Top 5 data centre pain points... and remedies for overcoming them
Practical advice for avoiding the most common stumbling blocks on the journey to a next-generation data centre

The data centre continues its steady evolution from a mega facility, filled with disparate technologies that are difficult to integrate, maintain, and manage, into a more agile business response centre. While these present exciting opportunities for IT leaders, we need to be mindful that the journey to a next-generation data centre doesn’t happen overnight ... and that it may be littered with potential hazards. Read on to find out how you can ease the five most common data centre pain points – and put your data centre transformation journey on the fast track.

Pain point #1: My IT processes don’t cater for both on-premise and cloud-based data centre infrastructure.

Existing IT processes pose a significant stumbling block for many businesses looking to take advantage of transformational technologies. That’s because process requirements change significantly when you go down this path. Frank Casey, Dimension Data’s Group Director, Managed Services for Data Centres, explains: ‘In today’s age of technology, we still find that many businesses haven’t defined processes or documented standard operating procedures for their existing infrastructure. What’s the process when systems need to be shut down and then brought back online in the event of a test or, worse still, a disaster? Without this level of insight and detail, it’s very difficult to automate specific processes and reduce the level of human effort required to run your operations. This in turn hampers your ability to take advantage of technologies such as virtualisation and, of course, cloud, which is founded on the notion of self-service.’

Build versus buy?

Casey explains that to overcome this challenge, organisations are increasingly looking to engage the services of cloud and managed services providers, as this enables them to access ‘built-in’ automation. ‘These providers have already made the necessary investment in standard frameworks and operating procedures, and apply industry-certified processes, all of which drive high levels of automation,’ he says. ‘By using their services, you can benefit from this automation without having to make the same investment in time, money, and resources. In addition, you only pay for the services you use, when you use them, and you don’t need to worry about network quality of service.’

When selecting a partner, Casey believes organisations would do well to select one that also has consulting and systems integration capabilities. ‘As part of this process, most businesses will require guidance on which workloads are ideal initial candidates for virtualisation or a move into the cloud, and which should remain on-premise.’

Pain point #2: Technology is moving so fast – I can’t keep up.

While a steady stream of innovative and transformative technologies continues to enter the market, taking advantage of them isn’t always that easy. ‘Many IT leaders are unable to leverage new data centre technologies due to the process changes and other investments needed to support them,’ says Kevin Leahy, Dimension Data’s Group General Manager for Data Centres. ‘Often, vendors will introduce new technologies that supposedly come “in the box”, yet many organisations lack the skills to unlock their true value.’

Game of catch up

‘The result is that the time-to-value is too long. By the time the organisation has invested time and resources in updating its processes, deployed the technology in a test environment, ironed out any teething problems, and finally taken it into production, months or years may have passed. And in the meantime, technology has continued to advance at pace, and the organisation finds that it’s fallen behind the curve once again.’

For these reasons, many turn to a managed services provider that:

• has already invested in the relevant tools and automation technologies, and regularly updates its functionality
• has architecture and processes that are designed to support modern infrastructure and emerging trends – as well as more traditional technologies
• can work with them to determine how to extract the most out of new technologies, and integrate them with legacy infrastructure

‘Such a partner can help you to look beyond the technology, and focus on the outcomes that you want to achieve as a business,’ Leahy adds.
Pain point #3: Data compliance rules are interfering with my big data ambitions

Increasingly, businesses need to turn data into a strategic tool. To do so, they need to gather it from various sources, analyse it, and move it both geographically and between different types of storage, depending on its criticality and usefulness at specific points in time. ‘Unfortunately,’ explains Leahy, ‘most organisations’ existing processes weren’t designed with this in mind. They were created to deal with traditional databases, not large volumes of different information originating from various sources. The challenge for today’s businesses is to find ways to extract value from their data, without compromising compliance regulations relating to where and how different types of data may be stored... or letting costs spiral out of control.’

Balancing act

Policy-based automation is a critical element in striking a balance between big data and compliance. That’s because anything that involves manual, human intervention, is ultimately going to result in a breach in compliance – at some point people will make mistakes. But how do you achieve this, given all the new sources of data you need to manage?

One option is to offload operational compliance to a provider that’s proficient at managing such activities at scale, and across industries and geographies. This approach is particularly effective for disaster recovery and business continuity. By engaging a provider to deliver disaster recovery services, you eliminate the need to build and manage your own secondary facility. In addition, providers’ data centres will typically be far more reliable and automated than those you build and operate yourself.

Pain point #4: I’m not sure I really want to own – or manage – my own data centre at all.

Owning and operating your own data centre can be costly. If you’re on a tight budget, you may find that once you’ve made the necessary investments in the infrastructure that’s running your applications inside the data centre, there’s little left over to spend on the maintenance of the facility itself. Some businesses outsource the facilities management responsibility to a third party, but often the results are less than satisfactory.

Go to co-lo

Given these issues – and the ever-increasing costs of real estate, energy, and human resources – the option of moving parts or all of you data centre to a co-location facility may be attractive. Often, these considerations are prompted by a compelling event, such as limited power capacity or diminishing available floor space.

The advantages of co-location are compelling and include:

- excellent network connectivity;
- lower power costs
- centrally delivered services to any location
- full maintenance and management of the facility
- on-site, skilled resources, who are available 24/7

Pain point #5: I’m not in the business of IT, I need to focus on my core capabilities.

The desire to invest less time and money in IT processes – and more on core business applications – is a common pain point among IT leaders. Managed services can provide a remedy. Typically, managed services providers have:

- invested significantly in their facilities, over a long period
- implemented industry best practices and standards, resulting in high levels of automation – so you don’t need to invest in developing your own

Once you have highly automated processes in place you can spend less time focusing on the technology itself and more on finding ways to align your IT organisation with the business. A managed services provider also provides relief from the headache of finding, hiring, and retaining scarce technical talent. So it’s not just about asking yourself ‘What don’t I want to do anymore?’ You also need to consider what higher-value activities you could be performing instead.

Exit strategy

Fear of being ‘locked in’ to a contract and losing architectural control makes some IT leaders hesitant about going down this path. Leahy explains: ‘The longer-term benefits that this approach promises in theory are often held back by businesses’ concerns about their ability to extract themselves from contracts that they feel are no longer serving them well. This is where the value of standardisation comes into play – particularly when you’re considering cloud services.’ Leahy’s advice is to look for a partner that:

- implements open standards
- has built its cloud platform on the same enterprise-grade architecture and technologies that reside within your own data centre
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