UNDERSTANDING HPE GREENLAKE

BRINGING PRIVATE AND HYBRID CLOUD SUCCESS TO YOUR CUSTOMERS

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INTRODUCTION

Executive Summary

Cloud is not a place; it is a strategic arrangement of executing processes with superior scalability, agility, and value over alternative methods defined by limited infrastructure, storage, or computing parameters. A true "cloud experience" should be defined less by what it is and more by what it provides to operations and business objectives.

An ideal cloud experience expands — and contracts — computational power and provides a pay-asyou-grow fee structure with capacity and cost transparency. Operating at cloud speed gives organizations unmatched advantages by enabling rapid system upgrades or new app launches instead of waiting months to build out hardware and add to teams.

Another advantage of an advanced cloud experience is a mechanism through which users can selfservice their requests within secure, preset parameters. Al-based automation drives these capabilities, can execute tasks more quickly and accurately than manual systems, and frees up precious IT resources to work on higher-value projects while ensuring more consistent and robust access and security to systems.

Leading modern cloud service providers optimize an organization's specific workload needs, going above and beyond general-purpose technology and solutions. Advanced solution providers help avert costly repatriation situations or application outages for businesses lacking the skillsets needed to pivot existing applications to the cloud or create new cloud-native ones.

Inherently, cloud advantages should not require full public cloud migration. Some businesses shy away from using the cloud because they already invested heavily in on-premise infrastructure, have regulatory or compliance concerns about cloud security, or lack in-house expertise running cloud applications. However, businesses can get the same agility, scalability, and even pay-as-you-go fee structure of the cloud with hybrid cloud — and even with full on-prem — solutions from leading vendors.

The HPE GreenLake platform brings the cloud experience - self-serve, pay-per-use, scale up and down, and managed for you by HPE and our partners to apps and data everywhere, in edges, colocations, and data centers - freeing capital, boosting operational and financial flexibility, and opening talent to accelerate what is next for you. With the HPE GreenLake platform, customers get cloud services that are production-ready, elastic, and scalable with a simple experience delivered to customer locations in as little as 14 days.

Purpose

Most businesses struggle to capitalize on all their data due to the inherent complexity of where it lives across edges, data centers, and multi-clouds - and how it can be connected and activated.

Modern operating models are required to unify data across the hybrid estate so organizations can easily mine the data to drive new business models, as well as protect and rapidly recover in the event of a disruption.

Organizations that find competitive advantage through their strategic data initiatives can:

- Deliver richer customer and employee experiences with data-driven, personalized content, more efficient interactions, and experiences that delight rather than discourage.
- Accelerate decision velocity with the right data at the right time.
- Predict and prepare for what's next, accelerating innovation, and significantly reducing cost, risk, and time.

The cloud experience significantly increases organizational ability to respond quickly to new datadriven opportunities. However, 70% of apps and data remain outside the cloud, for reasons of data gravity, security, latency, IP protection, performance, and app entanglement. Often customers believe their choice is between "cloud first/cloud-only" or "traditional IT", thus progress is slow bringing the benefits of the cloud model to all their apps and data. HPE and Trace3's point of view is to be "cloud smart" - find the "right mix" of cloud services for each workload – and deliver the cloud experience to all apps and data, no matter where they live.

ACHIEVE A MODERN CLOUD EXPERIENCE ON-PREMISE

Virtual machines (VMs) are ubiquitous, supporting almost any workload, and often used in private cloud environments, where their speed and flexibility can help businesses quickly achieve business objectives. These efficiencies are especially beneficial considering many workloads must remain onpremises or in colocation facilities to meet security and isolation requirements.

However, setting up and managing your virtualized environment can have its challenges. For example, organizations typically move through six-to-nine-month procurement cycles to acquire virtualized compute and storage infrastructure. These drawn-out timelines slow not only application development and deployment, but also the ability to meet quickly evolving business demands. In addition, managing the virtualization landscape in a private cloud environment can drain IT staff's time. VM sprawl, compatibility issues, IT process, and over- or under-provisioning for needs are just some of the obstacles that organizations face.

Hewlett Packard Enterprise and Trace3 now make it possible for organizations to achieve speed, simplicity, and pay-per-use value in their private cloud environments with the <u>HPE GreenLake edge-to-cloud platform</u>.

Get a True Cloud Experience:

Achieve a seamless user experience with access through HPE GreenLake Central to the self-service VM provisioning dashboard. The pre-integrated solution is delivered on a pay-per-use basis, operated for you in your colocations or data center, and can be easily scaled up or down with business demand.

- **Simplify IT**: Free IT staff to focus on more strategic business initiatives with a managed service, including design, installation, and operation of your private cloud infrastructure.
- **Reduce Costs**: Avoid up-front capital expenses and costly overprovisioning with a pay-per-use model that aligns IT spending with actual usage. Gain insights into usage and costs with intuitive consumption analytics available through <u>HPE GreenLake Central</u>.
- **Improve Productivity**: Spin up VMs in five clicks or less from the self-service VM dashboard. To save even more time, customers can pre-load golden images, enabling users to quickly run any app on VMs including production, test and development, databases, and line-of-business applications.
- Achieve Consistent Performance: Reduce latency and increase security with infrastructure in your own, single-tenant, and private cloud environments. VMs are built to the high-performance standards for resiliency you have come to expect.
- **Improve Flexibility**: Meet requirements for flexibility and scale, while leveraging existing investments in IT toolsets like VM templates/images and backup solutions.

Speed Up Business Outcomes:

TRACE

- **Improve the User Experience**: No more waiting to requisition and procure gear. Based on their credentials, lines of business and developers can launch VMs within five clicks from the self-service portal and start running them within minutes.
- **Increase Visibility**: Obtain at-a-glance information into usage and spend across your hybrid cloud estate, as well as detailed insights into capacity trends with HPE GreenLake Central.
- **Cost Savings**: Pay-per-use consumption model avoids costly overprovisioning, resulting in a savings of 30–40%.¹ When combined with management services from HPE GreenLake, administration and IT overhead costs can also be reduced by up to 40%.

The HPE GreenLake Platform: The Cloud Experience Everywhere

The HPE GreenLake platform brings the cloud experience - self-serve, pay-per-use, scale up and down and managed for you by HPE and its partners to apps and data everywhere, in edges, colocations and data centers. This solution is designed to help customers free up capital, boost operational and financial flexibility, and open talent to innovate faster across a broader spectrum. In addition, customers get production-ready, elastic, and scalable cloud services delivered to customer locations in as little as 14 days.

HPE and Trace3's strategy is to deliver the cloud experience everywhere enabling enterprises to eliminate complexity and silos across with common cloud ops tools, processes, and automation that offload the management of day-to-day operations, shifting resources to accelerate business outcomes.

As *the* edge-to-cloud platform company, HPE helps accelerate digital transformations with a holistic strategy across technology, people, economics, and sustainability, including:

- **Self-Service**: HPE GreenLake's Intuitive self-service portal provides simple point-and-click automated provisioning.
- **Pay-Per-Use**: HPE GreenLake provides a boost to financial flexibility, frees capital, better controls costs, and aligns costs to business outcomes.
- Scale Up and Down: HPE GreenLake allows organizations to scale resources up and down as needed with ease ahead of demand. This allows businesses to meet growing or shrinking platform needs head on and with increased agility and speed.
- Managed for you by HPE and Trace3: Management and governance services to operate the solutions for you, securely managed from HPE's world-class IT Operation Centers (ITOCs) around the world, freeing up resources to be more productive providing data and insights through a unified portal, HPE GreenLake Central.
- Cloud Services for Your Workloads: HPE GreenLake delivers more than 50 cloud services across 17 categories, from single-technology compute, storage, and networking, to VM or container platforms, to specific workloads for VDI, SAP, Machine Learning, and business applications, such as electronic health records, payment processing, and SAP. It's an enterprise cloud platform that allows you to start with what your business needs today and easily grow and expand as new opportunities arise.

HPE GreenLake Advantages

Build Your Cloud How You Want:

An edge-to-cloud architecture has several layers:

- At the foundation, you access your IT through the HPE GreenLake cloud platform.
- Following, you have infrastructure supported by networking, compute, and storage.
- Next, you likely need data management services to connect data and apps across multiple locations.
- Then, optimize workloads in your hybrid environments with upmost security and compliance.
- Last, you'll want to tap into analytics and advisory services that helps drive value from data.

Differentiated Design:

HPE GreenLake is different from its competitors because it is open, elastic, and partner enabled:

- **Open Platform**: Secure, cloud-native, fully integrated so no fear of lock-ins.
- **Elastic**: Automated and easy to consume with capacity available to scale up and down on demand pay for what you want to use.
- **Partner-Enabled**: Designed to plug in third-party services, across multi-cloud environments, with HPE GreenLake experts to help.

HPE GreenLake can help your company drive a data-first modernization strategy, providing <u>organizations</u> the freedom to choose not to choose.

HPE GREENLAKE BUSINESS VALUE

HPE GreenLake Edge-to-Cloud Value

With the HPE GreenLake edge-to-cloud platform you can:

- **Get faster time to value:** 75% shorter time to deploy digital projects with capacity ready ahead of demand. With a self-service approach, rapid scalability of resources, and automated, cloud-native infrastructure, be ready for the next project or business initiative.
- Get lower, more predictable costs, align costs to business, and reduce TCO by 30-40%: Your cost scales as your business scales, enabling "fail fast" and continuous improvement, and with no upfront payment, which can reduce the risk of experimentation. With usage metering and capacity planning built in, eliminate expensive overprovisioning but always have the extra capacity required for unpredictable growth.
- With 80% of data being processed at the edge, leverage all your data where it is, to gain business advantage and solve the biggest problems: Take an integrated approach to the data pipeline, protecting your data and keeping your IP under your control. Take on problems that previously could not be addressed economically, gaining more insight and "seeing around corners" in every part of the business.
- Simplify and secure IT operations across your data centers and clouds with 85% less unplanned downtime: Offload routine work, with management services, freeing staff to improve business outcomes, and leverage skills where gaps exist. With an automated, proactive, Al-based management model, simplify IT with one operating environment for traditional and cloud operations. Remain confident in your security, using a secure platform, and security monitoring services.

HPE GreenLake Platform Provides Clear Business Value

Forrester Research and other analysts have closely examined HPE GreenLake and found the benefits:

- Save Time: Helps customers shorten the time to deploy digital projects by 75%.
- Reduce Risk: Enables customers to simplify IT and spend 85% less time "keeping the lights on".
- Lower Costs: 30-40% TCO savings due to eliminated need for overprovisioning.
- Increase Control and Insight: Increases IT team productivity by 40% by reducing the support load on IT and providing insights through HPE GreenLake Central on how to better manage capacity, performance, compliance, and costs to enhance cloud governance.

The Forrester Research ROI estimator tool can estimate potential ROI from HPE GreenLake, based on their analysis and study. Discover your ROI potential using the following link:

https://tools.totaleconomicimpact.com/go/hpe/greenlake/index.html

HPE GreenLake Turns Data Into an Asset

Data is at the heart of how data-first enterprises deliver differentiated, rich experiences across billions of moments, accelerate decision velocity, see around corners, and deliver continuous innovation.

Realizing these outcomes requires enterprises to overcome data silos across multi-gen IT, apply advanced analytics, AI/ML at scale, simplify data management, be vigilant amidst constant threats of ransomware and cyberattacks – and capture data's value wherever it is.



Data needs to be always on, always-fast, and powering apps, secure, compliant, and protected – and seamlessly accessible for data innovators to unlock insights wherever data lives.

With HPE GreenLake, enterprises bring the cloud to data where it is to discover, connect, store, access, protect, mobilize, analyze, and act upon – so you can shape your data strategy, simplify data management, access, and control your data – and innovate faster with a data-first strategy.

With the HPE GreenLake platform, you can turn your data into an asset:

- Simplify data access and management
- Transform faster with storage-as-a-service
- Manage and scale highly available databases and data platforms
- Unify the experience for data consumers and producers
- Modernize data protection
- Protect your business
- Increase data value through attestation and verification
- Power your private cloud and edge, where your data lives
- Deploy enterprise grade Al
- Automate and operationalize MLOps
- Unify analytics and modernize legacy data lakes
- Get real-time analytics with cloud on-premises
- Scale with optimized, high-performance compute for data-intensive workloads

HPE GreenLake provides cloud services for:

- Data Fabric
- Scality
- Qumulo
- Storage
- Data protection
- SAP HANA
- Dataspaces
- Security risk-compliance
- Hyperconverged
- AI/ML/Analytics
- HPC

HPE GREENLAKE CENTRAL

The HPE GreenLake platform helps customers quickly and easily get rich insights and controls, unified across clouds for easy, instant action to enhance experiences, reduce costs, mitigate risk, ensure regulatory compliance, and run the business better, with a simple, self-service portal, HPE GreenLake Central.

HPE GreenLake Central is an advanced software platform that provides customers with a consistent cloud experience for all apps and data, through an online operations console that runs, manages, and optimizes their entire hybrid cloud estate through an intuitive, self-service portal that uniquely meters actual cloud usage with unprecedented transparency to cloud costs and usage, with cost KPIs integrated into a single self-serve dashboard. The recommendation engine in HPE's consumption analytics helps optimize resources, predict capacity needs, and optimize cloud spend. The HPE GreenLake platform provides sophisticated governance and continuous monitoring of IT controls across the major regulatory frameworks, helping customers spot and fix any issues fast with the confidence to pass audits and protect your business.

Visibility into usage and spend, and active capacity planning with powerful consumption analytics in HPE GreenLake Central enables transparency to see costs by service type, location, or other parameters, and aggregated usage across on-premises and cloud deployments in AWS and Microsoft Azure, unified in one management console, giving stakeholders what they need, faster. Customers can be assured they always have the capacity needed for workloads with a built-in buffer to enable scale to meet unexpected spikes in resource demand. Near-real-time visibility into usage against reserve and buffer capacity, enables HPE to scale up capacity ahead of customer needs business growth.

CONCLUSION AND RECOMMENDATIONS

HPE GreenLake platform delivers unique value

- HPE GreenLake platform leads the industry for on-premises cloud services, with approximately \$4b in contract value and customers of every size, in every geography and industry around the world. With the GreenLake platform, HPE has been pioneering the service experience on-premises for years, bringing pay per use, scalable, and managed cloud services to clients.
- Inherently multi cloud and multi stack choice that mirrors customer needs.
- Sixteen patents granted, thirty-nine more pending from the development of HPE GreenLake Hybrid Cloud.
- True pay-per-use on-premises, based on self-service portal and actual metered usage (not product financing or subscription).
- Active capacity planning when combined with pay-per-use and metering drives cost savings and eliminates overprovisioning.
- Maturity decade of leadership/experience in IT as-a-service on-premises.
- Breadth and depth of offerings, partners, technologies.
- HPE cloud expertise is open and unbiased, with over 1,000 successful cloud migrations bolstered with acquisitions of CTP and RedPixie.

Recommendations – Next Steps

- Discover your ROI from HPE GreenLake platform with Forrester Research ROI estimator tool
 <u>https://tools.totaleconomicimpact.com/go/hpe/greenlake/index.html</u>
- Try and buy cloud services through HPE GreenLake platform and Trace3 today.
- Assess and define your right mix of clouds.
- See the demo of HPE GreenLake platform.



SUPPORTING DOCUMENTATION

The following is a list of supporting documentation referenced during the creation of the HPE GreenLake White Paper.

| Support Documentation |
|---|
| Document Name |
| IDC White Paper, sponsored by HPE, The Business Value of HPE GreenLake Management |
| Services, January 2020 |
| A commissioned study conducted by Forrester Consulting, The Total Economic Impact [™] of |
| HPE GreenLake, May 2020 |
| IDC Cloud Pulse Q1 2020 |