

Chapter 6

Hybrid: the cloud at its most flexible

For some enterprises, “the cloud” refers only to the public cloud: workloads run on as-a-service systems operated by the industry’s major cloud providers. For others, the cloud can mean something private: tightly controlled systems that are hosted on a dedicated environment, often within their own data center. Then there’s hybrid cloud, which lets enterprises select from on-premises, private and public cloud environments as needed. With hybrid cloud, organizations have the flexibility to optimize performance, security and compliance based on their specific needs.



In search of a flexible operating environment

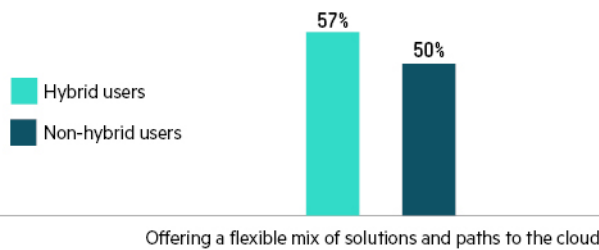
IT leaders reported clearly that hybrid cloud strategies are superior to non-hybrid approaches at offering their enterprises a flexible mix of solutions and paths to the cloud: 57% of hybrid cloud users said their strategy was effective on this front, while only 50% of non-hybrid users could make the same claim (see Chart 9).

The numbers are even more pronounced for users of hybrid cloud (on-premises, private cloud, and public cloud): 60% of adopters said their strategy

was successful at creating flexibility in the enterprise. That same percentage was reported by users of multicloud. Similarly, 57% of users of both private and public cloud services (multicloud) reported a high degree of flexibility (see Chart 10).

The numbers fall off with respondents who reported unilateral approaches to architecture, with 37% of on-premises-only users reporting flexibility in their operations.

Chart 9: What has your current cloud strategy been most successful at helping you achieve so far?



Quantitative research-base size: hybrid users (n=837), non-hybrid users (n=82)

Chart 10: Percent who said their current strategy is successful at achieving: “offers a flexible mix of solutions and paths to the cloud”



Quantitative Research-base size: Private cloud only (n=36*), On-premises and public cloud (n=108), On-premises and private cloud (n=140), On-premises private cloud and public cloud (n=285), Mix of private and public cloud (n=304), On-premises only (n=19*), Public cloud only (n=27*). *Indicates small base sizes; use directionally.



Hybrid cloud provides optimal flexibility

It makes logical sense that any hybrid approach would inherently improve organizational flexibility: the more environments available to run workloads, the more options you have to place each. Simple, well-understood applications such as messaging services are run on standard, public cloud environments. However, sensitive applications such as health records management and accounting services are run on private cloud or on-premises platforms, which are generally more secure or provide better compliance with regulations.

Hybrid cloud users reported that flexibility makes operations and various processes more streamlined and faster, ultimately increasing profits and revenue. It also helps them scale and automate processes.

Central to these concepts was the notion that hybrid cloud makes possible better integration between on-premises operations and the cloud. The upshot: hybrid cloud improves data safety, creates more efficiency, enhances cost-effectiveness, increases redundancy and reduces the need for on-site staffing.

Driving the need for hybrid cloud

The flexibility of hybrid cloud is best exemplified by the comments IT leaders made about what drove their need to adopt this enterprise structure. For example, a CIO of a medium-sized enterprise in the US said performance and IP security are key: “Our business needs are mostly to avoid downtime and protect our data.”

But for one CIO of a large US-based enterprise, the flexibility provided by hybrid cloud was most evident in the way it helped the organization reduce its levels of complexity. “From a pragmatic standpoint,” they said, hybrid cloud helps to “minimize the number of moving parts in the enterprise.” In other words: fewer on-premises equipment and staff needed to run it.

Rationales for implementing hybrid cloud vary greatly across the board. Another large enterprise CIO cited

Tech leaders share 9 keys to maximum flexibility

1. Accommodates different app requirements more effectively.
2. Offers flexibility to right-size the cloud environment to any task at hand.
3. Helps move data to the cloud from different tools and places.
4. Allows data to move more securely.
5. Delivers access to those who need it, where and when they need it.
6. Provides the ability to move data with minimal lag.
7. Offers the organization a way to do more with fewer resources.
8. Provides the ability to try out projects before committing to a specific environment.
9. Sets the stage for easier business growth.

the need for load balancing as the critical factor driving hybrid cloud adoption. And yet another CIO of a very large enterprise said the ability to create what-if scenarios and optimize capacity was the deciding factor.

Last, one medium-sized enterprise CIO in the US said the hybrid cloud was a natural result for the way the company had changed over the years. “Our company grew and became more diversified in its products and sophisticated in its business models,” they said. “Our systems evolved with those changes, which meant our architecture evolved over time.” For this respondent, hybrid cloud was an organic shift rather than an intentional one, but it proved its value through the flexibility it provided to the company.

Considerations when embarking on a hybrid cloud initiative

Proponents point out that hybrid cloud isn't a product; it's part of a digital transformation strategy that changes over time. To get started with a hybrid cloud strategy, begin with a thorough understanding of your organization's processes with an eye toward what needs to be prioritized and where each of those processes should live. A Cloud Business Office, as outlined in Chapter 4, can be of great help here, and seasoned consultants can help you with this type of evaluation and planning as well. Also, thorough testing will help you determine if each workload is operating in the ideal location.

Fight the urge to consolidate everything in one place because you think it will be easier to manage that way. As one CIO noted, "Keep it simple, stupid" is a great mindset, "but in this business, nothing is simple. Having everything in one place isn't possible anymore." ■

What drove the need for hybrid cloud?

"Performance. . . . Our business needs are mostly to avoid downtime and protect our data, copyright issues."

– CIO, medium-sized enterprise, US

"From a pragmatic standpoint, internally our biggest drivers are . . . getting our footprint down, minimizing the amount of moving parts."

– CIO, large enterprise, US

"Our company grew and became more diversified in its products and in its business models, and how we managed was more sophisticated. So our systems evolved, and that meant our architecture evolved over time."

– CIO, medium-sized enterprise, US

"Flexibilities . . . load balancing."

– CIO, large enterprise, US

"Our existing production scheduling system didn't have the ability to do what-if scenarios or optimization of our capacity."

– CIO, very large enterprise, US





Read the full report

Research shows that enterprise decision-makers are increasingly choosing hybrid cloud as their preferred operating model because it offers significant value to the business. There is no one right way to build a hybrid cloud; it exists in many forms and varies from one enterprise to the next. But all hybrid cloud advocates tend to say the same thing about their strategy: it improves the flexibility and responsiveness, which in turn improves the ability of the organization to draw meaningful insights from data and open up new opportunities for growth. They also report that hybrid allows them to incorporate multigenerational IT into their environment, addresses security and redundancy issues and helps them meet compliance standards.

This report contains a behind-the-scenes look at real-life hybrid cloud experiences from a survey of hundreds of chief executive officers (CEOs), chief information officers (CIOs), chief technology officers (CTOs) and other IT decision-makers. Their candid advice, based on personal experience, can help guide your organization as you plan and implement your own successful hybrid cloud strategy.

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