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LEADING IT TRENDS

The New 2023 Cloud Reality: A Rebalancing Between Private and Public

What CIOs Today Are Deciding About the Best Place for Cloud Workloads

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constellation™ RESEARCH

Produced exclusively for Constellation Research clients

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EXECUTIVE SUMMARY

This report is designed to provide insights into cloud workload sourcing that will help enterprises best determine when workloads should be located in a public or a private cloud.

It includes data and insights from 22 high-level IT executives—primarily chief information officers (CIOs)—who found that private cloud is 50% less expensive, 65% more performant, and twice as fast on average when it comes to development cycles.

BUSINESS THEMES

New C-Suite

THE TRAJECTORY OF THE CLOUD HAS SHIFTED

For the past decade, organizations around the world have been shifting their IT infrastructure to public cloud—and for good reason. The benefits of scalability, cost savings, and ease of deployment have been touted as the future of computing. However, a new trend is emerging in the tech industry as many organizations are now giving fresh attention to private cloud. Why is this happening? This research report, backed by fresh data, aims to answer that question by exploring the reasons organizations are shifting to private cloud.

The research conducted for this report aimed at getting a better handle on what is happening in the IT industry in 2023 as this year's information technology agenda focuses more on managing costs, reinforcing resilience, and building diverse supply chains. To achieve this, Constellation Research interviewed 22 CIOs and IT leaders in equivalent positions who had carried out recent private cloud initiatives, to examine their motivations and results.

The public cloud has undoubtedly been transformative, but it has not been without a growing host of challenges. One major reason organizations are now turning to private cloud is for data security and better control over workloads in general. As more and more sensitive data is stored in the cloud, there is an increasing need for the ability to directly manage how it is accessed and used. Private cloud provides a viable alternative, because with it, organizations can maintain complete control over their data, ensuring its security.

Another issue that has led to the shift toward private cloud is the lack of customization available in public cloud offerings. Public cloud providers often have a one-size-fits-all approach to their services. This can limit an organization's ability to tailor cloud resources to their specific needs. With private cloud, organizations can customize the resources they use, optimizing their infrastructure for their unique business needs.

Also, especially in this year of economic uncertainty, cost is becoming a selling point for private cloud. Although public cloud providers offer the convenience of pay-per-use resources, costs can quickly

accumulate for organizations with a significant cloud footprint. In contrast, the interviews conducted for this report revealed that private cloud gives organizations better control over costs and enables them to plan for their infrastructure needs more effectively.

For those who want to capture these benefits themselves, it's worth taking a deeper dive into the specific reasons organizations are increasingly turning to private cloud, and this report provides new data to support the trend. By conducting direct interviews with IT leaders in a range of organizations, Constellation Research gathered insights that shed light on the driving forces behind this shift. This report also explores the challenges organizations face when making the switch to private cloud and how these organizations are addressing those challenges. It is designed to help IT decision-makers gain a better understanding of the current state of cloud computing.

A COMPREHENSIVE STUDY ON PRIVATE CLOUD COMPUTING: INSIGHTS FROM 22 CIO INTERVIEWS ACROSS COMPANIES OF ALL SIZES

One key finding from the interviews conducted for this report is that private cloud computing has emerged as a strategic solution for organizations seeking greater control, security, performance, and customization of their IT infrastructure. Understanding the experiences, challenges, and benefits of implementing private clouds across companies of varying sizes is crucial for gaining valuable insights into this rapidly evolving landscape. In this study, Constellation Research presents the findings of interviews conducted with 22 CIOs or equivalents representing a range of organizations, from small startups to large enterprises, shedding light on their recent private cloud adoption journeys.

As technology continues to evolve and businesses become increasingly reliant on digital infrastructure, the importance of private cloud computing cannot be overstated. Private clouds offer a dedicated and customizable environment that enables organizations to leverage the benefits of cloud computing while maintaining control over their data and applications. However, the decision to adopt a private cloud comes with its own set of challenges, ranging from resource allocation and security considerations to migration complexities and cultural transformation.

Constellation conducted its one-hour interviews for this report in March through May of 2023. The industries included in this study were:

- Telecom
- Public sector
- Financial services
- Professional services
- Ecommerce
- Retail
- Manufacturing
- High tech
- Consumer packaged goods
- Education
- Hospitality
- Media

The average organization represented had 54,000 workers, the median had 5,900 workers, the smallest had 200, and the largest had 440,000. Eleven organizations were in the Fortune 500, and the remainder were in the public sector or midmarket.

There were six global organizations, six U.S.-only, and the remainder regional.

To capture a comprehensive perspective, the study engaged CIOs from companies of all sizes, ensuring representation from various industries and geographical locations. Through in-depth

interviews, this research explored the motivations behind their transition to private cloud environments, the challenges encountered throughout the process, the opportunities that arose, and the results and outcomes achieved. By aggregating these valuable insights, this study aimed to provide a nuanced understanding of private cloud computing, assisting organizations in making informed decisions and devising effective strategies for successful private cloud implementations.

The following sections delve into the experiences and perspectives of the interviewed CIOs, highlighting their unique insights and real-world scenarios. Through this study, Constellation Research sought to offer a comprehensive understanding of the intricacies involved in private cloud adoption, addressing the concerns and requirements of companies across the spectrum of sizes and industries. By examining the obstacles faced, opportunities seized, and outcomes achieved, this research will contribute to the existing knowledge base, assisting organizations in harnessing the true potential of private cloud computing.

Moving workloads from a public cloud to a private cloud environment is a strategic decision that requires deliberate consideration by CIOs—who often overlook this approach to cloud, given the industry focus on public cloud. Although the benefits of private cloud computing are unexpectedly enticing, there are several critical factors CIOs must carefully evaluate and address to ensure a successful transition.

PRIVATE CLOUD IS UNEXPECTEDLY IN PLAY IN 2023

Moving from public cloud to private cloud has yielded several unexpectedly positive benefits for CIOs, resulting in enhanced operational efficiency, improved control, and increased innovation within their organization. Real-world experiences from CIOs shed light on the following unanticipated advantages and their impact on various aspects of their business.

- **Operational cost reduction:** CIOs have found that the transition to a private cloud environment has led to significant improvements in operational cost efficiency. By customizing the infrastructure to meet their specific needs, CIOs have achieved streamlined workflows and optimized resource

allocation. As one CIO mentioned, “Moving to a private cloud allowed us to fine-tune our infrastructure and automate processes, leading to a more efficient operation overall.” The ability to tailor the environment and align it with specific business requirements has resulted in smoother operations and reduced operational complexities.

- **Increased control:** The move to a private cloud has provided CIOs with a higher degree of control over their IT infrastructure. They have gained greater visibility and management capabilities, enabling them to proactively address issues and implement changes as needed. This enhanced control has empowered CIOs to make more-informed decisions and quickly adapt to changing business requirements. As one CIO shared, “With our private cloud, we have full control over the infrastructure and can implement changes or upgrades on our own terms. This level of control has been immensely valuable in driving our business forward.”

- **Accelerated innovation:** CIOs have experienced a surge in innovation and experimentation within their organization as a result of moving to a private cloud. The flexibility and customization options offered by private clouds have enabled CIOs to explore new technologies, test innovative solutions, and drive digital transformation initiatives. By leveraging the private cloud environment, CIOs have fostered a culture of innovation, encouraging their teams to think outside the box and explore novel approaches. According to one CIO, “The move to a private cloud opened up opportunities for experimentation and allowed us to rapidly prototype new ideas, fueling our innovation efforts.” Quicker provisioning in private cloud helped with this early on in particular, because FinOps has not overly clamped down on private cloud as it apparently has with public cloud. The push for cost controls on public cloud has created an environment of cloud provisioning bureaucracy that slows innovation. Interviewees for this report found that private cloud was seen as having much less risk of creating uncontrolled costs and was now, unexpectedly, often easier and faster to innovate with.

These unexpected benefits have provided CIOs with a competitive edge, enabling them to optimize operations, gain control over their infrastructure, and drive numerous valuable outcomes within their organization. The move from public cloud to private cloud has brought about positive outcomes that

extend beyond the initial motivations, transforming their IT landscape and positioning them for future growth and success. What's more, key forces such as control and cost often go hand in hand. Said one CIO interviewed for this report: "With [public cloud], I do not have total control of my spending. I need to have control of my spending. I need to be able to say this is what my budget is going to be in 2023, 2024, and 2025."

MANAGING THE ISSUES IN SWITCHING CLOUD TYPES

Judging from the interviews conducted for this report, the key considerations and challenges CIOs faced when moving workloads from the public to a private cloud are the following:

1. **Security and compliance:** Security is a paramount concern for CIOs, particularly when transitioning from a public cloud to a private cloud. CIOs must assess the security measures provided by the private cloud infrastructure, such as encryption, access controls, and data protection protocols. Compliance with industry-specific regulations and data sovereignty requirements also is essential. As one CIO highlighted, "Moving to a private cloud allowed us to strengthen our security posture and ensure compliance with strict regulations much more easily than public cloud."

2. **Resource allocation, scalability, and performance:** CIOs need to evaluate resource requirements and scalability capabilities up front when migrating workloads to a private cloud. Private clouds offer flexibility in resource allocation, enabling CIOs to optimize infrastructure based on specific workload demands. However, determining the right resource allocation model and scaling strategy can be complex. According to a participating CIO, "One of the challenges we faced was accurately estimating our resource requirements and planning for future scalability within the private cloud. But once we mastered this, the benefits became evident." Significantly, performance in particular was consistently found to be better in private cloud when workloads were stable and did not vary greatly. As one CIO reported, "The same workloads run with less CPU in our private cloud than they did in the public cloud." Although the root cause of this benefit was not identified, other interviewees shared similar stories.

3. **Migration complexity:** The migration process from a public cloud to a private cloud can be complex and require planning, but most CIOs in the survey found the process straightforward. CIOs must consider factors such as data transfer, application compatibility, and minimizing downtime during the transition. As one CIO stated, "Data migration was thought to be the most significant challenge during the transition. We had to ensure smooth transfer and minimal disruption to our ongoing operations, but in the end, we had no major obstacles."

4. **Cultural transformation:** Transitioning to a private cloud often necessitates a cultural shift within the organization. CIOs need to foster a culture of adaptability and promote collaboration between IT teams and other business units. This includes providing appropriate training and support to employees to ensure that they understand the new environment. As one CIO noted, "The move to a private cloud required us to drive cultural transformation, promoting collaboration and empowering our IT team with the necessary skills and giving them more responsibility while also giving them the ability to grow their technical skills in cloud architecture."

5. **Cost considerations:** Cost optimization is a critical factor in the decision to move from public cloud to private cloud. Whereas public clouds offer a pay-as-you-go model, private clouds require up-front investments in hardware, software, and ongoing maintenance. CIOs need to carefully analyze the total cost of ownership (TCO) and assess the long-term cost benefits of a private cloud. A CIO emphasized this, saying, "Transitioning to a private cloud involved up-front costs, but in the long run, we achieved cost optimization by better aligning our IT infrastructure with our business needs."

6. **Vendor independence and support:** CIOs must evaluate their reliance on specific cloud service providers and consider the support and service agreements offered by private cloud vendors. Vendor lock-in can limit flexibility and hinder future scalability. As one CIO stated, "By moving to a private cloud, we gained vendor independence, allowing us to select the best technologies and negotiate better service agreements." Several CIOs reported high frustration and poor customer service with public cloud vendors.

To summarize, CIOs must carefully consider various factors when moving workloads from public to private clouds. Security, compliance, resource allocation, migration complexity, cultural transformation, cost considerations, and vendor support are among the critical aspects that need to be assessed. By addressing these challenges, the CIOs in this report were able to successfully navigate the transition, leveraging the benefits of private cloud computing while ensuring the seamless operation of their workloads and applications. Furthermore, none of them reported significant issues in doing so.

A CASE EXAMPLE OF THE PARADIGM SHIFT: THE JOURNEY FROM PUBLIC TO PRIVATE CLOUD INFRASTRUCTURE

In 2022 the CIO of a leading home mortgage firm was confronted with an increasing need for enhanced data privacy, tighter control over IT resources, and improved cost management. These needs arose from evolving data regulations, unpredictable IT spending related to public cloud usage, and an expanding user base demanding more personalized services. These factors, combined with the strategic growth plans of the firm, made the organization reconsider its cloud infrastructure strategy, driving it to transition from a predominantly public cloud setup to a private cloud infrastructure.

The first step in this process was to conduct a detailed analysis of the firm's existing IT environment and understand its strengths and shortcomings. A comprehensive audit highlighted two primary concerns: escalating costs associated with public cloud usage and potential data security vulnerabilities, given the sensitive nature of the data the firm handles. It also revealed that the firm's resources were often underutilized, suggesting that potential efficiencies could be achieved with a more flexible infrastructure. These findings acted as catalysts, setting the stage for the transition to a private cloud environment.

After securing top-level approval and budget, the CIO embarked on a diligent vendor selection process. The firm evaluated several top-tier private cloud providers, based on its needs and their capabilities, such as the ability to provide a highly secure and scalable infrastructure, offer robust

disaster recovery solutions, and demonstrate a proven track record in the finance sector. After rigorous evaluation, the firm selected a partner that stood out in all these areas and whose vision aligned with its vision and needs.

With the vendor in place, the migration process was planned in detail. The firm initially adopted a hybrid approach whereby some applications and data were kept in the public cloud while the rest were transitioned to the private cloud. This method enabled the firm to maintain service continuity, avoid downtime, and manage risks effectively. The transition phase also involved a significant focus on workforce training and process reengineering to enable the staff to manage the new infrastructure effectively.

The transition to a private cloud infrastructure was completed in the third quarter of 2022. The result was a highly scalable, secure, and cost-effective IT environment that not only fulfilled the firm's immediate needs but also equipped it well for future growth. Initial postmigration audits showed improvements in data security, a reduction in costs, and an increase in operational efficiency. Importantly, the firm gained the flexibility to manage its resources as needed and shortened the time it took to respond business needs.

Reflecting on this journey, it's evident that the move to a private cloud infrastructure was a strategic necessity for the company. It has not only resolved its immediate concerns related to data security, cost management, and resource utilization but also has enhanced its agility and resilience, vital for a business operating in an ever-evolving industry. "This transition has paved the way for our next phase of growth while ensuring we stay true to our commitment to data privacy and regulatory compliance," said the CIO.

THE BENEFITS OF PRIVATE CLOUD: SIGNIFICANT AND CONSISTENT

Embracing a private cloud infrastructure delivers considerable tangible benefits in terms of cost efficiency, performance enhancement, and accelerated development cycles. For businesses grappling

with escalating costs associated with public cloud services, a private cloud can offer superior cost management through predictable pricing models and efficient resource utilization.

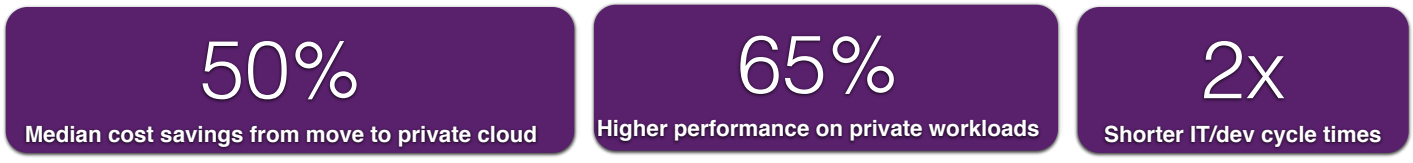
The result is a finding that private cloud significantly improves performance by providing dedicated resources, thus reducing latency and ensuring a high level of service reliability. Most importantly, private cloud supports agile and DevOps methodologies, enabling faster development cycles, especially since development environment provisioning and operation are easier and faster than with the growing cost management controls related to public cloud. This ability to quickly build, test, and deploy applications not only increases the business's agility and responsiveness to market trends but also stimulates innovation and competitiveness. In essence, transitioning to a private cloud infrastructure can transform the IT landscape of a business, driving substantial operational efficiencies and growth.

Aggregating the data across all the interviewees, Constellation Research found the total mean benefits for cost saving, cloud performance, and faster IT/dev cycles shown in Figure 1.

A PRIVATE/PUBLIC CLOUD DECISION HEURISTIC

In deciding where to place a cloud workload—public or private—the choice often hinges on a set of key considerations such as cost-effectiveness, security and compliance requirements, scalability needs, and the complexity of the data and the applications involved. Developing a decision tree or a heuristic helps organizations systematically evaluate these factors, ultimately guiding the right infrastructure choice.

Figure 1. The Specific Benefits Found in Adopting Private Cloud

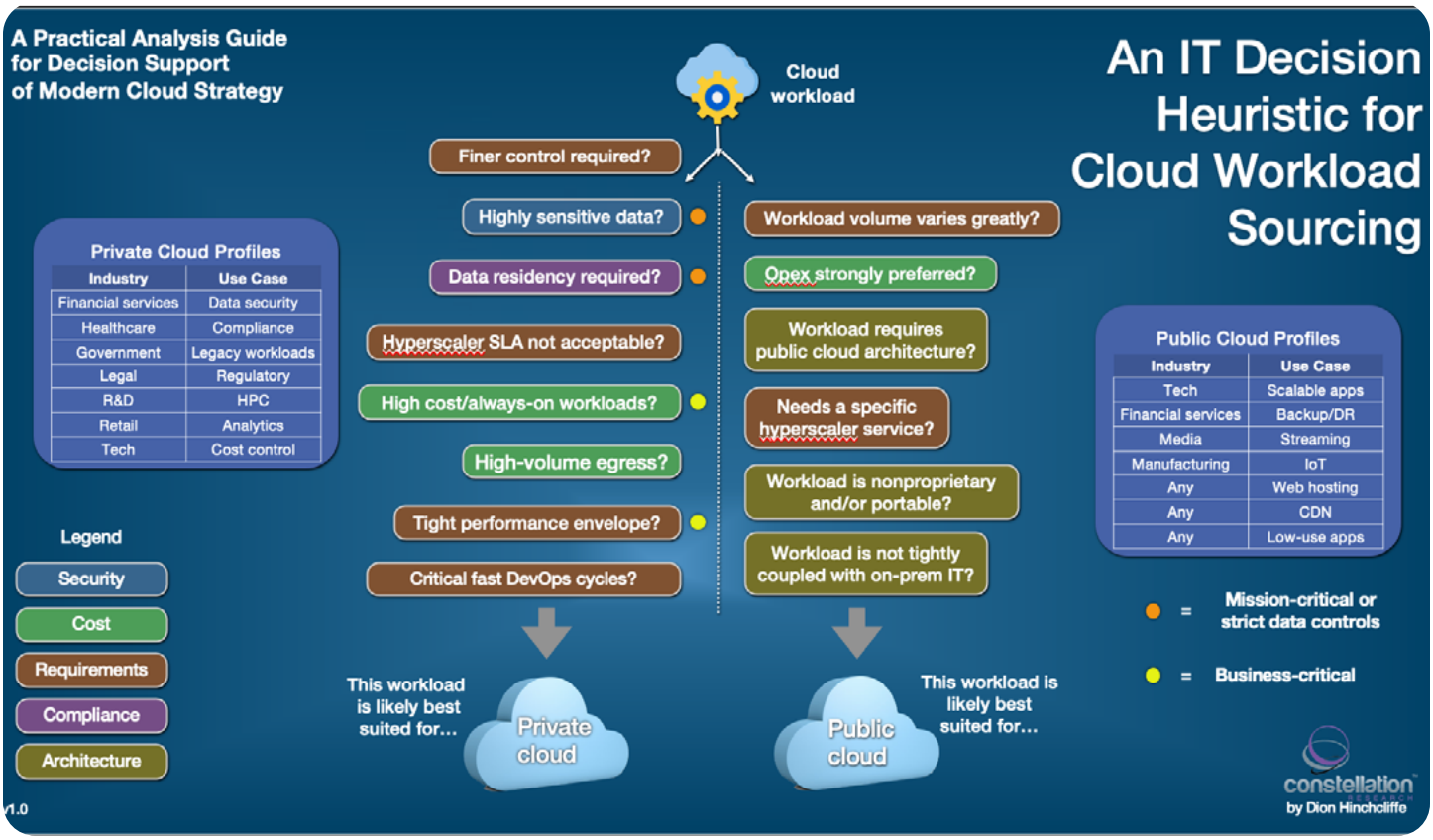


Source: Constellation Research

A decision tree enables a sequential, binary decision-making process, starting from a broader question, such as the nature of the data or the application, and proceeding to more-specific questions based on the responses. For instance, if an application involves sensitive data, the decision tree might lead to choosing a private cloud for enhanced security. However, if cost-effectiveness is paramount and if the application can tolerate variable performance, a public cloud might be the better choice. Although this approach is structured and straightforward, it may oversimplify the complex considerations involved in cloud deployment decisions.

This report analyzed the lessons interviewees had learned and the guidance they had used in making their decision to move to a private cloud. Then Constellation developed the following heuristic to help organizations better make their own decisions (see Figure 2).

Figure 2. A Holistic Decision Heuristic for Private Versus Public Cloud



Source: Constellation Research

The heuristic approach used in Figure 2 considers a broad range of factors and their relative importance in the decision-making process for deciding the best location for a given cloud workload. It uses an experience-based approach for problem-solving, learning, and discovery for workload placement.

The following are decision points used for cloud workload placement:

- **Sensitive data:** The first issue involved is the legal and compliance aspect, which consists of understanding the regulations dictating data storage, processing, and transmission. This includes laws such as the General Data Protection Regulation (GDPR), Health Insurance Portability and Accountability Act (HIPAA), California Consumer Privacy Act (CCPA), and other regulations that might apply, depending on the type of data and geography. The second issue is the risk and security factor, assessing whether the public cloud's security measures are sufficient or whether a private cloud's enhanced control and customization options would better mitigate potential threats. This includes considerations such as data encryption, access controls, and intrusion detection systems.

- **Data residency:** This is also known as the data sovereignty issue, which is particularly important when data cannot legally leave a specific geographical jurisdiction—which might not be guaranteed in a public cloud or even be impossible given the specific geographic regions the cloud provider supports.

- **Hyperscaler service-level agreements (SLAs).** A primary concern can be the uptime guarantee provided in the SLA. If the public cloud provider promises less than "five nines" (99.999%) of uptime and the business operations require high availability, the SLA may not be acceptable. Similarly, the SLA might not adequately address disaster recovery and business continuity plans, which are essential for maintaining operations in the event of an outage or a failure. Another concern may revolve around the aforementioned data protection and privacy. If the SLA doesn't align with the company's compliance requirements or doesn't offer enough safeguards for sensitive data, it can be a deal-breaker. Last, the SLA might not provide satisfactory resolution or compensation

mechanisms for potential service failures, or it could lack the flexibility to adjust to changing business needs.

- **High cost/always-on workloads.** Several factors come into play here. The first is the performance requirement: CPU-intensive workloads may require high-performance computing (HPC) capabilities that can be dynamically scaled in a public cloud. However, for specific tasks with unique requirements, a private cloud can offer greater control for customization, performance, or cost reduction. Second, storage-intensive workloads necessitate robust and scalable storage solutions. Although public clouds offer scalable and cost-effective storage, private clouds can provide better performance and control, especially with data locality considerations. For always-on workloads, availability and reliability are paramount. Public clouds often guarantee high availability across regions, but private clouds can offer more control over the infrastructure to ensure uptime. Third, cost becomes a significant determinant, because public clouds use a pay-as-you-go model that can be expensive for always-on workloads, whereas private clouds can entail a substantial up-front investment, which this research found can be quite cost-effective in the long run for such tasks. There are also pay-as-you-go options for private cloud. Last, data security and compliance requirements will also influence the decision, particularly if the workloads process sensitive data.

- **Egress costs.** When deciding between public or private cloud for data egress—transferring data out of a cloud service—of heavy workloads associated with capabilities such as rich customer experiences or data analytics, several factors are crucial. Foremost, cost is a key consideration: Public cloud providers often charge for data egress, and the expenses can quickly escalate for data-intensive operations, making a private cloud potentially more cost-effective in such scenarios, according to several of the interviewees. Second, latency and performance can significantly impact customer experiences, particularly if the application is real-time or near-real-time. Public clouds offer distributed edge locations to reduce latency, but private clouds can offer better performance for localized user bases. Last, considerations related to interoperability and integration with other systems, particularly if the workload needs to interact with other applications or databases, play

a role in the decision-making process. Supporting this finding, nearly a third of the interviewees reported that high egress costs were currently or had been an issue for them in a public cloud.

- **Tight performance envelope.** The first consideration is the nature of the workload itself: Does it require high compute resources, low latency, or a particular architecture? Public clouds provide scalability and flexibility, enabling you to adjust compute resources according to demand. However, private clouds can provide more control over performance optimization and customization specific to the workload. Second, the geographic location and distribution of users also matter. Public clouds have data centers spread globally, reducing latency for distributed users, but for localized user bases, private cloud was found to frequently provide better performance. Third, network performance is a crucial aspect, with public clouds often sharing network resources among multiple users (potentially leading to the "noisy neighbor" issue), whereas a private cloud offers dedicated resources. Fourth, considerations related to cost should be taken into account, because high-performance requirements in a public cloud can lead to substantial costs.

- **Fast DevOps cycles.** An unexpected finding in this research was that a private cloud often can be more flexible and agile than a public cloud, given the complex cost controls and bureaucracy often erected around public clouds to manage costs and improve governance. This surprising benefit is due to a combination of having more control over the infrastructure with private cloud, less perceived risk in runaway provisioning, and consequently fewer cost controls or processes standing in the way. The difference was substantial compared with public cloud and can speed development considerably.

- **Workload volume.** This is when elasticity of the cloud infrastructure becomes a pivotal factor. Public clouds typically excel at scaling resources up and down rapidly, making them suitable for handling workloads with significant fluctuations. However, this flexibility comes at a cost, and the pricing model of public clouds—where customers pay for the resources used—can make this option expensive if volume spikes are frequent or unpredictable. In contrast, private clouds offer more-predictable costs but require capital investment and may lack the same level of instant scalability.

Second, performance considerations during peak load times should be evaluated, because this can affect user experience. Third, the ability to automate scaling to meet demand is crucial. Public clouds usually provide robust autoscaling capabilities, whereas private clouds might require more manual intervention. Fourth, the workload's specific security and compliance requirements should be taken into account, because these can influence the choice between public and private clouds. Last, the capacity to manage and support fluctuating workloads is critical, and whereas public cloud providers offer extensive support, private clouds may offer more control over the environment for custom scaling scenarios.

- **Opex is preferred as an IT expenditure.** The first consideration is the financial structure of the organization: If capital expenditure is to be minimized and operational expenditure is preferred, the public cloud's pay-as-you-go model is an attractive option, enabling costs to be spread over time and scale with usage. The second consideration is the predictability of the workload. If the workload is unpredictable or fluctuates, the scalability and flexibility of the public cloud can offer significant advantages. However, for steady, predictable workloads, the pay-as-you-go model can end up being more expensive over time than the fixed costs of a private cloud. Third, the need for technical control and data security is a crucial factor. Although public cloud providers offer strong security measures and compliance certifications, a private cloud gives more direct control over the infrastructure and data. Fourth, consider the technical expertise available within the organization. Managing a private cloud requires significant in-house expertise, whereas public cloud providers offer extensive support and management tools. Last, the time to deployment can influence the decision, because public clouds typically allow for quicker deployment and scaling than private clouds do.

- **Public cloud service or architecture is required or a dependency.** First, the requirement of a unique service or feature—such as machine learning tools, advanced analytics, or serverless computing capabilities—offered exclusively by a public cloud provider would tilt the decision toward a public cloud. Second, the compatibility of the workload with the chosen architecture, including considerations related to migration, integration, and potential vendor-lock-in risks, must

be evaluated. Third, although a public cloud may offer a particular service, the cost associated with using this service at scale should be weighed against the costs of replicating a similar service in a private cloud. Fourth, data security and compliance requirements should be factored in, especially if the specific service involves sensitive data or complex processing tasks. Also, the availability of in-house skills to manage and optimize the chosen service or architecture in a public cloud versus a private cloud scenario is a key consideration.

- **The workload is nonproprietary and/or portable.** The main consideration here is the level of flexibility and scalability the workload requires. Public clouds typically excel in these areas, offering on-demand resources that can be rapidly scaled up or down according to workload demands. However, if the workload is steady and predictable, a private cloud could offer better cost efficiency. Second, the ability to avoid vendor lock-in is crucial for portable workloads, and certain public cloud providers may offer more open and interoperable architectures. In addition, the consideration of data security and privacy is essential, especially if the workload involves sensitive information. Although public clouds provide robust security measures, private clouds offer more direct control over data and infrastructure. Next, the technical skill set within the organization should be assessed, because managing private clouds can require more specialized knowledge than public clouds do. Finally, the cost implications of both models should be evaluated, considering not only the direct costs but also the potential opportunity costs and the TCO over time.

- **The workload is not tightly coupled with on-premises IT.** All the other factors above come into play here and should be used to better decide where this sort of workload should be located. It is definitely possible to locate the workload in either a public or a private cloud, although if there is a dependency with on-premises IT, latency should be taken into account and tested if a public cloud is chosen.

This heuristic for cloud deployment considers not just factors such as cost, security, and scalability but also more-nuanced aspects such as the strategic importance of the workload, the expected growth in workload demand, and the organization's broader IT and business strategy. This approach offers

more flexibility and is better suited to the complexities and uncertainties inherent in cloud decisions. Although this heuristic may not always guarantee the kind of optimal solution a decision tree can produce, Constellation's research suggests that using it is a more generally satisfactory approach to workload placement that meets most organizations' needs and is easier to use. Its strength lies in its practicality and its ability to accommodate a broader and more realistic range of considerations, which makes it arguably the preferred tool for deciding on cloud workload placements.

CONCLUSION AND FINDINGS

In evaluating the transition to a private cloud, one of the most compelling benefits is the potential for significant cost savings. Public cloud models often present unpredictable expenses, due to their pay-as-you-go structure, whereas private clouds offer predictable and often more manageable costs. Moreover, by eliminating pernicious issues such as egress costs, private clouds further strengthen the financial case for this transition. CIOs can capitalize on this benefit by aligning their IT resource usage with business needs, taking advantage of the flexible resource allocation in a private cloud.

The move to a private cloud also promises substantial performance improvements. By dedicating hardware resources, private clouds can reduce latency and deliver more reliable performance. This is particularly critical for businesses operating in sectors where real-time data processing and analytics are vital. Focusing on optimizing workload distributions and configurations within the private cloud can further enhance these performance gains.

Private clouds can significantly accelerate DevOps cycles, especially during the early stages of application development. By providing an environment that closely mirrors the production environment, private clouds enable developers to quickly build, test, and deploy applications. For CIOs, fostering a culture of continuous integration and continuous deployment (CI/CD) will help leverage this benefit to its fullest, ensuring rapid product development and delivery.

Another key advantage of private clouds is the enhanced control and flexibility they offer for an organization's infrastructure. Unlike public clouds, where the underlying hardware and software

layers are managed by the service provider, private clouds allow for customization at all levels to meet specific business needs. This advantage extends to vendor flexibility as well, offering businesses the freedom to choose the solutions that best align with their needs. CIOs should maintain open communication channels with vendors and continuously reassess their partnerships to ensure that they align with evolving business objectives.

Additionally, transitioning to a private cloud can make organizations more attractive to top IT talent. As the technology industry continues to grow and evolve, professionals are increasingly seeking opportunities that enable them to work with cutting-edge tools and technologies at the infrastructure level. By offering the chance to work in a sophisticated private cloud environment, organizations can attract and retain high-caliber talent. CIOs should leverage this by promoting a culture of learning and growth where IT professionals have the opportunity to broaden their skill sets and advance their careers.

Finally, regarding the rebalancing between public and private cloud, the results of this study clearly indicate the importance of noting that it's not an all-or-nothing proposition. Many organizations find value in a hybrid approach that leverages the strengths of both. CIOs can play a pivotal role in this process by conducting regular audits of their cloud strategy, ensuring that it aligns with business goals, and adjusting the mix between public and private as needed. The overall goal should be to achieve an optimal balance that delivers the best-possible performance, cost-effectiveness, and flexibility for the organization. In summary, this research demonstrates that private cloud has returned as a major presence in the mix for organizations that use cloud computing.

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Hinchcliffe is an executive fellow at the Tuck Center for Digital Strategies and was recently identified as one of the top three people most mentioned by IT leaders. Industry analytics firm Onalytica ranks Hinchcliffe as the No. 2 influencer globally on the subject of digital transformation. He has keynoted or spoken at hundreds of leading industry conferences, including CeBIT, KMWorld, IT Roadmap, Dreamforce, CIO Perspectives, AIIM Conference, IBM Connect, and other industry events.

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ABOUT CONSTELLATION RESEARCH

Constellation Research is an award-winning, Silicon Valley–based research and advisory firm that helps organizations navigate the challenges of digital disruption through business model transformation and the judicious application of disruptive technologies. Unlike the legacy analyst firms, Constellation Research is disrupting how research is accessed, what topics are covered, and how clients can partner with a research firm to achieve success. Over 350 clients have joined from an ecosystem of buyers, partners, solution providers, C-suite, boards of directors, and vendor clients. Our mission is to identify, validate, and share insights with our clients.

Organizational Highlights

- Named Institute of Industry Analyst Relations (IIAR) New Analyst Firm of the Year in 2011 and #1 Independent Analyst Firm for 2014 and 2015.
- Experienced research team with an average of 25 years of practitioner, management, and industry experience.
- Organizers of the Constellation Connected Enterprise—an innovation summit and best practices knowledge-sharing retreat for business leaders.
- Founders of Constellation Executive Network, a membership organization for digital leaders seeking to learn from market leaders and fast followers.

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