

Adoption of as-a-service models continues to accelerate as organizations seek new consumption models that offer flexibility, agility, and transparency around usage. IDC research illustrates why organizations are shifting to these models for IT infrastructure, including storage devices.

The Business Value of "as a Service" for Storage Environments

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As-a-Service Models Align Usage with Budgets

For the past few years, digital transformation (DX) has been the focus of many organizations because investing in DX technologies will enable businesses to use new technologies such as artificial intelligence (AI), blockchain, and Internet of Things (IoT) to accelerate growth. IDC believes that 65% of organizations will modernize legacy systems with extensive new technology platform investments through 2023. Modernization of IT environments is a key part of the digital transformation movement and organizations are focused on these goals, but what are the pain points for IT and business leaders? In 2019, IDC asked IT decision makers (ITDMs) about the top datacenter priorities to meet transformation goals.

Ensuring data security and compliance, improving network performance, and improving overall efficiencies are important priorities (see Figure 1). But when examining other responses, IDC found commonality in the following top concerns:

- » Improve flexibility to move workloads
- » Improve capacity planning
- » Enable our internal IT team to act more cloudlike

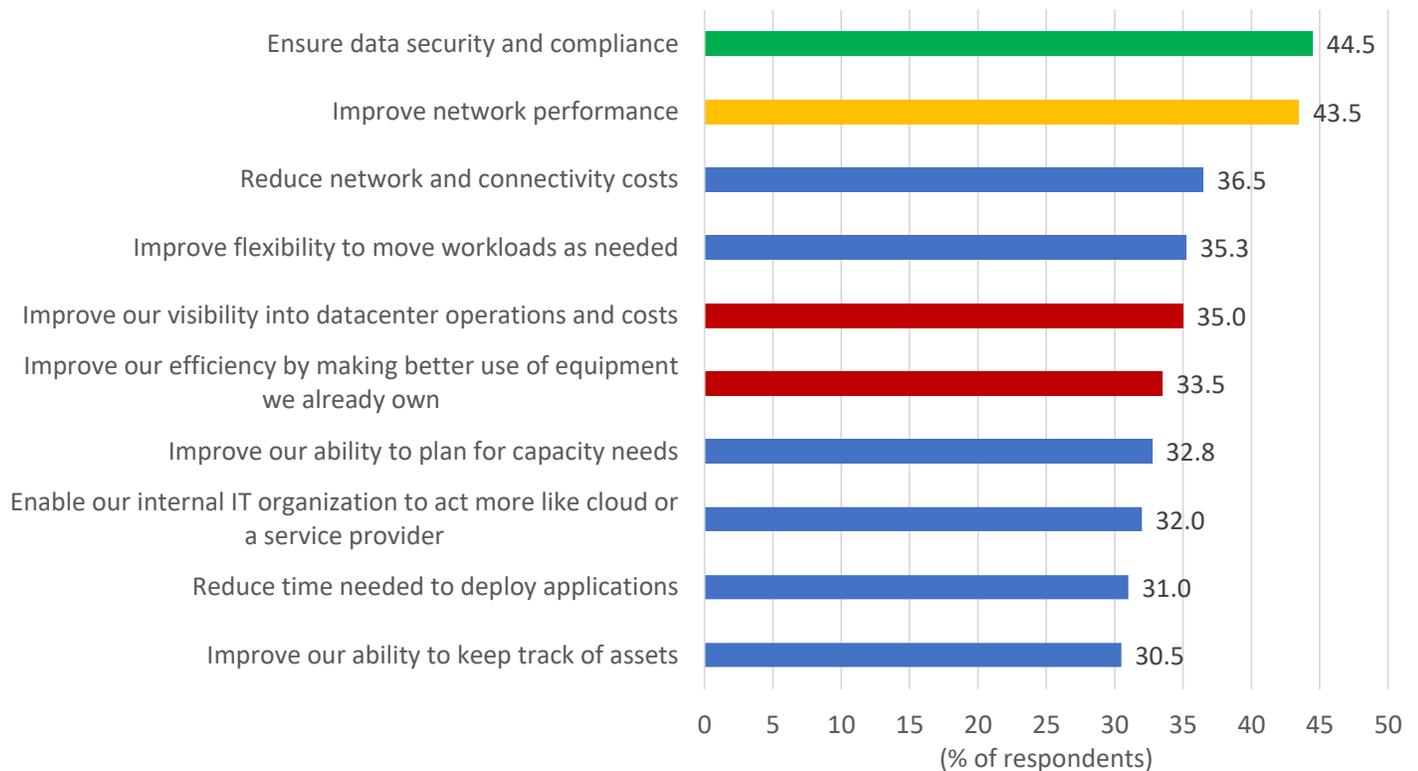
This data underscores that important objectives are not being met with the current tools, which may hinder transformation goals. Clearly, visibility into current usage levels and the associated costs is necessary to implement changes.

Another issue blocking progress is that most organizations — already faced with budget challenges — are under increased financial pressures because of the economic crisis. Increasingly, organizations are taking a serious look at as-a-service models because these programs provide the flexibility, agility, and transparency that enable businesses to align budgets and usage within an operating model. Adopting these offers removes the need for a significant capital outlay and streamlines all hardware, software, and services costs into a monthly payment — improving cost metrics and streamlining decision making.

AT A GLANCE

KEY STATS

- » 65% of organizations will modernize legacy systems with extensive new technology platform investments through 2023.
- » 43% of organizations believe interest in as-a-service models will significantly or moderately increase because of the economic crisis.
- » 45% of organizations consider data backup and recovery to be the most important service offered by as-a-service models.
- » By 2024, over 50% of datacenter infrastructure and 75% of infrastructure in edge locations will be consumed/operated via as-a-service models.

FIGURE 1: *Top Datacenter Priorities*

n = 400

Source: IDC's Datacenter Operational Survey, January 2019

Definitions

As-a-service models are flexible arrangements in which procurement of hardware, defined software, deployment, support, optimization, and life-cycle management services are handled by one third-party vendor under one contract.

Consumption-based models have the following characteristics:

- » May be used in multiple locations for one customer within a contract
- » Provide capacity that can be scaled up or down
- » Include a portal with metering and monitoring capabilities to provide a clear view of costs and usage
- » Allow customers to use assets that are owned by the provider

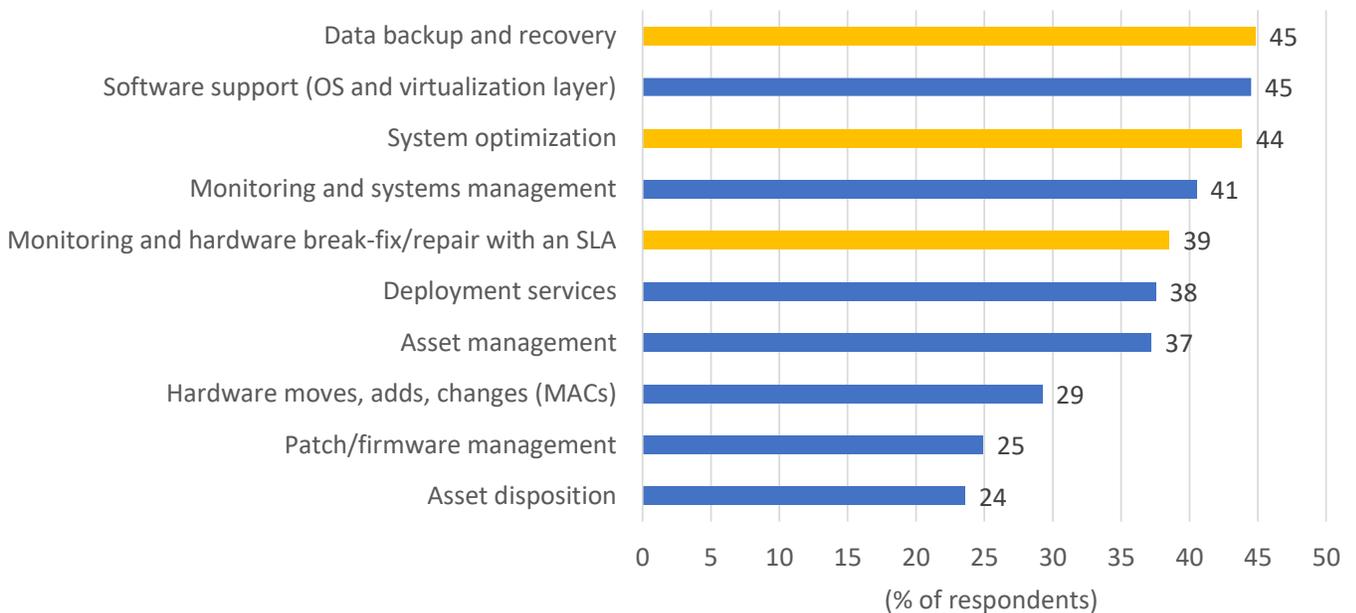
Benefits: As-a-Service Models Enable Business Agility

IDC's research demonstrates a shift in the key drivers for flexible consumption models over the years. When these programs were first introduced, the initial focus was the shift from capital to operating budgets to preserve cash and meet new accounting standards. That thinking has evolved from a capex versus opex budget decision to the many advantages that these models offer beyond budget planning.

In an October 2019 IDC survey, top drivers for these models focused on reducing IT staff workloads, faster refresh cycles, and better cost metrics per user, demonstrating that adopters of these offers are already reaping benefits beyond budget models. They also provide analytics that can improve business outcomes because of increased flexibility and transparency about all aspects of consumption. The top outcomes from consumption models align with the previously outlined top datacenter priorities. Additionally, IDC surveyed IT buyers to understand the top services that matter in as-a-service models and help inform their business decisions (see Figure 2).

FIGURE 2: *Top Services*

Q Which of the following services are most important in a flexible consumption offer?



n = 301

Base = all respondents

Notes:

Categories highlighted in yellow represent best fit for storage as a service (STaaS).

This survey was managed by IDC's Quantitative Research Group.

Data is not weighted.

Multiple responses were allowed.

Use caution when interpreting small sample sizes.

Source: IDC's IT Procurement Trends and Consumption Models Survey, October 2019

The survey data clearly shows that customers are relying on as-a-service models to provide system optimization through constant monitoring of performance levels. Conversations with customers underscore that improved monitoring and systems management reduces overprovisioning, improves upgrade cycles, and aligns outcomes with service-level agreements (SLAs). This added level of support, services, and monitoring reduces unplanned downtime and improves response times and overall efficiencies. The result of all these enhancements is a better-run IT environment that can support business initiatives quickly without long planning cycles.

Implementing storage-as-a-service (STaaS) models reduces the common pain points with storage environments such as overprovisioning to meet unexpected increases in storage utilization and forklift upgrades. Utilizing a STaaS model enables IT decision makers to align costs with business requirements and provides more flexibility in creating and addressing business opportunities. For example, matching usage to spending through real-time analytics provides the data tracking that storage managers need to effectively run their environments without maxing out their budgets. STaaS models also address other top concerns for IT managers such as data protection and backup with constant monitoring, which provides peace of mind because managers no longer need to worry about capacity fluctuations or support levels and can focus on supporting business growth.

Key Trends

With a focus on delivering improvements in business value, organizations continue to migrate to cloud operation models, use cloud-native technologies to modernize workloads, and retire underutilized IT resources. Applications and data reside in public, private, and traditional IT datacenter and colocation facilities. However, customers find the experiences across these facilities to be unequal. Heavy production workloads and data sets with strict governance policies have yet to migrate to a public cloud environment. For a true hybrid cloud, IT managers are seeking a unified experience across public, private, and even traditional infrastructure.

This unified experience includes constant updates about usage metrics across the entire IT environment — from edge to datacenter to cloud — that will deliver data insights that matter so that organizations can make strategic decisions to drive business goals. IDC surveys reveal that customers are looking for transparency in all aspects of usage to align application costs with infrastructure, reduce overprovisioning, and streamline operations. Digital transformation efforts also play a key role in this focus on flexible consumption as IT and business leaders recognize that for their organizations to be truly agile, they need an IT infrastructure that is dynamic and can quickly integrate new workloads and applications. For many organizations, as-a-service models are the solution to this long list of challenges.

Additionally, because of the pandemic and the recession, organizations face new challenges that are testing preconceived plans about the pace of digital transformation. The current economic outlook is accelerating interest in these new consumption models as customers look for new ways to acquire capacity without significant capital outlay. To understand the impact of COVID-19 on customer buying behaviors, IDC conducted bimonthly worldwide surveys and asked respondents if they believe the current crisis would increase investments in certain technologies. Forty-three percent (43%) of respondents believe interest in as-a-service models will significantly or moderately increase because of the economic downturn. IDC believes that the market for as-a-service models is at a tipping point as organizations recognize that having a comprehensive program that provides automated service and support options, as well as constant monitoring for usage and reliability, is invaluable in this new normal.

Considering Pure Storage

Pure Storage (NYSE: PSTG) pioneered the all-flash storage array with the goal of giving technologists their time back. Pure delivers a Modern Data Experience that empowers organizations to run their operations as a true, automated STaaS 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. Pure's focus on customer success is evidenced by a certified customer satisfaction score in the top 1% of business-to-business (B2B) companies since the company began measuring.

In 2018, Pure launched Pure as-a-Service to provide on-premises and cloud storage services. This portfolio of storage and data protection services covers block, file, and object storage needs while delivering the following important benefits:

- » Pay-as-you-go billing, with no overprovisioning
- » Designed so that assets deployed are not on the balance sheet
- » The ability to spend from opex budgets
- » Monitoring, software upgrades, and capacity expansions managed by Pure
- » The ability to use truly elastic storage — scaling up, out, and even down based upon business requirements
- » A single, unified subscription for storage whether delivered on premises, in a colocation/service provider facility, or in hybrid and public cloud architectures

Pure as-a-Service offers three fundamental values: cloud economics, cloud operational benefits, and a cloud customer experience.

From an economic perspective, Pure as-a-Service allows customers to subscribe to storage via contracts as short as 12 months — letting customers start small and grow over time. Unlike some competitive offerings that require long-term commitments and provide few benefits, Pure as-a-Service is a true storage utility — blending cloud economic benefits into a single subscription delivered in locations that suit the needs of the business.

Pure as-a-Service bills on-demand usage at a standard rate, without a cost penalty. Customers who know that a particular amount of capacity will continue to be used until the end of the contract term can commit to that usage and receive significant discounts.

Operationally, Pure as-a-Service gives time back to overworked IT staffers by providing AI-based monitoring and proactive support. Installation, upgrades, and maintenance are performed by Pure.

Elasticity is a fundamental element of a true utility, and because Pure as-a-Service is built on Pure's Evergreen architecture, customers can grow their footprint over time without worrying about capacity planning or forecasting usage years in advance. Compared with capex purchasing, the ability to start small and grow over time in a nondisruptive manner not only eliminates much of the uncertainty enterprises feel about forecasting usage and around the potential for costly rebuys but also frees up time and capital to address skills gaps in IT staff.

Pure as-a-Service delivers a cloud customer experience. The rich APIs provide customers with the ability to interact and build powerful integrations with the storage environment, delivering the self-service experience that cloud consumers have come to expect. Policy-based management simplifies the user experience, and the ability to manage subscriptions for an entire fleet of storage locations via a "single pane of glass" has proven to be a powerful tool to make even on-premises storage feel and behave like a cloud-delivered service.

Challenges

Over the years, IDC has watched the as-a-service space evolve from another financial option to a true consumption model with flexibility and transparency. As interest in these models increases, IDC observes similar concerns from IT decision makers as they evaluate these new flexible offers. A 2019 IDC survey revealed the following top concerns about as-a-service offers:

- » Ensuring security of data
- » Initial cost of deployment
- » Monitoring and maintaining equipment remotely
- » Monitoring or ensuring performance levels
- » Long evaluation process to determine best fit

IDC believes addressing these top concerns is the key to removing objections to adopting flexible consumption models such as STaaS. As IT decision makers evaluate these models, they will be looking for customer case studies or testimonials that provide metrics about cost savings from reduced capacity allowances, lower power consumption, and realistic timelines for deployment. For most organizations, the goal of deploying these new models is to improve IT and business responsiveness, resulting in improved agility. IDC is confident that removing barriers to adoption and providing customers testimonials with usage metrics and cost analysis will accelerate approval of models such as Pure as-a-Service in organizations of all sizes.

Conclusion

Looking forward, IDC expects the adoption of as-a-service models to accelerate as more customers look for innovative ways to acquire capacity and fund their transformations. The continued shift to flexible consumption will also drive the providers of these offers to streamline the adoption process with clearer metrics about pricing, capacity, and services that will simplify the deployment of these models. IDC expects the ramp-up of as-a-service models to accelerate over the next few years a result of advanced analytics and integration of AI.

IDC believes the previous innovations by Pure, such as the Evergreen upgrade program and Pure1 that used artificial intelligence for monitoring, established a solid foundation for the success of its Pure as-a-Service offering. Pure's focus on other key drivers, such as the support of multiple storage architectures and single point of access to all storage metrics regardless of whether the workload is on premises or in a cloud, removes the common concerns that customers have about these models. Pure as-a-Service provides analytics, security, service, and support within a flexible offer that meets market requirements. IDC believes that Pure's focus on innovation and track record of success will boost the company's reputation as a trusted vendor for these programs.

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About the Analyst



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Susan Middleton leads IDC's worldwide research on IT equipment, software, and services financing markets. As research director for IDC's Flexible Consumption and Financing Strategies for IT Infrastructure research, her analysis provides insight from both a supply side and a buyer's point of view. Ms. Middleton's core research coverage includes the evolution of procurement models from purchasing, leasing, and financing to the new as-a-service models, also known as flexible consumption.

MESSAGE FROM THE SPONSOR

About Pure Storage

Pure Storage remains focused on customers, delivering the products that drive success along with the procurement models that meet the needs of businesses. Across a customer base that exceeds 7,800 globally, Pure Storage maintains a Net Promoter Score of 82 – in the top 1% of all B2B companies. Pure as-a-Service blends block, file and object storage into a single unified subscription and allows customers to place data in locations that suit their needs.

Please visit <https://www.purestorage.com/products/pure-as-a-service.html> to find out how Pure as-a-Service can provide the operational and financial flexibility required to overcome budget challenges and deliver a truly modern data experience.

IDC Custom Solutions

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