

January 2023



Survey Report

# The State of Hybrid Cloud Storage





# Executive Summary

When we talk about modern hybrid cloud infrastructure, the focus is usually on the “cool” aspects of it—the shiny new capabilities that enable digital transformation, innovation, and agility. Compared to all that, storage is decidedly uncool, even humdrum. But make no mistake—storage is an enterprise workhorse, and it is crucial. Virtana commissioned a survey to understand the state of hybrid cloud storage.

## Key findings we uncovered include:

### There is a lot of storage in the cloud—and on premises

**55%** **55% of respondents** want as much storage in the cloud as possible, but are willing to keep it on premises when it makes more sense for cost or performance reasons.

**57%** On average, companies have put **57% of their storage in the cloud**, keeping 43% on premises.

### Cloud storage costs are big...and growing

**69%** **69% of respondents** said that storage accounts for over one-quarter of their company's cloud costs.

**94%** **94%** said cloud storage costs are rising, and 54% reported that their storage spend is growing at a faster rate compared to their overall cloud costs.

### Storage placement decisions matter

- Organizations are using different approaches to determine when to move storage into the cloud and when to keep it on premises.
- Storage expertise, primarily used by one-third of respondents, is an important factor in keeping costs in check—100% of the few whose storage costs are actually shrinking rely on their team's knowledge to make placement decisions.
- 47% of respondents whose storage costs are growing at a slower rate than overall cloud costs are primarily using automated third-party tools.
- 36% of respondents dealing with spiking storage costs are relying on cloud service provider (CSP) recommendations.

### Supply chain challenges are affecting storage

- The supply chain issues afflicting many spheres of business are also wreaking havoc on enterprise storage. 91% of respondents reported an impact on their storage and/or the IT equipment that supports storage systems, and 49% said that the impact has been significant.
- This impact translates to 67% of respondents spending more time on procurement and supply chain management and 65% on having to optimize and extend the life of their existing resources.



## Survey participants and methodology

Virtana commissioned an independent research firm to survey 350 IT leaders in the US and the UK during October 2022. Respondents were verified and randomized using global panel service providers, and all surveys were completed online. 100% of respondents contributed to cloud decisions for their organization. The margin of error for this study is +/- 5.2% at the 95% confidence level.

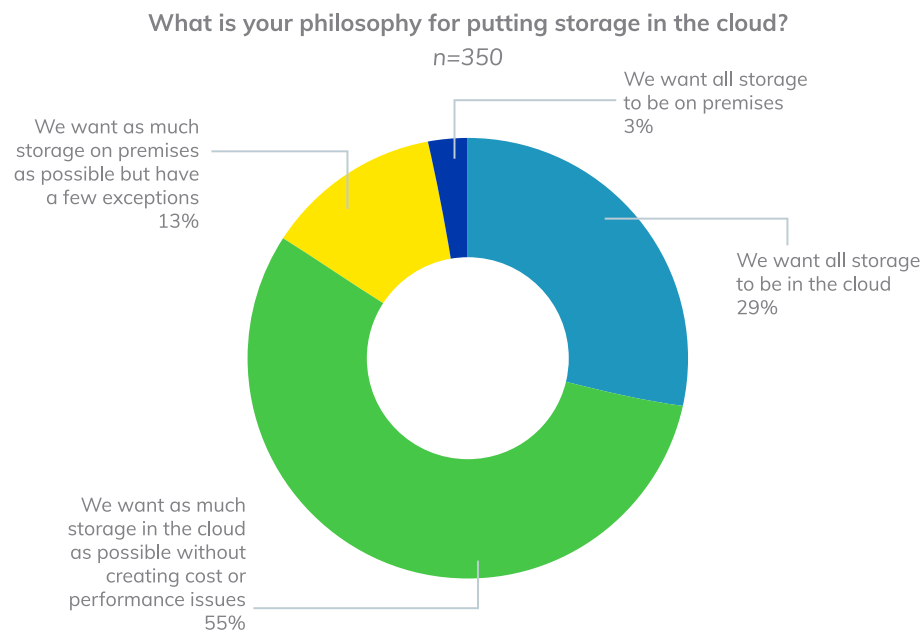


## Results are in ...

### There is a lot of storage in the cloud—and on premise

The vast majority of respondents (84%) want at least a good portion of their storage in the cloud, but two-thirds of that group (55% of all respondents) are willing to keep storage on premises when it makes more sense for cost or performance reasons. (Figure 1)

FIGURE 1





In fact, on average they've put over half (57%) of their storage in the cloud, keeping 43% on premises. (Figure 2)

And this proportion holds steady regardless of company size. (Figure 3)

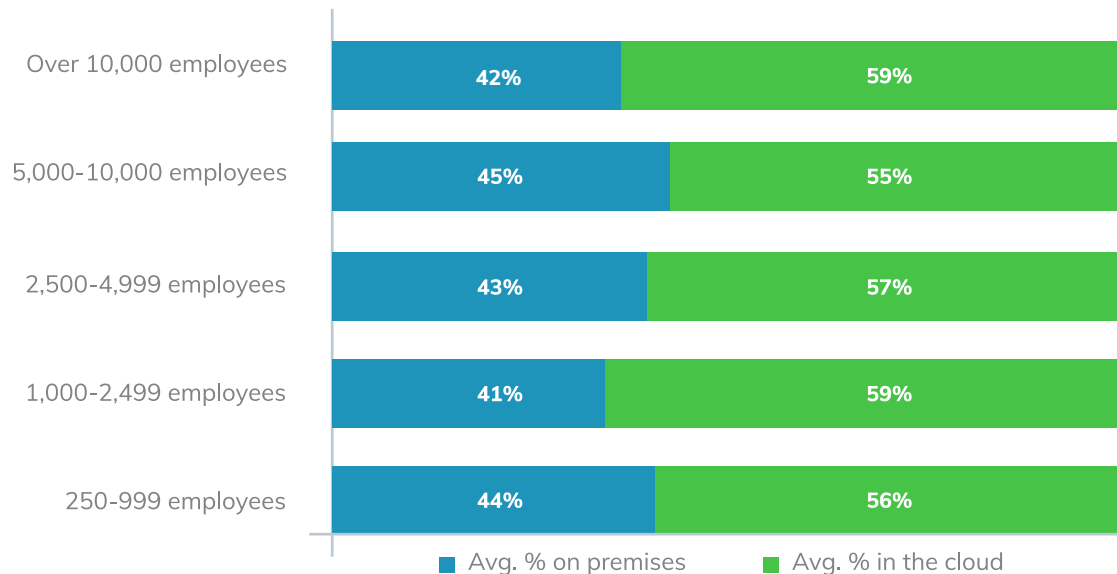
FIGURE 2

What is your split of on premises and cloud as it relates to storage? (n=350)



FIGURE 3

What is your split of on premises and cloud as it relates to storage? (n=350)



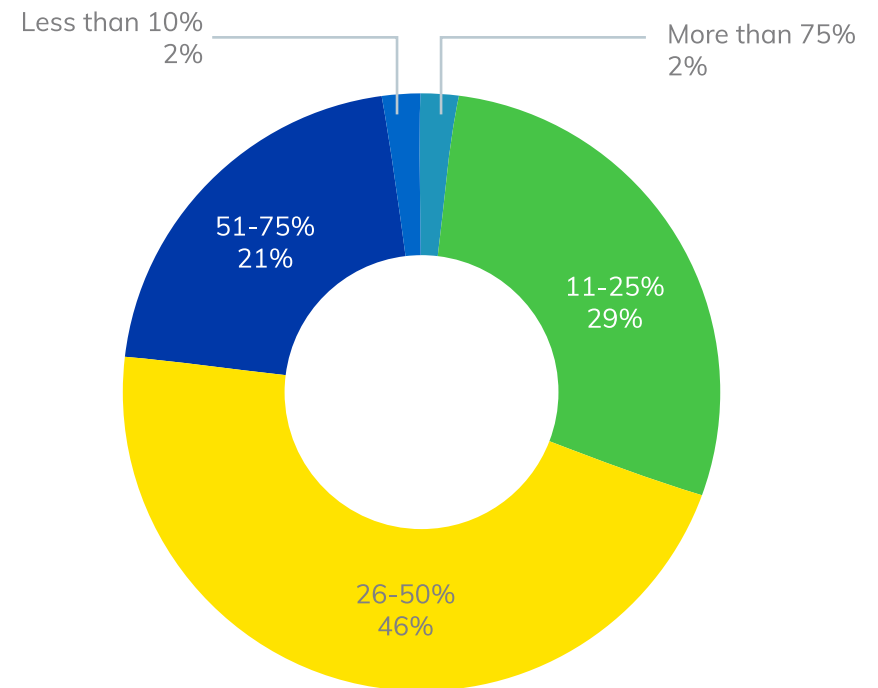


## Cloud storage costs are big... and growing

The majority of respondents (69%) said that storage accounts for more than one-quarter of their total cloud costs, and almost one-quarter (23%) said that more than half of their overall cloud spend goes to storage. (Figure 4)

FIGURE 4

On average, what percentage of your total cloud costs are from storage? (n=350)





You could infer from this that cloud storage costs aren't any more or less concerning than cloud spend in general. But this snapshot doesn't tell the whole story, because almost all respondents (94%) said that cloud storage costs are rising, and 54% reported that their storage spend is growing at a faster rate compared to their overall cloud costs. (Figure 5)

FIGURE 5

How fast are your cloud storage costs growing in relation to your overall cloud spend? (n=350)

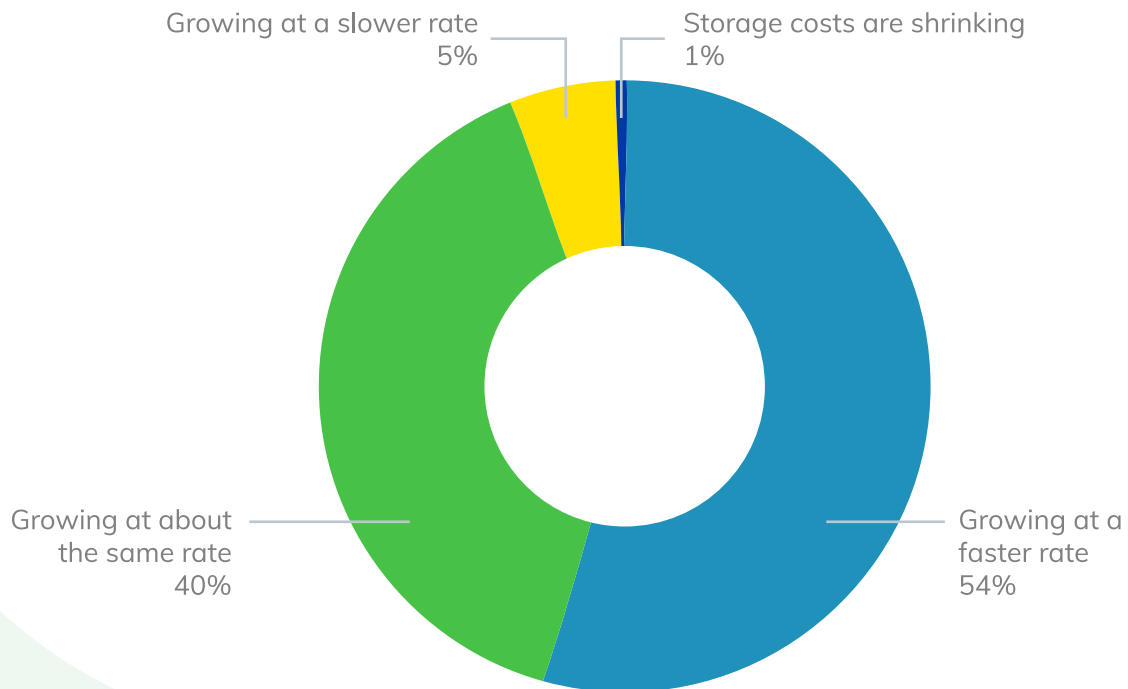
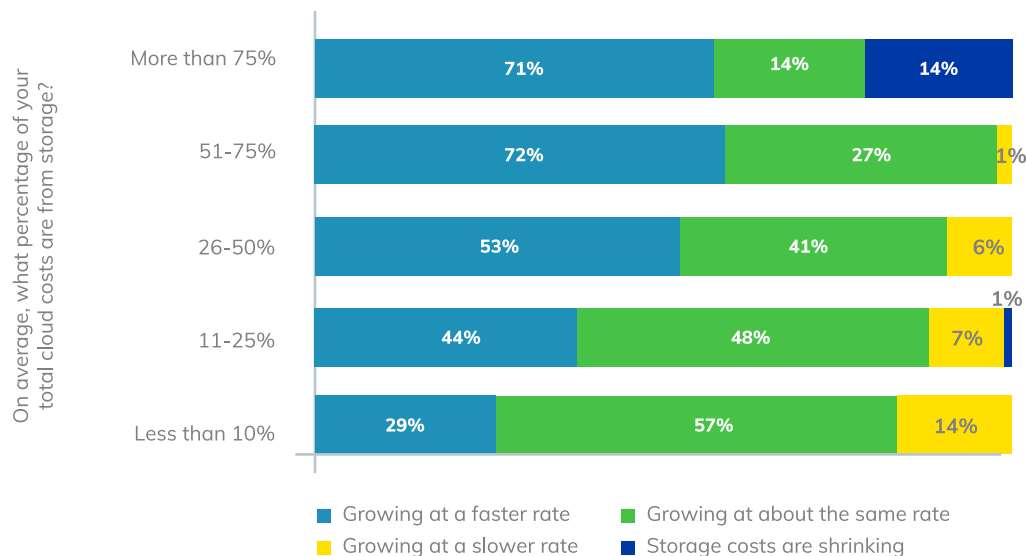




FIGURE 6

How fast are your cloud storage costs growing in relation to your overall cloud spend? (n=350)



What is interesting is that as the percentage of cloud costs allocated to storage increases, the more likely it is that those storage costs are growing at a faster rate than other cloud costs. Of the organizations with more than half of their cloud spend going to storage, 71–72% said that those costs are growing at a faster rate, compared to only 29% of those with the least amount of cloud storage spend. (Figure 6)



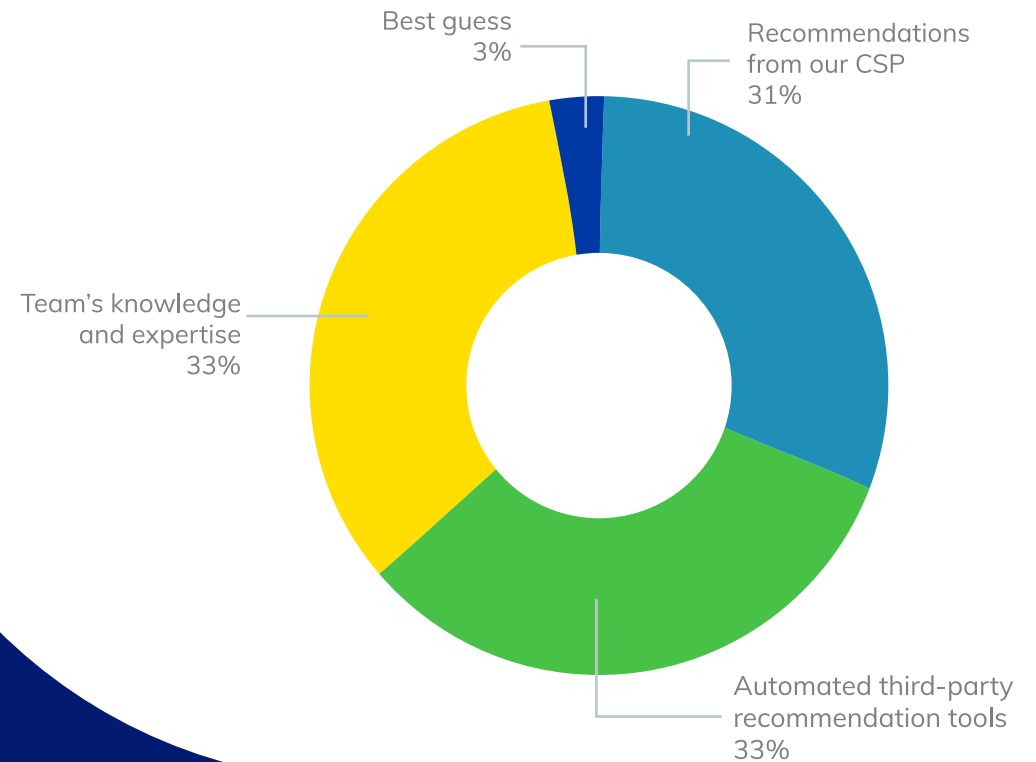


## Storage placement decisions matter

So, how are companies deciding what storage to put in the cloud and what to keep on premises? There's no one prevailing approach. Overall, respondents are fairly evenly split between relying on their team's knowledge and expertise (33%), using automated third-party tools (33%), and taking recommendations from their CSP (31%). (Figure 7)

FIGURE 7

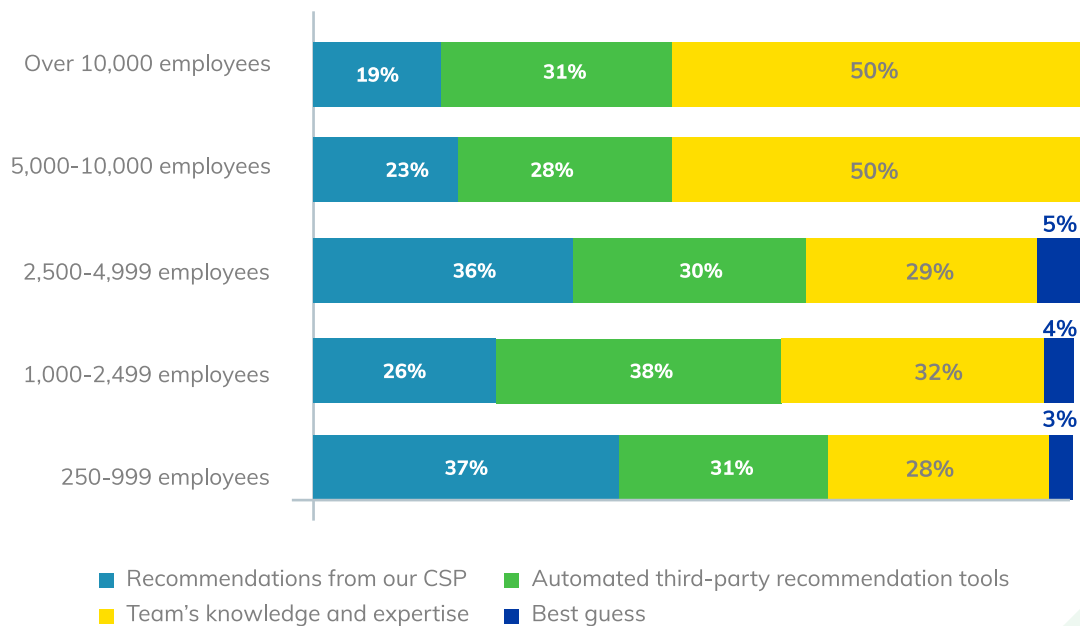
Which of the following do you primarily rely on to decide what storage to put in the cloud and what to keep on premises? (n=350)





**FIGURE 8**

Which of the following do you primarily rely on to decide what storage to put in the cloud and what to keep on premises? (n=350)



Breaking it down by company size, however, does show slight variations. Half of companies with more than 5,000 employees rely on team knowledge and expertise, compared to only 28–32% of smaller organizations, who are more likely to take recommendations from their CSP or even just guess. (Figure 8) This is not surprising, given that the larger enterprises are more likely to have a deeper bench of expert talent.



Of the respondents that spend the largest percentage (more than three-quarters) of their cloud costs on storage, only 14% are using automated third-party tools to make storage placement decisions. This is significantly less than the 29–35% of companies with a smaller proportion of storage spend. The big storage spenders are also much more likely to rely primarily on CSP recommendations (43% vs. 23–34%) and even on pure guesswork (14% vs. 0–4%). (Figure 9) The latter is problematic and unsustainable for obvious reasons.

The challenge with CSP recommendations isn't that they are inherently inferior—quite the opposite, in fact—but simply that the CSPs are limited in their ability to factor in characteristics from your entire hybrid, multi-cloud infrastructure.

FIGURE 9

Which of the following do you primarily rely on to decide what storage to put in the cloud and what to keep on premises? (n=350)

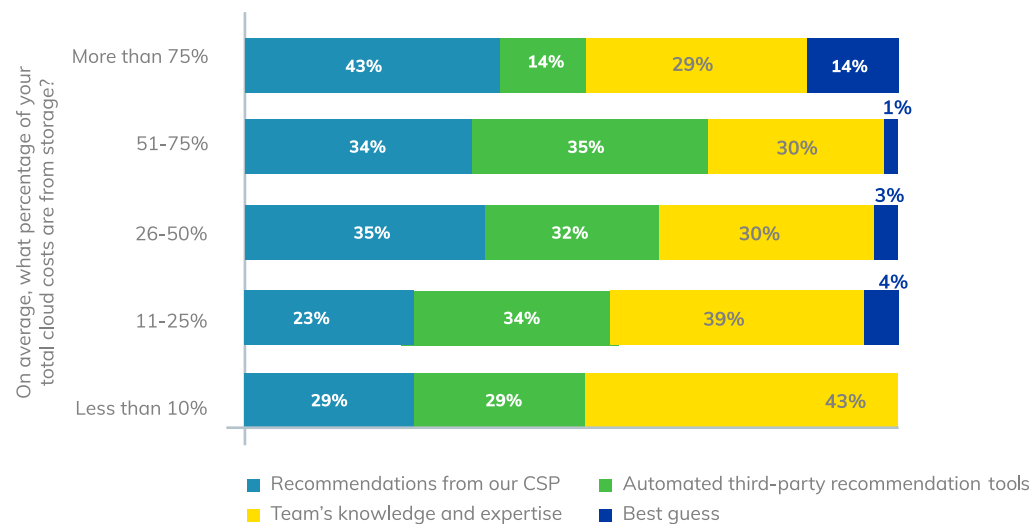
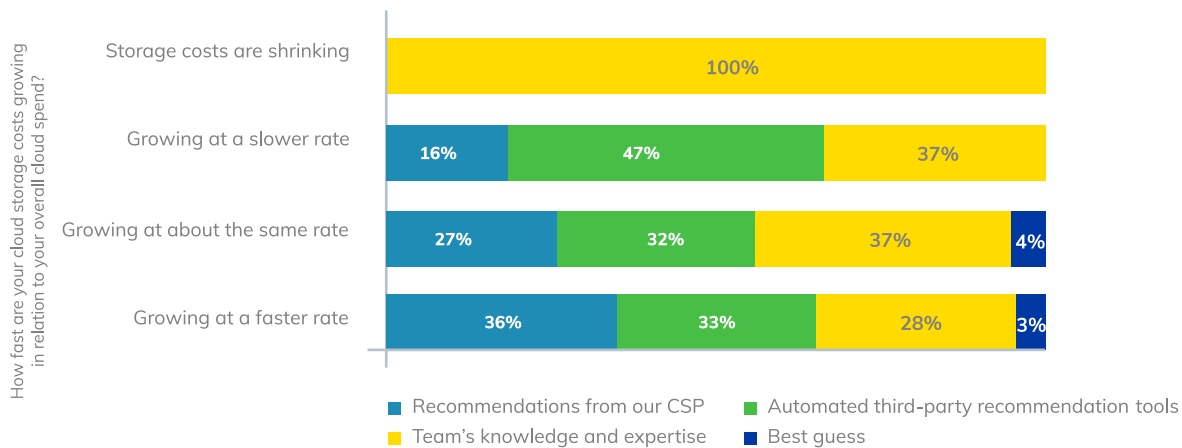




FIGURE 10

Which of the following do you primarily rely on to decide what storage to put in the cloud and what to keep on premises? (n=350)



This has an impact on storage cost growth. Reducing storage costs requires a lot of expertise. In fact, a full 100% of the few companies that are decreasing storage costs as a percent of overall cloud costs are primarily doing so thanks to the know-how of their team.

While bringing this kind of knowledge in house via hiring might be out of reach for many organizations, there are partner and vendor options that could help. Almost half (47%) of the organizations that are able to keep storage cost growth in check compared to other cloud costs are using automated third-party tools to make storage placement decisions. Only 16% of these companies are relying on CSP recommendations, compared to 36% of organizations with spiking storage costs. (Figure 10)

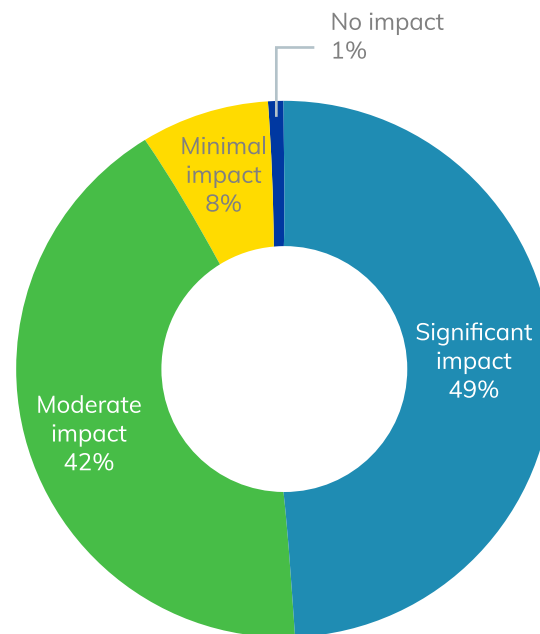


## Supply chain challenges are affecting storage

Cloud costs aren't the only factor having an impact on enterprise storage. The vast majority of respondents (91%) are feeling the pain of supply chain challenges, with almost half (49%) saying that the impact on their storage and/or the IT equipment that supports storage systems has been significant. (Figure 11)

FIGURE 11

How have supply challenges affected your storage and/or the IT equipment that supports storage systems? (n=350)





These problems plagued businesses of all sizes, though fewer of the very largest enterprises saw a significant impact (31% vs. 44–55% of smaller organizations). (Figure 12)

**FIGURE 12**

How have supply chain challenges affected your storage and/or the IT equipment that supports storage systems? (n=350)

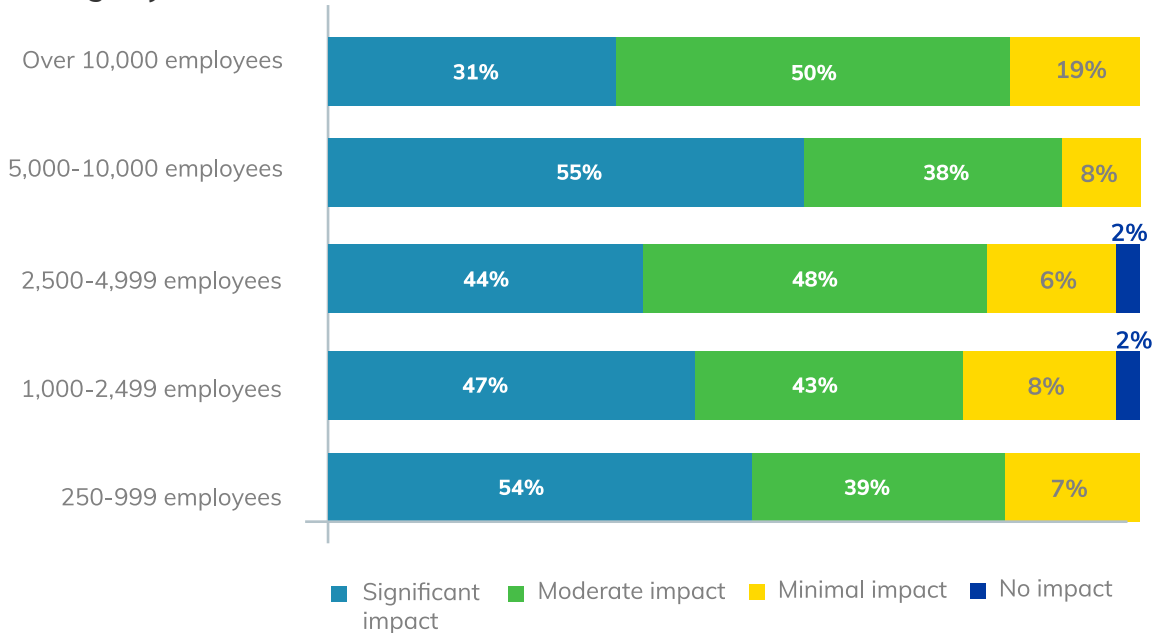
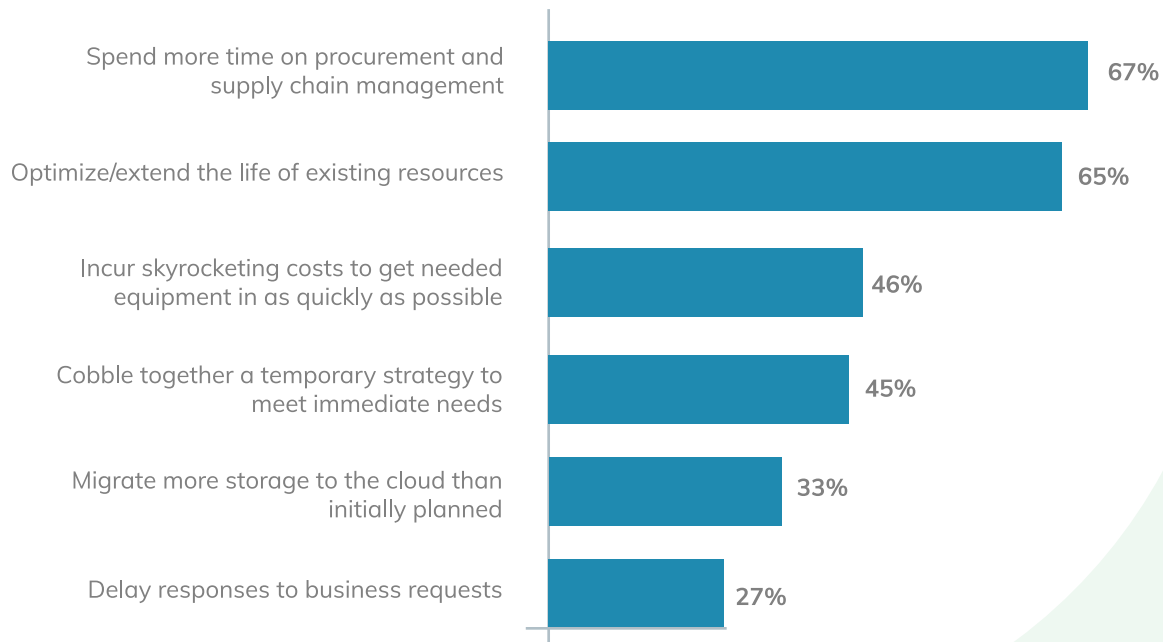




FIGURE 13

What actions has your team taken as a result of supply chain challenges? (n=347)



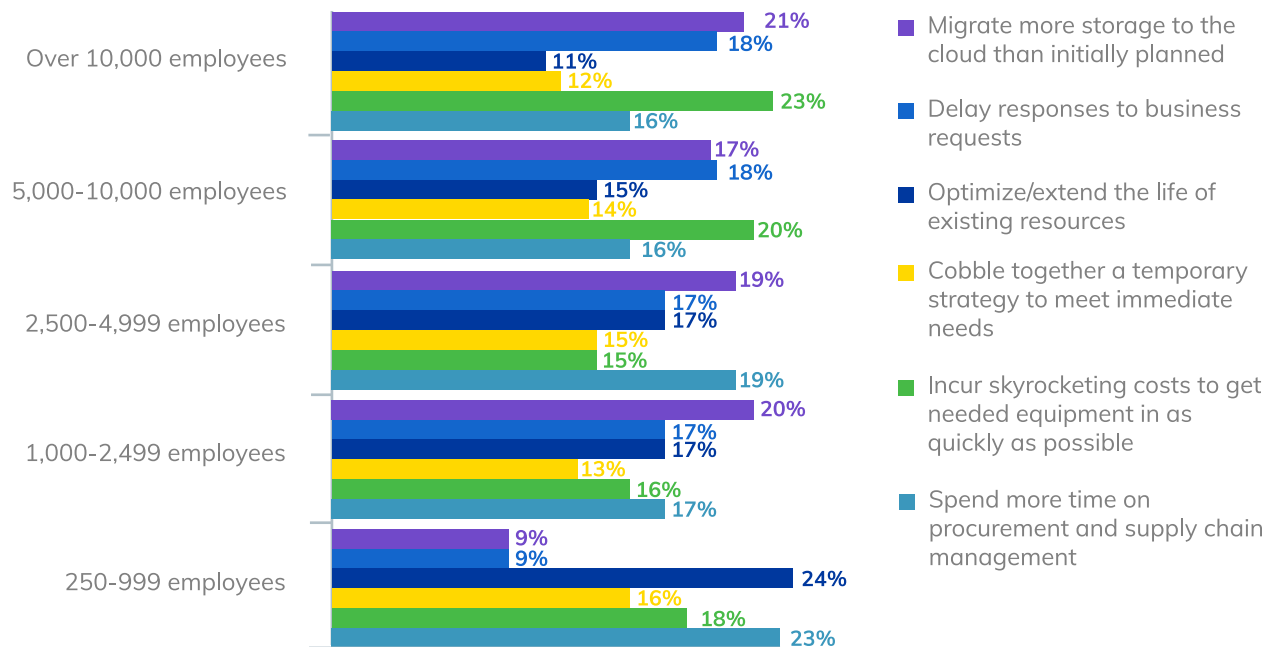
These supply chain challenges are creating extra effort with more than two-thirds (67%) saying they have to spend more time on procurement and supply chain management. Almost the same number (65%) are forced to optimize and extend the life of their existing resources. Only 27% are willing to delay responding to business requests—in fact this option came in last place. (Figure 13)



Of course, these issues don't hit companies of all sizes in the same way. The smallest organizations are far less likely to migrate more storage to the cloud than initially planned (9% vs. 17–21% of larger companies) or to delay responses to business requests (9% vs. 17–18%). They are also more likely to optimize/extend the life of existing resources (24% vs. 11–17%).

**FIGURE 14**

What actions has your team taken as a result of supply chain challenges?  
(n=347)





# Storage can't be an afterthought

Storage is not exciting, but it is an essential element of all enterprise applications. Too often, however, organizations assume that when they move storage to the cloud, the CSP will just take care of it.

The hard truth is that storage decisions can have a significant impact on cost and performance. This is why observability—powered by deep expertise—into storage across your global hybrid multi-cloud infrastructure is critical. Not only will you optimize storage performance and costs, you'll also be better positioned to deal with external challenges, whether that's the current supply chain issues or whatever is around the next corner.



## About Virtana

Virtana delivers the industry's first unified platform for migrating, optimizing, and managing application workloads across public, private, hybrid, and multi-cloud environments. Using artificial intelligence for IT operations (AIOps) technologies, including machine learning and advanced data analytics, the cloud-agnostic Virtana Platform solves the most difficult challenges facing enterprises as they seek to leverage public clouds. The platform enables a “know before you go” approach by providing intelligent observability into which workloads to migrate. It also ensures that unexpected costs and performance degradation are avoided once workloads are operating in the cloud. With the Virtana Platform, enterprises can confidently speed cloud adoption and reduce cloud operating costs by simplifying management of their IT environments.

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