



THE WHAT, WHY AND HOW OF COLOCATION A BEST PRACTICE GUIDE TO IT





WHAT'S DRIVING THE ADOPTION OF COLOCATION?

The advent of Cloud computing, big data applications, the Internet of Things and an increasingly mobile workforce have changed, forever, the demands on an organisation's infrastructure.

On their journey to the Cloud, many organisations choose to adopt a hybrid infrastructure. One that frequently includes an element of colocation. But, what exactly is colocation and why are so many organisations including it in their IT strategies going forward?

A colocation strategy simply places your equipment (servers, storage etc.) within a third-party data centre environment.

The reasons why are obvious, not only are you moving to a state-of-the-art data centre facility – benefiting from all the connectivity, resilience, security etc. that comes from your service provider's investment in the latest technologies to support enterprise Cloud services – but you are also able to sweat your current investment in IT – prolonging its useful life.

When equipment goes end of life you can transition to a utility based Cloud service from within the same, familiar, secure environment. Or, you can scale your computing or server capacity by adding Cloud services to your current colocation agreement.

It is safe to say that any organisation operating within a compliance-heavy industry could benefit greatly from colocation – predominantly because of the security, resilience and connectivity improvements realised by moving from what might be an aging on-premises environment to an enterprise-grade data centre.

However, this doesn't mean you have to be bound in red tape to realise the same benefits. Colocation offers a wide range of benefits to organisations of all types and sizes that are looking to:

IMPROVE RESILIENCE

Colocation helps to mitigate risk and improve disaster recovery as a part of your business continuity strategy. By housing equipment in a resilient, enterprise-grade data centre you are gaining access to failover and multiple sources of connectivity; eliminating a single point of failure.

REDUCE COSTS

Eliminating on-premises hardware helps reduce both capital and operational expenditure – transitioning to the Cloud eliminates the need to purchase new hardware and eliminating on-premises equipment reduces the associated costs of power and cooling.

ENHANCE SECURITY

Moving key servers and storage from a room in the office to a data centre facility places your data and equipment in a more secure environment. One that features both physical and virtual security at a level that is likely to far exceed an on-premises estate.

BUSINESS BENEFITS OF COLOCATION

Adoption of Cloud services – as organisations transition to the Cloud, they are increasingly adopting colocation as a way to experience the benefits of a Cloud-ready environment whilst leveraging greater value from their existing investment in technology.

According to Forrester research, 59% of organisations will be employing a hybrid Cloud infrastructure in 2017.

Server consolidation and virtualisation – to make the most of intelligent server and IT management practices, such as server consolidation and virtualisation, you need to be operating within a carefully controlled and monitored environment. One with a degree of operational and environmental control that is likely to be beyond a standard on-premises IT estate.

Server virtualisation can result in savings of up to 50% on hardware and up to 80% on energy costs. (VMware)

Compliance will be a factor within certain industry sectors – as the security of your data centre will impact on the relative security of the personal data you gather, transmit, process and store. As we move closer toward the Internet of Things, the scale of data increases exponentially. With this increase in data volumes, comes an increased security risk.

The Gemalto Breach Level Index revealed that over 550 million records were lost or stolen in the first half of 2016.

Workforce mobility – the mobile or remote worker has become the norm rather than the exception. The need to support users from a range of physical devices and locations calls for 24/7 support – something that is not traditionally available from an on-premises DC (unless you are a major multinational). This also places a demand on 100% availability of access to business-critical data and applications.

Over 80% of UK companies have adopted a remote or mobile working strategy, enabling employees to work from anywhere. (Citrix)

Big data and the IoT – big data is big, but it's not necessarily clever. As the IoT evolves, organisations will see an exponential increase in the number of devices connected to the corporate network and a corresponding rise in the type and volume of raw data pouring into the data centre. This will require bandwidth, more storage and more sophisticated data analysis tools.

By 2020, there will be over 200 billion IoT connected devices, that's an average of 26 devices per person on the planet. (Intel)

WHO COULD BENEFIT FROM COLOCATION?

Colocation offers a wide range of benefits to organisations of all types. You might not have thought about colocation as an option in the past, but if any of these situations sound familiar, it could be the answer you're looking for.

1. Your business is experiencing rapid growth. As you grow, it is difficult to maintain a right-sized on-premises infrastructure cost-effectively. Bolting-on blocks of internal infrastructure doesn't allow you to scale efficiently and you will find yourself either over or under capacity.
2. As you embrace the IoT and big data applications, you need to review your data centre model. The exponential growth in data volumes demands increased capacity for data storage and back-up. You may look to leverage edge computing to reduce the flow of unstructured data into the data centre.
3. Mobile and remote workers have placed additional demands on the availability of business-critical data and applications. Nine-to-five is no longer a typical working model. The more geographically dispersed your workforce, the greater the demand for 24/7 service and support.
4. You are moving more non-essential services to the Cloud or adopting a hybrid infrastructure. As you employ a range of public and private Cloud services, you need to maintain connectivity to several external services. On-premises data centres are limited by the connectivity available.
5. As a part of your disaster recovery or business continuity plan, you need to maintain a degree of geographic redundancy. Eliminating a single point of weakness in your IT infrastructure enables you to carry on business as usual in the event of a service-affecting incident.
6. You may have recently acquired another organisation as a part of your growth strategy and you need to consolidate or integrate a variety of technologies without impacting on service availability. Your internal IT teams may not be able to support some of the new hardware or software.
7. You may be planning an office move – scaling up or down – and need to consider the footprint of your current IT estate. A relocation is an opportunity to re-define how IT supports your organisation; delivering new value-add services to office and remote workers alike.
8. In light of the new General Data Protection Regulations you need to reassess the security of your IT infrastructure; improving the process of user and device authentications and ensuring the integrity and security of data as it travels across your network.

If you have a project involving any of these business drivers and haven't considered how colocation can add value, you've probably missed out on some significant cost savings and value adds.



Yearly Revenue 2010-2015



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WHERE TO BEGIN?

One of the key success factors for any IT project is the removal or mitigation of risk. This is as true for a colocation move as any other IT migration.

When you are assessing potential colocation service providers, look for a potential partner that can demonstrate an understanding of both on-premises and Cloud infrastructures. If they can't, they may be outsourcing some elements of the move and will not have complete control over the project.

Whatever the trigger behind your colocation project, there are a few essentials you need to consider to ensure everything runs smoothly, with minimal impact on systems availability.

OBJECTIVE SETTING

The first stage of any migration plan is to understand exactly what you want to achieve. Establish a clear set of operational and technological objectives that are directly aligned with your organisational strategy. If infrastructure optimisation is to deliver the long-term benefits you are seeking, it will need to translate into tangible business outcomes.

SYSTEMS AUDIT

An audit doesn't just mean a line-itemised list of current hardware and software. Auditing your infrastructure includes mapping user behaviour, understanding current systems' performance, a review of management processes, analysis of workloads, capacities and maintenance costs. It is important to include as much details as possible, as the data gathered during the audit will be used to inform future decisions.

IMPACT ANALYSIS

One of the key success factors for a migration is minimising the impact on business as usual. The gold standard would be to undertake a seamless migration, with zero impact on productivity, availability or customer experience. In reality, there will be a degree of downtime involved in any migration. The aim is to understand what your tolerance for downtime is and to minimise any actual business interruption.

PROJECT & RISK MANAGEMENT

Risk management and mitigation is one of the cornerstones of IT project management. Understanding the risk landscape goes beyond what might happen on the day; it extends to the potential financial and operational impact of project delays, integration issues, compliance obligations, user adoption and long-term return on investment.

A MOVING EXPERIENCE

Minimising disruption and ensuring business continuity is critical during a relocation. Look to partner with a service provider that can offer project management to recognised PRINCE2 standards and can provide you with a detailed migration plan, including:

- Asset Management
- Equipment Tagging
- Floor and Desk Plans
- Installation Schedules
- Test Log-Ins etc.

WHAT DOES GOOD LOOK LIKE?

- Minimal downtime – adherence to pre-defined service level agreements
- Comprehensive planning and risk assessment
- Asset tracking and security throughout relocation
- Specialist IT removals equipment (server lifters, stair walkers, flight cases etc.)
- Ensuring product integrity to maintain warranties

In addition to the standard relocation services, you may want to take advantage of any value-add services available from your new service provider.

These may include:

- Cable and asset management
- Device cleaning / refurbishment
- Equipment storage and redeployment

RESPONSIBLE IT RECYCLING AND DISPOSAL

In January 2007, the UK Waste Electrical and Electronic Equipment Directive (WEEE) was launched with the aim of minimising the impact of electrical and electronic equipment on the environment by increasing reuse and recycling, thus reducing the amount of equipment going to landfill.

Look for a partner that will enable you to comply with equipment disposal and data destruction obligations. An audited and tracked process will include a certification of data destruction and adherence to key disposal procedures:

- Fully reported, barcode tracked process for every item
- Guaranteed 100% data destruction to HMG InfoSec 5 standards
- WEEE certification provided
- On-site and off-site shredding
- Asset value recovery (money back) for equipment

CHOOSING A COLOCATION PARTNER

As you seek to take advantage of the benefits of colocation – improving IT agility, scalability, availability and cost-efficiency – it is important to choose the right colocation partner. The more complex your proposed infrastructure, the more likely it is to feature a combination of on-premises, public and private Cloud.

The challenge comes in finding a service provider that has proven experience across all deployment models. Ideally, your service provider should be able to demonstrate their expertise and experience of both Cloud and on-premises estates. Look for a provider that offers infrastructure orchestration and can seamlessly blend the requirements of all topologies.

The ideal service provider will be a proactive contributor to the partnership, helping to design and implement an infrastructure that is agile and scalable enough to respond rapidly to your changing needs over time – in terms of capacity, lifecycle management and the provisioning of new services and applications.

Service Level Agreements vary from one service provider to the next. Don't settle for a one size fits all SLA, look to negotiate on the things that are most important to you and don't be tempted into paying for something you don't need. Flexibility is just as important when it comes to commercial agreements as it is to systems deployment.

KEY QUESTIONS FOR YOUR COLOCATION PARTNER

Before you decide on a service provider, you need to look behind the SLAs and the glossy brochures to understand what the real implications for your organisation are. You might want to ask some of the following questions:

1. What physical and virtual security is in place?
2. What SLAs and service credits are available?
3. What disaster recovery / business continuity plans are in place?
4. Does the data centre have multiple connectivity and redundancy options?
5. How quickly can you scale your resources or add/remove services & applications?
6. What happens if the lights go out?
7. What service and maintenance contracts are available?
8. What happens if you want to terminate your agreement?





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