

THE CIO'S AS-A-SERVICE PLAYBOOK

Table of Contents

PLAY#1 LEARN THE CONCEPTS

- Basics of As-a-Service and Consumption-based IT
- How As-a-Service Works
- Applying the Consumption Model to the Full IT stack

PLAY#2 MAKE YOUR BUSINESS CASE

- How to Justify an Investment in As-a-Service
- The Financial Value of As-a-service

PLAY#3 MASTER THE LANGUAGE

- Key Terms and Concepts for As-a-Service
- Evaluating Your Consumption IT Provider

Table of Contents

PLAY#4 PRESENT THE SOLUTION

- Everything You Need to Know about HPE GreenLake
- How HPE GreenLake Works
- Key Benefits of HPE GreenLake

PLAY#5 ANSWER ANY QUESTIONS

- HPE GreenLake: FAQs and Key Takeaways
- Features at a Glance
- Frequently Asked Questions

PLAY#6 VISUALIZE & PROVE ROI

- Manage Your As-a-Service with HPE GreenLake Central
- <u>Jaw-dropping Returns on Your Investment</u>
- Working with HPE: Depend on Deep Expertise and a Wide Ecosystem
- A Closer Look at HPE GreenLake

LEARN THE CONCEPTS Basics of As-a-Service and Consumption-based IT PLAY #1

Jason James, CIO of Net Health, believes the concept of delivering As-a-Service has not only arrived, it is here to stay.

"Whether it's on premises or in public cloud, a consumption-based model makes it easier to adapt to a now forever-changed workforce and be nimbler for future change," he said. "This idea of embracing a utility-based solution is now forever ingrained."

In other words, the consumption-oriented model of public cloud changed everything, including organizational dynamics. Business units got a taste of speed and agility, and started circumventing IT to buy services and resource capacity themselves. This workaround, or shadow IT concept, has introduced new risks for CIOs to manage — including security, governance, and uncontrolled costs.

IT wants to deliver the public cloud experience their users crave, and yet some workloads cannot make that transition and must remain on-premises for a multitude of reasons — data sovereignty, compliance, data gravity, or because some legacy, monolithic applications are too complicated to migrate.

Those limitations have been brought into sharp focus when contrasted with the scalability and cost efficiencies of cloud. The traditional IT model was simply not built for speed, agility or faster time to market. It was, and still is to a large extent, mostly concerned with stability and availability of services.

Now, with the As-a-Service model, companies can get the same cloud experience everywhere — including in their on-premises data centers, at the edge, and in multi-clouds — and can operate, manage, and control mixed environments from one central location.

As-a-Service not only removes complexity, it also speeds business outcomes and creates the cost efficiencies typically only seen with public cloud. The IT consumption-based model enables rapid deployment of hardware, software, and services anywhere, anytime it's needed.

"What makes an on-prem IT consumption model interesting is it brings the idea of a cloud consumption model down to a traditional data center," said James. "You have that elasticity, where you can actually shrink once the given demand subsides."

HOW AS-A-SERVICE WORKS

So how does an IT consumption model work? After assessing immediate and projected capacity needs, an equipment provider supplies and installs the gear — including a buffer or reserve capacity — in your on-premises data center, co-location facility, or edge location. There are no upfront capital investments; instead you start using the resources and pay for what is actually used. Usage is determined based on metering technology, with units of measure aligned to the hardware and/or software being consumed.

The IT consumption model mimics the public cloud experience, but in your own environment or co-location facility. Capacity — servers, storage, compute, networking, and more — can be scaled up or down on-demand.

In traditional environments, it's difficult to predict how much infrastructure will be needed in the future. And, with lengthy procurement cycles for capacity, it's safer to err on the side of having too much rather than not enough. For example, most organizations over-provision for storage capacity, according to Futurum Research:



Over-invest in storage solutions

More than one-third have run out of capacity or experienced high utilization rates that impact performance, including downtime

Sources: Futurum Research

With improved forecasting and use of IT resources, the As-a-Service model makes a significant difference.

"The advantage of a public cloud model versus an on-prem data center is the ability to scale on demand," said James from NetHealth. "In a traditional data center, you're buying for a high water mark that in some cases, may never occur."

Even when that capacity target is met, there isn't elasticity in on-premises or private clouds to scale back down. For example, considerable advance capacity procurement must be done for retailers to achieve proper Cyber Friday scaling; and yet once all the shopping is over, that expensive extra capacity sits unused, tying up capital expense that could be used for new projects.

A lack of scalability on-premises also affects time-to-market goals, giving rise to Shadow IT. Lines of business are no longer willing to wait for lengthy procurement cycles for resources, and will simply buy what they need from the cloud, subjecting the business to potential security risk or unmanaged cost.

That may be acceptable for a project management solution or other less-sensitive applications; however, there are many workloads that are not appropriate for public cloud. For example, monolithic and legacy apps are often too complex and entangled to migrate. Even some newer workloads – such as AI and analytics processing applications — don't make sense for cloud; they need to be close to the data for faster performance.

In fact, 54% of respondents to a recent IDG cloud survey described their environments as mostly on-premises, with some infrastructure in the public cloud, and another 8% said they're solely on-premises.

The survey also uncovered a repatriation trend: 28% said they either have or plan to move applications or workloads from public cloud back to their data centers. IDC research suggests two reasons for moving back on-premises center around security and compliance.

In addition, companies are quickly shifting to hybrid cloud environments, where workload placement can be determined on a best-suited basis. That said, this trend has led to a new challenge: integrating, managing, and gaining visibility across newly complex IT infrastructures.

Discover how to bring the public cloud experience to the on-premises data center.

Read the 451 Research white paper titled "Having Your Cake and Eating it Too."

All of these challenges are further complicated by the overarching IT skills shortages. Gaps are everywhere, especially in security roles. It's interesting to note, in light of multicloud uptake, that individuals with technology integration and implementation expertise are in especially high demand, according to IDG's 2020 State of the CIO report. Ultimately, these staffing challenges will slow delivery of IT services and thus, the business.

APPLYING THE CONSUMPTION MODEL TO THE FULL IT STACK

It's clear the IT consumption model works for infrastructure – but it can also be applied to software and management services. For example, the infrastructure provider may offer a catalog of cloud services — such as SAP HANA, data protection, VDI, cost optimization, compliance, etc. Companies can choose which services they'd most like to run As-a-Service, then only pay for those options.

And herein lies another significant benefit: cost savings. In the same way that forecasting for capacity is improved, so too is budgeting.

Although she's not using an IT consumption model at the University of Tulsa, CIO Paige Francis gets the value proposi-

tion — and how the conversation with her CFO would ultimately change.

"It would be a lot easier for me to sell this to our CFO, where every single piece directly ties into how it's being used and consumed across the campus," she said. "I'm not having to offset the physical hardware piece, trying to explain why we need it, and why we can't wait another one or two years to refresh."

The shift from IT capital expenditures to an operating expense model gained traction with public cloud. And yet, similar savings can be achieved in the data center, private cloud, or at the edge, while also improving IT's ability to deliver resources As-a-Service.

Additional benefits from an IT consumption model include:

Faster time to market.

Agility is achievable when resources are delivered on-demand, including a buffer of capacity when needs change. Businesses can move faster when availability and performance of mission-critical workloads in the data center are instantly scalable.

Improved visibility.

As CIOs struggle to find talent to manage their newly emerging hybrid cloud environments, they can lean on the IT consumption provider for expertise in integration across public and private infrastructure. Not only can management services fill a gap, companies can also achieve greater insights into their IT environment.

Free up IT staff.

Using an on-demand consumption model allows IT to offload infrastructure management to an outside partner – in turn freeing up internal IT staff for high-value, priority projects.

Maintain security and application controls.

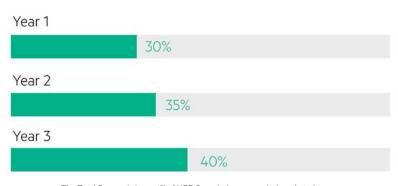
With on-premises infrastructure — including resources supplied in a consumption model — organizations still control their applications and data. That includes compliance and security risk mitigation. Here again, if staffing to meet these requirements is one of the reasons for turning to a public cloud, management services can serve as an extension of the IT team.



In making the business case for As-a-Service, there are multiple value propositions or use cases. Here are a few of the most common.

Cost Optimization

CapEx savings



The Total Economic Impact™ of HPE GreenLake, a commissioned study conducted by Forrester Consulting, May 2020

"In the next 12 to 18 months, many CIOs are going to focus as heavily on cost optimization as they are on digital transformation," said James from NetHealth. "And that's to get the most effective use of their budgets."

The on-premises IT consumption model makes sense in this regard, he said, "because we'll know that we're not just handing out storage and compute on an ad hoc basis. We'll actually have very granular controls and visibility into what teams are

consuming and how to bill that back — whether it be an improvement from a P&L standpoint, or even to a better understanding of client consumption models."

By paying only for capacity that is actually used, CIOs can get a better handle on budgeting and forecasting — and avoid the risk of overprovisioning resources. In fact, a study by Forrester Consulting, including an aggregate financial analysis of organizations using an on-premises IT consumption model, found average IT CapEx savings of up to 30% in year one, 35% in year two, and 40% in year three.

Agility

The Forrester report also found significantly faster time to market among users of on-premises IT consumption. The buffered capacity and ability to quickly scale on-demand brought efficiencies in meeting project deadlines.

For example, not having to wait during long IT procurement cycles enabled organizations to quickly develop products and applications and launch new projects. The average time to launch decreased by 75%.







Strategic work

By optimizing costs and speeding project delivery, IT organizations can focus on more strategic tasks for the business. This is where Paige Francis, CIO at the University of Tulsa, sees an advantage.

"It seems that by eliminating the need to manage the hardware piece and the budget piece, more time can be spent on focusing on our users, carving out exactly what they need — without having to spend time worrying about the transition period of one piece of hardware to the next piece of hardware," she said.

Similarly, the Forester study found that, with capacity planning removed from their daily routines, IT organizations reported increased flexibility to take on new business initiatives.

Public cloud forever changed the way IT services are delivered. It has dynamically enabled speed, efficiencies, and cost savings. Now, that same experience can be gained on-premises, in a co-located data center, at the edge, and in mixed environments.

"CIOs don't want to, and in some cases cannot, run everything in the public cloud," said James Henry, worldwide go to market and business development manager, HPE GreenLake. "And yet they need that same seamless experience on-premises in order to meet business demands, including faster time to market and cost efficiencies. That's the beauty of the IT consumption model, where companies can quickly deploy infrastructure and optimize their data centers — for fast delivery of As-a-Service."

"That's the beauty of the IT consumption model, where companies can quickly deploy infrastructure and optimize their data centers — for fast delivery of As-a-Service."

For additional use cases, download "Why Everything-as-a-Service? Why HPE?"

THE FINANCIAL VALUE OF AS-A-SERVICE

CIOs know the drill: Obtaining budget for capital expenditure is a pain point.

"The more hardware you have to replace, the more pleas for capital dollars," said Francis.

That's why some companies are transitioning away from CapEx models, in which IT equipment is bought and then depreciated over a three-to-five-year period. Instead, they're adopting IT consumption models, where they only pay for the infrastructure capacity they actually use,

based on metered usage.

"IDC research shows that customer adoption of flexible consumption-based models is increasing because of the agility, transparency, and simplicity of these offers," said Susan G. Middleton, IDC research director, in a March 2020 report, IDC's Worldwide Consumption-Based IT Infrastructure Taxonomy, 2020.

As companies make this transition, they should take into account these considerations:

- Costs of annual capital expenditures on IT infrastructure
- Number of global
 IT projects conducted
 per year
- Percent of global IT projects that require additional provisioning of infrastructure or capacity

- Average length of time to deploy a global IT project (in months)
- Average number of fulltime employees required for a global IT project
- Number of full-time employees required to support IT infrastructure tasks

Average fully loaded, annual salary for a full-time IT resource

Learn more about the As-a-Service solution from HPE GreenLake here.

You can run the actual numbers here to receive a custom analysis.



As-a-Service

On-demand services available in a pay-per-use model and managed for you.

Buffered or reserve capacity

Installed IT infrastructure capacity for immediate needs plus a buffer for scalability; buffered capacity is available but not charged for until consumed.

Capacity management

The ability to monitor capacity, ensuring sufficient resources are available for spikes, new projects, or changing business demand.

Consumption analytics

Visibility, via an intuitive dashboard, into ongoing usage and costs to help optimize costs and plan capacity based on actual and forecasted use.

Leasing

Spreading payments for infrastructure over a fixed period of time, vs. paying for actual usage.

Metering technology

The ability to uniquely and accurately measure consumption of a service, such as storage, compute, software, or management services. Metering technology should also collect related metadata such that the consumption data can be categorized and used to drive visibility and insights.

Monitoring functionality

The ability to proactively and reactively respond to infrastructure needs, such as firmware updates, patching, and problem resolution.

On demand

Capacity — servers, storage, compute — that is immediately available and can be scaled up or down as needed.

Pay-per-use

Payment for infrastructure capacity based only on actual consumption above the reserve capacity.

Showbacks

A view of metered usage — right down to department or project, even across multiple locations — that provides a meaningful showback or chargeback of costs.

Units of measure

Metering technology calculates consumption in a number of ways, including: gigabytes at the storage level, right down to a device or set of devices; servers at the unit level, including individual blades; memory usage per virtual machine; and licenses for backup software or the backend terabytes for backup.

Evaluating Your Consumption IT Provider

Not every IT consumption provider is built the same.

Keep these essentials in mind as you compare potential partners:



Metering and capacity management

Find a partner that offers capabilities such as metering technology, monitoring functionality, capacity management, and consumption analytics. This enables IT and the business to better understand usage trends and allocate for showbacks.



Usage-based billing model

Evaluate whether your provider offers a pay-per-use model or leasing options that are termed "pay as you go." They may sound the same, yet the differences ultimately affect how much you're spending for capacity.



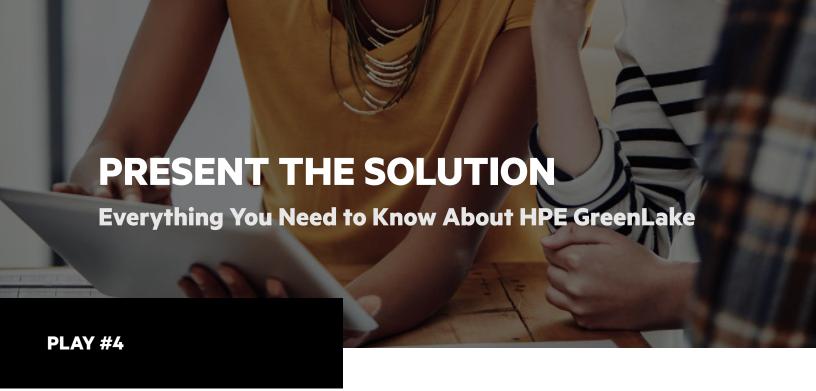
Management services

Don't forget management services. When it comes to achieving the ultimate goal of IT delivering resources As-a-Service, outsourcing alone isn't sufficient. True management services extends your IT team, from filling gaps by carrying out routine tasks like patching, all the way to helping manage, monitor, and optimize complex hybrid IT environments.



Self-service control and insights

Look for self-service functionality with a single portal and a catalog of options to get intuitive visibility and analytics into the IT environment. A dashboard view can provide consumption analytics, for example, to improve understanding of usage trends over time and better allocate showbacks to individual teams, departments, or projects.



Like many organizations, the University of Tulsa has a hybrid IT environment: 35-40% on-premises, 10% private cloud, and the rest in public cloud.

Also like many organizations, the university is trying to streamline these resources, says CIO Paige Francis. "We've started a process to make sense of our environments. We're developing a roadmap that we will execute over the next 3 to 5 years where our use of public and private cloud becomes a bit more intentional."

Specifically, Francis says cloud makes it easier for her team to focus on the user experiences of faculty, staff, and students, ensuring they have the "right-fitting" solutions they need.

That's the beauty of cloud. It has enabled IT departments to more easily meet business objectives for speed, scalability, cost savings, and more.

Yet, many applications and data aren't appropriate for public cloud. They must remain on-premises, for a variety of reasons – security, compliance, governance, or legacy entanglement issues. However, this doesn't mean these workloads can't achieve the same cloud experience. Enter HPE GreenLake.

HPE GreenLake offers a wide range of cloud services delivered to your data center, co-location facility, or edge location. It provides the agility and economics of public cloud with the security and performance of on-premises IT. Combined with HPE GreenLake Central, companies can centralize operations and insights across their entire hybrid IT estate using a single platform.

With HPE GreenLake, we are now able to bring hardware elasticity on-premises at a fraction of the cost of public cloud. If demand from our users increases, I'm confident that the HPE GreenLake consumption model can bring the additional resources we need to meet the business demand."

— Jarkko Kytömäki, vLab infrastructure manager, Nokia Software

How HPE GreenLake Works



Choose your cloud services

Select from a wide range of pre-configured services, such as containers, VMs, storage, compute, data protection, or SAP HANA, just to name a few.



Pay only for what you consume

Free up capital and gain financial flexibility for new ventures and business operations with monthly payments based on what you consume.



Scale up and down

Scale with ease with an installed buffer of capacity that is actively monitored, managed, and proactively deployed when needed.



Free up your resources

Rely on expertise from HPE's world-class IT Operations Centers to monitor and manage your on-premises infrastructure and public clouds.

HPE GreenLake is built on a decade of experience in delivering IT-As-a-Service for on-premises environments.

Over the years, HPE has developed a unique set of technologies designed to deliver the cloud experience on-premises. In addition, HPE has worked closely with software partners, hyperscalers, and other solution providers to increase the depth and strength of its offerings.

"HPE enables CIOs and IT managers to provide a seamless cloud-like experience everywhere," said Marcello Bullara, HPE's worldwide director of HPE GreenLake product management.

The result is a cloud experience that customers can take everywhere — data centers, multi-clouds, and edge — with one unified operating model. Apps and data that must remain on-premises can now gain cloud benefits with HPE GreenLake.

"HPE GreenLake is standardized in terms of the experiences they have come to expect from a hyperscale environment — including self-serve elements that allow developers and lines of businesses to procure the virtual machines and container services they need to immediately get to work."

HPE provides this solution in a pay-per-use, consumption-based IT model, with IT infrastructure delivered immediately to avoid long procurement cycles, as well as avoiding the risks of traditional over-provisioning of resources (see Features at a Glance, below). HPE GreenLake has transparent pricing and usage costs, which can be directly aligned with business processes, projects, departments, and users.

Yet, HPE GreenLake is so much more. It offers a range of services that can help IT simplify operations, scale and manage hybrid cloud environments, cost-effectively achieve modernization efforts, and gain end-to-end, holistic visibility across the IT estate.

"HPE can right-size the solution to meet your business needs," Bullara said. "It's a hybrid world and IT departments are scrambling to deliver the right services to the right locations. We are in a strong position to help."

Key Benefits of HPE GreenLake



Get the Cloud Experience Everywhere

Modernize apps, transform data into insights, and deliver elastic capacity to lines of business to accelerate desired outcomes.



Achieve faster time to value

Get preconfigured solutions delivered and installed, in as little as 14 days.



Right-size with a consumption-based model

Scale with business demand using the pay-per-use model above a reserve, with no up-front capital expenditures.



Gain centralized control and insights

Leverage the HPE GreenLake Central platform to manage resources, costs, capacity, compliance, and more across on-premises and cloud environments.



Simplify IT

Reduce complexity with management services to reduce risk and free up IT resources for strategic and innovative initiatives.



Expertise on-demand

Add additional services to meet business needs for compliance control, performance tuning, migration services, and more.

Learn more about the As-a-Service solution from HPE GreenLake here.







SPEED BUSINESS OUTCOMES

Application modernization

Give developers the resources they need to work faster—and smarter. For example, transform traditional, non-cloud native apps without having to re-architect them using containers with HPE GreenLake, a 100% Kubernetes-based open source solution, delivered As-a-Service.

Data transformation

Speed insights to unlock the data value that is core to digital transformation initiatives. HPE GreenLake offers an end to-end service that helps operationalize machine learning in your data centers, edge, and private clouds, as well as services for Hadoop, databases, data protection, and data management.

Self-service delivery

Put control and insights in the hands of those who need them with HPE GreenLake Central. For example, provide financial teams with cost transparency and consumption analytics that span public cloud and HPE GreenLake services. Accelerate time to-value for lines of business with fast resource provisioning and the ability to scale up and down on-demand. Help legal officers reduce risk with enhanced governance using compliance services from HPE GreenLake.



Based on input from customers worldwide, here are answers to some frequently asked questions about HPE GreenLake.

Q: In the on-premises IT consumption model, who maintains the physical infrastructure?

A: HPE owns, manages, and maintains the equipment for you at your data center, co-location facility, or edge location. If a server, blade, or any other piece of gear needs refreshing or updating, HPE takes care of it. You're responsible for data and applications residing on the equipment unless you have added additional management services to your HPE GreenLake contract.

Q: How does HPE know what capacity we're actually using?

A: HPE uses metering technology to determine how much capacity has been consumed. For example, you can measure by: gigabytes at the storage level, right down to a device or set of devices; servers at the unit level, including individual blades; memory usage per virtual machine; and licenses for backup software or the backend terabytes for backup.

Q: How do I figure out our initial capacity needs?

A: You will work with HPE to make an initial assessment of your infrastructure needs, right-sized for your business, including a buffer of capacity that allows you to immediately scale when you need to. Because HPE performs ongoing active capacity management, additional capacity will always be there when you need it.

Q: HPE GreenLake can help us achieve up to 75% faster time to market? Really?

A: Yes, really. And that's an average, based on studies and interviews conducted with existing HPE GreenLake customers by Forrester Consulting. For example, the research found that, although the time varied by project and organization, an average global IT project could take up to six months to implement — including the procurement process for additional capacity requirements. Organizations in the study noted a significant decrease in time-to-market — up to 75% — for their global IT projects after the HPE GreenLake investment.

Q: What other benefits can we expect to achieve?

A: Forrester Consulting details IT resource efficiencies, including freeing staff to focus on strategic business initiatives (up to 40%); a reduction in outside fees for maintenance and professional services (up to 90%); and CapEx savings by eliminating overprovisioning and tech refresh costs (up to 40% by year three). Forrester also uncovered "soft" benefits — including improved productivity, reliability and transparency, increased security, and better performance with access to the latest in hardware technology.

Q: What if I want to add additional HPE GreenLake services?

A: It's easy to add additional services to your HPE GreenLake contract with a simple change order. You can explore new services on hpe.com/greenlake and even get pricing or request a trial online. With new preconfigured services, you can accelerate your time to value with delivery in 14 days or less.

Q: Could you share examples of cost savings from adopting the As-a-Service model?

A: IT consulting company Sopra Steria is using HPE GreenLake as a Private-Cloud-As-a-Service — including flexible server and storage capacity — to deliver a broad mix of diverse workloads to its customers. The company has been able to eliminate CapEx, and has reduced its operational and personnel costs between 15% and 30%, depending on the service.

Also, Toyota Mapmaster Inc. adopted the HPE GreenLake IT consumption model to support and accelerate its mapping production system. "In the new environment, servers, storage, and backup devices are stored in four racks quite spaciously," said Koji Takeo, group manager of the technical development department. "The data center cost has been reduced to about 2/3, with reduction of the number of racks and power consumption."

Q: How does HPE GreenLake work with my existing vendors – such as for public cloud, networking and storage gear, applications, etc.?

A: The HPE GreenLake portfolio includes a broad range of services that include hardware and software from HPE and leading technology partners (learn more here). For each one, HPE leverages a solution architecture validated by software partners and backed by HPE's global experience and deep expertise.

In addition, HPE has existing agreements with co-location providers where it can act as your single point of contact, so you can enjoy both the benefits of HPE GreenLake and those of your co-location provider.

HPE is proud of its partnerships with SAP HANA, Veeam, Nutanix, and other industry-leading solution providers, and believes this is one more area where HPE GreenLake can claim a substantial lead over competitors.

Q: Does HPE GreenLake include automation services?

A: Yes. HPE works behind the scenes to automate routine IT tasks such as service request fulfillment and infrastructure deployment. We also use automation for our metering and billing capabilities, as well as monitoring and managing on-premises infrastructure.

In addition, HPE offers a range of governance and management services that you can choose to add to your HPE GreenLake contract, such as compliance monitoring, cost controls, migration services, and workload placement consulting.

Q: Can we use HPE GreenLake in our hybrid cloud environment?

A: Definitely. In fact, HPE GreenLake Central is designed to help companies manage their hybrid ecosystems. Enterprises can rapidly deploy services, gain cost and compliance insights, and simplify management across their data centers, edges, and multi-clouds from the HPE GreenLake Central self-service software portal and operations console.

Q: Does HPE offer managed services for hybrid cloud infrastructure?

A: Yes. HPE understands the inherent complexity in these mixed environments, which can consume significant time and resources to manage. That's where HPE GreenLake Management Services can help. For example, HPE experts can support management for configuration, as well as public cloud, SAP HANA, and machine learning operations environments — enabling your IT organization to become an As-a-Service provider to your business.

Features At a Glance

Fast capacity procurement.

This is an As-a-Service model; HPE owns and manages the equipment — storage, servers, compute — for you at your site. Together, you and HPE assess infrastructure needs, right-sized for your business. HPE delivers and installs it including a buffer of capacity.

Scale up and down as needed.

Capacity can be scaled up or down as needed. If you need more, HPE will proactively provision more, and you only pay for what is used. This eliminates the risk of over- and under-provisioning resources.

Simplified IT.

Offloading the day-to-day infrastructure maintenance, such as firmware updates and patching, helps reduce risk and frees your IT resources for higher value contributions to the business.

Pay only for what you use.

There are no upfront capital expenditures on your part. HPE provides a reserve amount of capacity, measures how much you use, and charges based on that usage. HPE uses metering technology, with units of measure aligned to the service, to determine how much capacity has been consumed.

Innovative portal.

HPE GreenLake Central provides a centralized dashboard to help you monitor and manage your HPE GreenLake environment. For example, you get consumption analytics to analyze costs and consumption, with historical usage trends and forecasts to predict future needs.

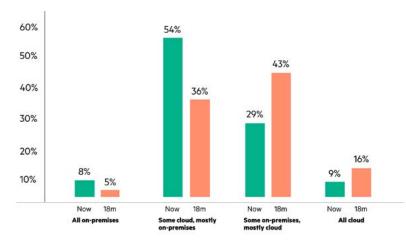
Expertise on-demand.

Additional services can always be added to your HPE GreenLake contract as needed. For example, HPE GreenLake Management Services can act as an extension of your IT team and fill gaps in areas such as security, migration, and performance, or even manage your entire hybrid environment for you.



Organizations are quickly shifting to a mixed IT environment, according to IDG's 2020 Cloud Computing survey among 550 IT professionals.

Organizations Shifting to Mixed IT Environments



Source: IDG 2020 Cloud Computing survey

The challenges associated with managing these environments are complex. Consider workplace placement decisions.

"Hybrid cloud has become the IT model of choice," said James Henry, worldwide go to market and business development manager, HPE GreenLake. "It offers the best of both worlds — on-premises and cloud.

"And yet," he continued, "it's challenging to find the 'right mix' across all this infrastructure to ensure you're gaining efficiencies and best possible performance. It's about understanding each workload and putting them into buckets according to their needs — such as SLA or compliance requirements."

It can be a time-consuming task, considering your organization likely has hundreds, if not thousands of applications. 451 Research suggests there are five factors that weigh into workload placement decisions: cost, agility, control/IT centralization, security, and compliance. Add in the need to consider these requirements against all the deployment options, and the complexity around these decisions multiplies.

Another challenge in the hybrid landscape is cost visibility and optimization. For example, different business units may need to quickly spin up public cloud services and can't wait for IT to appropriate the expenditure. Costs here can quickly get out of control when there's a lack of visibility.

HPE GreenLake Central helps companies overcome these obstacles, and ensure IT organizations have a friction-free, cohesive experience — freeing them to focus on strategic business initiatives.

HPE GreenLake Central is a self-service portal where customers can:

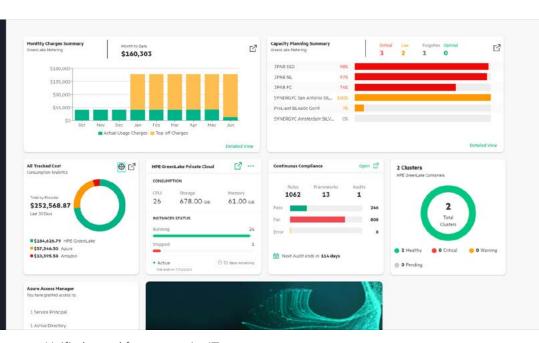
Unify cloud and on-premises IT in a single intuitive dashboard

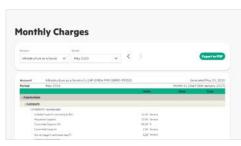
Manage IT infrastructure resources, including continuous monitoring for compliance and governance

Deploy and manage resources like VMs and containers

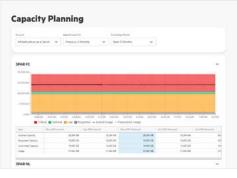
Gain visibility and insights across the hybrid environment to understand, for example, security and compliance posture, capacity usage trends, resource spend analysis, and more

"We're bridging the worlds between on-premises and cloud with the HPE GreenLake IT consumption model and HPE GreenLake Hybrid Cloud Services," Henry said. "And HPE GreenLake Central is the umbrella over all of this, delivering Everything-as-a-Service."





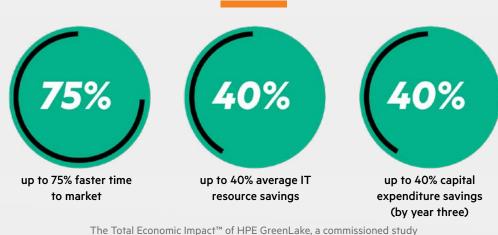
Intuitive consumption analytics



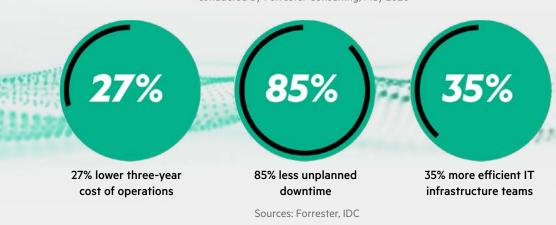
Unified portal for your entire IT estate

Automated capacity management

JAW-DROPPING RETURNS ON YOUR INVESTMENT

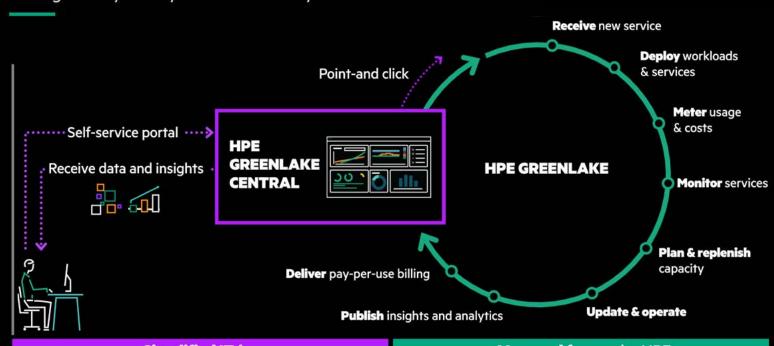


The Total Economic Impact™ of HPE GreenLake, a commissioned study conducted by Forrester Consulting, May 2020



HPE GREENLAKE DELIVERS THE CLOUD EXPERIENCE

Managed for you so you can focus on your business



Simplified IT for users

Managed for you by HPE

WORKING WITH HPE: DEPEND ON DEEP EXPERTISE AND A WIDE ECOSYSTEM

HPE has decades of experience, with 23,000 experts in all IT disciplines — software, hardware, networking, virtualization, storage, compute, cloud, and more. The company has strategically acquired talent across the IT infrastructure spectrum to help you wherever it makes sense, whether as an extension of your IT team or for consulting and knowledge sharing.

In addition, HPE works with most of the technology vendors you work with — AWS, Google, Microsoft Azure, Citrix, SAP, VMware, Nutanix, Veeam, and many more. HPE's deep partner relationships ensure your IT team can focus on the user experience and not on the heavy lift of the cloud experience.

GET THE FACTS HERE.