

ACHIEVING RESILIENCY WITH XAAS & HPE GREENLAKE

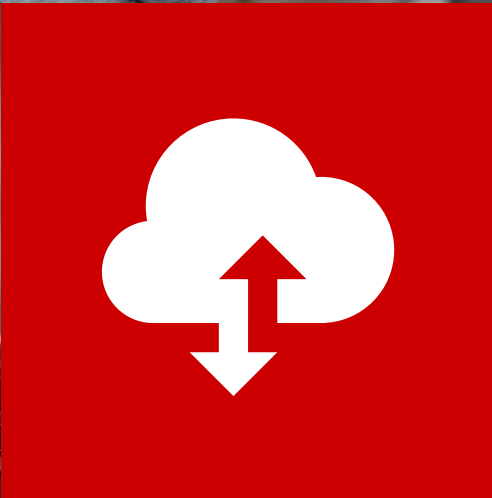
AN EBOOK OFFERING FROM CDW



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WHAT IS XAAS?

XaaS stands for Everything-as-a-Service or Anything-as-a-Service—based on the concept that eventually all IT requirements can be provided as-a-service, via a cloud model. This means that any IT function can be provided on a pay-per-use or subscription basis.

In the world of enterprise IT, service providers offer many options from the cloud, including Software-as-a-Service (SaaS), Platform-as-a-Service (PaaS), and advanced innovation capabilities provided as-a-service. These services could be on-premises (in one's own data centre, or private cloud), third-party-hosted, or public cloud. In some cases, services could run as hybrid cloud, living on-premises and in the cloud—such as Backup and Disaster Recovery services, which require software to run routines on the data centre and co-ordinate with storage in remote locations.

On-premises cloud services combine infrastructure, platforms, and automation as well as management services to give you the same experience you get from the public cloud: a unified interface and subscription-based payment.

As businesses transformed during the pandemic to support work-from-home and hybrid office scenarios, services like remote-desktop software have become ubiquitous. But, at the same time, this brought greater demands on the data centre (and its staff). VDI and VMs take up additional resources, from setup time to bandwidth.

With incrementally more workers logging in remotely to the data centre, the risk of intrusion has multiplied. At the same time, other cyberthreats have increased, with ransomware and zero-day attacks frequently making the headlines. With privacy regulations putting the onus on organisations to protect the personal data of their customers, the need for stringent intrusion detection, as well as backup and disaster recovery protocols, have all added to the complexity of running a data centre.

Service providers and system builders recognise these needs and today, many organisations rely on managed services for backup, disaster recovery and even intrusion detection, providing the specialised services to combat these sophisticated challenges.

THE SHIFT TO XAAS

Research over the past few years (since 2018) has shown enterprises' rapid uptake and transition to flexible consumption models. The researchers cite operational efficiency, business agility and innovation as principal drivers. In fact, they found that "grassroots experimentation is the primary catalyst for XaaS adoption", with IT staff, business users and product developers most keen to experiment with new products or solutions.¹

¹Crossan, Hupfer, Loucks (2018) "Accelerating agility with everything-as-a-service" Deloitte Insights

²Hupfer, Loucks, Muratovic, Srinivasan (2021) "Enterprise IT: Thriving in disruptive times with cloud and as-a-service" Deloitte Insights

82%

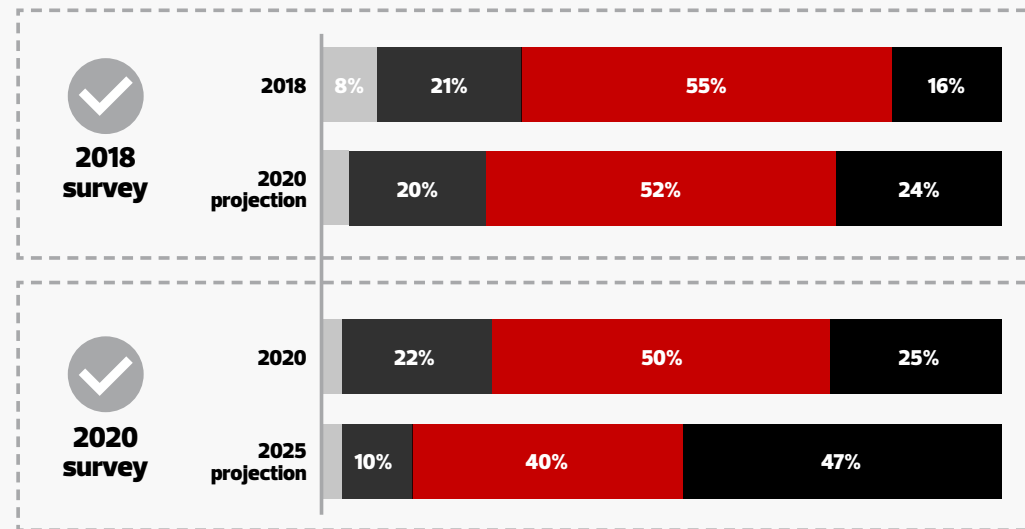
of organisations that have adopted XaaS view it as very/critically important for their business success—an increase from 70% in 2018.

(Deloitte 'Everything-as-a-Service (XaaS) Study' 2021)

Recent research by Deloitte states that "leaders view XaaS as helping them create new solutions or business models to thrive in the new normal, and they're backing up that view by increasing their XaaS investments".¹

The study states that "the shift to XaaS has progressed since 2018, and is expected to continue rapidly transforming the enterprise IT landscape in the post-pandemic era".

Up to 25% XaaS 26% to 50% XaaS 51% to 75% XaaS 76% to 100% XaaS



Note: US IT and LoB professionals surveyed: 2020: N=600; 2018: N=1,170. Source: Deloitte Everything-as-a-Service (XaaS) Study, 2021 edition.

Deloitte INsights | Deloitte.com/insights

Proportion of organisations' enterprise IT purchased and consumed as-a-service.

The researchers predict that, at the current rate, "by 2025, 87% expect to consume more than half their enterprise IT as-a-service—and almost half expect to consume more than three-quarters as-a-service". This, despite predictions that annual IT budgets will be cut by 5% to 11%, depending on industry sector.

ADVANTAGES OF XAAS

The main benefit of XaaS, given the current trend of shrinking IT budgets, is economical. 'Outsourcing' to service providers allows organisations to reduce capital expenditure and convert it to a predictable, controllable operational expense.

Flexibility

The cloud model allows businesses to quickly adapt to changing market conditions with new apps or solutions, as cloud service providers can provide much-needed flexibility. A company can quickly access new technologies, scaling infrastructure automatically when innovative resources are needed.

“ Six in 10 respondents say XaaS gives them a competitive edge and eight in 10 adopters see XaaS as critical to the digital transformation of their company. ”

(Deloitte 'Everything-as-a-Service (XaaS) Study' (2021)³

By purchasing infrastructure, organisations are investing in a depreciating asset that will require maintenance and eventual replacement. Ancillary costs include insurance, physical security and power usage. Purchasing compute, storage and other infrastructure on a 'pay-as-you-go' basis defers these costs to a third party, allows for increased flexibility in scaling up or down, and may even drive new revenue sources.

Service provider roles

The cloud service provider can take advantage of economies of scale and leverage multitenant approaches to maximise their investment. Service providers should also be better equipped to take on the burden of regulatory compliance, and be able also to assist with expert advice on cloud and AI strategy. Service providers have access to network analytics tools that can identify revenue 'leaks' where, for example, VMs are spun up unnecessarily or processes are left running when they should be shut down.

Not having to plan for infrastructure upgrades for years into the future also means that you never need to be under- or overprovisioned. Whether you regularly need more compute for end-of-month data runs, or unexpectedly need to add more storage capacity, scaling is flexible and (most importantly) fast.

Innovation & personalisation

Increased flexibility to scale means you can now experiment with big data projects, such as using data analytics to unlock the value of personalisation at scale—before risking the expense of purchasing a computing system capable of crunching the numbers.

Why does this matter? Because data analytics has been proven to unlock the value of personalisation at scale, according to McKinsey:

“Across industries, our research has found, companies that excel at personalisation generate 40 percent more revenue than average players. At the same time, amid the massive rise in e-commerce and broader changes in shopping habits spurred by the pandemic, consumers are increasingly willing to abandon brands that don't meet their expectations. Roughly

three-quarters of US consumers [tried a new shopping behaviour](#) during a recent three-month period and over 40 percent tried a new brand.”⁴

Optimisation

Migrating workloads to the cloud allows organisations to shift IT resources to higher-value projects. Increasingly, IT organisations are turning to XaaS delivery models to streamline operations and free up resources for innovation. They are also using the benefits of XaaS to transform digitally and become more agile. Deloitte found that 71% of companies report that XaaS now constitutes more than half of their company's enterprise IT. XaaS provides more users with access to cutting-edge technology, democratising innovation.⁵

Business process improvement

Internally, organisations are seeking to reinvent their business processes, change how services are sold and used, and develop new products. XaaS can provide the flexibility to experiment with AI to create new ways of working, such as automating menial tasks.

³Deloitte

⁴Arora, Ensslen, Fiedler, Liu, Robinson, Stein, Schuler (2021) "The value of getting personalization right—or wrong—is multiplying" [McKinsey & Company](#)

⁵Crossan, Hupfer, Loucks, Srinivasan (2018) "Accelerating agility with XaaS" [Deloitte Insights](#)



CHALLENGES FOR XAAS

Despite the many advantages outlined above, several challenges remain, and (perhaps expectedly) security and privacy are main concerns among adopters.



Security & privacy

According to a 2021 report,⁶ 73% of cybersecurity incidents involve external cloud assets (vs. on-premises assets), and there are signs that cloud security incidents are increasing. Cloud data breaches can have serious consequences, including regulatory and legal problems, response costs, reputational damage, and even erosion of market value. According to another analysis, the average cost of a data breach incident in 2021 was US\$4.24 million, a 10% increase over 2020.⁷

According to Verizon researcher and architect and the 2021 DBIR's lead scientist, Gabriel Bassett, cloud incidents surpassed on-premises incidents in 2021 for the first time. But this does not necessarily mean that cloud services are less secure than on-premises infrastructure.

"Nothing in our data says that on-prem is more secure," Bassett said.⁸

GDPR and ever-tightening restrictions for protecting personal privacy affect where companies choose to keep their data, but, as service providers improve their offerings and provide better guarantees, confidence is increasing, and, according to the Deloitte study, the optimum scenario is for XaaS providers to become partners in their customers' IT success.



Data integration

A secondary (but major) concern among adopters is integration and interoperability of data. Adopters expect their service providers to assist with transferring legacy data to cloud-based systems if they are to migrate successfully.

The Deloitte study found that, across the various kinds of XaaS used, seven in 10 adopters are dissatisfied with their current XaaS providers and would be open to exploring new relationships—although many agree that data portability issues make it difficult for them to simply switch from one provider to another.

Organisations that Deloitte classifies as 'frontrunners' in XaaS adoption are seeking long-term relationships with their cloud services providers. They expect them to guarantee reliability and performance, offer integration with other XaaS solutions, help to optimise their utilisation and provide strong data security/privacy safeguards.



Cost

The third main concern among XaaS adopters is cost. Specifically, underutilisation of cloud assets is a concern, with more than four in 10 companies using less than half of the capabilities of their XaaS solutions.⁹

Organisations embracing XaaS and cloud solutions aren't just focusing on process improvement—they're using XaaS to be more agile, experiment with innovative technologies like IoT-as-a-service and AI-as-a-service, and generally just compete more effectively. But XaaS is becoming ubiquitous, so those early adopters may have to work even harder to differentiate themselves. The good news is they can stay ahead by keeping a close eye on the marketplace for the latest XaaS solutions that fit with their business, and by aligning with providers that are genuinely dedicated to their long-term vision and success.

— [Dr. Jeff Loucks](#), executive director, Deloitte Center for Technology, Media and Telecommunications, Deloitte Services¹⁰

⁶Korolov, M (2021) "Report: Cloud Security Breaches Surpass On-Prem Ones for the First Time" [DataCenter Knowledge](#)

⁷Chris Brook (2021) "How much does a data breach cost in 2021?" [Digital Guardian blog](#)

⁸Korolov, M (2021) "Report: Cloud Security Breaches Surpass On-Prem Ones for the First Time" [DataCenter Knowledge](#)

⁹(2021) Deloitte Survey: Accelerated by Pandemic, Cloud and Everything-as-a-Service (XaaS) Solutions Continue to Transform Enterprise IT - [Deloitte](#)

¹⁰ibid.

THE NEW HPE GREENLAKE OFFERING FOR RESILIENT XAAS

The HPE GreenLake platform is designed to provide an integrated public/private cloud experience, with the convenience and pay-as-you-go flexibility of XaaS, and the privacy, performance and control of your own environment.

HPE's market-leading hybrid cloud platform now offers:

A simplified and unified experience: HPE GreenLake provides one view of all services from edge to cloud; convergence with Aruba Central adds 120,000 Aruba networking customers to the platform.

New cloud services:

12 new cloud services added to the growing portfolio of 50+ services on the HPE GreenLake Edge-to-Cloud platform, including:

- AI, ML and Analytics
- Business Applications
- Compute
- Containers
- Data Protection
- Database
- Edge
- HPC
- Hybrid and Multi-cloud
- Hyperconverged (HCI)
- Migration
- Networking
- SAP
- Security, Risk and Compliance
- Storage
- Virtual Desktop and Virtualisation

An expanded partner ecosystem:

HPE GreenLake is now directly available from carefully vetted partners, like Platinum Partner CDW.



Considerations in planning for XaaS:

- Create a road map
- Start with areas that need scaling up
- Imagine how your business can use XaaS to improve efficiency and agility
- Know your weaknesses: consider addressing these through hiring, training and/or partnering with your trusted XaaS provider
- Pitfalls to avoid
- Partnering with XaaS providers—providers become partners
- Data portability
- Focus on the customer

HPE GreenLake has always been the cloud that comes to you—wherever your apps and data live. With roughly 70% of apps and data still residing on-premises, the HPE GreenLake platform delivers the cloud experience across your edges, colocations and data centres.

The HPE GreenLake Edge-to-Cloud platform is an innovative development in XaaS. Unifying and simplifying your cloud estate, across your edges, data centres, colocations and clouds, delivering flexibility, scalability and ease of operation wherever your apps and data live.

Key enhancements to HPE GreenLake tools and capabilities:

- Eight new streamlined cloud services within HPE GreenLake for Aruba networking to address popular customer use cases—simplified and packaged for the channel, making it easier for you to procure, deploy and manage
- Enhancements to HPE GreenLake for high performance computing (HPC) including several advanced capabilities and a lower entry point
- HPE GreenLake for Block Storage, which brings self-service provisioning and faster deployment to mission-critical applications and can be complemented with partner services such as inspection, installation and managed services
- Enhancements to HPE Backup and Recovery Service that enable backup of virtual machines (VMs) from heterogeneous infrastructure, with opportunities for you to deliver data protection consulting services
- HPE GreenLake for Compute Ops Management, a cloud-native management application to access, monitor and manage up to 10,000 servers, enabling you to manage the entire compute lifecycle from the cloud
- HPE GreenLake for Microsoft Azure Stack HCI, an integrated solution that provides Microsoft Azure Stack HCI running on HPE GreenLake Lighthouse with managed services
- New global partnership with the world's largest colocation provider Digital Realty, providing even broader choice to you and your customers seeking to take advantage of HPE GreenLake off-premises or at their edges

HPE continues to make it easier and more rewarding for you to sell

HPE GreenLake with:

- HPE GreenLake QuickQuote updates to streamline and enhance your deal opportunities and development, including bill of materials preview, deal registration status and customer credit approval
- New automation capabilities and pre-defined HPE GreenLake SKUs for better integration into distribution cloud marketplaces. An API for programmatic access to HPE invoices will be piloted with select distribution partners prior to broader rollout later in the year
- Extended assessment tools, including complimentary use of HPE CloudPhysics, to bolster your status as a trusted adviser to your customers with upfront assessments
- HPE GreenLake partner workshops to help you create your own portfolios of as-a-service solutions
- HPE GreenLake Framework for Agreement Simplification and Transformation (FAST) template for channel contracts—shrinking statements of work from 140+ pages to 15—and simplifying master contract terms
- New capabilities and tools to expand the ordering process for HPE GreenLake platform offerings



HOW HPE GREENLAKE AND CDW PROVIDE RESILIENT XAAS

As cloud technologies have matured, the realisation that each company's right cloud mix is diverse is a key milestone in determining workload placement. Regardless of which model(s) of the cloud is implemented, CDW is focused on delivering the agility and speed the business expects.

HPE GreenLake and the on-premises cloud model require specialist skills and knowledge to ensure you acquire the correct approach to cloud migration.

CDW is a leading multi-brand technology solutions provider to business, government, education and healthcare customers in the United Kingdom, the United States and Canada. Our global supply chain delivers products and services in over 170 countries, and our team possesses the industry's highest achievable accreditations, allowing you to focus on running your business—and not on managing your IT.

CDW is an HPE Platinum Partner with over 38 years of experience and the resources that allow us to provide personalised service—a trusted partnership that endures.



CDW is a XaaS provider that can:

- Guarantee reliability and performance
- Offer integration with other XaaS solutions
- Help you optimise your utilisation
- Provide strong data security/privacy safeguards
- Provide easy-to-access innovation services
- Provide highly specialised or industry-specific solutions
- Demonstrate how their solution can address business needs
- Train your workforce in the use of solutions
- Provide a dedicated customer success representative or team
- Help you accurately forecast spend
- Guarantee industry-specific regulatory compliance

“ Providers that offer value-added services—such as assistance with integration and helping customers understand and optimise their utilisation—will likely gain an edge. And there's plenty of room to increase customer satisfaction on the wide range of IT attributes—for example, demonstrating how solutions can address specific business needs, providing training and helping forecast spend. Customers may also welcome conversations to better understand how XaaS can help them respond to, and recover from, pandemic-related challenges. ”

(Deloitte)

NEXT STEPS

Contact CDW today to discover how we can help you in your digital transformation journey and secure your business the competitive advantage it needs.

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