Advizex
FULCRUM IT PARTNERS

Hewlett Packard
Enterprise

A Guide to
HPE GreenLake for Healthcare

The last few years have been a shock to the healthcare industry. Covid-19 was a stark illustration of the need for healthcare organizations to become more resilient, sustainable, and resourceful.

Hit with a global pandemic while already dealing with the impacts of several demographic and regulatory trends, hospitals and other healthcare organizations have had to do even more with less.

Post-pandemic as staffing numbers have continued to fall short, many organizations have had to find ways to free up budget for recruitment and to pay higher rates for temporary or locum nurses and medical practitioners. Meanwhile, organizations continue to contend with an aging population, spikes in chronic disease, and an increasingly complex and strict regulatory environment.

It's no easy balance. Technology, long the enabler of better outcomes, has become difficult to fund as priorities lean towards staffing, advanced beds, and medical equipment such as MRI machines.

The impact of IT

The power of digital transformation to improve operations and lead to better patient outcomes is not new to many healthcare organizations. Technologies like EHRs (electronic health records), and ultra-high resolution 3D imaging for diagnostics, have revolutionized the industry — and patient care and health outcomes. In medical research, genomic medicine is levering big data analytics to uncover clues and correlations to provide individualized health strategies and therapeutic decisions based on a patient's own DNA.

Of course, all these state-of-the-art healthcare solutions require significant IT infrastructure resources on which to run, leading many to consider the cloud to achieve the scale and agility needed.

But many health organizations emerged from the pandemic, almost counter-intuitively, with limited cash, growing expenses, and a plethora of challenges. Old approaches to procuring IT can't meet the modern challenges that hospitals, insurers, and healthcare providers face, but cash-tight budgets often can't support modernizing the infrastructure to support ever-increasing service demand.

The problem with overprovisioning

There was a time when IT would simply "throw money" at the many infrastructure challenges healthcare organizations face today by over-provisioning resources. That way they'd have the compute, storage, and security services needed to meet bursts during crises like pandemics or epidemics without compromising patient care. That option is increasingly becoming unsustainable, as on top of unnecessary costs, it introduces management complexity, tremendous waste, and an unnecessary ecological impact.

Of course, top of mind in all this is the patient. Patient care can never be compromised. As new forms of self-directed patient care take route, and telemedicine continues beyond lockdowns, security and performance are paramount even as the IT activities of healthcare move beyond the hospital campus borders — all while somehow making budgets line up.

The power of a cloud-like experience... everywhere

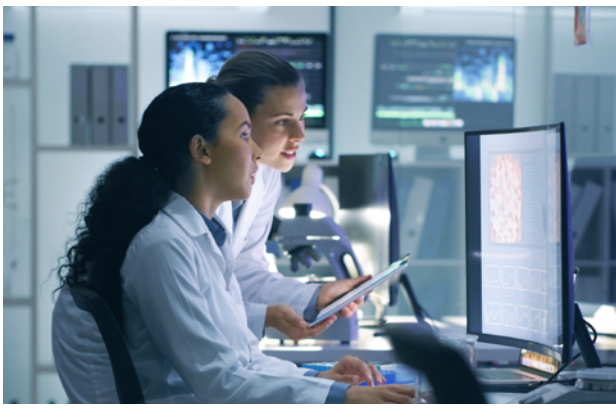
One logical approach for healthcare organizations to achieve the resource availability and agility needed to meet growing infrastructure demands, and their digital transformation goals is, of course, the cloud. But the public cloud isn't appropriate for all workloads — especially in healthcare.

Many healthcare organizations maintain a mix of legacy and modern systems, cloud applications and unique backend platforms, all with various states of interdependence that can make the public cloud impractical or even impossible. Add to that healthcare faces some of the strictest compliance, data sovereignty, and data privacy requirements, making the cloud ill-suited for some applications, while the costs associated with the effect of data gravity in the cloud — with public service providers charging high data egress fees — can be crippling to healthcare providers and their networks.

Finally, there is the all-important patient. Application latency and performance must be considered, as the results of an outage can have real consequences. And poor security in health services can lead to anything from disclosed PII (personally identifiable information) to, in the worst case, ransomware lockdowns and outages. These, of course, are not options.

With that in mind, most healthcare organizations today must run some workloads on-premises or in hosted data centers.

What's a healthcare organization to do? It's unquestionable the cloud model has the benefits needed to compete with existing players and new purely online entrants, but maintaining the hybrid operation needed to support data and performance concerns is complex and cloud costs can easily skyrocket.



The digital health revolution

Many major trends in digital health continue to prevail in the healthcare space and are driving the need for technology investment. The industry was already in the middle of a digital revolution when the pandemic accelerated the need for transformation for many healthcare organizations, especially around supporting areas such as telehealth, home testing, and new emerging pharma delivery options.

But with these adoptions of digital services come unique challenges for healthcare around insurance coverage, data privacy concerns, the technical talent to support them, and, of course, new infrastructure needs. Meanwhile, many legacy technologies and infrastructures don't support the latest generation of EHR, and upcoming versions have even more taxing needs (powerful DBMS, high-performance servers, etc.) At the same time, the data egress costs for big data solutions like genomic medicine can quickly skyrocket to equally epic proportions. Telehealth, digital cameras and medical tools, tablets, and other IoT devices raise new concerns about performance and security at the edge.

The good news: all these digital solutions are a pathway for healthcare organizations to improve access to healthcare, and may lead to better, more personalized care.

The answer is a consumption-based model for IT services.

Bringing an OPEX model to on-premises IT resource deployment frees organizations up from capital costs, allowing them to focus on the innovation needed to get and stay ahead of the competition.

A consumption-based model provides a cloud-like experience whether in the cloud, on-premises, or at the edge, providing health-care organizations with: quick response to changing demands; the elimination of over-provisioning; faster IT procurement and, ultimately, time to value; a metered OPEX procurement model; simpler, centralized management with fewer operation silos; shared risk with vendors and service providers; and, the scale and elasticity needed for during growth and expansion, or to handle unexpected health crises.

HPE GreenLake, a consumption-based solution from HPE — and backed by the expertise and services of Advizex — has emerged to extend the consumption-based model beyond the public cloud to provide the infrastructure, compute and application resources healthcare organizations need across multiple clouds, on-premises, and at the edge — everywhere business is taking them.

HPE GreenLake: HPE's edge-to-cloud platform

HPE GreenLake is an IT-as-a-Service consumption model that brings a cloud-like experience across healthcare organizations' edges, colocations, and data centers.

HPE GreenLake uses actual metered usage to provide on-premises IT resources on an OPEX model, where healthcare organizations pay only for what they use. This gives them the openness, agility, speed, and scalability they've come to expect from the public cloud, but also the performance, security, and control they have at their on-premises data centers, satellite offices, and local healthcare branch.

How does HPE GreenLake work?

The organization's hardware and software — yes, the organization's, HPE GreenLake is not a lease with static monthly fees — are installed on their premises by HPE or Advizex as a certified partner. This installation includes reserve capacity to scale for future or unanticipated needs. HPE and Advizex implement, then manage and support each HPE GreenLake solution, so the organization's IT team can focus on high-value tasks, not routine infrastructure management.

Benefits of IT-as-a-Service

Because of its as-a-Service delivery model, hardware and software are continuously updated, again, with organizations only paying for the IT resources they use. This frees up IT staff further, taking from them the burden of securing and updating those resources, while still cost control and risk mitigation, and achieving compliance.

Advanced forecasting capabilities found in HPE Infosight help to predict and address infrastructure needs now and in the future. Armed with the most advanced AI for infrastructure, organizations can predict and prevent issues before they become a problem, ensuring their infrastructure and apps are always on, always available, and always fast.

Flexible and scalable

With HPE GreenLake, educational organizations can adopt the modern IT architecture they need in a massively changed learning environment. It gives the elasticity needed to scale up (or down) as needed to give educators the confidence of always being prepared with the resources required — no over-provisioning necessary.

Schools can be ready to scale to adopt new technologies and digital teaching methods, as well as any unexpected digital service demands knowing with confidence everything is supported from a technology perspective. And, because it's pay-per-use, organizations can control costs and make sure they line up with the business outcomes they achieve.

HPE GreenLake Central

HPE GreenLake Central is HPE's enterprise management software, allowing organizations to manage their entire hybrid estate — public cloud providers and on-premises environments — through a single pane of glass. With it, organizations can keep track of usage and security, monitor, and run instances wherever they reside and keep track of costs and compliance issues. Through its Monitoring-as-a-Service (MaaS) offering, Advizex can use GreenLake Central to monitor its customers' hardware, software, and usage, while they retain control.

HPE GreenLake Central

HPE GreenLake has a comprehensive Epic platform as a service offering, bringing pay-per-use economics, agility, and simplicity to the healthcare providers Epic Systems. With it, organizations can simplify operations, increase efficiency to deliver projects faster, and reduce the total cost of ownership. HPE and Epic have more than 25 years of partnership, and HPE design and architecture principles meet Epic Target Platform and Honor Roll.

HPE GreenLake benefits for healthcare at a glance

HPE GreenLake provides hospitals and other healthcare organizations with the benefits of a consumption-based model like the public cloud, but much more. HPE GreenLake provides many remarkable benefits including:

Flexible metering. HPE GreenLake is a pay-per-use solution based on actual metered usage, with several flexible metering options

Operational ease. All the hard work around the equipment installation, usage analysis, capacity monitoring, and proactive maintenance are done by HPE or Advizex.

Comprehensive insights. Through Infosight, organizations have clear, real-time visibility into usage and spend by service, project, location, or business unit, wherever IT activities occur, ensuring costs line up with business outcomes.

Faster time to market. Organizations can go from planning to production-ready infrastructure fast for even the most demanding workloads — acting fast and going where the market takes them.

Reduced waste. Through active capacity planning provided by HPE, organizations can avoid overprovisioning, reducing costs but also their environmental footprint.

A wide ecosystem. HPE offers a wide breadth and depth of solutions, partners, and technologies through HPE GreenLake that meet all modern IT needs.

Security. Security is simplified but bolstered through role-based access, HPE's trusted supply chain, and zero-trust architectures.

Compliance. HPE GreenLake provides educational institutions with an integrated view of costs, governance, performance, operations, and security.

Billing and support. Organizations benefit from one support team for infrastructure, installation, upgrades, support, and metering, and from a single bill for all services.

With HPE GreenLake, hospitals, insurers and other organizations no longer need to choose between the agility and scale of the public cloud or the security and performance of on-premises infrastructure. They get the best of both worlds: leading-edge technology, reduced capital expenditures, and both flexibility and control wherever they do business.

About HPE

Hewlett Packard Enterprise (NYSE: HPE) is the global edge-to-cloud company that helps organizations accelerate outcomes by unlocking value from all of their data, everywhere. With offerings spanning Cloud Services, Compute, High Performance Computing & AI, Intelligent Edge, Software, and Storage, HPE provides a consistent experience across all clouds and edges, helping customers develop new business models, engage in new ways, and increase operational performance. For more information, visit www.hpe.com

About Advizex

Advizex is a leading technology provider of infrastructure and enterprise application solutions. For more than 45 years, Advizex has partnered with its customers to accelerate the adoption of new solutions and create business value. Its deep heritage in both applications and hybrid infrastructure are essential elements in its approach to developing new solutions that meet its customers individual business needs. Combining the expertise of its people with the innovative technologies from its strategic partners, Advizex helps solve complex IT issues that impact its clients' businesses— all guided by its mission of creating customers for life. For more information, visit www.advizex.com