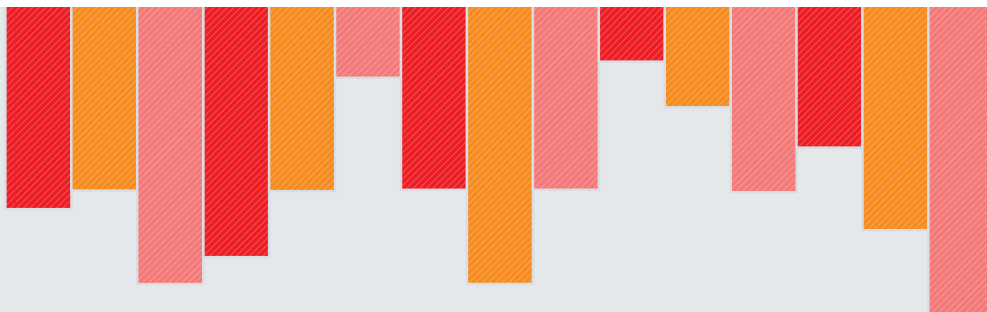


EXECUTIVE SUMMARY

The Rise of Data Storage as a Service

Solving the Data Storage Dilemma in the Age of Big Data



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Pure Storage gives technologists their time back. Pure delivers a modern data experience that empowers organizations to run their operations as a true, automated, storage-as-a-service model seamlessly across multiple clouds. One of the fastest-growing enterprise IT companies in history, Pure helps customers put data to use while reducing the complexity and expense of managing the infrastructure behind it. And with a certified customer satisfaction score in the top 1% of business-to-business companies, Pure boasts an ever-expanding list of customers who are among the happiest in the world.

The Rise of Data Storage as a Service

Solving the Data Storage Dilemma in the Age of Big Data

Data storage is becoming a critical capability in the age of big data. As businesses increasingly rely on data to drive decision making, they have a growing need for data storage systems that make it easy to take in and consolidate data from multiple sources and then make that data available to end users—quickly, reliably, and securely. But many organizations are struggling with traditional data storage models they purchase and manage on-premises. Data storage as a service (STaaS) is data storage capacity and service purchased on a subscription basis from a third-party provider and billed according to one or more usage metrics, and it is becoming a popular—and more efficient and more effective—solution for organizations.

STaaS' emergence comes at a crucial time. A new global survey of 430 business executives by Harvard Business Review Analytic Services shows that 90% of executives believe data is critical to their organization's business strategy. Nearly as many (88%) agree that data storage is critical to their business strategy, too. Yet many organizations have room to improve on the latter front. While 87% of executives say a robust data storage infrastructure is very important to their organization, only 56% say the data infrastructure they have right now is very effective.

The most common operational challenges executives associate with traditional data storage models involve maintaining strong data security and working with siloed storage systems that complicate internal data sharing. Meanwhile, the most common challenges associated with purchasing and

HIGHLIGHTS



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A majority of executives believe STaaS offers several advantages over a traditional storage model, including a better experience at simplifying data backups, minimizing data storage costs, and avoiding disruptions due to software and equipment upgrades.

managing traditional storage systems concern staying current with technology, coping with the cost of maintenance, and trying to accurately forecast capacity needs several years into the future.

A majority of executives believe STaaS offers several advantages over a traditional storage model, including a better experience at simplifying data backups, minimizing data storage costs, and avoiding disruptions due to software and equipment upgrades. In addition, the vast majority of all executives surveyed—75% and higher—believe a STaaS model is more likely than a traditional data storage model to eliminate the need to forecast data storage capacity requirements years into the future; reduce capital expenditure demands by converting data storage from a capex to a pay-as-you-go operating expense; provide improved consistency for on-premises and cloud-based applications; free IT staff to focus on other work, including higher-value activities; and offer more flexibility for scaling storage capacity up or down as needed in near real time.

Businesses are backing their beliefs with action. One-third of the executives surveyed say their organizations have moved to a STaaS model (referred to in this report as STaaS users), and 43% say they have been investigating such a move or plan to do so over the next two years (STaaS investigators). Only 24% say they are still using a traditional on-premises storage model and have no plans to do otherwise (traditionalists).

Among the survey’s other key findings:

- **Organizations that have embraced STaaS are getting materially better results than those that haven’t.** Two-thirds of STaaS users say their data storage programs are very effective, versus 56% of those who are investigating its uses and just 40% of those using a traditional data storage model.

- **STaaS users are benefiting more and suffering less from their data storage models than other organizations.** STaaS users are materially more likely than traditionalists to say their current data storage model makes it easier to get real value from their data. **FIGURE 1**

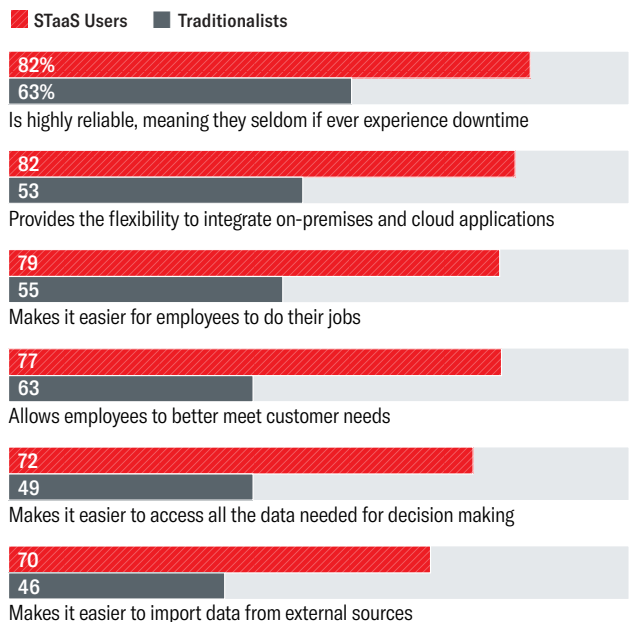
What’s more, STaaS users are suffering less from data storage woes in almost every instance. They’re less bogged down by complexity, difficulty in sharing data across the enterprise, and trouble facilitating self-service by end users. This efficiency is key when data is increasingly the lever for nearly every modern initiative.

- **STaaS users think sooner and farther out in developing their data storage strategies.** This circumstance may both contribute to and be a recognition of the better data storage performance provided by a STaaS model. Seventy-one percent of STaaS users consider data storage from the outset when developing their data storage strategy, versus 43% of traditionalists. That mindset could impact results; 70% of organizations that consider data storage from the outset say their storage infrastructure is very effective, nearly twice as

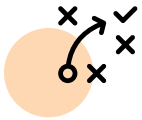
FIGURE 1

STaaS Users Get More from Their Data Storage Model

STaaS users are more likely than traditionalists to say their data storage model ...



Source: Harvard Business Review Analytic Services Survey, October 2020



Overall, 43% of executives say their organizations will spend 30% or more of their total IT infrastructure budget on as-a-service offerings, including 13% who say they'll spend 70% or more.

many as those who don't worry about storage until later in the process. Meanwhile, STaaS users are more likely than traditionalists to plan for and invest in their data storage needs three or more years out. One possible explanation: having experienced the advantages that a STaaS model delivers, they are more eager to sign longer contracts that lock in term-based and volume discounts. Another possibility: STaaS puts usage data at their fingertips, which makes planning easier.

- **Data security is one of the biggest challenges executives associate with switching to a STaaS model**, with 48% citing it as a concern. Opinion is split over whether traditional or STaaS models are better for data security. About a third of survey respondents (34%) think STaaS is more secure, 30% think STaaS and traditional models are about equal in terms of data security, and 26% think traditional arrangements are more secure. Those currently using STaaS and those looking into it are more likely to rate STaaS the more secure model (43% and 35%, respectively) than are those not considering it (20%). This disparity may reflect greater familiarity with the service among the first two groups.

INDUSTRY FINDING

Financial services firms are significantly more likely than others to say their current data storage infrastructure is very effective. They also are more likely to say they prioritize data storage from the outset in crafting their overall data strategy. That said, the use of STaaS in the financial services industry doesn't appear to be radically different from its use in other industries. The explanation may be that data and data storage have long been absolutely integral to everything financial services firms do, especially as we've transitioned to a world in which physical cash is used less and less, so they've spent more time and effort to get things right.

Where Do We Go from Here?

Businesses plan to spend a significant chunk of their IT infrastructure budget on as-a-service offerings over the next two years.

Overall, 43% of executives say their organizations will spend 30% or more of their total IT infrastructure budget on as-a-service offerings, including 13% who say they'll spend 70% or more. STaaS users will continue to ramp things up in this area, devoting even more of their budgets to as-a-service offerings—52% say they'll spend 30% or more of their budget that way, with 21% planning to spend 70% or more. But traditionalists are getting on board. Around a quarter of this group plans to spend 30% or more of their infrastructure budgets on as-a-service offerings. It's evidence that the shift in mindset is happening, slowly but surely, across the board.

Covid-19 may be helping accelerate subscription-based spending by IT chiefs.

Eighty-one percent of executives say the pandemic has added to the workload of their IT staff. Of course, that makes subscription-based models, which relieve staff of some of their less strategic responsibilities, attractive.

STaaS seems set to grow as the data storage solution of choice.

The more reliant businesses become on data to drive decision making, the more important it is for them to have a data storage infrastructure that can keep up. STaaS can help them manage the speed, scope, and complexity of modern data.

Indeed, big data is putting pressure on traditional ways of storing and consuming data. This circumstance provides an opportunity for STaaS, which, because of its flexibility and reliability, may establish a new paradigm for both consumers and organizations when it comes to unlocking the data capabilities they will need to succeed in the years ahead.



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