

## Intelligently implement your IT evolution

Creating a new data centre is no small undertaking. With so much to consider, from choice of infrastructure to location, to type and scale, it can be a daunting process.

However, it's a crucial step for businesses to take. An outdated system with complex storage will slow your business down, lower productivity and cost more money. And crucially, it'll stop you from extracting the maximum value from the data you generate.

A modern, future-proofed data centre can help. Whether a business chooses to stick with its own local data centre, opt for a simplified cloud option, or mix and match through a hybrid setup, there's an opportunity to benefit from increased data insight, faster response times and simpler day-to-day management.

So, if you're looking at transforming your data setup, here are some of the factors you should consider.



## XMA, in conjunction with HPE, is here to help you identify and address your IT infrastructure challenges.

And as we continue to navigate through uncertain times, we can empower you to be ready for the now and set for the future.

That's because we understand that ways of working continue to shift, and that you may need to rethink your strategic approach to infrastructure.

#### We can help you:

- Increase sustainability
- Improve operational efficiency
- Boost revenues
- Protect, expand and replicate
- > Enjoy a cloud-like experience, on prem
- Increase IT resource savings

### **Tip 1** – Think hard about the right solution

Cloud, on-premises or hybrid? This is the first question you need to ask yourself when you're looking to upgrade to a new data centre. It's not an easy one either, each approach has distinct advantages that need to be weighed up in order to identify the right one for you.

So, as a starting point, what are the key advantages of each?

#### **On-premises**

The traditional option, but one that's still the right choice for certain uses. When it comes to keeping total control over your data, there's no better option. Your business will be the only one with access, which can make a significant difference to data compliance. You can also use your own infrastructure to create a private cloud environment, so remote workers can still access everything they need from anywhere.

However, it's worth remembering that keeping the data centre working smoothly is entirely your own responsibility, making it potentially more costly, more time consuming and riskier.

#### At a glance

#### Benefits:

- Total control
- Tried and tested
- Keeps data compliance simple

#### Drawbacks:

- Significant maintenance costs
- Takes up a lot of space
- Occasional downtime

#### Hybrid

The comfortable middle ground for businesses. By combining a smaller on-premises data centre with cloud storage, businesses can enjoy the benefits of both, and mitigate the main drawbacks.

Users can access files from anywhere, and cloud backups can prevent downtime and data loss, while the business' own servers can hold the most sensitive data without sharing it with the cloud.

#### At a glance

#### Benefits

- Combines the best of cloud and on-premises
- Ensures data is always accessible
- Takes less space than equivalent on-premises

#### Drawbacks:

- Still requires regular upkeep and maintenance
- Can be expensive to upgrade
- Presents multiple access points for security threats

#### Cloud

The approach that has taken the world by storm. Rather than buying infrastructure and maintaining it yourself, you access servers run by businesses like HPE. Data is shared and backed up across multiple centres, so the risks of data loss and downtime are minimised, while trained specialists handle maintenance and security on your behalf.

Perceived drawbacks of the cloud often relate to security.

Businesses can feel uncomfortable leaving critical data in the hands of a third party, and believe their data would be more secure on a private server. However, cloud security is usually as high, if not higher than elsewhere, although cloud data centres do present a larger and more enticing target for hackers.

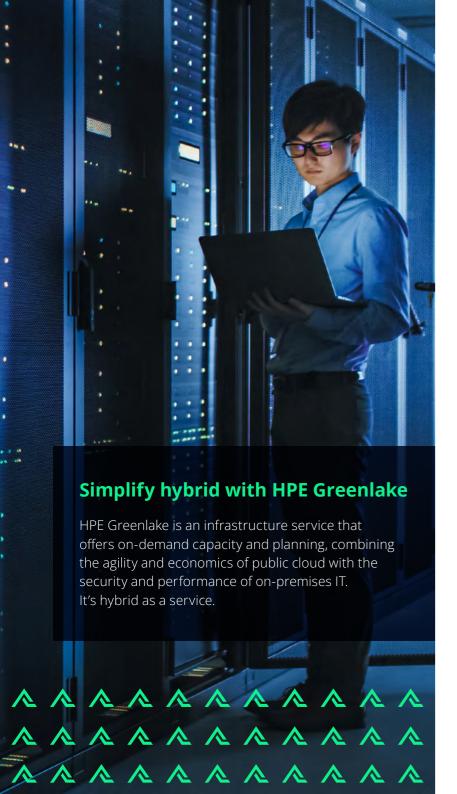
#### At a glance

#### Benefits:

- Endlessly flexible
- Eliminates downtime
- Saves office space

#### Drawbacks:

- Requires a monthly subscription
- Could present compliance issues
- Subscription prices can rise



## Tip 2 – Choose the right location

As with where you choose to set up your business, or buy your house, location is everything when it comes to data centres. This is true regardless of the approach you choose.

With data centres, there are a lot of factors to consider. Here's a brief guide to a few:

#### Is the location too hot?

Data centres tend to operate in relatively narrow temperature windows, but also dislike extreme cold. Therefore, for optimum results, your location needs to be temperature controlled, or in a relatively cool climate.

Some cloud servers have taken this to the extreme, with Microsoft even experimenting with placing a data centre at the bottom of the sea near the Orkney Islands. The result is lower cooling costs, and greater efficiency.

#### Is the location too humid?

As with heat, humidity can be a risk for data centres. Too much can lead to rusting and corrosion, while too low can lead to static build-up and breakdown. This is a particular problem for data centres in areas like India, where real estate costs are low, but humidity can lead to significant maintenance challenges and costs.

#### How close is your team?

The further away a data centre is from the people using it, the higher the risk of latency issues. That's why cloud servers usually store your data relatively close by but create a backup on another server in another country.

If you're building your own on-premises data centre site, and you have multiple sites to support, consider building it in a relatively central location relative to the others.

#### How safe is your location?

As with your house or business, consider what's around you. Be aware of environmental and criminal concerns in any area you're planning on building a valuable data centre. It just takes one break-in, flood or power cut to potentially derail your entire operation. Stability is key.

Many data centres in the US deal with this by having sites across the country working in unison. For example, if a hurricane is forecast to hit a data centre in Louisiana, it'll transfer its data to another centre in Seattle. If you have multiple data centres, you can follow similar principles.

### How busy do you want your location to be?

City-based hybrid cloud servers can be leased out in a 'data hotel' structure. This can potentially offset costs and speed up data transfer, by sharing server space with other data centres across the city.

Of course, if you'd prefer to keep your server and its precious data to yourself, you might choose to not do this, or set up your server in a location where real estate is cheaper. However, be aware that a fast data connection is always beneficial, so don't go too rural.

# **Tip 3** – Find the right tools for the job

With an enormous number of options from a variety of major brands available, all with varying storage sizes, speeds and more, picking the right data centre is no easy task. And that's just the start.

Finding the right tools to identify data trends, improve efficiencies, converge experience and control networks can make all the difference for a data centre.

### Checklist of tools Do you have:

- A networking solution?
- Data storage access?
- Al-based insights and analytics software?
- Application management tools?
- Oloud management tools?
- Security software?

Choosing a cloud option can simplify this shopping list, as many of these will be supplied for you.

## **Tip 4** – Get the right support

At XMA, we have partnered with HPE to offer you the very latest infrastructure products and services.

HPE is recognised as a data centre leader across the globe, and has the expertise, technologies and partner ecosystem to help you modernise your IT infrastructure, accelerate operations, and drive innovation.

With over 20 years of experience delivering financial and asset lifecycle solutions to customers around the globe, HPE and XMA can help you unlock the value of your entire IT estate, from edge to cloud to end user.

XMA's specialist IT infrastructure teams understand vertical and customer challenges, and can add value around the HPE portfolio.

We can simplify HPE services and help you navigate everything on offer – from financial models to suit business needs, to sustainability initiatives, security, scalability and much, much more.

Speak to a member of our team to get started.