

THE AS-A-SERVICE PLAYBOOK FOR CIOS AND CTOS





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LEARN THE CONCEPTS

Basics of As-a-Service

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 as-a-service 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. As-a-service not only removes complexity, it also speeds business outcomes and creates the cost efficiencies typically only seen with public cloud.

Yet, it doesn't have to be all or nothing — a choice between public cloud or traditional IT. Now there's a third choice: on-premises cloud services, where enterprises can seamlessly deploy an edge-to-cloud platform in the data center or colocation facility, and only pay for the services that are actually used.

"What makes this 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."

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.

HOW AS-A-SERVICE WORKS

So how does the on-prem cloud services model work? It starts with how IT infrastructure is procured and yet goes much further to streamline how services and applications are delivered and managed — by IT and for end users.

Let's start with the infrastructure story. 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.

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 <u>Futurum Research</u>:



Over-invest in storage solutions

Sources: Futurum Research

Have run out of capacity or experienced high utilization rates that impact performance, including downtime

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 Monday scaling; and yet once all the shopping is over, that expensive extra capacity sits unused, tying up capital that could be used for new projects. In contrast, with pay-per-use on-prem cloud services, once the demand is over, you're no longer paying for that additional capacity.

The second part of the on-premises cloud services story is the experience. The rapid availability of capacity and the ability to instantly scale eliminates the risk of shadow IT. Lines of business (LOB) no longer have to wait through lengthy procurement cycles for resources, and rather than simply buying what they need from the public cloud, they can spin up on-prem infrastructure, platform services, and industry applications from on-prem resources. IT still maintains control, LOBs get fast self-service functionality, and the business avoids potential security risk or unmanaged cost from shadow IT.

The on-premises cloud services model mimics the public cloud experience, but in your own environment or colocation facility. It starts with the gear but goes much further to create experiences that are seamless for IT management and end users. On-prem cloud services allows for scalability, self-service functionality, and centralized IT control.

This as-a-service model can be used for the 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 addition, the on-prem cloud services model makes it easier for companies that are quickly shifting to hybrid cloud environments. The right platform should have unified insights and operations across an organization's edges, data centers, colocations, and clouds. This helps IT managers quickly make workload placement decisions on a best-suited basis. It also eases the challenges associated with integrating, managing, and gaining visibility across complex hybrid cloud environments.

Another advantage: The seamless IT experience provided by the on-prem cloud services model helps overcome IT skills shortages. It's interesting to note, in light of multi-cloud uptake, that individuals with technology integration and implementation expertise are in especially high demand, according to IDG's 2021 State of the CIO report. The on-prem as-a-service experience eases these staffing challenges, while speeding the delivery of IT services and thus, the business.

Read the 'Accelerate your Hybrid Transformation Buyer's Guide"

APPLYING THE AS-A-SERVICE MODEL TO THE FULL IT STACK

It's clear the on-premises cloud services 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 on-prem cloud services model at the University of Tulsa, CIO Paige Francis gets the value proposition — 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, colocation facility, or at the edge, while also improving IT's ability to deliver resources as-a-service.

Additional benefits from an on-prem cloud services 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.

Free up IT staff

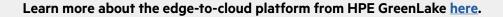
Using an as-a-service model allows IT to offload infrastructure management to an outside partner – in turn freeing up internal IT staff for high-value, priority projects.

Gain new expertise

As CIOs struggle to find talent to manage their newly emerging hybrid cloud environments, they can lean on the cloud services 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.

Maintain security and application controls

With on-premises infrastructure — including resources and cloud services 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.



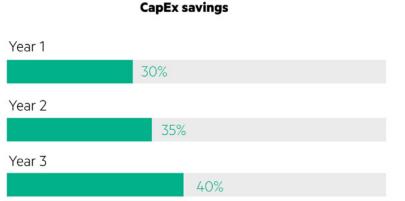
MAKE YOUR BUSINESS CASE

How to Justify an Investment in As-a-Service

PLAY #2

In making the business case for the on-prem cloud services model, there are multiple value propositions or use cases. Here are a few of the most common.

Cost Optimization



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 cloud services 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 <u>Forrester</u> <u>Consulting</u>, 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 cloud services. 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 Forrester 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 on-premises cloud services model, where companies can quickly deploy infrastructure and optimize their data centers — for fast delivery of services."

> "That's the beauty of the on-premises cloud services, where companies can quickly deploy infrastructure and optimize their data centers for fast delivery of services."

- James Henry,

worldwide go to market and business development manager, HPE GreenLake

Learn about the HPE GreenLake edge-to-cloud platform here.

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 as-a-service models, where they only pay for the infrastructure capacity they actually use, based on metered usage.

"The most digitally advanced organizations are leading the way with extensive adoption of flexible consumption

models. These consumption models enable them to pay for enhanced investments that transform IT into an agile as-a-service platform without breaking the bank," said Andrew Buss, research director for European Enterprise Infrastructure at IDC. "IT infrastructure vendors are quickly recognizing this shift and have begun offering a range of solutions for customers. However, different customers are at different stages of acceptance and adoption, and vendors will need to tailor their messaging and approaches accordingly."

As companies make this transition, they should consider these factors:

on IT infrastructure

Costs of annual capital expenditures

Average length of time to deploy a global IT project (in months)

Average fully loaded, annual salary for a fulltime IT resource

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

Number of global IT projects conducted per year

Average number of fulltime employees required for a global IT project

Percent of global IT projects that require additional provisioning of infrastructure or capacity

Number of full-time employees required to support IT infrastructure tasks

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

MASTER THE LANGUAGE

Key Terms and Concepts for As-a-Service

PLAY #3

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.

Cloud services

On-demand infrastructure and software services in the on-prem data center, colocation facility or edge, with self-service functionality, scalability, pay-per-use, and managed for you.

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 metered 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.

<u>On demand</u>

Capacity — servers, storage, compute — and services, such as networking and software, that are immediately available and can be scaled up or down as needed.

Pay-per-use

Payment for infrastructure capacity and cloud services are 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 On-premises Cloud Services

Not all cloud services are created equal. Keep these essentials in mind as you compare:

Broad range of cloud services

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Look for services that include capabilities such as metering, monitoring, capacity management and consumption analytics for IT infrastructure. This enables IT and the business to better understand usage trends and allocate for showbacks. In addition, seek a full stack of application and IT management services to help you integrate and deploy resources that best suit your business.

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.

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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 that unifies insights and operations across your entire hybrid environment, enabling you to easily deploy resources, view costs and manage capacity.

Learn about the HPE GreenLake edge-to-cloud platform here.

PRESENT THE SOLUTION

Everything You Need to Know About the HPE GreenLake Edge-to-Cloud Platform

PLAY #4

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 the HPE GreenLake platform.

The HPE GreenLake platform offers a wide range of cloud services delivered to your data center, colocation 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.

The HPE GreenLake platform 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.

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

The result is a cloud experience that customers can take everywhere — data centers, multi-clouds, and edge — with one unified

How the HPE GreenLake Platform Works



Choose your cloud services

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



Scale up and down

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



Pay only for what you consume

Free up capital and gain financial flexibility for new ventures and business operations with monthly payments based on the infrastructure and cloud services you actually consume.



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.

operating model. Apps and data that must remain on-premises can now gain cloud benefits with the HPE GreenLake platform.

"HPE GreenLake is the leading platform for delivering the hybrid cloud experience for horizonal workloads and vertical solutions – all in the location of your choice," said Keith White, senior vice president and general manager, HPE GreenLake Cloud Services. "Customers can adopt a cloud environment anywhere, while also reducing risk by delivering the agility and simplicity of the cloud, but with the governance, compliance, and visibility that comes with on-premises environments."

HPE GreenLake brings the cloud experience to wherever your apps and data live. We do all of this with no egress charges, no vendor lockin, and the flexibility our customers require to meet their unique needs."

Keith White,
senior vice president and general manager,
HPE GreenLake Cloud Services Commercial Business

HPE GreenLake cloud services are delivered 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). With transparent pricing and usage, organizations can align their spending to departments, projects, and users for better business visibility.

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

"We are making it even easier for customers to accelerate adoption of effective cloud operating models for any environment by delivering industry-leading solutions with the <u>HPE GreenLake platform</u>," White said. "These cloud services, which include support for storage, AI, machine learning, high-performance computing and container management, allow organizations to seamlessly run any type of application and scale where there is demand."

Key Benefits of the HPE GreenLake Platform



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 an as-a-service 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

Easily add additional services as needed to meet business needs for compliance control, performance tuning, migration services, and more.

Learn more about the HPE GreenLake edge-to-cloud platform 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 HPE GreenLake for containers, 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. The HPE GreenLake platform offers an end to-end service that helps operationalize machine learning in your data centers, edge, and private clouds, as well as services for high performance compute, 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 cloud 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 the HPE GreenLake platform.

ANSWER ANY QUESTIONS

HPE GreenLake: FAQs and Key Takeaways

PLAY #5

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

Q: In the on-premises cloud services model, who maintains the physical infrastructure?

A: HPE owns, manages, and maintains the equipment for you at your data center, colocation facility, or edge location. If a server, blade, or any other piece of gear needs refreshing or updating, HPE takes care of it. In addition, HPE maintains the software for platforms and applications you choose to consume in a preconfigured HPE GreenLake cloud service — such as containers, virtual desktop infrastructure, electronic health records, or payment processing, to name a few. You're responsible for data and applications residing on those platform applications.

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: The HPE GreenLake platform 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 cloud 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 <u>hpe.com/greenlake/services</u> and even get pricing or request a trial online. With 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 <u>Sopra Steria</u> is using HPE GreenLake for private cloud — 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, <u>Toyota Mapmaster Inc.</u> adopted the HPE GreenLake cloud services 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 the HPE GreenLake platform work with my existing vendors – such as for public cloud, networking and storage gear, applications, etc.?

A: The HPE GreenLake portfolio offers a broad range of services that include hardware and software from HPE and leading technology partners (<u>learn more here</u>). 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 <u>colocation providers</u> where it can act as your single point of contact, so you can enjoy both the benefits of HPE GreenLake and those of your colocation provider.

HPE is proud of its <u>partnerships</u> 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 the HPE GreenLake platform include automation services?

A: Yes. HPE works behind the scenes to automate routine IT tasks such as service request fulfillment, configuration, 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 <u>governance and management services</u> 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 the HPE GreenLake platform 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.

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 <u>GreenLake Management Services</u> 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

Rapid deployment

This is an as-a-service model, which offers the cloud experience including self-service functionality to quickly deploy resources, such as virtual machines, containers, and machine learning operations (MLOps) projects. HPE owns and manages the equipment — storage, servers, compute for you at your site. HPE delivers and installs the equipment, including a buffer of capacity, and can help integration of and support for cloud services.

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.

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.

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.

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.

Expertise on-demand

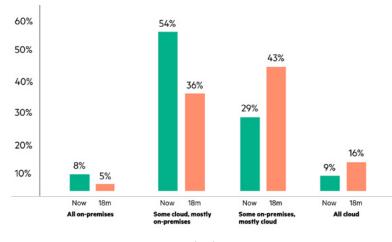
Additional services can always be added to your HPE GreenLake contract as needed. For example, HPE GreenLake Management Services can act as an extension of your IT team and fill gaps in areas such as security, migration, and performance, or even manage your entire hybrid environment for you.

VISUALIZE & PROVE ROL

Manage Your As-a-Service with HPE GreenLake Central

PLAY #6

Organizations are quickly shifting to a mixed IT environment, according to <u>IDG's 2020 Cloud Computing</u> <u>survey</u> 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 Cloud Services. "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."

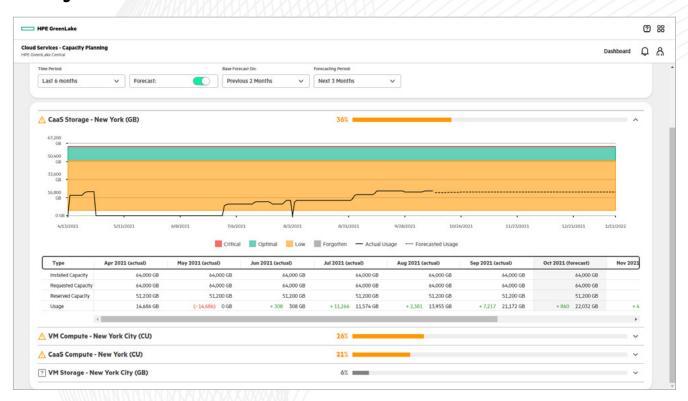
It can be a time-consuming task, considering your organization likely has hundreds, if not thousands of applications. <u>451 Research</u> suggests the top factors that weigh into workload placement decisions include: security, cost, platform reliability, application performance, and sovereignty/compliance issues. 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.

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

At-a-Glance Cloud Services Capacity Planning with HPE GreenLake



The HPE GreenLake Central Dashboard: Fast Insights Into Cloud Services Usage

HPE GreenLake						?	88
oud Services E GreenLake Central					Dashboard	Φ	8
Dashboard							
All Tracked Cost Consumption Analytics Total by Service Category	•	Capacity Planning Summary GreenLake Capacity Planning CaaS Storage - Ne 343 VM Compute - Ne 235	Monthly Charges Summary GreenLake Billing \$54,813 Month to Date \$60K	HPE GreenLake for Private Cloud	ď		
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HPE GreenLake for containers Clusters	6 Healthy	HPE GreenLake for ML Ops Projects	Continuous Compliance Rule Status Current 700 Pass 6 Error 178 Fail	Run more of your workloads with HPE GreenLake			
6 Clusters		Projects	Next audit ends	87 Days			

HPE GreenLake Central Provides Transparent, Detailed Monthly Charges

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- New York City		
- Compute		
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+ VM Compute - New York City	1,044.00 CU	\$11,797.20
Subtotal Group: Compute		\$49,437.32
- Storage		
+ CaaS Storage - New York	51.200.00 GB	\$4,096.00
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	21,333.00 GB 560.20 GB	
Reserved Capacity		
Reserved Capacity Actual Usage		\$0.0400 \$1,279,98

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

Unify public cloud and on-premises cloud services in a single intuitive dashboard

Deploy and manage resources like VMs and containers Manage IT infrastructure resources, including continuous monitoring for compliance and governance

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

JAW-DROPPING RETURNS ON YOUR INVESTMENT



up to 75% faster time to market

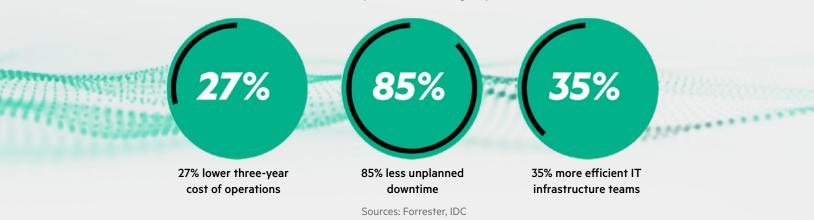


up to 40% average IT resource savings



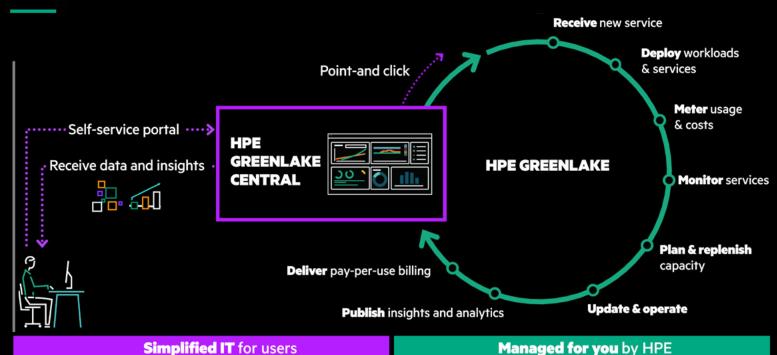
up to 40% capital expenditure savings (by year three)

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



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.

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