RESEARCH REPORT

FASTER, GREENER, CHEAPER

Dealing with IT infrastructure complexity in a hybrid cloud world

THE CHANGING FACE OF THE IT LANDSCAPE

The business systems and IT landscapes organisations need to manage have significantly evolved over the last five years. The pandemic was understandably a huge driver of change, with most organisations having to quickly bolt on new capabilities to support remote working and keep day-to-day operations running. But those 'temporary add-ons', plus the many others implemented since, are now embedded in many organisations.

The operating environment has changed too. Alongside increasing competition and globalisation, and continuous political and supply chain instability, we also have consumers' heightened expectations for seamless and personalised digital experiences. The impact on IT? Teams are having to enable greater business flexibility than ever before, while simultaneously driving operational efficiencies and supporting sustainability agendas.

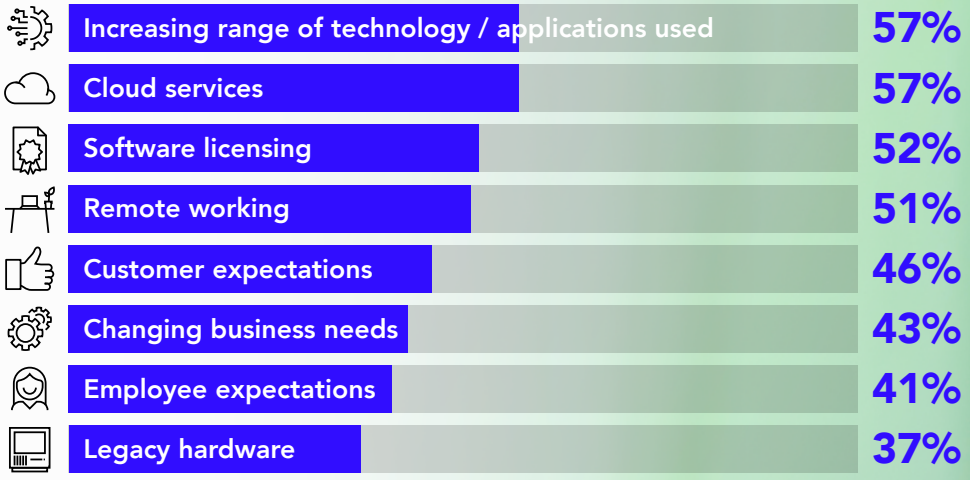
For this report, we talked to more than 250 senior IT decision-makers (ITDMs) at large private and public sector UK organisations (250+ employees). We've uncovered what they consider to be the main IT infrastructure challenges facing them and their teams today, and how they can overcome these issues.

Part 1:

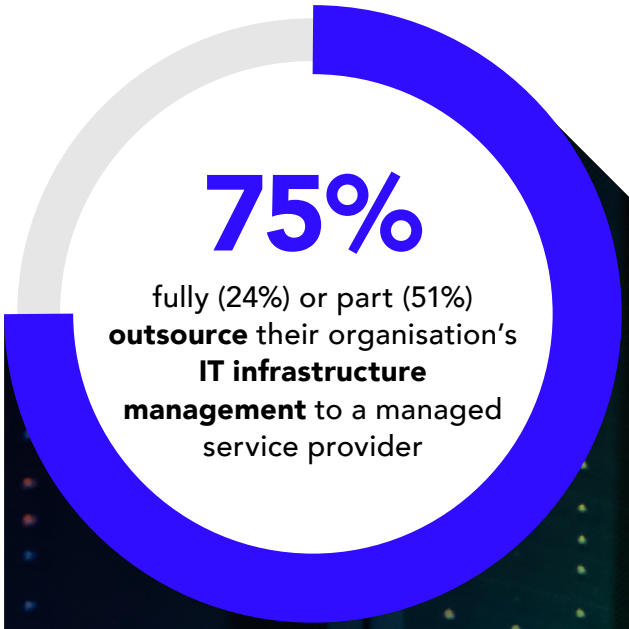
THE STATE OF IT INFRASTRUCTURE TODAY

IT is at the heart of every organisation. It not only supports the running of day-to-day operations, but also enables the projects and initiatives that deliver on every business strategy. However as digital transformation is accelerating, so is the complexity of the IT landscape. Pandemic-related technology investments have significantly contributed to this complexity; the range of technology and applications in use has increased along with a shift towards using more cloud services. This has made it much more difficult for IT leaders to have complete visibility into the performance of their IT infrastructure.

Top contributors to IT complexity

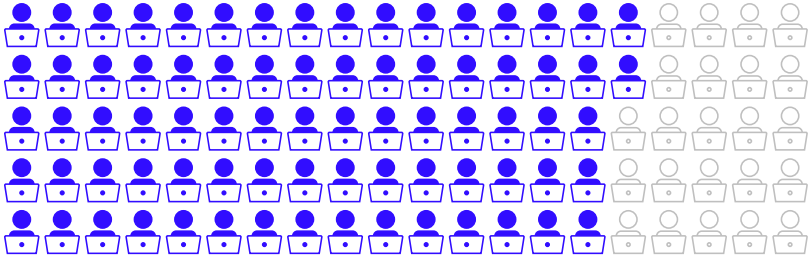


The global talent shortage is also an issue for IT teams, with many organisations lacking the necessary skills and expertise in-house. As skilled employees leave, it's proving hard to replace them – leaving many IT departments unable to meet the needs of the business at the speed required.



fully (24%) or part (51%) **outsource** their organisation's **IT infrastructure management** to a managed service provider

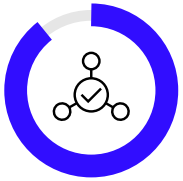
77% of ITDMs say a **lack of the necessary skills and resources in-house** prevents them from meeting the needs of the business, at the speed it requires



Some organisations are choosing to combat this skills shortage by outsourcing all or part of their IT infrastructure management to a managed service provider. This approach gives organisations access to the specialist technology skills they need, at the point they need them.

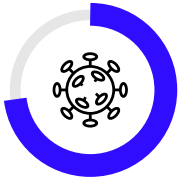
Main drivers for outsourcing

90% of ITDMs say **building, managing and maintaining** their IT landscape has become more complex



89% say simplifying IT infrastructure management is a priority for their organisation

59% of ITDMs say they lack complete visibility into the performance of their IT infrastructure



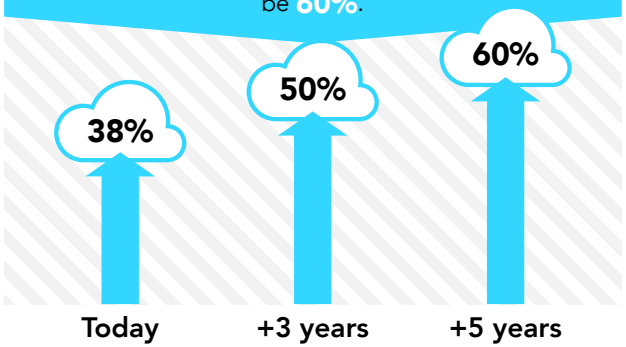
73% of ITDMs say pandemic-related technology investments have created additional IT infrastructure management challenges

Part 2:

CLOUD: A WINNING STRATEGY, BUT NOT YET FOR EVERYTHING

The business benefits of the cloud are clear: organisations making the move are seeing increased transaction and processing speeds, and improved agility and scalability. They're also finding cloud to be a great future-proofing technology, ideally suited to emerging data – and power-intensive use cases, such as artificial intelligence (AI) and machine learning (ML), edge processing, and data analytics. So, it's no surprise that cloud usage is continuing to increase in organisations of all sizes.

On average, ITDMs estimate **38% of their IT estate is currently in the cloud**. In three years' time they estimate it will be **50%** and in five years' time it will be **60%**.



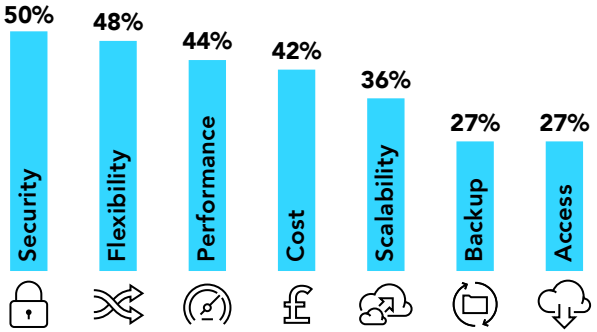
However, organisations are finding that their ability to harness the power of the cloud depends largely on their existing IT landscape. The biggest barrier to success is that the greater the complexity of the existing IT infrastructure, the greater the work to migrate it to the cloud. At the same time, data security concerns continue to pose a significant challenge for organisations interested in moving more of their IT estate to the cloud.

Top challenges facing organisations moving more of their IT estate to the cloud

Complexity of existing IT infrastructure	50%
Data security concerns	46%
Complexity of growing multi-cloud environment	40%
Application modernisation/transformation challenges	40%
A lack of internal skill/resource	36%
Data sovereignty/compliance challenges	35%
A lack of budget	31%

As a result, many organisations have ended up with a hybrid cloud environment by accident rather than design, with applications and services running across a variety of public cloud, private cloud, and on-premises platforms. In today's hybrid cloud world, it is vital that an organisation's infrastructure is secure and able to dynamically adjust to workload demands. But the multitude of different environments and tools in use make it hard for organisations already struggling to gain the end-to-end visibility needed for consistent security and reliability.

Most important factors when it comes to on-premises/hosted IT infrastructure



62% of ITDMs say they have ended up with a **hybrid cloud environment** by accident rather than by design

Only **30%** of ITDMs say their existing IT infrastructure can "very effectively" dynamically **adjust to workload demands**

61% of ITDMs worry the growth of AI-related workloads will place a huge burden on their organisation's IT infrastructure

Part 3:

THE STRATEGIC IMPORTANCE OF SUSTAINABILITY

Today, sustainability is an important business differentiator. Customers are increasingly choosing sustainable and ecofriendly options, while more job seekers are looking to work for companies that share their social and environmental values.

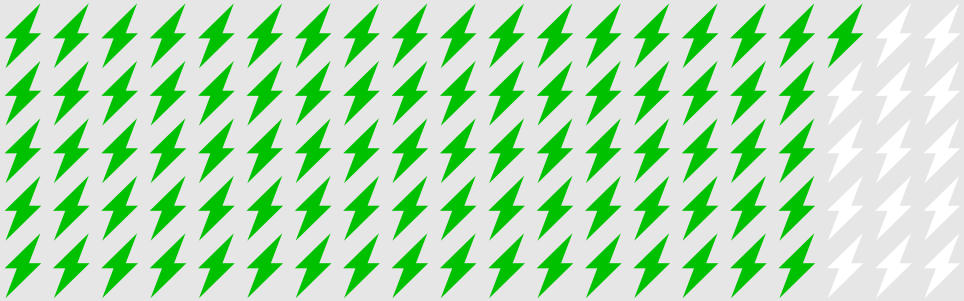
This focus on corporate and social responsibility is filtering through to IT teams, with many organisations now looking at the sustainability and energy efficiency of their IT operations. While IT teams in most organisations have been given IT sustainability targets, they aren't at all confident that they can meet them.

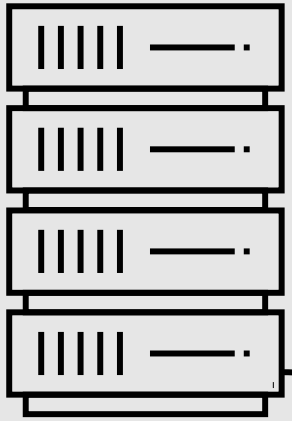
One of the biggest hurdles for IT teams is legacy and on-premises infrastructure, with a large number of teams defining legacy tech as 'a sustainability nightmare', as well as a massive contributor to overall IT power consumption. Organisations are increasingly benefitting from the sustainability features of their cloud providers, many of which run at very high efficiency levels and use sustainably sourced power. But this leaves organisations with legacy hardware that's hard to migrate, unable to realise the full benefits of their cloud providers' eco-credentials.

84%
of ITDMs say their organisation has IT sustainability targets in place...

...but only
51%
of those are "very confident" of meeting these targets

86% of ITDMs say **sustainability** and **energy efficiency** is important to their IT operations





On average, **legacy hardware** contributes to
37%
of organisations' overall IT power consumption

63% of ITDMs say their legacy IT infrastructure is causing them a huge sustainability nightmare

Part 4:

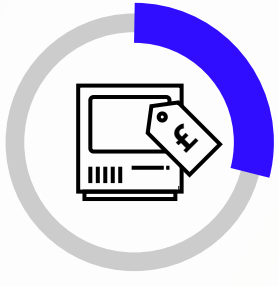
IT SPENDING IS UNDER PRESSURE

A global economic slowdown, increasing supply chain uncertainty, high inflation and the cost-of-living crisis all add up to a very tough operating environment. Businesses are having to adapt quickly to survive. Driving efficiencies is a big part of businesses' survival strategies today, which is having a huge impact on IT teams.

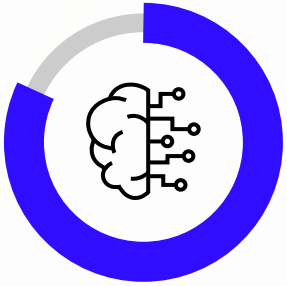
IT leaders are under pressure to reduce capital expenditure, with many using cloud services to turn capital infrastructure expenses into opex costs. IT teams are also looking to consumption-based pricing to reduce ongoing costs and increase flexibility by paying only for what they use – scaling up and using more resources at peak times, and then reducing resources and costs again afterwards.

However, many organisations with legacy hardware are struggling to achieve these savings as they are still incurring significant maintenance and support costs.

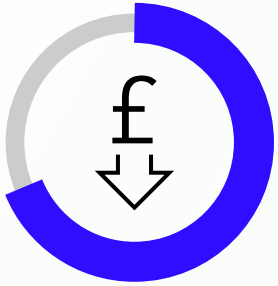
IT teams are also starting to think about how new technologies can increase productivity and drive efficiencies. For example, many IT leaders expect to see the benefits of using artificial intelligence and automation (e.g., AIOps) to augment processes in areas such as service management and performance management.



On average, **29%** of IT budgets are being spent on supporting, maintaining and managing **legacy hardware**



82% of ITDMs think **AIOps** will enhance IT operations at their organisation in the future



69% of ITDMs are under significant pressure to reduce IT **capital expenditure** at their organisation

86% of ITDMs think moving to a **consumption-based** IT infrastructure model will benefit their organisation

Conclusion:

CREATING A FUTURE-PROOF HYBRID CLOUD PLATFORM

IT infrastructure remains a key part of delivering ongoing business success against a backdrop of constantly changing industry and business challenges. Most organisations are adopting cloud solutions in some form, and starting to gain the benefits of speed, flexibility, agility and consumption-based pricing. But many have found it difficult to move wholesale to the cloud, often because of an overly complex IT landscape and the burden of legacy infrastructure and applications that simply cannot be migrated.

However, organisations restricted by legacy infrastructure do now have the option to create a cloud-like experience across their entire IT landscape. HPE GreenLake, delivered by hybrid cloud experts Daisy, bridges the gap between on-site infrastructure and cloud with a single platform that brings the cloud experience to apps and data where they must live. This means monthly consumption charges with no up-front costs, and scalability up and down, on dedicated infrastructure in any data centre.

Working with Daisy means access to a trusted HPE Gold Partner who can help you to simplify your IT operations. We can help you manage performance, cost, security and compliance across the hybrid, multi-cloud estate to reduce risk and accelerate the business. The goal is to help you deliver the business outcomes that you need, by delivering cloud services for your infrastructure, platforms and management as well as your most demanding workloads.

For more information our specialists are at hand:

Call: 0344 863 3000

Email: enquiries@daisyuk.tech

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