision-makers are seeking to improve the self-service nature and the consistency of experience for their on-premises infrastructure environment to accelerate operations. For example:

- 83% of organizations agreed: "We need to (or are actively working to) increase or improve self-service, on-premises storage provisioning for application teams and developers."

- 84% agreed: "Consistency of experience across data center and cloud environments delivers significant operational benefits."

While investments in automation have provided some tangible benefits, businesses increasingly are looking for integrated solutions to help simplify operations. When asked what technologies are key to helping their organization create a "cloud-like" experience within their data centers (see Figure 1), the most common response was on-premises hyperscale cloud solutions (cited by 45%), defined as technology from public cloud providers that can be deployed on premises such as AWS Outposts, Azure Stack, and Google Distributed Cloud. This option surpassed more traditional on-premises solutions such as hyperconverged infrastructure (42%) and consumption-based as-a-service models for on-premises infrastructure (39%).
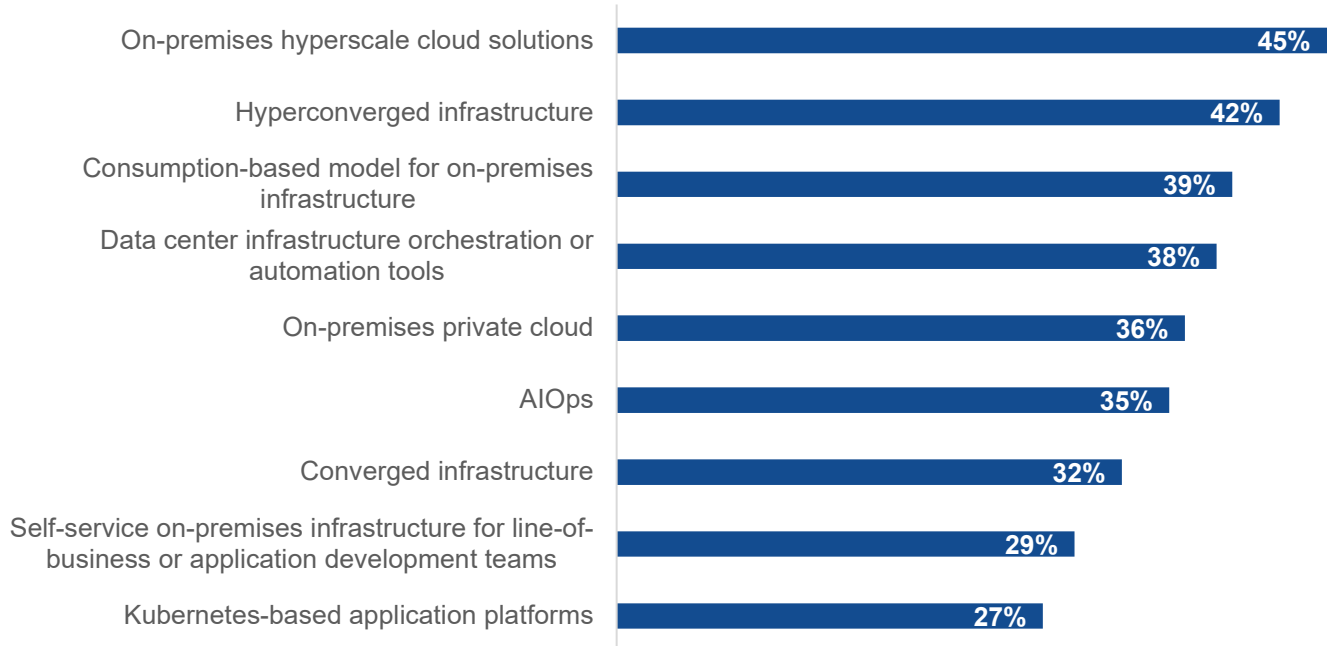
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[1] Source: Enterprise Strategy Group Research Report, *Private AI, Virtualization, and Cloud: Transforming the Future of Infrastructure Modernization*, July 2025. All data in this brief has been taken from this research report.

Figure 1. Public Cloud Technology Leads List of Preferred Options for Data Center Clouds

What technologies or approaches are key to helping your organization create a cloud-like experience in its data centers? (Percent of respondents, N=253, multiple responses accepted)

Technology	Percent
On-premises hyperscale cloud solutions	45%
Hyperconverged infrastructure	42%
Consumption-based model for on-premises infrastructure	39%
Data center infrastructure orchestration or automation tools	38%
On-premises private cloud	36%
AIOps	35%
Converged infrastructure	32%
Self-service on-premises infrastructure for line-of-business or application development teams	29%
Kubernetes-based application platforms	27%

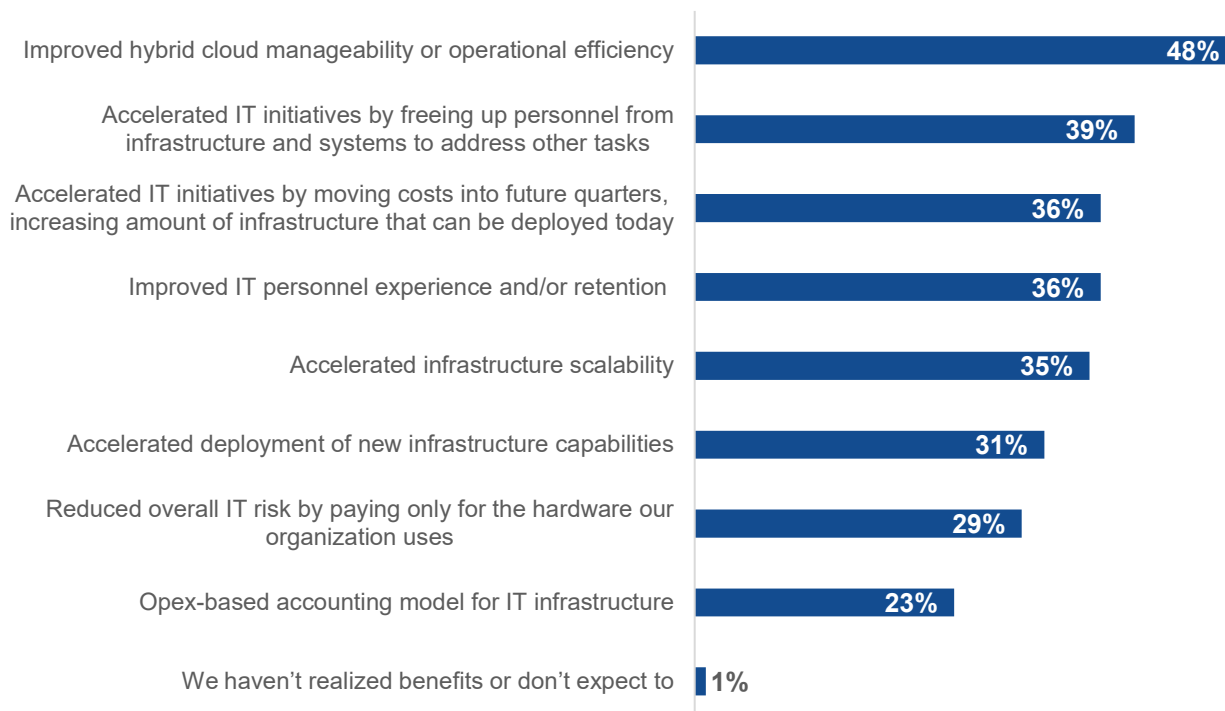*Source: Enterprise Strategy Group, now part of Omdia*

Public Cloud Options Viewed as Strategic for Data Center Modernization

When it comes to adoption, 36% of organizations identified themselves as using on-premises hyperscale cloud solutions, with an additional 23% in pilot and 20% with plans to deploy in the next 24 months. One-quarter of all the participants in the study viewed the use of on-premises hyperscale cloud solutions from providers such as AWS, Microsoft Azure, and Google Cloud as strategic to their current and future data center strategy. This strategic perception is buoyed by tangible realized benefits from users (see Figure 2).

The most commonly identified benefit was improved hybrid cloud manageability and operational efficiency (48%). A majority (68%) agreed that it is difficult to hire enough expertise to cover the necessary skills for each cloud platform. The ability to extend a familiar cloud experience to on-premises infrastructure offers significant benefits to infrastructure management. Beyond the improvement in hybrid cloud operations, the next three most common benefits all build on the benefits that result from improving the operational experience, such as the ability to accelerate initiatives by freeing up personnel for other tasks (39%), accelerating initiatives by freeing up budget via a pay-per-use model (36%), and improved employee retention/experience (36%).

Figure 2. On-premises Public Cloud Technology Accelerates Data Center Ops

You indicated your organization uses on-premises hyperscale cloud solutions. What are the most significant benefits your organization has experienced or expects to experience from these solutions? (Percent of respondents, N=138, three responses accepted)

Improved hybrid cloud manageability or operational efficiency — **48%**

Accelerated IT initiatives by freeing up personnel from infrastructure and systems to address other tasks — **39%**

Accelerated IT initiatives by moving costs into future quarters, increasing amount of infrastructure that can be deployed today — **36%**

Improved IT personnel experience and/or retention — **36%**

Accelerated infrastructure scalability — **35%**

Accelerated deployment of new infrastructure capabilities — **31%**

Reduced overall IT risk by paying only for the hardware our organization uses — **29%**

Opex-based accounting model for IT infrastructure — **23%**

We haven't realized benefits or don't expect to — **1%**

Source: Enterprise Strategy Group, now part of Omdia

Analyst Take

For data center modernization to provide its greatest benefit, it must do more than simply increase the hardware specifications of the infrastructure; it must also be able to radically simplify the operational experience. As modern digital business becomes increasingly defined by AI initiatives, the pressure on IT operations will only increase.

> " For data center modernization to provide its greatest benefit…it must be able to radically simplify the operational experience…"
>
> **- Scott Sinclair,** *Practice Director, Enterprise Strategy Goup*

For IT decision-makers, these research findings reaffirm the importance of data center modernization investment. They also highlight that on-premises solutions (whether for the data center or the edge) provided by the major public cloud providers offer viable infrastructure options for business-critical application environments. Organizations with a wealth of internal experience leveraging public cloud services will likely reap the largest rewards thanks to the consistency of experience. In an increasingly hybrid cloud world, these public cloud options on premises will likely become increasingly important to help simplify on-premises operations.

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contact@esg-global.com
www.esg-global.com