Enterprise leaders share insights on how hybrid cloud is opening up new opportunities

HPE surveyed tech leaders in nine countries about their hybrid cloud strategies. They are choosing hybrid cloud because it's helping them speed innovation and improve processes.







Our research "From hybrid cloud by accident to hybrid **cloud by design**" 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 say similar things 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.

Hybrid cloud helps businesses customize a strategy that successfully addresses the requirements of their multigenerational technologies and diverse workloads, as well as a variety of security and compliance issues. It also improves data safety, increases efficiency, enhances cost-effectiveness, builds more redundancy and reduces the need for on-site staffing.

How did hybrid cloud achieve such a prominent place in organizations today? For some, it developed by accident. Others developed a strategic plan. Both approaches have proved successful.

Hybrid cloud: by accident or design?

In the early days of cloud migration, enterprises sought to quickly adapt to new ways of doing business. Some workloads were lifted and shifted to the cloud, while new applications were developed there. Everyone moved fast, embracing new cloud technologies to advance their businesses. This change turned out to be transformative.

The cloud was seen as an easy way to save on capital investment while offering capacity on demand. But many enterprises were reluctant to store sensitive data in the cloud, and most lacked an overarching cloud strategy. As a result, nearly all large organizations today now manage a mix of workloads across on-premises, private clouds and public clouds. Without even realizing it, many have adopted a hybrid cloud design.

Definitions

Hybrid cloud: a combination of on-premises, private cloud and public cloud

Multicloud: combines two or more public clouds.

Edge to cloud: HPE's differentiated architecture; a computing topology where processing is located anywhere from the edge to the cloud.

Edge: where a business generates data that can be acted on, for example a retail store or autonomous vehicle.

Private cloud: an on-site or co-located cloud computing architecture that is accessed and controlled by the business.

Hybrid cloud makes perfect sense in a wide range of scenarios. Certain workloads are well suited to the public cloud; others, often mission-critical workloads, are better located on-premises. Of course, this division of workloads both on- and off-premises adds complexity to enterprise-scale operations. To solve this issue, organizations need a strategic approach, one that enables them to balance cost and performance and manage and optimize workloads across multiple locations. Today, a smart hybrid cloud strategy is not a matter of being "cloud first" but rather, as one executive told us, being "cloud right."

To learn IT leaders' thoughts on hybrid cloud, HPE asked 900 chief information officers (CIOs), chief technology officers (CTOs) and enterprise IT decision-makers in nine countries. The goal was to understand how enterprise leaders are adopting hybrid cloud solutions, what lessons they've learned along the way and where hybrid cloud is headed next.

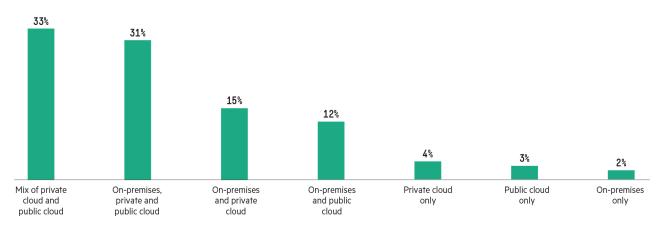
A summary of our key findings follows.

Hybrid cloud is here to stay but in different forms

Hybrid cloud, which we define as an operating model that includes a combination of on-premises, private cloud and public cloud, and multicloud was defined as two or more public clouds. More than nine out of 10 survey respondents said they rely on two or more distinct operating platforms. A third of respondents reported using private and public clouds, while nearly the same percentage (31%) added on-premises to the mix. Less than one in 10 were either totally on-premises or completely in the cloud (see Chart 1).

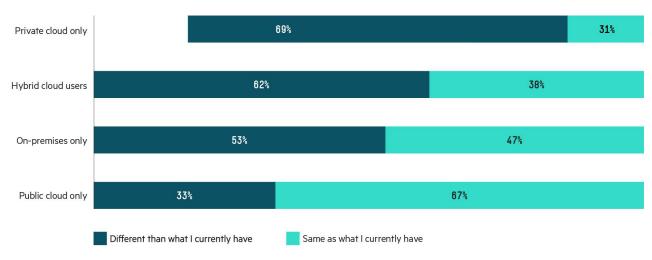
That ratio is likely to persist for some time to come. While six out of 10 enterprises said they expect to put more workloads into public and private clouds over the next five years, the changes aren't likely to be dramatic (see Chart 2).

Chart 1: Select which option best describes the model currently utilized at your company



Quantitative research-base size: total sample (n=919)

Chart 2: Is the model you'd like to have in the next 5 years different or the same as what you have currently?



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),

There is no one-size-fits-all strategy when it comes to the cloud. Though nearly all the companies surveyed shared common business objectives, such as minimizing downtime, maximizing security, enhancing teamwork and speeding innovation, the technologies they employ to achieve those goals vary. Every organization needs to pursue a customized approach that makes the most sense for how it operates, now and in the future.

For example, some survey respondents said they maintain specialized legacy systems that can't or shouldn't be lifted and shifted to the cloud. Others deal with extremely large files that would be cumbersome and expensive to move into or out of cloud storage. Maintaining local control over sensitive or proprietary data and applications was another reason cited for keeping some operations on-premises.

One vice president from a very large enterprise in India summed up his company's "what makes sense for us" philosophy this way: "We are now working with both private and public clouds. In the private cloud, we store our sensitive data and maintain a highly secure database, whereas in the public cloud, we share information with customers and third-party vendors."

For the majority of companies, it's clear that hybrid cloud is here to stay. But how it will look will always vary from one enterprise to the next.

The pros of a hybrid strategy outweigh cons

Every technology deployment has advantages and disadvantages, and hybrid cloud is no exception. By far, IT decision-makers said flexibility and customizability are the biggest benefits of adopting a hybrid strategy. That's especially true for organizations that maintain workloads and legacy systems that can't or shouldn't be migrated. For them, hybrid isn't just an option; it's a necessity.

The flip side of this, according to some respondents, is that hybrid cloud might provide too much flexibility and prevent them from modernizing their systems as rapidly as they otherwise could. It was also felt that managing

disparate systems across an on-premises data center combined with private or public clouds increased IT complexity vs. having everything in one place. This has implications across the enterprise, from greater potential for extended downtime to the challenge of securing an ever-expanding attack surface.

Enterprise leaders share the advantages of a hybrid cloud strategy.

"More secure, in better control of our own data."

- Director/VP, large enterprise, Germany

"Allows organizations to be more agile and flexible, as they can easily move workloads between different types of cloud solutions as their needs change."

- CEO, large enterprise, India

"The ability to have a hybrid cloud allows you the flexibility to grow up certain parts of your environment because you are going to acquire a company and want to take their systems and move them into one of those existing cloud components."

- CIO, large enterprise, US

"There is security and control over backup storage, and if one system crashes, you can easily access a separate system."

- CTO, very large enterprise, Australia

"With hybrid cloud, the benefits are it's really made more for your specific needs."

- CIO, very large enterprise, US

"It might be more secure for certain aspects of your systems. It's going to be more customized or customizable to your business. It might allow you to keep systems in place that are difficult to lift up into the cloud. It allows a gradual transition to the cloud."

- CIO, very large enterprise, US

Getting to the finish line isn't the point

IT decision-makers overwhelmingly indicated a lack of milestones in their hybrid cloud roadmaps, suggesting the process is truly a journey rather than a destination. Some CIOs and CTOs were able to describe in percentages how far they have come in completing their cloud strategy, but most spoke about these efforts in general terms. Only 23% of respondents—and 40% of Chief Executive Officers (CEOs)—said their hybrid cloud strategy was 100% complete, while 58% said they have been working on it for many years (see Chart 3). This

indicates there may be a difference of perspective between CEOs and their technology leaders on what it means to complete a hybrid cloud strategy.

This disconnect may be due to the nature of technology itself and the business priorities it underpins. Nearly all strategies require continual revision and updating—in terms of processes and technologies. Only a few enterprises have the same IT roadmap or business imperatives they laid out five years ago, and they're likely to have a different set of strategic priorities five years from now.

Chart 3: Which of the following best apply to your current situation?

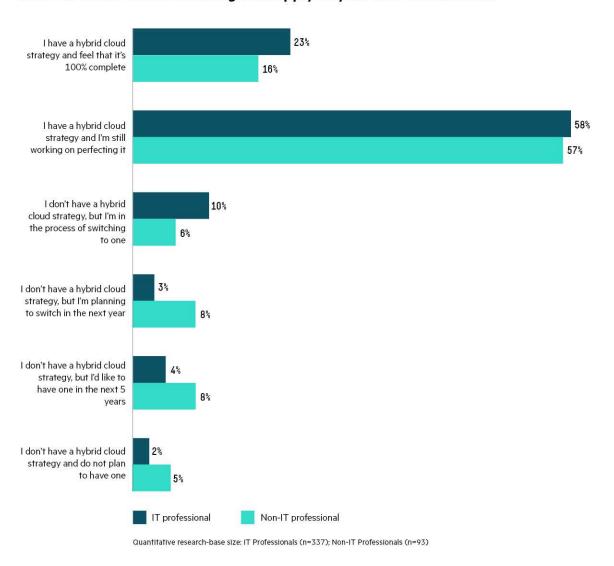
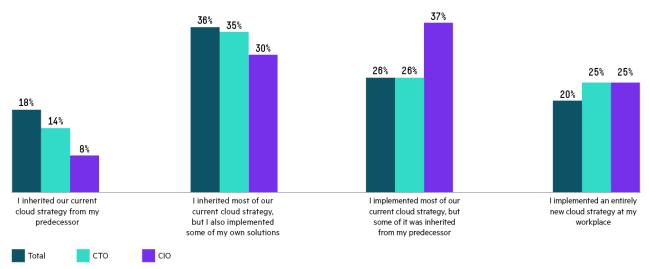


Chart 4: Most decision-makers have inherited some degree of cloud strategy from their predecessors



Quantitative research-base size: total sample (n=919), CTO (n=197), CIO (n=158)

"It's a rolling thing," said one CIO of a medium-sized enterprise in the US. "Every year, I'm thinking not just about next year but three years out or five years out or 10 years out."

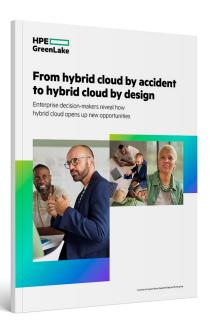
This challenge is further complicated by the changing nature of organizations and their IT leaders. Three out of four CIOs and CTOs said they inherited at least part of their current cloud strategy from their predecessors (see Chart 4).

Another key perspective IT leaders shared was that completing a hybrid cloud migration is not nearly as important to them as doing it the right way. While going more slowly may feel like a throwback, taking a more

deliberate approach can pay off in the long run with less disruption to the business. Slow and steady may indeed win the race.

Open up opportunities for your enterprise with hybrid cloud

Enterprise leaders worldwide are choosing hybrid cloud because it's working: it's opening up new opportunities by speeding innovation and improving processes. And although every organization's needs and goals are unique, the flexibility inherent in hybrid cloud offers each a strategy for success.



Read the full report

"From hybrid cloud by accident to hybrid cloud by design" 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.

Read the full research report at HPE.com/GreenLake

Visit HPE.com/GreenLake

