



# WHY COLOCATION BEATS OWNING YOUR OWN DATA CENTER

Colocation choices UK





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**Operating a data center is an expense that enterprises can minimise by outsourcing to a specialist provider**

With the rise of cloud services over the past decade or so, various experts expressed the opinion that cloud would soon gobble up all business workloads, and some still believe this will eventually happen. For the present, this has proven to be a simplistic expectation and, instead, a hybrid model has emerged where enterprises are, for the most part, using cloud services where appropriate, but keeping their most critical workloads running on their own infrastructure.

Perhaps a more puzzling question is why many organizations, especially in the UK, continue to own and operate their own data centers rather than moving their IT infrastructure into a colocation facility operated by a service provider. According to a report published last year by Information Services Group (ISG), about 60 percent of enterprise workloads in the UK still reside on-premise, and many of these are hosted in private data centers operated by internal staff.

Yet for most organizations, managing a data center is not a core part of their business. Instead, it is a cost that could be minimised by outsourcing the maintenance of the data center infrastructure to one or more managed colocation providers. Perhaps for this reason, the ISG report also forecast that the

UK data center colocation market is projected to grow significantly over the next few years.

Some organizations might have started off with their IT systems housed in part of their own office building, but over time the space this requires is likely to have expanded as IT has grown to become a vital service for the organization. Moreover, the demands that IT infrastructure places on a building, just in terms of power and cooling, are very different from those on a standard office building environment. Having the two environments inside the same physical structure could make that building challenging and costly to maintain.

In fact, data centers are expensive assets for any business to operate and manage. By switching to colocation, the capital expenditure costs of maintaining the site and its infrastructure can be turned into operational expenditure instead, enabling an organization to get the same benefits, but at a predictable regular cost.

## Securing access

One key reason why organizations ought to consider colocation rather than operate their own data center facility is security. The level of physical security at a data center campus is much greater than most office-based security systems. Only authorised personnel have access to the data center itself, and this will typically involve access cards, perhaps paired with biometric security, such as a fingerprint scan.

A data center campus will also have security cameras covering all of the building's exterior, as well as the entrances. All access to the site, as well as specific sensitive areas of the data center, are also logged, leaving an audit trail of who has accessed what and when. In contrast, organizations with a data center in their own offices may find that they are unable to get a level of security inside the office building that the IT director will be comfortable with.

Even if an organization has its own separate data center facility, the chances are that it will not be operating on the same kind of scale

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that a specialist provider does, nor with the range of specialist staff on-hand. The kind of campus site that a colocation provider operates will have access to hundreds of megawatts of power, backed up by very large UPS systems and powerful generator sets, plus support staff on-site 24 hours a day in case anything should go awry.

A colocation provider will also have support contracts in place so that it can call upon support staff from specialists if there are problems with the air conditioning systems or power distribution in one of its data centers, at any time of the day or night. Because it is their core business, providers will have ongoing maintenance schedules to ensure everything is in optimum working order, whereas an organization with an in-office data center might not even be able to get permission to run maintenance schedules and generator testing as often as they would like.

One data center provider aiming to

expand its share of the enterprise colocation market is Vantage, which sees a growing part in the UK market being played by major regional data center sites, such as its campus near Cardiff in South Wales. When fully finished, it will be the largest hyperscale data center in Europe, according to David Sandars, business development manager for Vantage Data Centers.

“There are lots of interesting things going on throughout the entire UK market now, a real kind-of regionalisation push with new data centers popping up in Newcastle, Glasgow and Edinburgh. Manchester

has now become established with a number of different data center operators up there, and we’ve got a very good proposition for the data center sector in Cardiff that is a very real alternative to the traditional kind of M25 ring locations,” he says.

Vantage is perhaps best known for serving hyperscale customers across most of its data center locations. With its Cardiff campus, the company is also looking to attract more enterprise colocation business, Sandars explained.

This particular site is well-served with access to ample energy resources, thanks to its proximity to the UK supergrid, according to Vantage, while customers have a choice of connectivity services offered by no fewer than 17 different telecoms operators – a mix of regional, national and international providers-linked up to its Cardiff facility.

#### The pandemic effect

Another factor is the upheaval caused by the Covid pandemic, which has seen many office locations forced to close during lockdown and large numbers of employees working from home. Data centers were quickly made exempt from that, with new regulations and methods of working implemented to ensure social distancing and protection of the workforce so that technicians could still go in and perform maintenance tasks, and ensure everything is kept running smoothly.

Many organizations with their own in-office data centers, on the other hand, will have struggled to adapt to this change in working practices as their staff may not have been allowed to enter their site.

In addition, many businesses found that offices with on-site data centers lacked the network bandwidth to

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**- David Sandars, Vantage**

handle a situation where much of the workforce is trying to connect remotely, according to Sandars, a situation that may persist even as lockdown restrictions are lifted.

“On-premise networks have not been able to cope with large workforces having to almost instantly switch to working from home, and yet still have access to all the business systems and the files and the data that they need to do their work,” he says.

Another good reason why organizations are better served by moving into colocation rather than maintaining their own data center is the greater ease with which they can scale up their infrastructure, perhaps beyond the total capacity of their own-managed data center site.

Dedicated data center operators, such as Vantage, have the skills to help customers plan future expansion of their data center operations, apply additional capacity, and also support them with high-density cabinets, if required. This means enabling customers with rack densities up to 100kW cabinets, a capability that would likely prove difficult for them to operate in an on-site data center.

Meanwhile, data center operators also tend to work closely with

wholesale equipment providers and systems integrators, and the economy of scale that their colocation sites operate at means that the vendors are better placed to support them rather than a business with its own small self-contained data center. The cost benefits of this economy of scale are another reason why it is more cost effective for organizations to choose colocation.

Of course, there are reasons why some organizations may be reluctant to give up their own data center. Often, these concerns center around the desire to retain control over IT infrastructure, and managers may perceive that moving all their mission-critical IT assets into a location that they do not own as risky, especially as it is sitting in a facility along with infrastructure belonging to unknown third parties.

However, it is widely accepted in the industry that data center providers offer a much higher level of physical security than an enterprise's own premises, as detailed above. In addition, service providers typically have specialist resources and staff dedicated to cybersecurity concerns, which means they can more quickly identify threats and better mitigate

risks than in-house IT specialists.

So while every organization has its own unique needs and requirements that influence which data center choices they make, there are fewer and fewer reasons for an enterprise to own and manage its own data center.

“In my opinion, and this is shared by just about everybody in the data center industry, there is no business in the world that should be doing their data center operations in house, and by that I mean no enterprise business,” says Sandars.

“The big guys who run their own data centers, the hyperscalers, they have the resources to run their own buildings, they have their own teams doing that. But a bank, a manufacturing organization, or even an IT services company should already be using outsourced data centers because it's not their core business, and it's not the core focus of their facilities team either.”

