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## ESG IMPACT VALIDATION REPORT

# HPE GreenLake for Block Storage

Mature Cloud Operations On-premises to Accelerate Operations and Reduce Storage Management Complexity

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March 2022

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## Executive Summary

As IT services fuel increased digital business opportunity, businesses pressure IT organizations to accelerate operations to a greater degree. This push for faster operations helps drive a growing movement toward using on-premises as-a-service solutions because of the value they provide in accelerating and simplifying IT operations and business processes alike.

In 2021, HPE partnered with ESG to conduct third-party research among 750 IT decision makers worldwide to explore whether businesses that were better able to address the common challenges of data and infrastructure management, such as providing self-service storage provisioning agility to line-of-business teams and app owners, were able to deliver superior business results. The results of this research were eye opening. Organizations with superior data and infrastructure management capabilities—data-first leaders—move much faster than their competition, are better able to mitigate risk, and have happier and more capable users. In other words, data-first leaders create stronger, healthier businesses.

HPE GreenLake for Block Storage is a cloud data service designed to simplify storage operations and increase agility with a self-service ordering, deployment, provisioning, and management experience that abstracts and automates underlying storage infrastructure complexity. It delivers on-premises storage consumed as a service, meeting any applicable workload SLA with the required performance, cost, and resilience, including a 100% availability guarantee for mission-critical applications.

## Growing Demand for Cloud Operations On-premises

The data center is not going away, and hybrid and multi-cloud IT are here to stay, too. As a result, IT leaders are focusing on modernizing their data center operations to leverage the agility benefits of the cloud. Forty-seven percent of organizations surveyed by ESG expected to increase spending on data center infrastructure in 2022, while another forty-eight percent expect to maintain their 2021 spending levels. ESG research also found that 53% of surveyed organizations expect that in three years, at least 60% of their applications will reside outside of public cloud services.<sup>1</sup>

Some enterprise applications and data should remain on-premises due to data gravity, latency, application dependency, and regulatory compliance reasons. As a result, IT's focus has shifted to modernizing the data center (and data center operations) to become more cloud-like. In general, over the past few years, IT decision makers' preference has shifted to as-a-service IT. According to the most recent ESG research survey, 54% of IT decision makers now say they prefer this type of consumption-based/pay-per-use model for data center infrastructure over traditional models involving larger upfront capital purchases (see Figure 1). This percentage has increased from 42% in 2020.<sup>2</sup>



**Legacy infrastructure deployment takes too long:** for example, traditional storage purchases take an average of ~19 weeks



**Legacy capacity planning often gets it wrong:** on average organizations over buy for what they ultimately need 54% of the time



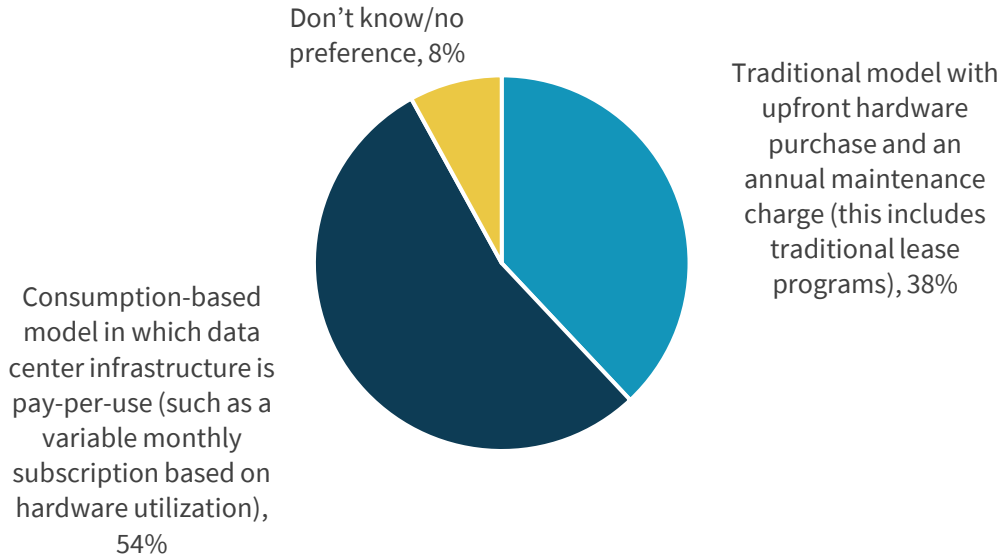
**Legacy capacity provisioning takes longer than expected** 55% of the time on average

<sup>1</sup> Source: [ESG Research Report, 2022 Technology Spending Intentions Survey](#), November 2021.

<sup>2</sup> Ibid.

**Figure 1. On-premises Infrastructure Payment Preferences Shift to Consumption-based**

Assuming the net-cost was the same, which of the following do you believe would be your organization’s preferred payment model for on-premises data center infrastructure?  
(Percent of respondents, N=706)



Source: ESG, a division of TechTarget, Inc.

However, the pay-per-use model, while appealing, is not all that the cloud has to offer. Organizations should also be leveraging the cloud’s agility benefits because, simply put, on-premises infrastructure ordering, provisioning, and management take too long. For example, ESG research shows that traditional storage purchases take an average of about 19 weeks.<sup>3</sup> Additionally:

- Organizations overprovision infrastructure **54%** of the time.
- Organizations take longer than expected to provision hardware **55%** of the time.
- **74%** of organizations acknowledge their data management capabilities can’t keep pace with business requirements. Some of the biggest reasons organizations are not achieving more success in accelerating operations relate to the increased scale and complexity of infrastructure management today, an inability to recruit/hire experts fast enough, and insufficient budgets.

A cloud-based consumption model is valuable. But organizations do recognize the need to leverage a cloud operational model as well. The vast majority of survey respondents (91%) agreed that mature cloud operations on-premises is the single most important step they can take to eliminate IT complexity.



**91% of respondents agree** that mature cloud operations on-premises is the single most important step to eliminate complexity

<sup>3</sup> Source: ESG Custom Research commissioned by HPE, November 2021, as summarized in this [eBook](#). All ESG research references and charts in this impact validation report have been taken from this research, unless otherwise noted.

## The Technical Impact of HPE GreenLake for Block Storage

More than four out of five ESG survey respondents report that they are under pressure to deliver more cloud-like experiences to end-users, including line-of-business owners, app owners, and developers. For these organizations, ESG has established three essentials for delivering a cloud operational model on-premises successfully:

- Try to establish an operational/management model that delivers the self-service agility benefits of public cloud. Namely, it should reduce burdens related to a lack of in-house expertise by automating and abstracting as much as possible.
- Establish a consumption-on-demand/predictable subscription monthly payment model akin to how public cloud services operate.
- Leverage the same service to support the entire application portfolio.

[HPE GreenLake for Block Storage](#) is one such cloud data service to consider for this purpose. It is on-premises storage delivered as a service, and it simplifies and automates storage management by providing a cloud-like operational experience for every applicable workload.



**More than four out of five** respondents say they are under pressure to deliver more cloud experiences to end-users

At the start, HPE GreenLake for Block Storage provides an SLA-driven quoting and rapid ordering experience. Instead of having to take time to research and select a specific storage system or configuration, organizations instead can choose the service levels—including availability SLA, performance tier, reserved capacity, and subscription term—that meet the SLA needs of their unique workloads. HPE offers an as-a-service portfolio of on-premises cloud data services that come in mission-critical, business-critical, or general purpose options. Organizations pick the outcomes they require and HPE delivers them.

Post-implementation, HPE GreenLake for Block Storage delivers on the consumption-on-demand requirement, and it enables the IT organization to leverage the same service to support an entire application portfolio. HPE GreenLake for Block Storage simplifies how customers manage infrastructure at scale across the lifecycle with an end-to-end cloud operational experience that includes:

- Streamlined deployment: Simply rack the infrastructure, plug in the power cords, and connect the network cables. In a few clicks, the new system is configured and available in the fleet, ready to serve data for application workloads.
- Intent-based provisioning: Shift from LUN-centric to AI-driven, app-centric storage provisioning. No storage domain expertise is required, and no more guesswork. Storage provisioning time is slashed from days or weeks to minutes, and line-of-business and app owners are empowered with self-service, on-demand provisioning.
- Invisible upgrades: Thanks to SaaS-based delivery, new data services instantly become available. Data plane software upgrades are non-disruptive and intelligently matched to a given system.
- Management from anywhere: Global unified management enables the management, configuration, and monitoring of highly distributed, complex data infrastructure from a single SaaS-based web interface—accessible from anywhere and from any device.

- Powering cloud operations with data-driven intelligence and insights: The GreenLake for Block Storage cloud operational experience is powered by an industry-leading AI Ops for infrastructure from HPE InfoSight. AI-driven HPE InfoSight has collected more than 1,250 trillion data points since 2011 in the effort to optimize performance, increase efficiency, and proactively avoid issues across storage, servers, virtual machines, and applications. Other on-prem storage-as-a-service vendors may imitate this messaging, but they don't come close to matching HPE InfoSight's breadth of telemetry, full-stack visibility, applied machine learning, and prescriptive actionable recommendations.



## Why This Matters

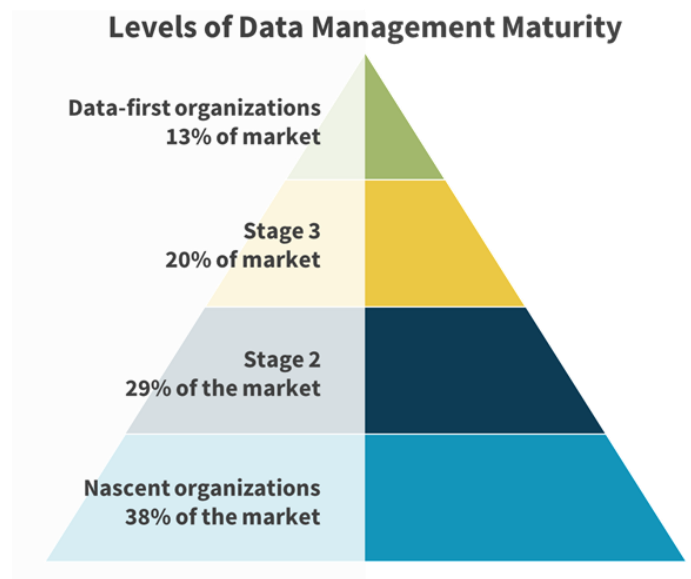
For organizations that seek to deploy a cloud operational experience on-premises, HPE GreenLake for Block Storage is capable of transforming their IT operations. The following capabilities of HPE GreenLake for Block Storage deliver particularly significant business value:

- Simple deployment and invisible upgrades—Infrastructure deployment and management tasks steal precious time from IT personnel. With HPE GreenLake for Block Storage, upgrade work is abstracted, reducing operational costs and freeing up admins' time. The service even comes with an instant, SLA-driven quoting and rapid ordering process.
- HPE InfoSight integrated intelligence—Disruptions and support escalations consume resource cycles and impede IT's ability to deliver on SLAs. HPE InfoSight can predict and prevent disruptions across the stack before they occur, pinpointing issues between storage and VMs and underutilized virtual resources, and taking the guesswork out of managing data infrastructure with AI-driven recommendations. This solution offers predictive support automation that also provides direct access to experts—eliminating time-consuming and frustrating escalations. Thanks to HPE InfoSight technology, HPE GreenLake for Block Storage comes with a 100% data availability guarantee for its mission-critical service and 99.9999% data availability guarantee for its business-critical service. Other on-prem STaaS providers often can only commit to four-nines uptime guarantees.
- Intent-based provisioning—Application environments are scaling and becoming more diversified. Understanding the specific infrastructure requirements of these continuously evolving application environments steals IT personnel cycles and slows down operations. By leveraging the integrated intelligence of the intent-based provisioning service included with HPE GreenLake for Block Storage, users can specify the storage tier (mission-critical or business-critical), workload, the capacity, and protection policy needed, and the service will automatically recommend the best-suited system across a fleet to optimize SLAs. This enables IT organizations to simultaneously accelerate operations, improve utilization, and free up personnel. Shrinking storage provisioning time from days or weeks down to minutes provides the degree of self-service agility that line-of-business owners, app owners, and developers require to build and deploy apps, services, and projects fast.
- Simple, global, SaaS-based management—Consistency is essential for accelerating operations, reducing complexity, and lowering risk. HPE GreenLake for Block Storage reduces the skill barrier related to providing storage services while providing a consistent experience even as the service evolves. In this way, HPE helps accelerate operations—allowing a larger pool of personnel resources to perform necessary storage-related activities.
- Consume as a service, on demand—With HPE GreenLake for Block Storage, users avoid over- and under-provisioning concerns, CapEx budget constraints, and complex procurement cycles. They can get the storage resources they need with workload-optimized storage tiers—delivered in days. They can scale on-demand as required with buffer capacity for unexpected workloads or usage demands. And they can shift from upfront costs to a transparent and predictable subscription with monthly payments. This shortens project deployment times, frees up capital and IT resources, aligns spending with business needs, and boosts financial flexibility and operational speed.

## The Economic Impact of HPE GreenLake for Block Storage

ESG conducted a research study of 750 IT environments across the globe, placing the respondents into one of four groups based on their level of progress toward achieving cloud operations for data and infrastructure management on-premises. ESG determined these maturity levels using multiple criteria—for example, how actively each organization used an invisible, automated, AI-powered infrastructure; how much they leveraged workload placement intelligence; and how extensively they leveraged trends tied to management simplification. The most mature (data-first) organizations represented the top 13%. The least mature (nascent) organizations comprised the bottom 38%.

ESG found that data-first organizations were more likely to automate data and infrastructure management and, as a result, reduce many of the associated challenges and complexities.



- Data-first organizations are 2.7x more likely than nascent organizations to have automated infrastructure selection and provisioning.
- Data-first organizations are 77% more likely to have dramatically reduced support time/effort challenges.
- Data-first organizations are 71% more likely to have dramatically reduced data placement challenges.

As a result of those advances in data and infrastructure management, data-first organizations were able to achieve the following IT and business benefits:



Data-first organizations have reduced the storage costs associated with their data management environment **2.2x more** than nascent organizations

- Data-first organizations have reduced the storage costs associated with their data management environment 2.2x more than nascent organizations have.
- Data-first organizations have reduced the support burden associated with their data management environment 2.1x more than nascent organizations have.
- Data-first organizations have driven 49% more product/service innovation in the last year than nascent organizations have.
- Data-first organizations are 20x more likely than nascent organizations to beat competitors to market by multiple quarters.
- Data-first organizations were 11.5x more likely than nascent organizations to beat revenue goals by 10% or more.

### Why This Matters

The ability of HPE GreenLake for Block Storage to automate and accelerate storage provisioning and workload placement also accelerates IT operations overall, which, in turn, accelerates digital initiative and application development.

As a result of these efficiency benefits, HPE GreenLake for Block Storage enables organizations to deliver more products and services faster, which equates to more revenue.

At a time when data creates business opportunity, cloud operations on-premises accelerates IT operations, which, in turn, creates more revenue opportunities and a stronger, more competitive business.

### The Bigger Truth

In an era where data and digital services fuel both business operations and revenue creation, simplified, accelerated IT operations delivers business success. By automating, simplifying, and accelerating an organization's ability to select, deploy, and provision new infrastructure, new initiatives can be deployed faster, and the burden on IT resources is lessened, which frees up personnel for additional tasks. The most important step organizations can and should take to achieve these benefits (according to 91% of respondents) is to deploy mature cloud operations on-premises.

Businesses that met the criteria of being data-first, which involved having an invisible, automated, AI-powered infrastructure that leverages workload placement intelligence, far surpassed nascent organizations in revenue and competitive metrics. Winning the digital economy requires the speed and self-service agility of a cloud operational experience on premises, and HPE GreenLake for Block Storage has the cloud data services to help.



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