

Chapter 5

Turning data into intelligence with hybrid cloud

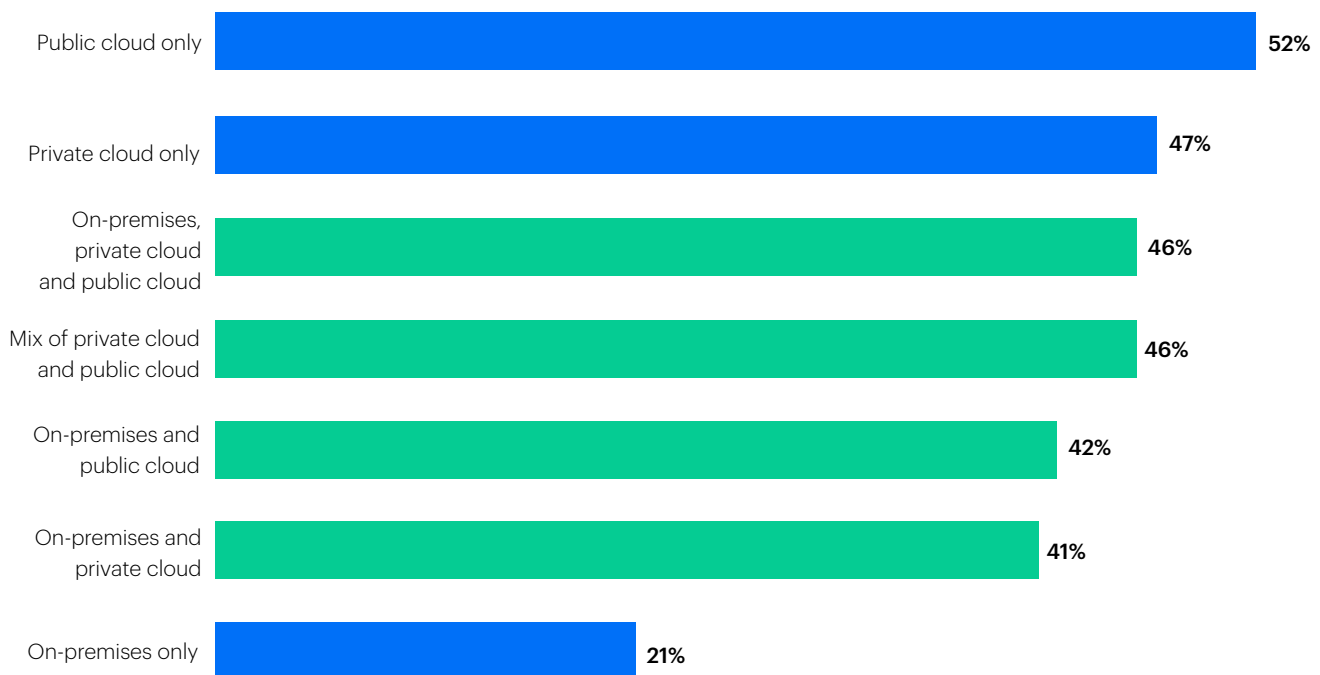
Data on its own can be a useful thing. But can you turn your data into intelligence? That's where a business can find a competitive advantage. As data proliferates from edge to cloud, strategies for getting the value from the data can become elusive. What approach works best? And how does an enterprise's IT infrastructure work to deliver a single source of truth for better decision-making?

On-premises architectures are weakest at turning data into intelligence

When we asked participants about their enterprise architecture, one thing was clear: all types of cloud-based strategies beat on-premises-only approaches when it comes to generating meaningful intelligence from data. It didn't matter the specific cloud design they used—public cloud only, private cloud only or a hybrid mixture of cloud on- or off-premises. They all outpaced on-premises-exclusive approaches on this front. At the top of the pack stood public cloud strategies (52% reporting success) with private cloud (47%) close behind. Various hybrid cloud approaches were closely bundled from 46% to 41%. At the bottom of the pack, on-premises-exclusive users reported a mere 21% success rate at turning data into intelligence (see Chart 8).

Why does the cloud help turn data into intelligence? One potential factor is speed, as respondents reported the cloud simply gave them an ability to respond to new data faster than had been possible in an on-premises-only environment. And because the cloud offers more resilience, cloud users experience less downtime and more flexibility, helping ensure intelligence is being generated regularly and reliably. Hybrid cloud also plays a key role in helping to manage the vast amount of data being created and stored at the edge, ensuring that data can be processed as close as possible to its point of origin.

Chart 8: Percent who said their current strategy is successful at achieving: "turning data into intelligence"



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.

What impact has turning data into intelligence had on your business so far?

“The impact made was massively felt in the way our company functions; we are much more successful.”

— CEO, large enterprise, Canada

“Made it easier to identify behaviors that drive business outcomes and made the conversion of data into strategic metrics easier.”

— CDO, medium-sized enterprise, UK

The critical role a single source of truth plays

Paramount to the concept of maximizing enterprise intelligence is the development of **a single source of truth**, the aggregation of multiple data sources into a single data set. A single source of truth does not necessarily mean that all data is stored on a single server or database but rather that all data sources act in unison wherever they happen to be. With a data fabric design made possible through hybrid cloud architecture, data can reside anywhere but still be treated as a unified, cohesive source.

Hybrid cloud is one of the key components that makes a single source of truth possible. Respondents in our survey said the ability to combine data sources from diverse locations helps them find patterns and make meaningful analyses of it. This ability makes intelligence more cohesive and valuable, lessens the amount of time and effort needed to generate analytics, and decreases the amount of noise in reports. Being able to view data through a single pane of glass makes data analysts more efficient and the results of their efforts more accurate.

What is driving the need for hybrid cloud for generating meaningful data insights?

The concept of a single source of truth means different things to different users. Yet ubiquitous in our survey was the fact that using hybrid cloud to achieve a single source of truth meant better reporting accuracy with less overall effort.

“Nobody wants to look at 47 screens to do their job,” said one CTO of a very large US-based enterprise. “It just becomes impossible. I don’t have time to look at a different screen for every system we have. What I want is a dashboard that summarizes everything: if all the lights are green, I’m good. If one of the lights is red, I want to drill down into it and see what’s going on.”

That kind of capability is now possible, thanks to hybrid cloud, said the CIO of a large US enterprise. “We are now able to gather data whether it’s on the edge, internal cloud, public cloud or wherever,” they said. “We have been able to coalesce all those data points to provide a single point of truth.”

Echoed another CIO from a large US-based enterprise: “We’re getting visibility into what’s happening across the company that we haven’t really considered before. That, in turn, gives us the ability to better coordinate our resources and apply them more efficiently.”

The first step to generating a single source of truth

Whether you decide to embrace hybrid cloud or some other enterprise architectural design, experts say the key is to start by consolidating data sources to find ways to effectively link them together. Focus more on the goals of what you want to do with the data rather than how it should look or where it should be stored. And make sure you invest in training for your teams up front, so they fully understand the tools at hand.

CIOs and CTOs said the journey to building a single source of truth in the enterprise can be rocky, but all agreed the results — in the form of much more insightful and timely analyses — is well worth the journey.



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.

Read the full research report at [HPE.com/GreenLake](https://www.hpe.com/GreenLake).



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