Where IT operating models collide

The rise of consumption-based, on-premises infrastructure models

Data#3

Hewlett Packard Enterprise

Introduction

The desire for organisations to shift their technology operations towards Everything as a Service (XaaS) continues to drive purchasing and deployment solutions in the technology market.

Up to now, this has primarily meant a choice between two broad models:

1. **Move whatever can be moved to the public cloud in whichever flavour makes sense**
2. **Keep everything that can't or shouldn't be moved to the public cloud on-premises – whether that means in a dedicated data centre space or co-location.**

While public cloud has its place – as with any evolving IT operation – some organisations are revisiting earlier decisions to shift specific workloads to the cloud. Drivers include data sovereignty, security, governance, control, unexpected cost increases and operational considerations.

Each has its pros and cons, but one thing that has emerged has been the difficulty in changing from one model to the other. It is often harder to move workloads out of the cloud than it was to move in, and this is giving CIOs and IT teams a reason to pause before continuing to embrace cloud in all its forms.

This eBook examines how on-premises consumption-based models fit in this landscape – providing all the benefits of cloud, with the control and security of an on-premises solution.

Contents

1. The shift to consumption-based pricing

In general, we know that there are two things that kick off an IT procurement cycle:

1. **Existing infrastructure reaches end of life or can no longer provide the required capabilities**

   and/or

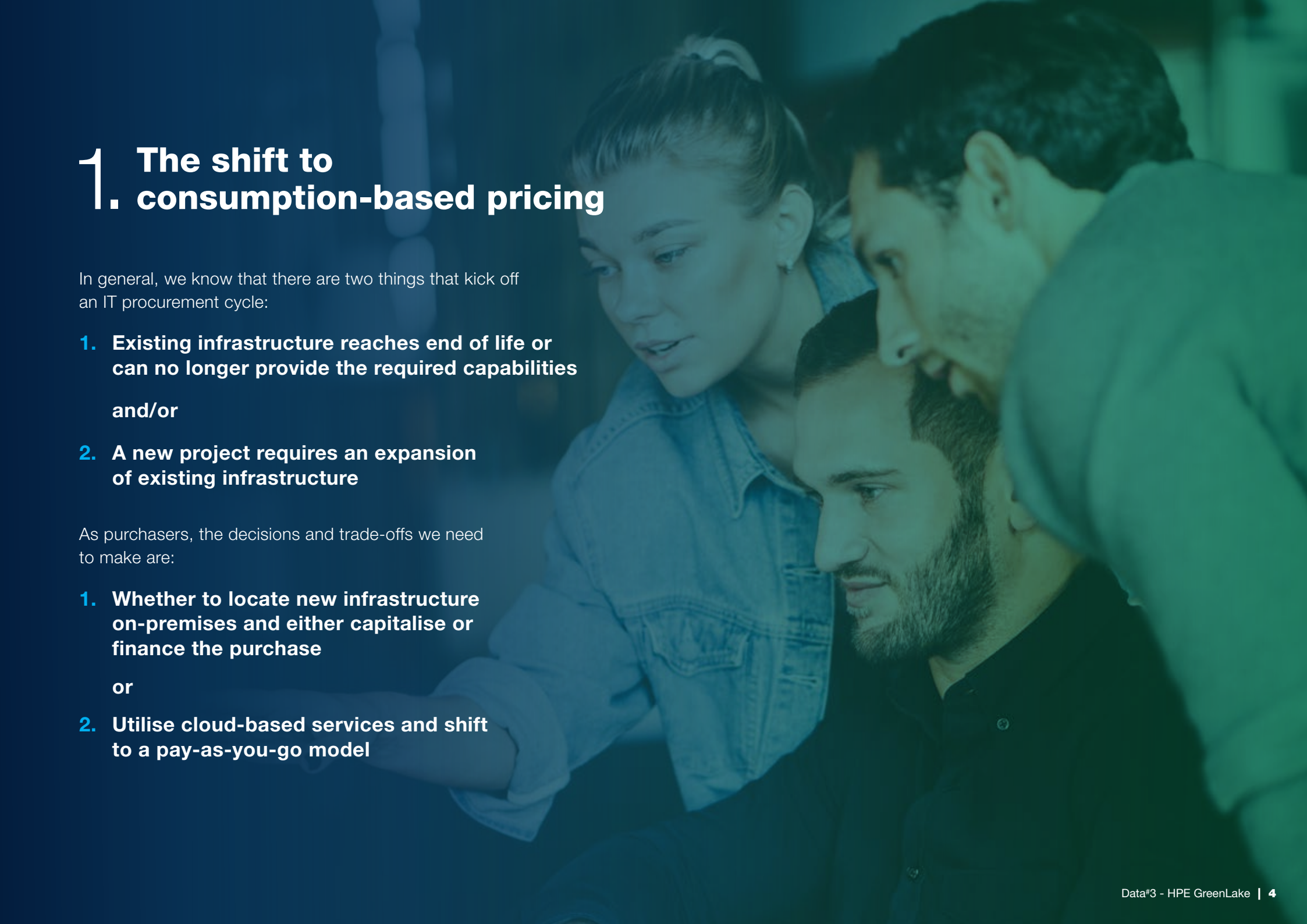
2. **A new project requires an expansion of existing infrastructure**

As purchasers, the decisions and trade-offs we need to make are:

1. **Whether to locate new infrastructure on-premises and either capitalise or finance the purchase**

   or

2. **Utilise cloud-based services and shift to a pay-as-you-go model**



We want to be consumers of technology, not operators

Globally, we are seeing a trend in decision making, causing a shift from on-premises to cloud and from traditional purchase methods to pay-as-you-go. While it has long been noted that price or cost savings weren't a primary driver for shifting workloads to the cloud, the attraction of consumption-based pricing models, and moving technology assets off the balance sheet, plays a role.

In an IDC survey, 41% of respondents said they **would use a flexible consumption model** in their next network procurement cycle.[1]

We've also seen increased interest from government departments, with initiatives such as the NSW Digital Government Strategy[2] promoting a shift from an "owned" model to a "consumption" model with 'as a Service' procurement for ICT.

Other reasons that have helped make cloud a preference over on-premises include:

Value creation

Increasingly we are seeing the creation of value within business via use of technology. Value is not created within the bare bones of basic infrastructure, but in freeing up IT staff from managing the day-to-day to focus on more strategic and innovative work.

Scalability

Public cloud SaaS offerings provide flexibility to scale up and down, add users, or expand and contract as your business changes. You also have the benefit of being able to take advantage of updates and feature improvements along the way.

> **It's not always about superior technology, but executing on technologies differently to competitors to change the game, the performance metric, or the value creation.**
>
> Scott Bales, Global Futurist

1 IDC (2021) Network as a Service Enables Flexible Consumption of Secure and Agile Enterprise Networks [ONLINE]. **Available here**

2 NSW Government (2021) Designing our Digital Future [ONLINE]. **Available here**

Key challenges of shifting to the cloud

While shifting to the cloud offers a range of benefits, organisations have seen challenges emerge after their investments in public cloud such as:

Inertia gets in the way of decision making

What you have in place, and the way you do things is not always easy to unwind if a new direction emerges. You have buying patterns worked out, investment models and ROI goals in place, day to day operations, management and security all established. Any decisions around change have a high barrier to overcome.

Loss of control

Not everything is under your control anymore, and trying to negotiate changes to a public cloud vendor's terms and conditions is tough, if not impossible. While the major vendors have gone to great lengths to establish in-country services, you often have no say about where your data is stored.

Unexpected cost blow outs

It's not always easy to predict or budget when you're paying based on usage – especially when it's so easy to turn on new features or spin up another server. Most organisations have experienced moments of bill shock from their cloud services that are hard to rein back in.

Technology lock-in

If you want to change vendors, the cost is often prohibitive. It is also technically complex to move an application out of a public cloud SaaS offering. It can end up that the more data you put in, and the more applications, the more entwined your operations become with that specific vendor.

Despite all this, in the choice between cloud and on-premises models, cloud is still in the ascendency for most business use cases - but another option is now emerging.

> **A fixed mindset means when looking at new technologies, they look for excuses as to why they don't need to do anything. There's no business case, or there's regulatory challenges. A growth mindset is not can I do this, but how can I do this.**
>
> Scott Bales, Global Futurist

2. The third option – on-premises consumption model

That brings us back to the choice between two fundamental technology models:

1. **Move whatever can be moved to the public cloud and take advantage of consumption-based pricing.**
2. **Keep everything that can't or shouldn't be moved to the public cloud, on-premises and either capitalise it or finance it.**

But what if there was a third option? One that allowed us to get the benefits of both, while also mitigating the downsides of each.

Consumption-based on-premises infrastructure models, like **HPE's GreenLake**, offer just that. HPE GreenLake's portfolio of services was the first of its kind and is the most comprehensive offering on the market today.

It's not public cloud.
It's not owned infrastructure.
It's a shift to something new.

HPE refer to GreenLake as *"the cloud that comes to you"*. Let's give some meaning to that. With HPE GreenLake, you choose the infrastructure packages you need from an extensive list including storage, backup, database management, big data and high-performance computing. It's all pre-configured and deployed on-premises, or in your data centre. However, you still only pay for what you use with traditional cloud consumption-based pricing models. A network of partners and service providers allows you to tap into a cloud experience within your own control and on your own site – without worrying about the overheads of infrastructure ownership and management. That's still the responsibility of HPE.

> **We need organisations to recalibrate to see the potential in a new approach, not just the risk.**
>
> Scott Bales, Global Futurist

Why should you use it?

On demand capacity

Unless your workloads are highly predictable, you will always have too much or too little capacity via in-house servers. GreenLake's pay-as-you-go consumption IT model eliminates this risk because it can scale up or down as your workloads dictate. No wasting limited IT budgets on overprovisioning, and no project delays waiting for CapEx approvals.

Visibility of consumption

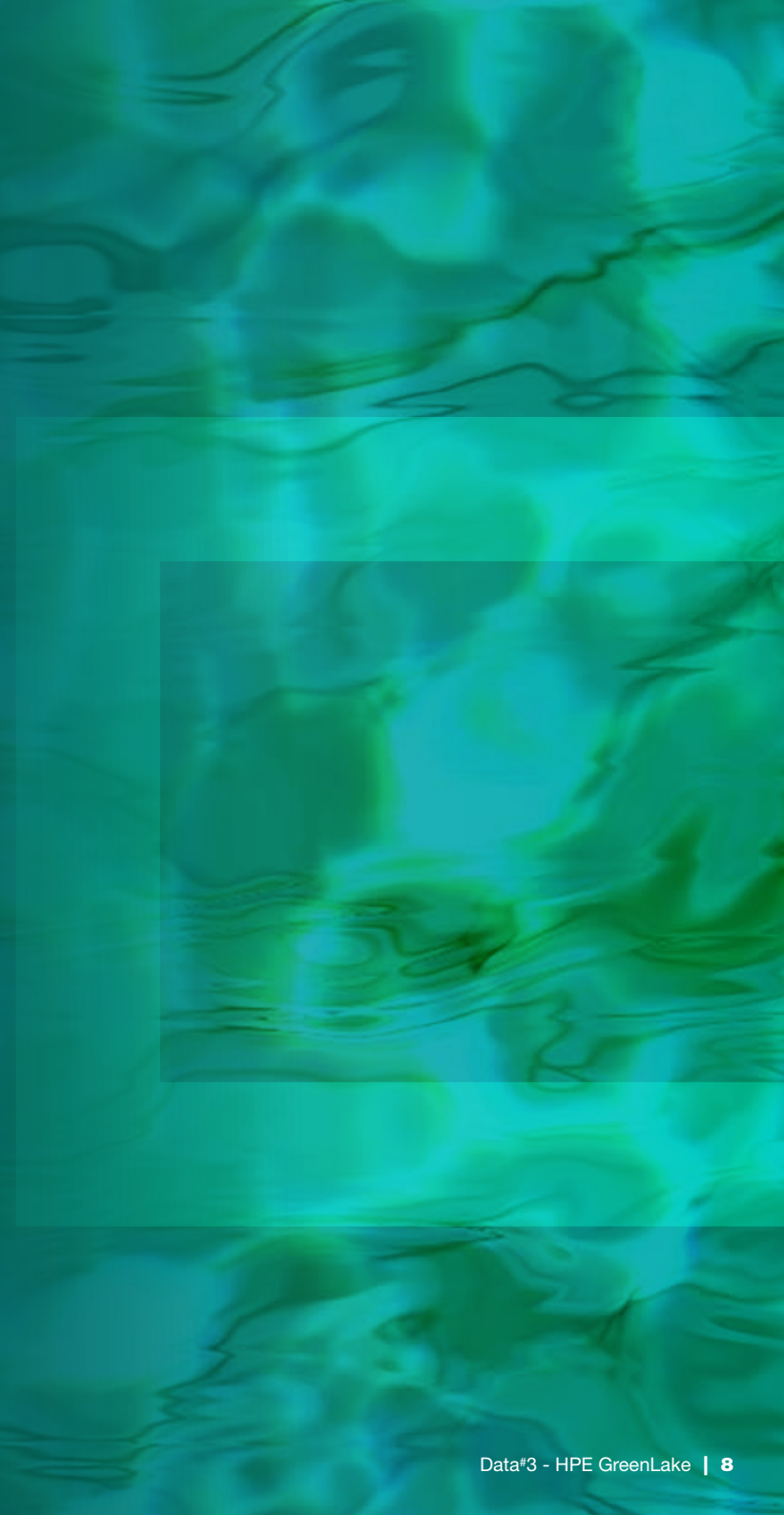
You have visibility of application usage, and where it occurs in your business. This enables the introduction of charge-back models, allowing IT costs to be attributed to the areas of the business that incur them, spreading the financial outlay to where it is used. This visibility can also inform decision making for future procurement.

Reduced wastage

The pay-as-you-go consumption model can help you find savings in unexpected places. If you've ever experienced a new project that demands infrastructure investment, only to be hit with delays that result in the equipment sitting around doing nothing, then this will help. The consumption method means you only pay for what you use, not what you have on-site, which could be a huge advantage where agility is a priority.

Retain data locally

If data sovereignty is a key requirement, then cloud services were difficult to navigate. An on-premises consumption model keeps your data under your control, while still providing cloud-like benefits.



Known costs

In contrast to traditional CapEx purchasing, you have the benefits of an OpEx model that uses monthly expenditure rather than upfront costs. You retain the flexibility of public cloud, but the costs are known, and you have the certainty to grow or contract based on your needs.

Portability

Technical lock-in can be expensive and constricts the reality of moving to a public cloud SaaS model. In contrast, an on-premises consumption model allows you to house applications and store your data on generic infrastructure, whilst ensuring that it remains completely portable with no technical lock-in.

Agility

This is the issue that's plaguing everyone. Using a generic infrastructure model on your premises allows you to easily deploy applications, with the flexibility to shift and scale as you need it. If you want to be agile, the on-premises consumption model offers many advantages.

Just a lease by another name?

This is a common question, and the short answer is no. The main differences between a lease and an on-premises consumption model are in:

1. **Management and ownership of equipment**
2. **Risk**
3. **What is included**

The differences may seem subtle, but this new model is really a hybrid of on-premises and public cloud in a single solution.

In a lease, you're still responsible for your own equipment – configuring, maintaining and operating. Using an on-premises consumption model means you have access to, and control of, both equipment and applications, coupled with the benefit of someone else overseeing and maintaining them. It's not just the hardware either; licensing upgrades, routine maintenance, patching, and replacement components can also be all part of the service.

3. What does using an on-premises consumption model mean for your IT team?

Focusing your IT resources

Owning and operating your own infrastructure comes with several mundane and time-consuming elements that are not particularly relevant to your business. With HPE GreenLake, you hand these elements to HPE to manage for you. They oversee the hardware, making sure that it is operational and up-to-date, with firmware updates performed promptly, whilst looking out for issues such as viruses and ransomware.

The integration points, and higher-level IT functions, which are specific to your organisation, will still require management by your IT team. A consumption model takes care of the basics, making your environment easier for IT to manage. You also have a dedicated support person for your organisation, someone that you can call directly without having to go through a call centre - so it's very much like having an extended team, ready to support you.

It's about focusing your IT staff back on business outcomes rather than maintaining the generic functions that sit underneath.

With on-premises consumption-based models like HPE GreenLake, it doesn't have to be all-in, or all-out. You can start small with one workload, one platform or one use-case, testing it before you invest further. This can be done in conjunction with your existing infrastructure or as existing contracts expire and equipment reaches end of life.

> **Two thirds of organisations said that driving new technologies was a top concern. However, understanding which of those would change the nature of their business is the real challenge.**
>
> Scott Bales, Global Futurist

4. What does it mean for your business?

In today's post pandemic digital world, technology underlies every aspect of your organisaton. As such your business performs only as well as your IT infrastructure. Moving to consumption-based models such as HPE GreenLake offers the business all the benefits of a secure on-premises environment with the economics and flexibility of the cloud.

One of the most important reasons to adopt a consumption-based model is to accelerate app and service deployment using the latest technology. Enabling solutions to be deployed in minutes rather than months not only helps you manage uncertainty, but it also powers innovation and facilitates new business models at the pace needed by organisations today.

Use Case

A Law firm feeling the effects of the labour market wanted to move to a more flexible and scalable purchasing model that required little from them operationally on a day-to-day basis. Starting with their backup and recovery, they shifted to HPE GreenLake and have plans to transition further workloads in the coming months.

The allocation of a dedicated GreenLake support contact, who is familiar with their environment, gave them the confidence they needed to move routine maintenance away from their in-house team. The ability to combine multiple licensing and third-party vendors into one monthly fee, while also enabling that fee to be split up and charged back to the practices or departments that are using the IT, gives the firm a fair way of allocating costs and driving less wastage of IT resources.

Customer story

The University of Tasmania (UTAS)

With end of life approaching for their existing Nimble Storage infrastructure, the University issued a tender to source a new solution with an operational expenditure model that would meet virtual platform storage needs.

Previously, any increase in capacity had involved lengthy planning, applying for funding, and over-allocation had occurred to prevent performance impact so a pay-as-you-go model was a priority.

Also, managing an ageing infrastructure added some burden to their already busy IT team. Reducing management effort in the storage environment was seen as an opportunity for skilled staff to focus more attention on activities that would improve user experience.

Despite this OpEx interest, Data#3 was the only provider to offer a pay-as-you-go solution with HPE GreenLake.

The scalability of the GreenLake solution has been a winning factor for UTAS, with the IT team able to respond rapidly to changing conditions. Where once, increasing storage capacity took considerable time and planning, it is now something that can be accomplished with minimal effort. The sought-after skills of the IT team can also be used where they can have the greatest effect. Importantly, the organisation no longer has to plan around major capital expenditure when storage needs updating.

Read more of this story here

Does this mean you should stop using public cloud?

Of course not! This just presents another option – allowing businesses to further tailor their IT needs to meet their specific environments:

1. **Choosing the right option for your workloads.**
2. **Having complete control where you need it.**
3. **Handing over low value activity for it to be managed for you.**

Your specific requirements drive the end-goal, and you need to consider technology, cost, complexity, data ownership, and security – and what these mean for you.

There is no optimal mix.

There is no right or wrong.

Your model, and what it looks like, is defined by what your organisation needs.

5. So, why do you need a partner like Data#3?

Most organisations live in a hybrid world, meaning the need for on-premises or private infrastructure for security, data protection or compliance is unavoidable. This means businesses require multiple services from multiple providers, often with the solutions sitting on-premises, in a cloud, owned, leased or ‘aaS.

So how do you decide what applications, what workloads, and what infrastructure, is optimal to meet your business needs – all whilst ensuring you have the performance, integrations, security, scalability, governance and flexibility that you need?

Balancing these factors is the role of the integrator and managed services provider – like Data#3 – to ensure all pieces of the puzzle work together seamlessly and deliver your desired outcome. This has always been the role that we have played – and it’s no different with consumption-based IT.

At Data#3, our heritage as a diverse services provider – along with an impressive portfolio of partnerships and accreditations with all leading technology vendors – means we’ve developed a proven model around consulting, implementation, and customer success. We understand there is no one size fits all solution for organisations wishing to migrate to a consumption-based model. It’s why we offer a personal approach to get to know your unique environment, helping you ‘connect the dots’ between business objectives and technology solutions.

And once your consumption-based model is implemented, we’re still here to help navigate the changes as part of a true lifecycle approach.

Conclusion

Every organisation has their unique set up and requirements for data sovereignty, security, governance, control, and operations. Decisions around shifting to the public cloud, remaining on-premises, or using a combination of them both, are entirely unique to each organisation.

With an on-premises consumption-based model, there is a new option to put into the mix. Shifting to the cloud, or staying on-premises, is not an all or nothing decision. You can have the best of both worlds.

What is important is how can you streamline and operationalise your IT to make best use of the resources within your organisation, so you can focus on core business activities.

Thinking about a shift to a consumption-based model?

If you are ready to explore how a consumption-based model can meet your current and future infrastructure needs, **contact us today** to request a consultation with one of our solution experts.

Data#3 | Hewlett Packard Enterprise

Together, Data#3 and HPE are helping customers future-proof businesses across their network, data centre and cloud.

As a **Platinum HPE Partner** with more than 30 years of experience, Data#3 is an expert in helping businesses reap the cloud-like benefits of hybrid on-premises environments, from cost savings and streamlined IT management to reaching new levels of scalability.

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