Hewlett Packard Enterprise

FOUR ESSENTIAL STEPS TO ADOPTING IT AS A SERVICE

A blueprint for delivering the cloud experience for your on-premises apps and data
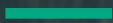
TABLE OF CONTENTS

EXECUTIVE SUMMARY

Improving customer experience is driving faster innovation cycles. Organization's large and small are on a transformation journey to keep pace. Cloud scaling and pay-per-use flexibility has been a catalyst for that transformation. As organizations embrace a multi-cloud model, they expect all their IT environments to keep up.

An organization's cloud needs vary significantly based on industry, workloads, and applications. While they may benefit from the flexibility of a public cloud resources, they generally also require an on-premises solution. According to Gartner, over 75% of midsize and large organizations will have adopted a multicloud or a hybrid cloud strategy by 2021.[1]

Beyond hybrid cloud deployment, managing digital transformation is challenging. Siloed and underutilized resources are costly and lead to misallocated valuable technical assets. Managing hybrid environments is a good example; it often forces IT departments to duplicate tools and skills spending to manage public and private clouds.

Recent 451 Research data shows that 65% of enterprises with hybrid cloud deployments are contracting out some workloads. IT systems monitoring and management is the top target for managed services, sought by over half of the survey respondents.[2]

This paper guides organizations on how to deliver the cloud experience on-premises. First, a quick review of the three basic approaches obtaining IT resources:

1. On-premises compute: a capital expense model.

2. Public cloud: a subscription or pay-per-use model.

3. Public cloud-like on-premises: a pay-per-use, elastic IT consumption model. Commonly referred to as IT as a service (ITaaS).

This guide will focus on achieving item No. 3, with some reference to 1 and 2, which are already well established. The benefits to the business of a cloud experience include faster project deployments, higher value products, increased operational efficiencies, and financial transparency that directly associates cost to consumption.

57%
Of enterprises are moving toward a hybrid IT environment that leverages both on-premises systems and off-premises cloud/hosts resources in an integrated fashion.

60%
Of enterprises will use flexible, lower-cost IT consumption models by 2023.

– **451 Research's Voice of the Enterprise: Cloud, Hosting & Managed Services, Workloads and Key Projects, 2019**

[1] Gartner IT Infrastructure, Operations & Cloud Strategies Conference

[2] 451 Research's Voice of the Enterprise: Cloud, Hosting & Managed Services, Workloads and Key Projects, 2019

THE VALUE OF IT AS A SERVICE

Achieving a cloud-like experience is challenging. Line of business managers want IT to operate like a public cloud vendor, yet typical IT delivery models favor traditional project deployments. ITaaS on-premises delivers many of the things that customers expect from the public cloud: pay-per-use, elastic IT, simplified IT operations. They also get the added control that comes from directly operating their data center or edge solution.

For this reason, many organizations are leveraging forward-looking best practices from the experts at HPE to help them deploy their own consumption-based infrastructure. This blueprint describes the critical business and technology practices for achieving the cloud experience on-premises. It covers determining workload destinations, using IT partner resources, applying ITIL features, operations service practices, and funding for infrastructure as a service.

Each organization adopts their unique process to improve IT operations and services and reduce complexities and costs. However, HPE has found that organizations commonly face the following challenges:

> Our IT vision is to be in the cloud. However, with a large data center, we need the control and security of critical applications and workloads to be on-premises. HPE GreenLake provides us with the best of both worlds while significantly reducing our costs and improving our IT productivity managing in this model.
>
> **– Storage architect, Global Consulting Company—Forrester Total Economic Impact™ Study, June 2020**

Proactively managing IT capacity and costs

- **Increased costs due to overprovisioning server and storage capacity.** These include both initial capital costs and higher support costs.

- **Constant changes in technology.** Organizations seek to get the latest hardware without the initial capital outlay to replace their existing infrastructure.

- **An increasing amount of data that needs to be stored and accessed.** It is challenging to keep up with storage requirements to support growth.

Optimizing staffing and processes

- **Continued pressure to reduce IT headcounts and budgets.** Organizations find it too costly to dedicate resources to routine support and maintenance activities.

- **Standardization of global operations** and transparency across usage and consumption within the organization.

- **Desire to simplify the IT provisioning process and improve time-to-value.** The existing process is taking too long.

ITAAS ADOPTION STRATEGY

Converting a traditional IT organization to delivering ITaaS takes careful planning. Each step must address business goals: to run workloads where they are needed on best-fit platforms, protect the company's IP, provide security and governance, control costs, and improve engagement with the business. Achieving this positions IT as a direct contributor to business outcomes.

Addressing these requirements is the purpose of this HPE GreenLake blueprint "Four essential steps to adopting IT as a service". These challenges are addressed by a series of steps that include an overview, a checklist of best practices and expected results. The diagram illustrates organizational expectations, starting with cost efficiency, innovation, and service levels.

The four essential steps to setting up IT as a service are:

1. Define the Right Mix of workloads to remain in on-premises based on your current business needs. Detailed workload profiling is required to make sound, cost-effective platform decisions. The reward is a well-managed, proactive approach to scalability, managed capacity, agility, spending, and cost control. Through this, IT can provide more resources towards innovation and meeting business needs.

2. Put in place scalability-on-demand processes as part of an everything-as-a-service hybrid cloud model. Adopting an on-premises consumption business model begins with discovery and mapping, followed by portfolio planning, on- and off-premises platform migration mapping and then ensuring that the right capacity is in place to meet on demand requests.

Factors most important in supporting the business case for the use of managed services in connection with cloud or hosted infrastructure/applications

Factor	Percentage
More cost-effective	62%
Frees our IT staff to focus on other projects	45%
Better performance/availability	41%
Access to specialized expertise we don't have	35%
Security is improved	34%
Speed/the work is completed faster	32%
Lack the staff to do the work ourselves	30%
Provider will do better quality job than our organization	15%
Access to better management tools	14%
Other	3%

Voice of the Enterprise: Cloud, Hosting and Managed Services, Workloads and Key Projects 2019—451 Research

3. Optimize skill sets within your organization. Organizations are also under pressure to meet growth objectives while reducing budgets and to make better use of existing resources. An honest assessment of resource utilization, including internal technical resources, is key to making the best use of the resources and expertise you currently have.

4. Assess your operating model to simplify IT. Take advantage of new approaches such as predictive analytics and proactive support to eliminate downtime and reduce staff time spent resolving them.

While the best practices outlined here can be applied in many ways, one way to gain the benefits and performance of a cloud experience is the use of resources-on-demand. HPE's approach to resources-on-demand is most frequently the HPE GreenLake solution, described later in detail in the section "HPE Solutions to Consume and Operate IT as a service". This guide will point to the best practices, from infrastructure design and operations to innovative financing and staffing resources that have been proven with that solution.

Many IT-infrastructure organizations lack a comprehensive cloud strategy. Partly as a result, they have struggled to evolve their service. As public-cloud innovators offer attractive features, such as pay per use, high resiliency, and the ability to scale use with demand, the gaps are becoming all the more glaring. Instead of receiving a seamless hybrid-cloud experience, internal and external customers often face a discordant one. Moreover, companies across the industry face a strategic imperative to build faster and more effective delivery platforms to jump-start growth, speed time to market, and foster innovation—and technology is the keystone in enabling that capability.

– Transforming infrastructure operations for a hybrid cloud world—McKinsey & Company, October 2019

STEP 1: DEFINE THE RIGHT MIX TO REMAIN IN CONTROL BASED ON CURRENT BUSINESS NEEDS

BUSINESS CHALLENGE: Increased cost due to overprovisioning of server and storage capacity across clouds. This includes both capital costs and higher support and maintenance cost.

Defining the right mix of hybrid cloud for your unique applications and workloads is a critical planning element. While the hybrid nature allows for better flexibility to meet individual application and user requirements with a consistent experience, these environments require new approaches. More choice brings added complexity which can result in overprovisioning and underutilization, skills gaps and talent shortages, and unpredictable costs.

HPE portfolio assessments typically reveal that 50% of applications can be moved to cloud, meaning public cloud, private cloud, or a combination. About 30% of applications are typically recommended to stay unchanged in traditional IT environments but are often candidates for modernization initiative, such as adopting an IT as a service model. In about 20% of the cases, data shows that an application should be retired, which can relieve you of management and hosting costs.

Taking a "right mix" approach can improve performance, cost, and agility by matching each application and workload to the right cloud platform. This approach optimizes platform mapping to accelerate and promote the value of IT to the business. Consider the contrast:

- On-premises IT is based on a known configuration of platforms, technology, people, places, and secured processes. It is a good way to stay in control of issues such as privacy, compliance, and performance. It is also CAPEX-based, and many want to move to a cloud environment due to as-you-go pricing and capabilities of service delivery anywhere, anytime.

The right mix, an approach for allocating workloads to platforms based on data location, cost, risk, and performance, supports the idea that hybrid cloud embraces a broad set of platforms, while ensuring governance across them.

- Cloud computing off-premises is good for some workloads but may lack accurate data workload processing predictability for others. Usage and costs with cloud services are often different from what is typical for on-premises. It is not cheaper—it is simply pay-per-use, and there are commitments needed. Costs often are ungoverned and can spiral upwards quickly.

Moving applications and data to new hybrid cloud locations requires rigorous planning. You need to determine which application should be hosted on a given platform. To plan successfully, you need to understand:

- The applications that should be first movers based on an ease-and-impact analysis.

- The destination profiles (public cloud, private cloud, on-premises, or edge) to optimally map them to your applications.

- The most appropriate migration approach for targeted applications taking business, technology, and operational factors into account.

- How to create an actionable road map to drive successful migration.

Addressing these will ensure a cost-effective positioning strategy based on auditable processes.

> The benefits of hybrid cloud in the enterprise are just beginning to reveal themselves. In a recent 451 Research survey, 57% of IT decision-makers said they were pursuing an integrated on-premises/ off-premises environment as part of their overall strategy, many of them using multiple public clouds in addition to on-premises resources.
>
> **– 451 Research, 2019**

Checklist

1. Perform an assessment to identify current and planned workloads, business requirements, application characteristics, and capacity requirements. HPE Pointnext Services offers the Right Mix Advisory to support this work.

2. Determine the right placement of workloads based on policy, cost, and risk. Without control over workload placement, IT is open to penalties for failure of policies without the ability to control the risks.

3. Migrate the workloads to the appropriate platform based on right mix decision criteria.

4. Govern the performance, security, and availability of workloads, data, and IP. Whether it is on-premises or off, IT will remain accountable for performance of workloads, for compliance with data sovereignty and industry regulations, and the protection of IP and privacy.

5. Enable accurate cost control monitoring and projections based on actual usage and cost data. Without the ability to control workload use on-premises, costs will escalate quickly.

Expected results

- Improved methods for performance, cost, and agility by matching each application and workload to the right cloud platform.

- Increased manageability of workloads and services. Accelerate and promote value of IT to the business.

- Reduce risk of non-compliancy or privacy violations, or loss.

DESIGN THE RIGHT MIX OF BOTH SIMPLE AND COMPLEX WORKLOADS

HPE Right Mix Advisor Process
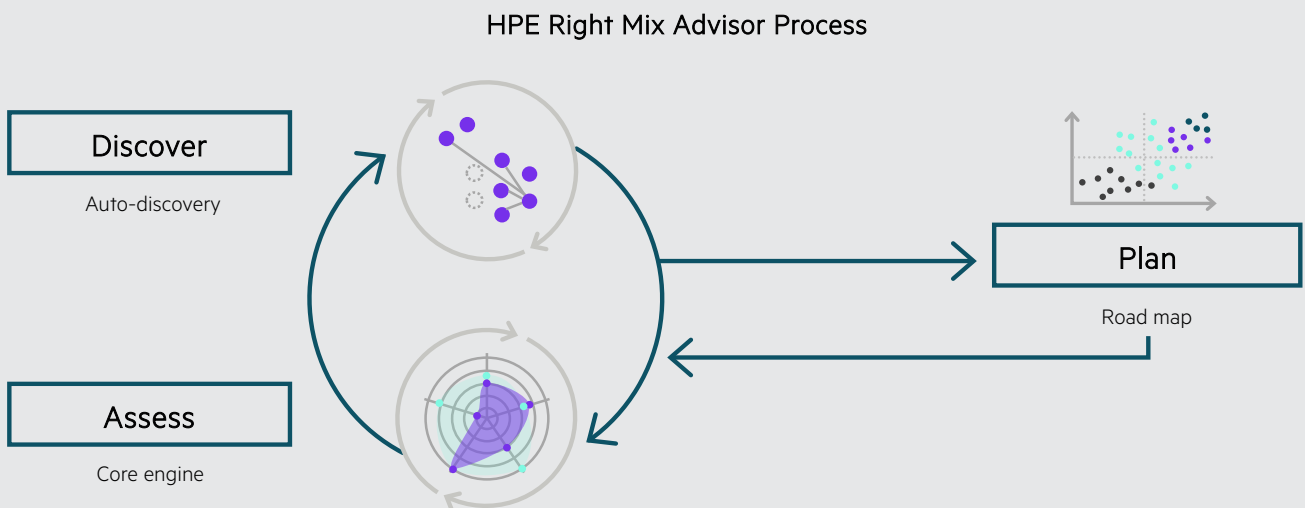
STEP 2: PUT IN PLACE SCALABILITY-ON-DEMAND PROCESSES AS PART OF AN EVERYTHING-AS-A-SERVICE HYBRID CLOUD MODEL

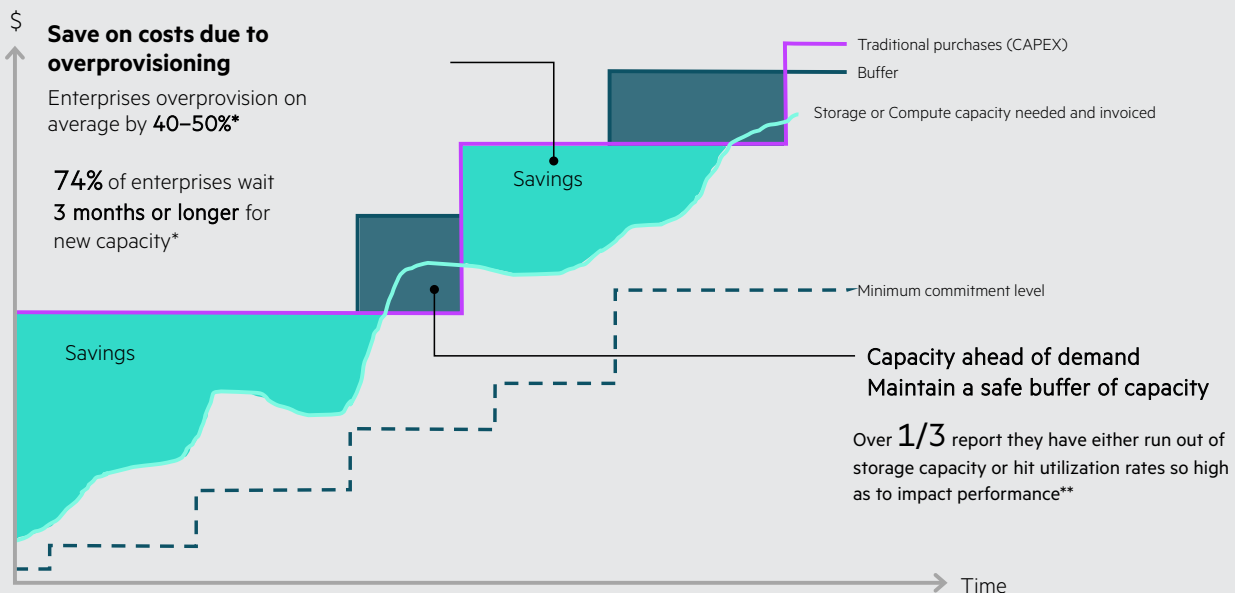**BUSINESS CHALLENGE:** Constant change in technology and loading. Organizations expect access to the latest hardware without replacing their existing infrastructure and incurring large capital expenses. For example, an increasing amount of data is being stored. This challenging IT to keep up with storage requirements to support growth.

Scaling and managing capacity for enterprise systems is increasingly complex and expensive. The primary goal is to ensure IT resources are right sized to meet current and future business requirements in a cost-effective manner. One way is to apply the IT Infrastructure Library (ITIL) framework, which covers management of business capacity, service capacity, and resource capacity.

Capacity management deals with monitoring the performance and load on servers, storage, networking, or other infrastructure to understand current usage and plan for the future. Capacity management is a challenge, and supply-to-demand mismatches can lead to performance issues, downtime, costly overprovisioning, and/or poor services delivery. The following table, based on HPE GreenLake best practices, illustrates how proactive forecasting and resource buffering optimizes spend.

AN AS-A-SERVICE MODEL WITH QUANTIFIABLE RESULTS

$

Save on costs due to overprovisioning

Enterprises overprovision on average by **40–50%***

74% of enterprises wait **3 months or longer** for new capacity*

Savings

Savings

Traditional purchases (CAPEX)

Buffer

Storage or Compute capacity needed and invoiced

Minimum commitment level

Capacity ahead of demand
Maintain a safe buffer of capacity

Over **1/3** report they have either run out of storage capacity or hit utilization rates so high as to impact performance**

Time

* 451 Research, November 2019
** Futurum Research, July 2019

Capacity management services can help organizations proactively analyze, manage, operate, and optimize their IT environments. These services should leverage common tooling and automation to provide end-to-end management of both on-premises and public cloud infrastructure.

Checklist

1. Have clear visibility into your historical usage trends and forecasted capacity needs to plan for future needs.

2. Have a proactive capacity management plan to meet growth demands and controls. Capacity should be actively managed. New growth, business fluctuations, new projects, new innovations, and unpredictability of demand are always present and part of the process.

3. Plan for platform and infrastructure load variations and growth with adjustable short-term buffers. Start with the immediate needs of servers, storage, networking, and software, and add a "buffer" of pre-provisioned capacity that can handle immediate short-term upside demands. Perform active capacity management with actual data usage to plan. Data metering provides actual usage of data and storage, providing exact planning to optimize procurement. IT gets the scalability needed beyond what is in production.

4. Grow capacity to always remain ahead of what is being used. Consider new technology and architectures such as composable IT or containers. This approach provides on-premises IT with scalability like the public cloud, while producing better value to the business.

5. Ensure billing only actual usage to avoid penalizing customers for pre-installing buffer headroom.

> The model for provisioning of compute and storage has moved from "buy the album" to "stream the song" with a monthly payment.
>
> **– Why Everything-as-a-Service, Futurum, January 2020**

Expected results

- Higher levels of resiliency in operations, capacity, availability, and scalability through optimized workload placement and capacity planning.

- Traditional IT transformed to a value creator with agility and flexibility to respond to business requirements more rapidly.

- Data metering to gauge actual data usage drives accurate planning and management for better performance and availability.

- Incremental additional capacity meets business needs with control of costs and risks.

"With HPE GreenLake, we are now able to bring hardware elasticity on-prem 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 business demand."

– **Jarkko Kytömäki, vLab Infrastructure Manager, Nokia Software**

STEP 3: ALIGN IT EXPENSE TO REVENUE STREAMS

BUSINESS CHALLENGE: Increased pressure to match project spend and return. Dedicated IT silos are fixed costs, which is a burden on the organization.

A traditional data center is an expensive cost center to the business, as it requires large, periodic, capital expenditures to deliver new IT resources. As stated earlier, ITaaS is attractive because the usage-based consumption model provides flexibility and scalability. This reduces capital expenditures that can be turned into operational spending or cost avoidance, such as when unexpected business events occur.

For instance, resources-on-demand positions IT to combine the simplicity, agility, and economics of the off-premises public cloud with the security, control, support, and performance of an on-premises solution. This model reduces the risk the business faces when committing to new projects. Without the need for the major capital investments, there is less "sunk cost" invested in each project. If the project succeeds, revenue and expenses grow together. If it fails, there is little risk, just capacity returned to the pool to support other projects.

Consumption-based pricing for on-prem deployments can provide the flexibility of public cloud with the reassurance of data control. In a hybrid cloud model, this gives enterprises a choice of venue for each workload, with the ability to scale on demand.

– 451 Research, October 2019

Our decision to move to HPE GreenLake has significantly reduced our procurement time our procurement time to add infrastructure capacity to meet business demand, and we have seen a perpetual reduction in cost from managing in this model.

– Global DC Manager, Chemical Company—Customer excerpt/quote from a Forrester Total Economic Impact™ Study, June 2020

Checklist

1. Set up a pay-per-use consumption model and supporting infrastructure with the pay-per-use range set above a minimum commitment level.

2. Define a buffer management model to ensure peaks are anticipated.

3. Define governance to enlarge the base infrastructure pool based on predictive capacity planning.

4. Accurately align IT costs to business results. Metered data and actual usage can align costs and accurately gauge profit and loss with what is being used and when, as well as what is paid for this usage.

Key cost and usage metrics for consumption-based IT include:

- **Cost drivers**—Top costs by service type, location, other
- **Aggregate costs**—Across on-premises and public cloud
- **Insights**—Custom rules-based views to uncover trends of interest
- **Predefined views**—Report costs and usage based on typical use cases and scenarios

These enable users to obtain transparent spend figures, identify cost optimization opportunities and set budgets and alerts.

Improved IT resources by 40%. With HPE GreenLake supporting organizational choices of on-premises infrastructure and data center management including support, administration, and planning, organization's internal IT professionals could take on a more strategic role in supporting business initiatives.

– Forrester Total Economic Impact™ Study, June 2020
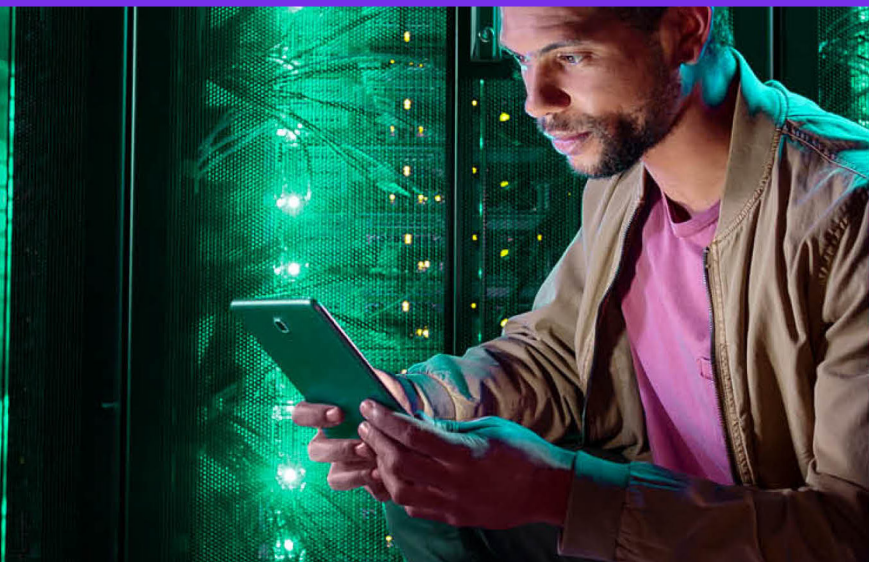
Expected results

- Managed and controlled IT costs delivering pay-as-you-grow scalability.

- Projects can start small and grow or fail fast without CAPEX penalty. Using consumption-based IT, new projects come online without large capital expenditures, allowing for more innovation.

- IT cash flows are aligned with revenue streams.

- Reduced IT costs through more efficient operations.

Reduces CAPEX spend by up to 40%.

HPE GreenLake enabled customers to avoid overprovisioning of infrastructure and eliminate expenses for technology refreshes. Companies can use modern, more powerful technology and scale their usage up or down as required by their business needs.

– Forrester Total Economic Impact™ Study, June 2020

Porsche Informatik is accelerating application development, decreasing data center complexity, and increasing responsiveness, with HPE GreenLake. With a fully managed hybrid cloud environment in which it only pays for what it consumes, the company can plan capacity ahead of use to avoid over provisioning.

The solution serves on- and off-premises data centers, is simple to operate, and supports virtual machines and containers. Resources required for each workload are ready to deploy in minutes, not months, allowing Porsche Informatik to innovate and better serve employees, dealers, and customers on a global scale.

STEP 4: ASSESS YOUR OPERATING MODEL TO IMPROVE PRODUCTIVITY

BUSINESS CHALLENGE: Simplify and unify operations. Organizations want to reduce staff and management tool duplication. They would prefer to leverage AI/ML and predictive analytics to improve outcomes.

MONITOR	OPERATE	ADMINISTER	OPTIMIZE
24x7 remote monitoring of infrastructure, capacity, costs, and compliance	Single point of contact for problem identification and resolution, and proactive updates	Infrastructure and network administration, patching, access control, security updates, backups, performance, and capacity management	Compliance and cost controls, security, and performance optimization; new service advice

Businesses are challenged with keeping their mission-critical applications and infrastructure running while deploying transformational technologies such as hybrid cloud. Managing diverse technologies is difficult, requiring different tools and skills that may not be available in house. Top reasons that businesses choose to outsource management are to free up human resources, access skills that aren't available internally, focus on core competencies, and reduce time spent on low-level tasks.

Moving to a hybrid cloud environment depends on having cloud native skills and operational capabilities that many organizations do not have. They lack control and visibility into costs and risks, and with 75% data projected to be created and acted upon at the edge, the complexity will only increase. As a result, these businesses struggle to meet either their overall business or transformation goals. ITaaS implies these tasks are included in the service.

The adoption of managed services for hybrid infrastructure is part of a larger approach towards an as-a-service model. The challenge is finding the right technologies and third-party partners that can best solve problems, speed up services, adjust capacity and scalability rapidly, and reduce complexity and risks. The business expects a stable IT operation without disruptions or downtime with efficiencies in scalability, agility, compliance, and security. The diagram illustrates typical savings observed in HPE GreenLake environments.

30–40%	**75%**	**85%**	**40%**
CAPEX savings due to eliminated need for overprovisioning[3]	Shorter time to deploy digital projects[4]	less uplanned downtime[6]	Increased IT team productivity by reducing the support load on IT[5]

[3, 4, 5] A commissioned study conducted by Forrester Consulting, The Total Economic Impact™ of HPE GreenLake, June 2020

[6] IDC White Paper, sponsored by HPE, The Business Value of HPE GreenLake Management Services, January 2020

Checklist

1. Move to a consumption-based model. Engaging a partner to operate the infrastructure reduces time and effort to move to production.

2. Unify operations, enhance control and insight across hybrid environments.

3. Consolidate relationships and simplify operations by handing off standardized operational tasks.

> IT departments need to consume infrastructure rather than administer; and finally control rather than support the IT provisioning for their business.
>
> **– Why Everything-as-a-Service—Futurum, January 2020**

4. Automate processes and procedures. Beyond automation, rely on third-party vendors when it is cost-effective. Leverage consistent monitoring across all cloud environments.

Expected results

- Gain control over costs and governance across on-premises and public clouds.

- Enhanced security, control, and visibility with unified management and analytics.

- Improved IT services and more cost-effective operations through handoffs of operations support services and improved automation.

- IT staff can contribute more to strategic planning and services innovation, adding more value to the business.

- Save up to 90% of professional services/contractor costs by replacing legacy infrastructure, avoiding costly maintenance and infrastructure management tasks.

HPE in partnering with Zenuity, a leading developer of software for self-driving and assisted driving cars. Zenuity is a joint venture between Volvo Cars Corporation (VCC) and Veoneer, two Swedish companies whose names are synonymous with automotive safety. HPE will provide crucial artificial intelligence (AI) and high-performance computing (HPC) infrastructure to support development of next generation autonomous driving (AD) systems, HPE will deliver this as a managed service via HPE GreenLake. This offers an easy-to-use environment for Zenuity's developers as they test, learn and validate new generations of its flagship AD software.

HPE SOLUTIONS TO CONSUME AND OPERATE IT AS A SERVICE

Consumption based IT takes both experience and breadth of capabilities to get right. A consumption-based IT vendor must offer robust choices for technology, expertise in solutions, strong financing, global enterprise-grade support, and advanced remote infrastructure management capabilities.

HPE GreenLake is a market-leading IT as a service offering that brings the cloud experience to your on-premises infrastructure and unifies your edges, clouds, and data centers. HPE GreenLake started 10 years ago delivering infrastructure in a pay-per-use mode on-premises.

HPE GreenLake

- **10 years' experience**—Market leading IT as a service offering that brings the cloud experience to apps and data everywhere.

- **The cloud experience is everywhere**— Get the modern cloud experience on-premises and at the edge.

- **Pay per use model**—Scale up and scale down as needed.

- **Operated for you**—Moves operations to a cloud-native/CloudOps process, unifying clouds with one operational console.

HPE GreenLake delivers as-a-service infrastructure including predictive maintenance and proactive support services for your key workloads. This ties technology spend directly to your business outcomes. With the addition of HPE GreenLake Management Services, HPE can operate your consumption-based infrastructure for you to free up in-house staff to focus on core business initiatives that are key to growth.

The benefit of HPE GreenLake is two-fold:

- IT organizations get infrastructure delivered to them as a service, paid for on a monthly based on actual usage. HPE is responsible for maintaining the infrastructure, ensuring capacity is available ahead of demand, and training the IT organization on how best to deploy IT to its downstream customers.

- IT can host workloads on demand for their customers using best practices operational techniques, orchestration, and service catalog technology. IT never has to be concerned with performance limits, since HPE owns the responsibility for the ongoing and buffered provisioning.

As we have discussed, adopting a consumption-based model shifts the way IT typically works to a more value-added resource for the business. Major steps on this journey include:

1. Assess portability. Determine best platforms and capacity requirements.

2. Support migration. Ensure applications can be hosted appropriately.

3. Specify initial environment. Deploy a tightly monitored new infrastructure to set a baseline to grow from.

4. Monitor usage and cost. Develop a capacity usage profile to simplify future planning and tightly align charges to resources used—typically in an as-a-service model.

5. Adjust capacity. Set a buffer to absorb short term peaks in utilization and growth. Boost total resources as needed to maintain buffer capacity.

6. Optimize operations services. Out-task routine services whenever possible to focus in-house resources on innovation.

HPE has consolidated their experiences working with enterprises globally into a comprehensive methodology. HPE GreenLake solutions, coupled with offerings from HPE Pointnext Services, such as Workload Portability and Migration, enable customers to transition to and then operate a successful ITaaS production environment.

Consume $

- HPE GreenLake pay-as-you-go consumption
- Cloud Management Services

Run & Operate

- HPE GreenLake Management Services

Insight & Control

- Managed Compliance
- Managed Cost Control
- Right Mix Advisor
- Performance and operations expertise

CONCLUSION

Consumption-based IT takes both experience and capabilities to get it right. A consumption-based IT vendor must offer robust choices of technology, expertise in solutions, strong financing, global enterprise-grade support, and advanced infrastructure management capabilities.

Enabling successful deployment of IT as a service enhances traditional IT operations traditions of high-quality delivery and service. It offers the agility and economics of a public-cloud experience, with the security, control, and performance of on-premises IT. Business users get a proactive, flexible capacity buffer that enables adding new resources quickly.

With guidance and support from HPE, you can successfully:

- **Define the Right Mix to remain in control based on your current business needs**—HPE Right Mix Advisor is designed to help you identify a trusted path forward by understanding platform destinations for each application based on each application's need for agility, performance, security, and cost.

- **Put in place scalability-on-demand processes as part of an everything-as-a-service hybrid cloud model**—Scale up and scale down with capacity ready ahead of business demand, pay only for what you use to eliminate overprovisioning and free up capital.

- **Optimize skill sets within your organization**—Offload management of your hybrid cloud environment to HPE GreenLake Management Services to free up resources to focus on business growth and needs.

- **Assess your operating model to simplify IT**—With HPE GreenLake, you have control over your costs, with increased security, control and increased visibility with flexible, consolidated analytics.

HPE GreenLake brings it all together by creating a cloud experience for all your apps and data, and by providing a robust as-a-service portfolio that drives flexibility and time to market.

10 years experience
from Flexible Capacity

Global scale
Over $3B under contract

Customer satisfaction
Over 90% retention

Innovative financing
Presence in over 50 countries

Lifecycle Asset Management Services
Remove and extract value from old, traditional IT

Industry leadership

Global expertise

Financial strength

Partner ecosystem

Strategic investments
with Cloud Cruiser, CTP, Red Pixie

Worldwide presence
Services delivered in 80 countries

Strong bench
Over 25,000 experts worldwide

Your partner of choice
40,000 Channel partners, and Alliance and SI partners

Multivendor expertise
Most vendors supported

"HPE will become an as-a-service company by 2022."

Antonio Neri
CEO, Hewlett Packard Enterprise
HPE Discover 2019

ADDITIONAL RESOURCES

IT as a service listings and links

Consumption-based IT as a service

HPE GreenLake

Assessment and transformation services

HPE Pointnext Services

HPE Cloud Consulting Services

HPE GreenLake Management Services

LEARN MORE AT
hpe.com/us/en/greenlake.html

Hewlett Packard Enterprise

SHARE THIS WITH YOUR NETWORK