

White Paper

8 STEPS TO CLOUD 9

How a hybrid approach can maximise the business value of cloud – and what you can do to make it happen

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Introduction

As the challenges for IT continue to get tougher, it's no surprise that the buzz around cloud keeps getting louder. The combination of agility and cost savings is pretty hard to ignore when you're faced with the current state of enterprise IT.

Traditional IT environments are becoming incredibly complex, as business expansion and rapid data growth force organisations to broaden their data centre footprint and attempt to integrate and manage a growing array of data siloes and point solutions.

On top of this, demands from business users and customers are continually changing, and global competition is fiercer than ever. Business agility is essential – and it's up to IT to make it happen (on static or shrinking budgets).

The flexibility and cost-effectiveness of cloud computing can help overcome these challenges, but it's not just about fighting fires – there's a more strategic development taking place in the cloud, too.

Today, we're seeing IT's place in the enterprise evolving from merely supporting the business to empowering it. Alongside other disruptive technologies, such as social, mobile and analytics, cloud has been instrumental in the shift of enterprise IT from just keeping the lights on to being the primary enabler of innovation and business growth.

Why cloud?

For IT leaders challenged to deliver far more with far less, cloud has some compelling benefits on offer:

- IT flexibility – to ensure services are aligned with business needs
- Scalability – to bring new or expanded services online quickly
- Cost-efficiency – pay only for what you need, when you need it
- Rapid provisioning – accelerating time-to-market for new applications, products and services
- Mobility – data and services are accessible anytime, anywhere, on any device
- Fast access to the latest technology – without any huge CapEx investments and lengthy implementation projects

The move to hybrid

Of course, using public cloud services can cause security concerns, and there will always be some applications and data that will need to remain in-house. That's why many organisations are now beginning to combine the flexibility of public clouds with the control of private clouds and traditional data centre set-ups.

These 'hybrid' clouds are rapidly becoming the dominant enterprise IT model. In fact, Gartner has forecast global IaaS spending to grow 32.8% year-on-year in 2015, and IDC predicts that more than 65% of enterprise IT organisations will commit to hybrid cloud before 2016.

In this white paper, we look at the benefits a hybrid approach to cloud can provide, and give you eight practical steps you can take to help plan your cloud strategy.

¹ <http://www.gartner.com/newsroom/id/3055225> ² IDC FutureScape: Worldwide Cloud 2015 Predictions

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Why hybrid cloud?

The hybrid approach to cloud provides a broader, deeper computing resource pool by combining multiple deployment models, including public and private clouds, managed services and traditional in-house IT environments.

However simple or sophisticated the deployment might be, hybrid cloud offers an ideal way to find the most cost-effective mix of fixed resources to meet consistent demand and pay-as-you-go resources for workloads with fluctuating demand.

In successful hybrid cloud deployments, a service catalogue accessed through a central portal puts lines of business in charge of their own service requests. IT then decides which part of the extended resource pool is used for each request, so public cloud services are consumed in the most efficient manner and costs are kept under control. Users have the flexibility to quickly provision their own IT services, while IT stays in charge of resource allocation, data residency and privacy.

The hybrid advantage

Combining different deployment models, each with their own advantages, can deliver enormous benefits – for IT and for the business.

Scalability and flexibility

Private clouds and traditional data centre environments can only provide a finite resource, but by combining them with public clouds organisations can access virtually limitless capacity whenever it's needed. This means IT can meet varying demand and business growth is no longer restricted by hardware limitations.

For example; if a company has a promotion coming up for a high-profile new product, it might expect a significant surge in demand. With a traditional approach, IT would need to spin up all the servers needed before the project could get off the ground. With a hybrid cloud, however, hundreds of web servers can easily be brought online and then retired after the promotion – without overloading the data center with hardware that's no longer needed.

Cost-efficiency

The pressure to cut costs is always intense, but so is the pressure to deliver performance and availability.

With a hybrid cloud it's possible to benefit from the economies of scale available in public clouds without exposing mission-critical applications or sensitive data outside of corporate-owned resources.

Security

A lack of security – whether real or perceived – has always been the number one concern for enterprises considering using public clouds.

The hybrid approach helps get past these concerns by enabling the organisation's most sensitive operations to be kept in-house while offloading less critical workloads to public clouds. The best hybrid environments will make it easy for IT to maintain complete control over where data resides and who can access it.

Hybrid may not be the end-state for enterprise IT, but it's certainly the next step in its transformation.

Fast access to innovative technology

Bringing innovative open-source technology into the data centre might sound like a good idea, but these projects can often be plagued by complexity, slowing down delivery at a time when the business needs to act fast.

Let's say, for example, that a company wants to listen to what's going on in the market before it develops a new product. Hybrid cloud makes it fast and easy to do just that; linking a Hadoop cluster up to social media traffic to discover and analyse what customers and competitors are saying – without wasting time and money on building the infrastructure.

Industrialisation of IT

Hybrid may not be the end-state for enterprise IT, but it's certainly the next step in its transformation.

In a mature hybrid cloud, services become standardised, automated and easy to procure for the end user. Which means that IT, just like older industries before it, can become industrialised; using repeatable, standardised and efficient processes to automate the provisioning of consistently high-quality IT services while reducing overall costs.

We've put together a checklist of the most important things you need to consider, based on all our experience

Your hybrid cloud checklist

If the benefits of hybrid cloud are so great, why hasn't every organisation jumped at the chance? Well, any move to cloud is a transformation, not just for IT but for the whole business. And like any transformation project, it requires some serious consideration and planning – and in many cases a change of mindset.

So how do you get started? We've put together a checklist of the most important things you need to consider, based on all our experience of successful hybrid cloud deployments, to help you start planning your journey to cloud.

#1: Assess your readiness

First up, you'll need to take a critical look at your current IT environment. Is it ready to act as an on-ramp for the cloud?

For a hybrid cloud to be successful, it must start with a modern, efficient, standardised infrastructure. A fully virtualised environment, with some element of automation, is an essential starting point.

It might be that you'll have to implement changes in your existing infrastructure before moving to the cloud, but it's vital to build the right foundation before you make any radical changes. First, you should make the best use of your internal environment through virtualisation, consolidation and automation – then you'll be ready to look at the best ways to consume external services.

#2: Build your business case

Before you decide how to move to the cloud, you need to ask why.

Clearly identify exactly what it is you're trying to achieve, not just from the point of view of IT, but for the broader business. What business advantage do you hope to gain?

- Do you want to reduce data centre CapEx, energy and space costs by consolidating or eliminating onsite hardware?
- Do you want to accelerate product development or improve the customer experience by delivering enhanced IT services to your users?
- Do you want to increase IT scalability and business agility to respond to spikes in demand or new business opportunities quickly and cost-effectively?

Once you've weighed up the potential risks and rewards, you'll know where the return will be found on your cloud investment. But it's important not to focus too narrowly on the obvious capital savings from public cloud services – remember to include operational savings, such as increased productivity and business process efficiency.

#3: Don't put the cart before the horse

Once you've defined the business outcomes you're looking for, don't jump straight into looking at products. There are two important steps you'll need to take before you're ready to properly evaluate technologies.

First, you need to establish a portfolio of services or applications that can deliver your desired outcomes. Then, based on a thorough understanding of what you're trying to achieve and the capabilities you need in order to achieve it, you can identify the right mix of delivery models that will get you where you want to go.

Your hybrid environment shouldn't tie you in to one vendor's hardware or limit your cloud service provider options.

#4: Get everyone on board – and prepare them for change

A move to hybrid cloud is a huge transformation in the way the entire business operates, and managing changes with people and processes can often be a bigger challenge than managing the technology change.

The role of the IT organisation will change, as it shifts to becoming a service broker for end users. At the same time, self-service will change employees' relationship with IT; an experience that some will be more prepared for than others.

To manage all the changes effectively, you need to get support at all levels:

- Get employees on board with the change of mindset –and provide training on how to use the new self-service portal.
- Highlight the benefits for IT teams, as talk of 'automation' and 'industrialisation' can cause concern for IT staff who may worry where their role might be heading.
- You'll need buy-in from business leaders across the organisation, as every department will become responsible for provisioning its own services.
- The CIO needs to sit down with the CEO and ask, "What could this business achieve – and how can IT help?" With a cloud strategy that's clearly aligned with overall business goals, it's much easier to get the CEO's support for the project.

#5: Balance user autonomy with IT control

End-users gain a great deal of autonomy and flexibility from using the self-service web portal that is the public face of your hybrid cloud. But although the efficiency and productivity benefits can be substantial, IT must always remain in control.

In a well-built hybrid cloud, IT retains control 'behind the scenes'. While users make choices about the services they need, IT makes decisions on which resource pool to use, based on application SLAs, cost considerations and data residency requirements. In this way, IT can simplify compliance, as well as ensuring cloud services are consumed cost-effectively and securely.

There is, of course, another ongoing role for the IT organisation. IT leaders need to draw on their technical expertise to help line-of-business leaders design and deploy cloud apps and make the most of cloud functionality as it evolves.

#6: Ensure your hybrid cloud is open and flexible

Flexibility is a fundamental principle of a hybrid approach to cloud computing. So if your hybrid cloud isn't flexible and open, you'll limit the advantages it can bring to your business.

It's vital to avoid vendor lock-in so you always have the widest possible range of options. Your hybrid environment shouldn't tie you in to one vendor's hardware or limit your cloud service provider options.

To maximise the business value of cloud, your hybrid environment should be based on open standards. That means you won't need to invest heavily in new hardware, and you can shop around from a long list of service providers to get the best deals, the best SLAs or the best functionality.

It's important to regularly assess whether the services you offer are up to date and relevant for your current business needs.

#7: Monitor everything, all of the time

Once you're operating your hybrid cloud, IT will need to continuously monitor physical and cloud resources to assess if your local infrastructure is running out of capacity and identify any pinch points that might mean you need to find additional public cloud resources.

But it's not just the technology you need to monitor – it's the business outcomes this technology provides. If your hybrid cloud isn't delivering on the outcomes you defined at the start, you need to look at what should be improved, added or removed from your IT environment.

It's also important to regularly assess whether the services you offer are up to date and relevant for your current business needs. If they're not, then users will often go around IT to find services that better meet their needs – putting at risk the security and control the hybrid cloud was created to provide.

#8: Decide where to go next

So you've built a high-functioning, efficient, scalable hybrid cloud – now what do you do next to get even more business value from your new IT environment?

You could ramp up your SaaS deployments and scale back your internal IT infrastructure. Or you could tighten up on both CapEx and OpEx by fine-tuning your delivery model. You might decide to continue the transformation of the IT organisation into a service broker, spinning up computing resources as needed and returning them to the resource pool, project by project.

Ultimately, you could even create a complete on-demand infrastructure, built on virtualisation, automation and cloud, giving your IT environment – and your business – unprecedented agility and flexibility.

identify the best ways
to get maximum
business value
from your hybrid
environment

Next steps

The benefits of hybrid cloud are there for the taking, but only with the right strategy in place – and the right technology partner to help. When you're planning your journey to cloud, remember to keep our eight steps in mind:

#1: Assess your readiness – if your current environment isn't ready, a move to the cloud could do more harm than good

#2: Build your business case – before you ask how, remember to ask why

#3: Don't put the cart before the horse – think outcomes and capabilities first, solutions second

#4: Get everyone on board, and prepare them for change – enterprise-wide buy-in will be invaluable to help smooth the transformation

#5: Balance user autonomy with IT control – give your people the flexibility they need, but make sure you're always in control

#6: Ensure your hybrid cloud is open and flexible – your hybrid cloud should open up more options, not close them off

#7: Monitor everything, all of the time – is your hybrid cloud delivering what you need, and will it continue to deliver into the future?

#8: Decide where to go next – identify the best ways to get maximum business value from your hybrid environment

At DTP, we help customers design and build hybrid clouds that deliver tangible business outcomes. Based on proven HP cloud technology and a strong commitment to open standards-based solutions, we provide the flexible, scalable, secure and cost-effective IT environments businesses need to succeed.

Ready to get started? Then we should talk.

If you'd like to discuss the opportunities a hybrid approach could open up for your organisation, our cloud-building experts are here to help. Get in touch today on **01635 295650**, or email us at **info@dtpgroup.co.uk**.

And for more information on how DTP can help you transform your IT environment from run-of-the-mill to state-of-the-art, visit **www.dtpgroup.co.uk**.

The tailored solutions DTP Group creates span Cloud services, virtualisation, consolidation, data centre optimisation and networking infrastructure upgrades and refreshes.

DTP applies a professional Project Management approach to everything we deliver and our solutions are designed to deliver real business outcomes and maximise your return on investment.

A solution from DTP delivers measurable outcomes, lasting value and a thoroughly rewarding experience.



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