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95 new data centres: overkill or essential for the UK IT sector?

Shortly after the recommendation that Britons should delete old emails to save water comes the news (from Barbour ABI) that the UK is expected to see 95 new data centre projects commence within the next 12 months, most of which will be completed by 2030.

These new data centres represent almost a fifth of the UK's current 477 facilities – a staggering amount, considering that the UK is already the world's third largest data centre region, trailing only the USA and Germany. While most of the new facilities will be in London and the Southeast, nine are planned in Wales, one in Scotland, five in Greater Manchester and a handful in other parts of the UK.

The demand for ever-increasing data centre capacity has been credited largely due to the rise of AI; and the UK's digital infrastructure, too, relies on more data centres to be built for storage. Moreover, the government has made clear it believes data centres are central to the UK's economic future - designating them critical national infrastructure.

"The reality is that all of us – whether we think of ourselves as 'tech users' or not – already rely on data centres every day," notes Mike Leaford, Associate Director, Arup. "A 96-year-old who reads a library book, pays in cash at the newsagent, and makes a rotary-dial phone call and has no idea what a data centre is, is still indirectly using data centres at every one of those steps. At the other end of the spectrum, teenagers practically live in the cloud - every photo, payment, revision note and driving test booking flows through multiple data centres."

However, serious concerns have been raised about their impact, encompassing pressure on power and water networks, sustainability, and a potential knock-on effect on people's energy bills. Indeed, Stewart Laing, CEO, Asanti Data Centres, says that the question isn't whether 95 new sites are needed, but how we deliver them in a way that maximises efficiency and sustainability.

"Modern data centres are a world away from the water draining, power-hungry image many people still hold. Closed-loop cooling systems means they don't constantly draw water, while continual improvements to drive as low a PUE (power usage effectiveness) score as possible means that we're constantly looking at ways to drive efficiencies," says Laing. "The real opportunity in the UK is to connect directly to renewable energy via private wire: last year alone the UK paid hundreds of millions in restriction payments, payments made to wind farms to restrict power generation because the National Grid cannot absorb the power. Allowing data centres to use that clean energy, save money and eventually drive down the cost of power, would make the UK a more attractive place for investment."

"The question isn't whether we need them, just as the challenge isn't whether we build them - but how we make their footprint as sustainable as possible, while recognising that AI and the digital economy will only fuel further demand," adds Leaford. ■

IN DEPTH: Circular economy, P7-8

Boldyn Networks and VMO2 deploy first full neutral host 5G network at Stadium of Light

Boldyn Networks and Virgin Media O2 have jointly delivered a major upgrade to 5G connectivity at Sunderland's Stadium of Light, deploying the UK's first full neutral host Radio Access Network (RAN) managed service tailored for high-density venues.

The innovative connectivity-as-a-service (CaaS) solution, part of the Sunderland Open Network Ecosystem (SONET) project, brings enhanced mobile coverage to the iconic stadium, transforming the fan experience during live events.

O2 customers are the first to enjoy the benefits of this cutting-edge network, which is designed to support increased data demands and deliver richer, more reliable connectivity. The deployment represents a significant technological leap, showcasing the potential of open RAN technology with an advanced connectivity platform that combines an evolved Distributed Antenna System (DAS) supporting O-RAN fronthaul standards and JMA XRAN®, a pioneering 5G O-RAN technology stack integrated with Boldyn's Network Management System (NMS). This fully virtualised platform reduces the space and power footprint by up to 60% compared to traditional indoor architectures and lowers operational costs through automation and digital service assurance.

The dedicated network management, monitoring, and optimisation resources provided by Boldyn's CaaS mean the venue benefits from enhanced service reliability with minimal involvement required from the mobile operator's internal teams. For spectators, this upgrade delivers seamless high-speed 5G connectivity, enabling real-time video uploads, social media interaction, and other digitally enabled services such as in-seat food ordering and safety features, significantly enhancing the overall experience.

This initiative is part of the broader SONET programme aimed at driving innovation and digital transformation across Sunderland, including the deployment of high-speed 5G at the Stadium of Light and the new British Esports Arena. Supported in part by funding from the UK's Department for Science, Innovation and Technology (DSIT), the project exemplifies successful collaboration between public and private sectors to deliver top-tier digital experiences for fans and visitors alike.

"This project underscores our commitment to delivering innovative connectivity solutions that enhance the digital experience for users in high-density environments, without sacrificing cost or energy efficiency. The launch of CaaS at the Stadium of Light is a testament to Boldyn's dedication to pushing the boundaries of digital connectivity and setting new standards in the industry. We are proud to contribute to the SONET project and to bring more engaging interactions to stadiums and arenas across the UK," said Brendan O'Reilly, CEO of UK & Ireland at Boldyn Networks.

"We have a long history of providing our customers access to the best live entertainment, so it's only natural they benefit first from the next-generation 5G network at the Stadium of Light. Our Mobile Transformation Plan is focused on improving connectivity for our customers wherever they are, and this collaboration with Boldyn Networks ensures match-goers enjoy a seamless experience," said Dr Rob Joyce, Director of Mobile Access Engineering at Virgin Media O2.

"The launch of an enhanced 5G network at the Stadium of Light marks a significant step forward for both our club and the city. This technology will unlock exciting opportunities to improve the matchday experience through faster connectivity, richer content, and more immersive engagement. It reflects our ongoing commitment to putting fans at the centre of everything we do and aligns with Sunderland's vision for innovation and growth, helping to create a smarter, more connected community," said David Bruce, Chief Business Officer of Sunderland AFC. ■

UK banking leaders frustrated by misleading cloud claims

A recent survey has revealed widespread dissatisfaction among UK banking innovation leaders regarding the authenticity of cloud technology claims in core banking systems.

The research, conducted by SaaScada, shows that a significant majority of senior banking executives are frustrated by what they term 'cloudwashing' — a practice where legacy systems are marketed as cloud-native despite offering limited genuine cloud capabilities.

The survey found that cloud migration is nearly universal across the UK banking sector, with 95% of institutions either having already moved or planning to move core banking workloads to the cloud. Leaders cited scalability, enhanced control over product development, and cost efficiencies as the primary motivations behind these initiatives. However, despite the enthusiasm for cloud adoption, many have encountered challenges, discovering that not all solutions deliver the true benefits associated with cloud-native systems.

The prevalence of cloudwashing is striking, with 39% of the 150 UK banking leaders admitting to having purchased systems labelled as 'cloud' that ultimately lacked authentic cloud features. An additional 23% expressed difficulty in determining whether the solutions under consideration were genuinely cloud-native. Consequently, only 38% of respondents expressed satisfaction that their core banking systems truly matched the cloud capabilities marketed by vendors.

"Adopting a 'cloud' core banking system that isn't truly cloud-native won't automatically resolve existing challenges. Cloudwashing often clouds the real picture, so it's crucial for banking leaders to do thorough research. A genuine cloud-native system should be born in the cloud, offer real-time data access, and provide architectural flexibility to foster innovation," said Nelson Wootton, CEO and Co-Founder of SaaScada.

While the motivations for cloud adoption are clear — primarily scalability and operational reliability — many banks are not experiencing the anticipated benefits because their systems lack true cloud architecture. This disconnect could have serious implications for competition and innovation, especially as traditional banks struggle to respond as swiftly as newer entrants.

SaaScada outlined five key characteristics that banks should look for in evaluating cloud-native core banking platforms. These include low initial setup costs, flexibility in product design and deployment, no mandatory downtime for upgrades, access to real-time customer data, and unlimited scalability. Industry experts emphasise that both technical and procurement teams must scrutinise vendor claims carefully and understand the underlying architecture to ensure that their digital transformation goals are genuinely being met.

The survey was conducted in March 2025, gathering insights from 150 senior leaders across UK retail and business banks, including Heads of Digital Transformation, CTOs, and Chief Innovation Officers. These institutions ranged in size from £0.5 billion to £100 billion in balance sheets, reflecting a broad spectrum of the industry's approach to cloud migration and digital transformation. ■

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Colt Technology Services confirms data breach following cyberattack

Colt Technology Services, a major provider of business communications and internet services, has issued an update after suffering a significant cybersecurity incident resulting from a breach of its internal business support systems late in August.

In response, Colt proactively took some systems offline to contain the threat, but it has now confirmed that a data breach has occurred, with sensitive information potentially compromised.

The incident began on the morning of 12th JULY/ AUGUST 2025, when hackers — believed to be part of a ransomware group — exploited a vulnerability in Colt's internal systems. The breach is thought to have occurred through the sharehelp.colt.net server, linked to a critical vulnerability in Microsoft's SharePoint platform (CVE-2025-53770), which has been rated with a severity score of 9.8 out of 10. However, Colt has yet to officially confirm the specific entry point.

In the wake of detecting unusual activity, Colt took key systems offline — including the customer portal, Network-as-a-Service (NaaS) portal, and Voice/Number API platform — to prevent further damage and began efforts to recover operations. The disruption has impacted service delivery, including delays in new service orders and customer support functions, which have been affected due to the shutdown of automated processes.

It has now emerged that the hackers have accessed and stolen some data, with reports indicating that customer information, employee details, financial data, network configurations, and software development information may have been compromised. The official Colt Cyber Incident webpage remains somewhat vague, but the company has acknowledged that files have been taken and that the threat actors are now attempting to sell hundreds of gigabytes of stolen data online, including details such as employee salaries, customer contracts, and internal network information.

In an official statement to customers, Colt's Chief Commercial Officer Annette Murphy confirmed that the breach involved files containing sensitive data, some of which have been posted on the dark web. Colt has notified regulators and law enforcement and is working with external forensic experts and investigators around the clock to assess the scope and impact of the breach. The company reassured clients that the affected systems are isolated from their core customer infrastructure and promised to share further details as the investigation continues. ■

Workday cyber-breach highlights rising threat of social engineering

Workday has disclosed a data breach resulting from attackers exploiting a third-party Customer Relationship Management (CRM) platform through social engineering tactics.

The company confirmed that no customer core systems or tenant data were compromised, with the information accessed limited to business contact details such as names, email addresses, and phone numbers.

Discovered on 6 August and publicly disclosed on 15 August, the breach involved malicious actors impersonating HR and IT personnel to deceive employees via SMS and phone calls. This enabled the attackers to gain access to the CRM system through compromised OAuth applications. Since the incident, Workday has taken steps to block unauthorised access, implemented additional safeguards, and urged stakeholders to remain alert against phishing and vishing attempts. The company emphasised that legitimate communications will never ask for passwords or sensitive information over the phone.

This incident follows a growing pattern of CRM-targeted breaches affecting major organisations like Google, Adidas, and Qantas, exposing the increasing risks associated with OAuth abuse and third-party integrations in enterprise environments.

Security experts warn that the breach underscores the persistent dangers posed by social engineering and the vulnerabilities introduced through third-party applications. ■

Network and Security Products on Your Terms - Why OMNIA Bundles Mean You'll Never Pay for Just SD-WAN Again

It's time to break free from tech giants' stranglehold – that means no more paying for standalone SD-WAN, no software maintenance charges, no bandwidth tier fees or multi-year lock-ins draining budgets and trapping you in strained long-term relationships. ATOMNIA breaks the mould and the hold that tech companies have had on businesses.

As SDWAN Solutions becomes ATOMNIA, it's a change to the way connectivity and cybersecurity are delivered and consumed - driven by OMNIA, the company's all-in-one, affordable, advanced connection and protection solution. This scalable, modular platform seamlessly blends the latest hardware & networking technologies, world-leading SASE frameworks, multi-layered encryption, XDR, multi-cloud access and advanced remote working and IoT solutions with flexible, subscription-based control.

Every OMNIA bundle includes ultra-fast, always-on ATOMIUS SDWAN as standard, so you'll never pay extra just to stay connected. Businesses can select, stack and scale the security and ICT features they need, all seamlessly integrated, then expertly managed (or co-managed) and supported by ATOMNIA's team.

"With OMNIA, you choose exactly what fits your needs now, then scale more components later as need arises, all with flexible contract terms and payment options," says Anthony Senter, ATOMNIA Co-Founder and CEO. "Our futureproof re-tech promise ensures you're always up-to-date and cyber secured by the best performing solutions."

Bundle options include OMNIA SME for growing businesses, OMNIA BLACK for enterprise-grade, quantum-ready no-compromise security, OMNIA CORE for fully custom deployments and OMNIA RED, the company's wholesale offer for telcos, MSPs and Sis.

Existing OMNIA customers have reported cost reductions of 40-50%, increased performance, increased productivity, continual enhancements, as well as seamless integration into existing infrastructure and "world-class support".

With ATOMNIA's rapid growth across Europe, APAC, Africa, the UK and Ireland, OMNIA is proof that there is a real hunger for affordable, intelligent, all-in-one network and security options.

Read the full interview with Anthony Senter, to find out why ATOMNIA is now the go-to alternative for customers seeking advanced, yet affordable alternatives to over-priced and underperforming solutions.

ATOMNIA

Capgemini's TryZone IQ provides AI-powered match analysis for Women's Rugby World Cup 2025

Capgemini's TryZone IQ, a cutting-edge generative AI-driven technology designed to provide live match analysis and contextual insights will be deployed during the Women's Rugby World Cup 2025 broadcasts worldwide.

This innovative tool aims to support commentary teams by delivering real-time match data, allowing rugby fans to access instant, concise information that deepens their understanding of the game as it unfolds. Notably, TryZone IQ marks the first instance of generative AI being utilised at a Rugby World Cup.

Developed in partnership with World Rugby and Opta, TryZone IQ leverages both historic and live match data, including player actions, team strategies, and overall match statistics, updating every minute. Its AI engine processes this data to generate brief, easy-to-understand text summaries which commentators can incorporate into their live commentary. The system is designed to facilitate effective collaboration between human analysts and AI, with commentators retaining full editorial control over which insights are broadcast or shared across digital and social media platforms.

Capgemini highlighted that over half of sports fans now rely on AI or generative AI as their primary source of sports information, with 67% seeking platforms that aggregate content seamlessly. The introduction of TryZone IQ aims to deliver timely, relevant insights that support storytelling and enhance the viewing experience for both dedicated supporters and newcomers to women's rugby.

The company collaborated closely with World Rugby and Opta to research fan behaviour and preferences, ensuring the technology's features align with audience expectations. The system transforms complex, raw game data into accessible narratives, making the sport more engaging, particularly as women's rugby experiences rapid global growth and attracts millions of new viewers.

"As women's rugby reaches new heights and the World Cup captures worldwide attention, we saw a unique opportunity to apply innovation to make the game more accessible and engaging for a broader audience. With TryZone IQ, we're harnessing the power of generative AI to provide fans with real-time stories, context, and clarity, helping them feel closer to the action and enhancing their overall experience," said Steven Webb, UK Chief Technology and Innovation Officer at Capgemini. ■

Benenden Hospital partners with LG Electronics for patient care

Benenden Hospital in Kent has partnered with LG Electronics to install 40 innovative digital screens in patient rooms, aiming to create a more personalised and calming environment for patients. This initiative is part of a broader effort to improve patient care through technology and artistic expression.

The hospital selected LG's 43UR762H displays — originally designed for hospitality settings — for their compatibility with hospital systems and their versatile content delivery capabilities. Patients are welcomed with personalised messages, and the screens provide access to wellbeing media, recovery guides, and the ability to stream content from personal devices, offering a familiar and engaging environment during their stay.

A key feature of the project is the integration of custom artwork, developed in collaboration with OOHSCREEN, a company specialising in digital art and signage. The artwork, inspired by the hospital's history and legacy, aims to reduce patient stress, anxiety, and pain — a benefit supported by research on the positive impact of art in healthcare settings. The displays' digital nature allows for easy rotation of themes and artworks, ensuring the environment remains dynamic and responsive to patient needs.

In addition to patient-facing screens, three control monitors have been installed for staff use, enabling real-time management of content, scheduling, and overall communication. The LG 43UR762H's Pro Centric technology allows the hospital to tailor and control messaging centrally, making it easier for staff to update content quickly and efficiently according to feedback or changing circumstances.

"We're always striving to offer a more personalised experience for our patients. Embracing innovation like this helps us create an environment where patients feel safe, relaxed, and supported in their recovery," said Claire Harley, Director at Benenden Hospital.

The project underscores the growing role of digital media in healthcare environments, demonstrating how technology can support personalised care, emotional wellbeing, and a more comforting hospital experience. As hospitals continue to adopt such solutions, Benenden Hospital's approach may serve as a model for integrating digital art and patient engagement into healthcare settings worldwide. ■

UK public sector faces continued challenges in digital transformation progress

A new survey reveals that the UK public sector is still grappling with the complexities of fully realising the benefits of digital transformation, with only 16% of organisations having successfully implemented comprehensive strategies across their entire operations — a decline from 23% in 2023.

The 2025 State of Digital report, conducted by Vanson Bourne on behalf of Unit4, surveyed senior and mid-level management across various sectors, including central government, healthcare, and non-departmental bodies, with 100 UK respondents participating.

Respondents highlighted ongoing frustrations with their existing IT systems, notably struggling to access data in real-time, a challenge exacerbated by an increase in manual data exports, which rose from 40% in 2023 to 50% in 2025. A significant 60% expressed scepticism about the effectiveness of transforming back-office applications alone to achieve interoperability, reflecting doubts about the impact of current initiatives.

Concerns over project delivery also persist, with 53% of those surveyed lacking full confidence that digital transformation programmes will be completed within budget, and 45% worried about delays in delivery. Less than half believe their investments have delivered value for money, highlighting the need for more tangible benefits from ongoing efforts.

"With the UK public sector under immense pressure to cut costs while improving citizen services, it is crucial that digital transformation strategies translate into tangible benefits swiftly. While the complexity of existing IT infrastructure presents challenges, there remains a strong commitment to modernisation. Leadership must provide clear strategic guidance, as adopting cloud-native applications can boost agility, enable rapid service scaling, and drive cost efficiencies," said Mark Gibbison, AVP of Global Public Sector and Higher Education at Unit4. ■

Word on the web...

How attacks on MCP servers could stymy AI rollouts

Mohammad Ismail, VP of EMEA, Cequence Security

To read this and other opinions from industry luminaries,

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The quantum countdown: why UK telcos must act now

Simon Dumbleton, UK CTO at World Wide Technology

Whilst AI continues to dominate headlines, the past few years have seen a quiet but equally significant leap forward with tech giants including Google, Microsoft, Amazon, many venture capital backed startups, and nation-states making rapid strides in quantum technology.

But like the internet and AI, the influx of new technology is not only an invaluable vehicle in spurring human progress; it can also introduce new threats. The most prominent of those threats with quantum computing is 'harvest now, decrypt later' where adversarial nation-states are harvesting and storing today's encrypted communications, with the intention of breaking the encryption once practical quantum computing becomes a reality. For the telecoms industry, which ranked in the top three most vulnerable sectors for cyberattacks, this is a very real threat and standardisation agencies are moving quickly to introduce remediations, most notably post quantum cryptography (PQC).

With the expectation from shareholders, potential investors, and executives to focus on more urgent challenges and other technologies such as AI, the migration to PQC is taking a back seat. As such, telcos must urgently address their preparedness for a quantum future or risk the integrity of their networks and the sensitive data they hold.

Prepare now to protect later

'Q-Day', the point when quantum computers can break current encryption, may come sooner than many expect. Quantum computers capable of this are known as Cryptographically Relevant Quantum Computers (CRQC). We've known for some time that attackers are already harvesting sensitive data, once quantum capabilities mature, customer information could be at risk.

It's worth noting that data, like anything else, has a lifespan. Your credit card information for example, may be sensitive today, but in five years when the card has expired or been deactivated, it's no longer useful to anyone. As the development of CRQCs progresses, the likelihood increases that data currently being collected will remain relevant when Q-day arrives.

While other time-sensitive matters exist, this transition will ensure critical futureproofing for telco businesses; those that delay may find themselves exposed to further regulatory pressure and large-scale reputational damage.

TSA compliance & quantum threats

Telcos have traditionally taken a risk-based approach to security, but with the introduction of the Telecommunications Security Act (TSA), the consequences of not doing something now are significantly more severe than ever before. The TSA is vague in its definition of 'secure' and 'best practice', particularly around the topic of encryption.

The CoP consistently references the National Cyber Security Centre (NCSC) and National Institute of Standards and Technology (NIST) websites when talking about 'secure' encryption. Both agencies, and others around the world, are relatively aligned on PQC deadlines, some more aggressive than others. Due to this vagueness, starting the transition to PQC sooner rather than later reduces the risk of a rushed and badly implemented PQC migration which could cause more challenges than it solves in the future.

Many major economies have an executive order or legislation mandating migration to PQC. The EU, for example, have mandated that all member states must start transitioning in 2026 and complete migration no later than 2030. This is well in advance of NIST/NCSC timelines. The TSA highlights 'best practice' for cryptography, so migration timelines will become mandatory for adherence. It's likely only a matter of time before the UK, like its allies, introduces explicit mandates for PQC migration.

Futureproofing starts now

While debate continues about exactly when Q-day will arrive, expert consensus is that it is inevitable. It's not a question of if but when and CISOs can no longer afford a 'wait and see' approach.

At the present time, telecom providers and operators should view the TSA as a catalyst to proactively prepare for this transition. This means preparing for change, new partnerships, and introducing in-house expertise to address both current and future threats. By implementing quantum-resistant encryption now, telcos can protect their data, customers, and reputation.

However, given telcos typically operate on a five-year procurement cycle, their current strategies are at risk of being unable to keep up with a technology which will increasingly undergo rapid change. With this in mind, as post-quantum cryptography emerges as a mission-critical technology with accelerating development timelines, telcos must decide: can they develop the necessary expertise internally to properly assess vendor PQC solutions, or will independent validation be essential to ensure quantum resilience and compliance?

Ultimately, whatever decision they do take, it must be met with immediate and proactive action, as any delays risks a slow but certain slide towards severe penalties for non-compliance and major vulnerabilities to cybercriminals both now and in the future. ■

Why every CIO needs a change management audit before a security breach forces one

Stephen Earl, Director, Cloudhouse

Change management is a fundamental IT discipline and process. Being aware of what is happening in your IT estate is key to having a secure and managed infrastructure and application landscape.

A good change and configuration management process provides you with the visibility of what is taking place in your IT estate and how it is evolving to meet your business needs. But it also allows you to check you are aligned to your own standards and policies alongside external standards.

A security breach or outage, for example, leaves IT systems exposed and can lead to significant remediation projects. The recent high-profile cyber-attacks against several high street retailers illustrates this growing and very real risk. Extensive audits take place into why the event happened – audits are still ongoing for last year's Microsoft's Crowdstrike outage, for instance – and then remediation projects are initiated to modernise systems and rectify vulnerabilities. However, an audit implies a heavy one-off event. Instead, change management should be weaved into business as usual.

Having confidence in your change management and enablement processes should be a given, and the use of these should be part of everyday activities. But how do you create a change process that reduces friction, isn't onerous and thus is there to watch your back?
For CIOs, it's about:

1. Small and steady improvements

It's crucial to strike the balance between enabling change and ensuring operational continuity. If too much change is done at once or nothing is done at all to modernise outdated systems, then in both situations companies can end up with significant gaps and vulnerabilities in their systems.

Incremental and low-risk updates can not only build resilience and reduce technical debt over time, but they also provide visibility into when security gaps emerge and allow you to manage them before they become threats. Keeping detailed changelogs and conducting configuration updates can be great ways to demonstrate compliance with internal and external standards too. Crucially, this normalises change.

2. Changing mindsets

Traditionally, change management could be seen as a major undertaking that didn't warrant its cost, the time it would take, or the disruption it would cause. Now, however, the scale of cyber-attacks happening to many high-profile organisations has put IT security much higher on the list of priorities for business leaders, if not at the top.

But this is where CIOs must model and advocate for proactive improvement, not just reactive fixes. Change management is not a one-time event but an ongoing way of working; it's crucial to reducing attack surfaces and ensuring operational stability.

Resistance to change can come from the perceived scale of updating existing critical business applications. But CIOs can educate leaders on the different options for modernising unsupported or outdated applications, such as redeploying them onto supported operating systems without needing to change the applications themselves.

3. Ongoing monitoring and collaboration

The key challenge in change management is maintaining oversight and hygiene of the entire IT estate. Where security vulnerabilities accidentally emerge is when there is a lack of alignment between how different elements of the estate interact with each other or teams not knowing what changes are being implemented by other teams.

It's why adopting a smart, centralised platform that can automatically and continuously monitor the whole IT environment can be a real asset. If teams have one view of their estate, they can spot and manage configuration changes and reconcile them in real time. If you can provide an evidenced trail of activities taken against your devices and configurations, you can enable faster time-to-incident resolution, increased awareness of the changes across your technology estate, and assurance that policies and standards are being adhered to.

Change management is a top priority

The current IT landscape is emphasising the importance of change and configuration management. But it shouldn't take a crisis to trigger an evaluation of the process. To avoid having to carry out a major remediation project and audit into IT failures, it's worth performing an audit of your change processes. To reduce friction in what can be an onerous activity, CIOs can adopt an approach that delivers small and steady improvements and gains buy-in from stakeholders across the company.

But true change management relies on having complete oversight of your entire IT estate.

This visibility means you can ensure devices are correctly configured, standards are being adhered to, and that changes do not accidentally lead to security holes and the damaging repercussions that can come from them.

In the current climate where security breaches are gaining visibility publicly, don't wait for your organisation to become a news story. By prioritising Change and Configuration management you get ahead of the pack, enabling IT estate visibility and insight before potential events force your hand. ■

Don’t bin it, spin it: how reuse is powering greener IT

Britain’s IT sector is learning that end-of-life doesn’t have to mean end-of-value. By embracing circular economy practices, organisations are cutting costs, reducing carbon, and giving technology a meaningful second life…

In server rooms and data centres across the UK, a quiet revolution is underway. Organisations are rethinking what happens to routers, switches, and laptops once they’ve reached the end of their ‘first life.’

Instead of consigning them to landfill, companies are adopting circular economy practices — refurbishing, redeploying, and recycling IT network equipment in ways that conserve resources, save money, and strengthen reputations.

“It’s increasingly feasible to scale circular practices,” says Emily Roberts, Head of Business Development at Absolute ITAD. “From compliance wins to cost savings, resilience, and reputational enhancement, the benefits are profound. The challenge is making sure organisations have the right skills, processes, and tracking systems — but those barriers are surmountable through targeted investments and partnerships.”

Why businesses are getting on board

Motivations for embracing the circular economy in IT are as varied as they are compelling.

Environmental sustainability tops the list. Extending the lifespan of equipment dramatically reduces lifecycle carbon emissions — crucial when as much as 80% of emissions occur before a device is even switched on. Recovering rare metals like copper, gold, and palladium from old kit also reduces pressure on global supply chains.

Cost is another driver: “refurbishment or redeployment costs much less than buying new,” explains Roberts. “Organisations can also generate revenue by reselling equipment and cut disposal costs.”

Marc Newman, CEO and Founder of Give IT Forward and Rec Assets Limited, adds that “while cost savings and efficiency are often the primary motivations for companies when managing their IT assets, I’m pleased to see a growing number of organisations considering how their obsolete equipment can be reused, recycled, or donated to charity. There is certainly more that could be done through regulatory incentives, but in my experience, it’s consumer expectations that are increasingly driving businesses toward socially responsible practices.”

For many, compliance is non-negotiable. The UK’s Waste Electrical and Electronic Equipment (WEEE) Regulations require businesses to recover and recycle IT gear responsibly, while data wiping ensures compliance with GDPR.

Then there’s the reputational edge. Companies are under pressure from investors, customers, and employees to demonstrate real progress against ESG targets. “Sustainability credentials are increasingly a badge of trust,” says Carl Greenwood, Business Development

Manager at Recycle IT.

Finally, resilience matters. Reuse and refurbishment help organisations sidestep global supply shortages and price volatility — a lesson painfully underscored during the pandemic.

From regulation to real-world impact

UK regulations have been instrumental in nudging businesses toward circular practices. WEEE rules set mandatory recycling targets, while standards such as BS 8001 provide a framework for businesses to embed circular economy principles.

"UK regulations have been instrumental in nudging businesses toward circular practices. WEEE rules set mandatory recycling targets, while standards such as BS 8001 provide a framework for businesses to embed circular economy principles."

Indeed, according to Greenwood, such regulations support and influence the implementation of circular economy principles through several key mechanisms:

1. **Waste Electrical and Electronic Equipment (WEEE) regulations:** These regulations mandate proper collection, recycling, and disposal of electronic waste, encouraging reuse and recycling of IT equipment to reduce landfill waste and environmental harm.

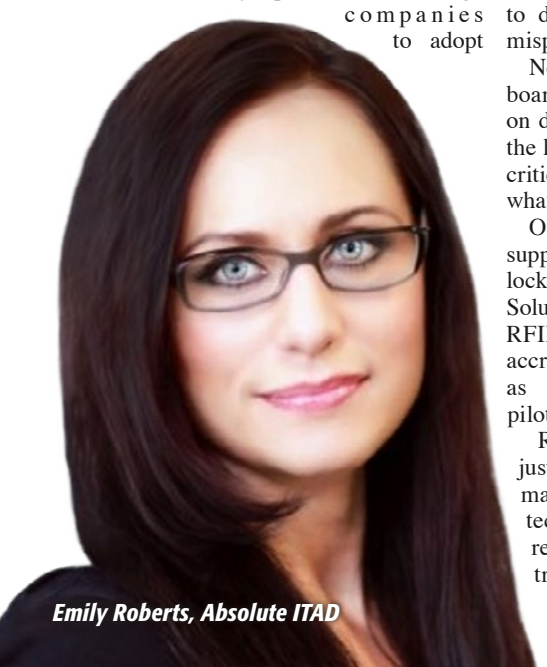
2. **Producer responsibility schemes:** UK policies promote extended producer responsibility, urging manufacturers to take accountability for the lifecycle impacts of their products, including design for durability, reuse, and end-of-life recycling.

3. **Environmental protection regulations:** Stricter standards for hazardous substances and waste management incentivise the design of more sustainable, less toxic IT equipment, aligning with circular economy goals.

4. **Environmental reporting and certification:** Regulations requiring organisations to report on their sustainability practices encourage companies to adopt circular strategies like refurbishment and responsible recycling.

5. **Incentives and funding:** Government grants and incentives support initiatives that facilitate circular economy practices, including refurbishing and resource-efficient management of IT equipment.

6. **Policy frameworks and commitments:** The UK's broader sustainability and carbon reduction commitments motivate organisations to integrate circular economy principles into their IT lifecycle management to meet environmental targets.



Emily Roberts, Absolute ITAD

"UK regulators increasingly recognise the importance of implementing circular economy principles and promote the 'reduce, reuse, recycle' approach through various regulatory frameworks," notes Newman. "ISO certification is a strong example, offering a structured standard for environmental responsibility. Another key enabler is the T11 exemption, which permits businesses like mine to refurbish Waste Electrical and Electronic Equipment (WEEE). Additionally, the Environment Agency's classification system helps support companies committed to managing the IT equipment lifecycle responsibly. UK also enables businesses to apply for an Approved Authorised Treatment Facility (AATF) licence — an important step that provides both practical support and motivation to grow a business in this vital sector of the economy."

Roberts adds that local initiatives such as Advance London also provide grants and platforms to support reuse and repair, making the leap to circular operations less daunting.

Obstacles on the road to circularity

Despite the momentum, challenges remain. One is a lack of technical skills in repair and refurbishment. Another is resistance at senior leadership levels, where decision-makers sometimes default to destruction rather than reuse out of misplaced data security concerns.

Newman recalls one case where a board overruled its IT team and insisted on destroying devices — despite the fact the hardware held no data: "it shows how critical it is to educate leadership about what secure reuse actually looks like."

Other hurdles include tracking complex supply chains, navigating manufacturer lock-ins, and managing upfront costs. Solutions range from barcode or RFID tracking to partnerships with accredited treatment facilities, as well as demonstrating clear ROI through pilot programs.

Roberts adds that cultural change is just as important as technical fixes: "for many organisations, the barrier isn't the technology — it's mindset. Building repair skills, introducing lifecycle tracking, and adopting repair-friendly contracts all help create a culture that sees equipment as an asset to be maximised, not a liability to be discarded."

The social side of circular IT in the UK

Circularity in IT isn't just about the environment or the bottom line. Increasingly, it's about social value. Newman founded Give IT Forward to help organisations donate retired IT equipment securely and responsibly.

"During the pandemic, schools and community centres were crying out for laptops and tablets," reports Newman. "Today, demand comes from a much wider range of charities supporting underprivileged communities. Knowing that a piece of kit you no longer need can change someone's life — that's powerful motivation."

This social impact dimension is often overlooked, but it resonates strongly with employees and customers. Donating IT equipment not only prevents perfectly usable devices from ending up in landfill, it bridges the digital divide — helping communities access education, employment, and essential services.

Best practices: what works in the UK

Case studies show that circular IT isn't just theory — it works in practice.

Give IT Forward recently helped a large organisation donate Microsoft Surface tablets that were less than five years old. By removing devices from remote management systems and refurbishing them, the company enabled the tablets to be donated to charities supporting young people from under-resourced communities.

Other standout examples, says Roberts, include:

- Circular computing and Atos/DEFRA, which supplied 34,000 UK government users with remanufactured laptops, cutting carbon footprints dramatically.
- E Cycle Limited, a non-profit refurbisher that has donated 30,000 PCs to Africa.
- The Royal Mint, which processes 4,000 tonnes of circuit boards annually to extract precious metals and recycle plastics.
- Westcon Comstor, which re-enters tested and repackaged network gear back into circulation.
- DTC Telecom, which hand-disassembles telecoms equipment, securely erases data, and recovers precious metals—all within the UK.

"These cases show the circular economy isn't just an ideal," says Roberts. "It's already happening — and at scale."

Measuring what matters

Tracking impact is vital for building trust and demonstrating value. Businesses are now reporting metrics such as tonnes of CO☐ saved, reuse rates, and reductions in virgin material usage. Some, like Circular Computing, highlight that remanufactured laptops emit just 6.34% of the CO☐ of a new device.

Frameworks such as BS 8001 and Life Cycle Assessment tools help organisations standardise their reporting, while integration into ESG and Scope 3 disclosures ensures sustainability isn't siloed but embedded across corporate reporting.

"Partnering with organisations like ours gives companies full transparency on how their donations directly support communities," says Newman. "It's about amplifying both environmental and social impact."

The future of circular IT

Looking ahead, industry experts agree that the circular economy in IT is poised for rapid growth. Supply chain pressures are unlikely to ease soon, rare metals remain finite, and the regulatory net is tightening. At the same time, younger generations entering the workforce expect businesses to take sustainability seriously — not just in words but in action.

For IT managers, that means embedding circularity from the ground up: designing networks with longevity in mind, documenting compliance rigorously, and choosing partners that can demonstrate responsible reuse and recycling practices.

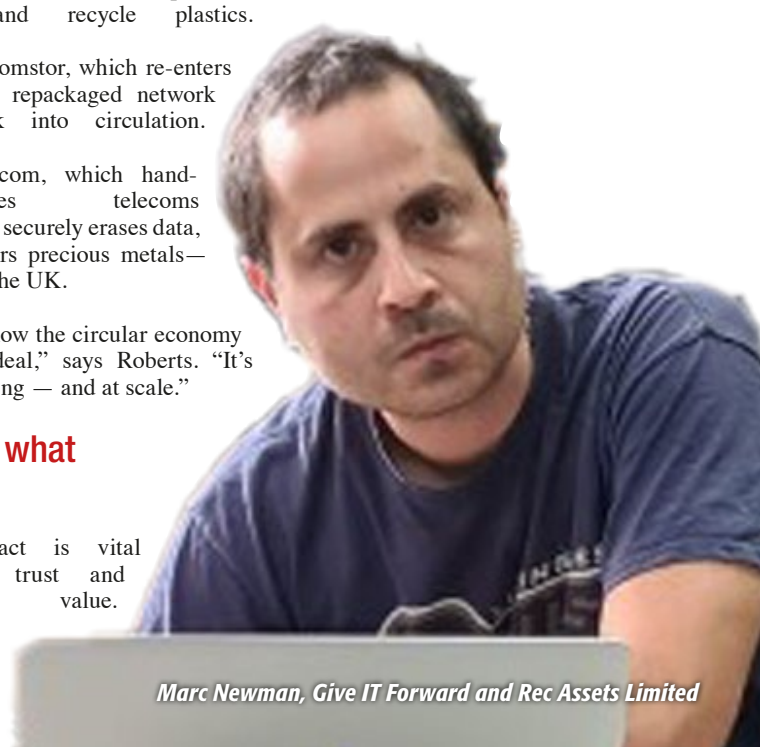
Cultural resistance will remain a challenge, but education and evidence can win hearts and minds.

"Show the board how circular practices save money, reduce risk, and enhance reputation," says Roberts. "Once leadership sees the data, they usually stop asking why and start asking how."

The shift toward a circular IT economy in the UK is no longer a fringe idea — it's becoming business as usual. Regulatory frameworks are aligning with market demand, and forward-looking organisations are seizing the chance to save money, build resilience, and strengthen their ESG story.

For IT managers, the message is clear: design for longevity, track your assets, partner with accredited refurbishers, and never underestimate the power of transparency.

Or, as Roberts puts it: "the circular economy is no longer just an option for IT — it's the smartest strategy for the future." ■



Marc Newman, Give IT Forward and Rec Assets Limited

No RCA, no clarity: every outage feels like a blame game

Daniel Salinas, Chief Operating Officer, Lakeside Software

When a critical service fails, the first minutes are often the most expensive. Multiple teams scramble to collect information, users are contacted for details, logs are pulled from disparate systems, and everyone tries to prove the problem lies elsewhere. Valuable time is lost in this relay race while the business impact mounts. The absence of immediate, reliable root cause analysis (RCA) means resolution takes far longer than necessary, and the true cause may only be confirmed long after service is restored.

Fortunately, root cause analysis in enterprise IT is evolving rapidly from a slow, retrospective task into a proactive capability that can keep pace with live incidents. Where RCA once relied on ad hoc debugging and partial event correlation, it can now draw on predefined models, detailed dependency maps, and real-time data streams. Packet captures and post mortems will always have a role, but in 2025, powerful tools exist to collect and correlate operational data as incidents unfold, giving engineers the ability to pinpoint and address the true cause far sooner. Today's enterprise networks span on-premises, cloud, SaaS, and remote endpoints, creating thousands of potential failure points. Without correlated data across these layers, even experienced teams can spend hours chasing symptoms instead of causes.

Real-world incidents demonstrate the significant benefits of having high-quality endpoint data and specific service checks in place, resulting in faster outcomes. In July, Cloudflare's public resolver 1.1.1.1 failed for just over an hour. Many organisations experienced widespread application failures that appeared to originate within their own networks. Time-aligned endpoint data showing DNS failures, together with health checks to alternative resolvers, would have revealed the actual cause within minutes and prevented wasted effort on internal escalation. Just days earlier, users found they could not log in to Microsoft 365 Outlook. Symptoms were indistinguishable from WAN failure. A correlated diagnostic view showing that other services were functioning normally while only Microsoft authentication failed would have pinpointed the service provider as the cause rather than the internal infrastructure.

This underlines why packet-only diagnostics are no longer enough. With modern encrypted transports and complex dependencies, visibility at the endpoint is essential. RCA depends on signals that remain observable, such as DNS resolution, TCP connectivity, SSL handshake success, application process behaviour, and local configuration changes. Aligning these on a single timeline enables engineers to replay incidents and pinpoint causes in minutes rather than hours. Additionally, today's platforms can detect abnormal patterns and trigger fixes before issues escalate, reducing help desk tickets and keeping users productive without them ever experiencing an outage.

Lakeside's own guidance on what an effective RCA solution should include points to three core capabilities. First is depth of telemetry, capturing real-time and historical endpoint data at high granularity, from CPU and memory usage to network throughput, DNS query behaviour, and application response times. Second is intelligent analysis, which utilises automation and AI to identify patterns across vast datasets and surface likely causes without relying on manual guesswork. Third is the ability to trigger investigative workflows or even predefined fixes when certain conditions are met, turning RCA from a purely investigative function into one that actively shortens recovery times.

These capabilities create a measurable return on investment. Independent validation found that an AI-driven endpoint observability platform delivered a 259% return over three years for a 30,000-user organisation, generating over £8 million in benefits. Much of this value came from faster resolution, fewer support tickets, and the prevention of repeat incidents.

Beyond the financials, robust RCA also repairs the human side of incident management. In many organisations, unresolved issues bounce between help desk, network, server, and application teams, wasting time and eroding trust. Objective, time-stamped evidence ends this cycle. When data shows that a slowdown was caused by a SaaS authentication fault rather than the WAN, the correct team can act immediately, and finger-pointing stops.

For network engineers, effective RCA not only resolves today's issues but also upskills teams for tomorrow's challenges. By working from complete, correlated evidence, engineers sharpen diagnostic skills, improve cross-team collaboration, and embed more efficient workflows into future operations.

Root cause analysis is a practical, forward-looking discipline that strengthens both network resilience and team effectiveness. Applied with the right tools, it works alongside detection and response to keep services reliable and users productive. By continuously capturing and correlating the right signals, network teams can resolve issues in minutes, reduce ticket volumes, and prevent repeat incidents. The result is faster recoveries, lower costs, and stronger collaboration. In 2025, RCA stands as a cornerstone of proactive, high-performing network operations that anticipate and prevent problems before they escalate. ■

Full fibre dreams, patchy realities: the rural connectivity story

For many rural UK enterprises, broadband isn't just slow — it's a roadblock to growth. But with fibre still lagging, a mix of satellites, 5G and fresh investment could finally turn not-spots into hotbeds of digital opportunity…

In today's digital economy, broadband is no longer a 'nice to have' — it's the oxygen businesses breathe. Yet for many rural UK enterprises, that oxygen supply is patchy at best. While policymakers promise gigabit speeds and flashy campaigns like Project Gigabit headline the news, business owners in remote areas still wrestle with sluggish connections and high costs.

The reality of rural connectivity

The challenges facing rural businesses are well documented: long distances, sparse populations, and the commercial unattractiveness of laying fibre across fields, hills, and hedgerows.

"This lack of connectivity can significantly hinder productivity. It impacts everything from cloud-based operations and digital communications to access to online services and real-time collaboration. Ultimately, poor connectivity can limit a business's ability to scale, compete, and attract talent," says Katy Liddell, Director of Business Operations at VodafoneThree.

"The most common challenges include limited availability of full-fibre connections, high latency, slow upload and download speeds, and a lack of resilience. In today's digital economy, reliable, high-speed connectivity isn't a luxury – it's a necessity," agrees Craig Messer, Managing Director at VeloxServ Communications.

Neil Heffernan, Group COO of Wifinity, doesn't mince words: "the biggest problem is cost. Fibre is much more expensive to deliver to rural premises, and major providers go where the return on investment is strongest. Rural areas sit at the bottom of the queue. Even voucher schemes add complexity, admin and risk."

Technology lifelines

If fibre is the holy grail, rural businesses are often forced to look elsewhere for salvation. Enter satellite internet, fixed wireless access (FWA), and 5G.

"You can certainly run a smaller business through a good 5G connection. 5G is also great for sites that need a temporary solution, where there is coverage. We can deploy rapid connectivity solutions like this to support our customers where they need connectivity quickly and for a limited time, for example in the construction sector," notes Heffernan. "Starlink is also an interesting technology, albeit more expensive than 5G. We see success in areas that it would be a challenge to otherwise connect."

Messer believes that hybrid solutions incorporating FWA, 5G and LEO satellite internet are key to closing the digital divide.

"These technologies offer greater reach, faster deployment times, and increasingly competitive speeds. For example, hybrid connectivity solutions that combine fibre with wireless or satellite can offer the resilience and bandwidth that remote businesses need. Coupled with SD-WAN and intelligent network management, we can now optimise performance even in areas with limited infrastructure," says Messer. "What's exciting is that these technologies are becoming more accessible and affordable for our partners to offer rural customers, allowing more rural businesses to participate in the digital economy on equal footing."

Liddell highlights one of VodafoneThree's recent world-first project: "we are pioneering satellite-supported connectivity as an additional way to bring broadband to areas where even mobile infrastructure is limited. In early 2025, we successfully conducted a world-first satellite video call using a standard smartphone and AST SpaceMobile's BlueBird LEO satellites. The call, made from a mobile 'not-spot' in the Welsh mountains, demonstrated how smartphones can seamlessly connect to satellites without any special hardware. With speeds of up to 120Mbps, these satellites support high-throughput applications such as video streaming and messaging, offering a powerful alternative where neither fibre nor FWA is feasible."

Policy and investment pressures

While technology helps, real progress comes from infrastructure investment and supportive government policy.

"Public-private programmes like Project Gigabit provide the financial backing to make rural deployment commercially viable. But there's still work to be done in streamlining planning processes, ensuring long-term funding continuity, and promoting infrastructure sharing," notes Messer.

Of course, one of the key problems with rural enterprise connectivity is achieving a good return on investment (ROI) in a timely manner.

"Infrastructure investors are the critical enabler to providing connectivity, but everyone investing is reasonably looking for good payback - and payback is easier in a denser populated area," explains Heffernan. "Government schemes, for example vouchers, do help to normalise that bit, but they do not go all the way, and they're complex to administer. And there's the risk that you might not get them. Even simple builds can become bureaucratic. Wayleaves can be difficult, there are difficulties doing street works, plus extra permissions are needed. Relationships and local expertise become very important."

"Ultimately, the UK's economic competitiveness depends on connectivity equity. Empowering rural enterprises through robust broadband infrastructure unlocks innovation, supports job creation, and sustains local communities. It's a shared responsibility — one that we're committed to driving forward," adds Messer.

Advice for rural enterprises

So, what should businesses do while waiting for fibre to reach their postcode?

The first step is to thoroughly assess what connectivity options are available in the area - this includes not only fibre but also FWA and business-grade mobile broadband solutions.

"If fibre isn't available or your timescales are challenging, FWA can often provide a reliable and scalable alternative, particularly with the growing footprint of 5G across rural regions," says Liddell. "We also recommend considering connectivity as a core part of your business continuity and growth strategy - engage with your service provider to explore backup solutions and keep an eye on government funding opportunities or infrastructure rollouts in your area."

Heffernan's advice is pragmatic: "make sure you've explored all avenues for fibre. Altnets and specialist providers can often be more flexible than the big ISPs. In Wifinity's case for example, we specialise in hard to reach, remote sites like holiday parks and MOD bases. We're a specialist provider, with the necessary expertise and agility to get complex sites connected. And don't go it alone — clubbing together with other local enterprises builds demand and makes you more commercially appealing."

Messer recommends strategic investment in business-grade connectivity solutions; prioritising redundancy and failover; embracing edge technologies and local hosting; and planning for scalability.

"Consumer-grade broadband often lacks the resilience required for consistent performance. Explore leased lines, conduct a connectivity audit, prioritise redundancy, and partner with providers who understand rural infrastructure. Connectivity is no longer a utility — it's a critical enabler of innovation, growth, and resilience," shares Messer.

The bottom line

For rural enterprises, connectivity remains a daily challenge. But between smarter use of emerging technologies, increasing infrastructure investment, and the persistence of innovative providers, the digital divide is slowly narrowing. Geography should no longer dictate a company's ability to thrive online. ■

UKREiiF showed us the future. Now it's time to retrofit the past

PJ Farr, Managing Director, UK Connect

At UKREiiF 2025, sustainability and innovation dominated the headlines. New towns, net zero targets, modular homes, and smart city ambitions were showcased as the foundations of a better built environment. But as I walked the exhibition halls and spoke with developers, councils, and tech leaders, one recurring question lingered:

How exactly are we going to measure any of this?

The reality is stark: we're building a vision of sustainable development that's rich in ambition but dangerously thin on infrastructure. And nowhere is this gap more visible than in our retrofit strategy.

Ambition is high, but so are the stakes

From the government's plans for 12 new towns to sweeping net zero goals, UKREiiF laid out a compelling future for UK real estate. But amidst the excitement, another reality demands urgent attention: most of the buildings that will be standing in 2050 have already been built. We cannot decarbonise our way to net zero through new developments alone.

The real battleground lies in retrofitting existing buildings — and doing so in a way that's measurable, auditable, and future-proof. That's where technology, and particularly IoT (Internet of Things), has a defining role to play.

Yet as someone who works with the UK's leading contractors, developers, and FM teams, I see the same recurring challenge: while regulation is increasing, the tools to meet those demands in a cost-effective and scalable way are still missing from too many portfolios.

Regulation is becoming a data problem

Let's be clear. The pressure is on. New regulatory targets are reshaping the way we value and manage real estate:

- **MEES** (Minimum Energy Efficiency Standards) already make it unlawful to lease commercial property in England and Wales with an EPC rating below E.

  Proposed updates to MEES will raise the minimum to EPC C by 2027 and EPC B by 2030, applying not just to new leases but also to all existing tenancies — representing a major compliance shift across the commercial property sector.

- **The Net Zero Government Initiative** requires a 50% reduction in public sector building emissions by 2032 and 75% by 2037.

- A recent report estimated over 95 million square feet of commercial real estate in England are at risk of becoming stranded assets — legally unlettable and financially unviable — if they fail to meet these new standards.

What does that mean for asset owners, councils, and fit-out firms? It means that compliance is no longer a once-a-year check-in. It's a live, ongoing performance requirement. And live problems need live data. Retrofitting without data is just guesswork. And guesswork is a liability.

Why IoT is the missing link

IoT is often spoken about in futuristic terms, but it's actually one of the most immediate and practical tools we have to drive sustainability today. At UK Connect, we're working with clients right now to install low-cost, long-life IoT sensors that:

- Monitor temperature, humidity, and energy usage in real time
- Provide early alerts for inefficiencies and failures
- Reduce compliance burden (e.g., automate emergency lighting and Legionella checks)
- Integrate into existing Building Management Systems (BMS)
- Help meet Scope 1, 2, and 3 emissions targets

The best part? Many of these sensors run for up to 10 years on a single battery, with zero cabling or retrofitting required. This isn't theoretical. It's field-proven, cost-effective, and deployable at scale.

A lesson from Wales

We've been watching Wales closely, where the Optimised Retrofit Programme (ORP) is leading the way. Although it's focused on residential buildings, the principle is powerful and easily translatable to commercial estates.

By combining fabric improvements, low-carbon technologies, and IoT-powered energy monitoring, ORP is proving that decarbonisation doesn't require deep disruption — just smart design and smarter insights.

Digital Twins: from buzzword to boardroom tool

One area that gained traction at UKREiiF was the use of digital twins. For us, this is more than just a trend.

A digital twin powered by real-time sensor data allows you to simulate upgrades before spending capital. You can forecast compliance outcomes, model different heating strategies, or compare insulation options — all without laying a single brick. It's not just smart; it's economically efficient.

We've already seen clients use digital twins to satisfy investor scrutiny, unlock funding, and reduce the cost of retrofit planning. It turns the sustainability conversation from abstract to actionable.

The real cost of doing nothing

This isn't just about regulatory risk. It's about asset value.

Mark Carney, former Governor of the Bank of England, warned years ago about stranded assets — properties that become unsellable and unlettable due to environmental non-compliance. That risk is no longer on the horizon. It's here.

We are working with landlords and facilities managers today who are actively seeking ways to avoid devaluation by improving their EPC scores, tracking usage data, and future-proofing their portfolios through low-disruption IoT installs.

In this new landscape, buildings that can't prove performance will simply be passed over by tenants, investors, and regulators. Your building's value may soon depend more on its sensors than its signage.

From vision to delivery

UKREiiF 2025 laid out a bold vision for the future of our built environment. But vision without infrastructure is just a nice idea. To meet the expectations of investors, regulators, and communities, we must equip our buildings — new and old — with the tools to measure, validate, and improve their performance.

IoT isn't just part of the sustainability toolkit — it's the foundation. And as retrofit pressures mount, it will increasingly decide which buildings survive, and which get left behind. ■

Revolutionising mobile connectivity at the Royal Sussex County Hospital

The Royal Sussex County Hospital is a major teaching hospital located in Brighton. The hospital offers a range of services, including an emergency department, cancer treatments at the Sussex Cancer Centre, cardiac surgery, maternity care, and specialised intensive care units for both adults and newborns.

Overcoming deep underground signal barriers

The Royal Sussex County Hospital was plagued by complete signal blockage at the construction of its new basement office due to the thick concrete walls.

Initially, TrellisWorks responded with a targeted QuickCel Basic solution setup comprising a single-panel donor antenna, a Solo network unit, and an omni-directional server antenna. This configuration successfully restored full mobile coverage within the designated workspace, enabling staff to operate effectively despite challenging underground conditions.

After three months, however, the scope of the project expanded. The construction company Laing O'Rourke required additional network coverage to accommodate 50 staff relocating from adjacent cabins into a larger underground office area. Moreover, there was an urgent need to establish reliable hotspot connectivity across six additional floors, including the first six storeys of the hospital.

The existing system, while effective, needed to be upgraded to ensure robust, OFCOM-compliant coverage for these new demands, which included critical communication during sensitive construction phases.

Precision deployment for complex environments

TrellisWorks conducted a comprehensive assessment of the entire hospital building, encompassing 11 above-ground floors and two basement levels. This entailed detailed analysis of cable runs, optimal donor antenna locations, and strategic placement of coverage units to maximise signal strength.

The deployment involved precise alignment of donor antennas over 1km of cabling across multiple floors; installation of six coverage units to create localised hotspots; and identification of the best cell towers for optimal connectivity.

This multi-layered approach was essential to ensure consistent, high-quality coverage throughout the challenging underground and above-ground environments.

Two skilled engineers completed the installation within just four days, mounting roof antennas, connecting network units, and meticulously testing the coverage. Following commissioning and final adjustments, the system was signed off by the client.

The results speak for themselves: what was once a complete coverage void now boasts full-strength, reliable mobile signals across critical areas. This upgrade not only supports current construction activities but also lays the groundwork for future expansion to cover remaining floors lacking consistent connectivity.

OFCOM-compliant and future-ready

As the only OFCOM-compliant mobile boosting technology currently available in the UK, the QuickCel Advanced solution ensures legal, safe, and effective operation within sensitive environments. The initial hotspot setup, purchased outright rather than rented, enabled timely deployment aligned with project deadlines, ensuring construction continuity.

Partnering with Nextivity, TrellisWorks installed two QuickCel Advanced systems connected to six coverage units, effectively transforming previously signal-devoid floors into fully connected zones.

Ultimately, TrellisWorks successfully expanded its upgraded mobile signal boosting solution within the Royal Sussex County Hospital, delivering reliable, high-strength connectivity across multiple underground and above-ground levels. This strategic enhancement ensures seamless communication vital for ongoing construction projects and hospital operations. ■

Transforming connectivity at Perenco's London headquarters

Perenco, a leading independent hydrocarbon producer operating across 14 countries, has struggled with its in-building connectivity since establishing the office in 2017. The 200-strong, multi-disciplinary team faced persistent issues with weak mobile reception both inside and outside the building, hampering communication and operational efficiency.

Recognising the importance of seamless connectivity, Perenco partnered with Simpli-Fi to develop a tailored solution that would enhance mobile coverage while maintaining the building's high-end aesthetic.

Understanding the challenges of urban connectivity

Located in the heart of central London, the building is immersed in a densely populated environment where external mobile signals are heavily congested, resulting in weak donor signals.

The structural design and building materials further impeded indoor signal penetration, leading to unreliable voice and data service. Additionally, as a premium commercial space, preserving the building's sophisticated appearance was paramount, requiring discreet installation of any signal-enhancing infrastructure.

Simpli-Fi's approach involved designing and implementing a bespoke in-building mobile signal enhancement system. The deployment included high-gain parabolic antennas strategically positioned to capture and improve the external donor signals effectively.

A key component of the solution was the installation of the Nextivity Cel-Fi QUATRA 4000 System, a multi-operator active Distributed Antenna System (DAS) hybrid that amplifies and distributes the mobile signal throughout the entire office space. Throughout the installation process, meticulous attention was given to ensure that the infrastructure blended seamlessly with the building's refined aesthetics, avoiding any compromise to its visual appeal.

Outstanding results and ongoing support

The implementation of Simpli-Fi's tailored solution resulted in a dramatic improvement in mobile connectivity within Perenco's London headquarters. Employees and visitors now enjoy reliable voice and data coverage across all major networks, enabling more efficient communication and collaboration. The enhanced coverage has not only increased productivity but also contributed to a smoother operational workflow.

Furthermore, Simpli-Fi continues to support Perenco through a comprehensive managed service agreement, ensuring the system maintains optimal performance and adapts to future needs.

By combining innovative technology with careful installation, Simpli-Fi has empowered Perenco's headquarters to operate seamlessly with uninterrupted mobile connectivity — a critical factor for modern business success. ■

Unified communications in healthcare: enhancing patient care through seamless connectivity

Jonathon Lees, Head of NHS Sales, Wavenet

As healthcare faces rising demand and digital transformation, Unified Communications (UC) is becoming critical to improving patient care, streamlining operations, and enabling true system-wide integration.

From chaos to cohesion

Historically, healthcare providers have relied on a patchwork of communication tools, including legacy phone systems, pagers, internal messaging, email, and handwritten notes. These siloed systems hinder coordination, create unnecessary delays, and often leave practitioners bogged down with manual processes when their focus should be on patient care. UC systems address these challenges by consolidating voice, video, messaging, and patient record access into a single, integrated platform. This enables staff across departments and sites to collaborate in real-time, regardless of location.

While the benefits of UC are clear, successful deployment depends on having the right underlying infrastructure. Some community health settings still operate on copper connections or legacy broadband with limited capacity, making it difficult to support modern cloud-based platforms. If connectivity isn't addressed first, even the best-designed systems will fall short as everything hinges on secure, high-speed access to data.

Integration, not isolation

A major lesson from recent years is that digital tools only reach their potential when they are part of a connected ecosystem. The success of UC lies not in any one feature, but in its ability to integrate seamlessly with other systems, whether it's electronic patient records (EPRs), telehealth platforms, or IoT-enabled devices.

Many healthcare organisations still struggle with EPRs that can't share data between trusts, or telehealth solutions that aren't optimised for mobile staff. Integration should be prioritised at the procurement stage, ensuring any new platform works cohesively within the broader digital environment.

Proactive collaboration between vendors, clinicians, and IT teams is essential. That means avoiding rushed technology decisions, engaging in more supplier dialogue before tenders go out, and focusing on long-term outcomes rather than short-term budgets. An integrated approach reduces duplication, improves continuity of care, and maximises return on investment.

Transforming care overall

When implemented well, UC doesn't just improve efficiency; it can fundamentally reshape the care experience. One of the most encouraging developments has been the rise of clinician-led contact models, especially in mental health services. In several forward-thinking trusts, where specialist contact centres receive calls from vulnerable patients, they are now handled by qualified professionals. These teams have real-time access to patient records and can triage support needs in an instant, enabling timely, appropriate intervention and reducing unnecessary A&E attendance or police involvement.

By implementing communication tools designed around user needs, rather than operating with generic call centre frameworks, these services are achieving measurable reductions in emergency admissions. The right technology, combined with the right people, allows care to be more personal, more timely, and more effective.

The growing cybersecurity threat within healthcare

As healthcare becomes increasingly reliant on connected technologies, the risks posed by cyber threats grow exponentially. Any device added to the network - a clinician's mobile phone, a telehealth camera, or a remote monitoring device - becomes a potential vulnerability. Protecting patient data and operational continuity must be non-negotiable.

Education remains the first line of defence, with staff across all levels needing regular training to recognise phishing attempts, understand password hygiene, and maintain vigilance in their digital behaviour. Beyond that, investment in network security, incident response planning, and managed cybersecurity services is critical. Health organisations must shift from thinking of security as a cost centre, to seeing it as a core enabler of digital transformation.

Meeting demand without compromise

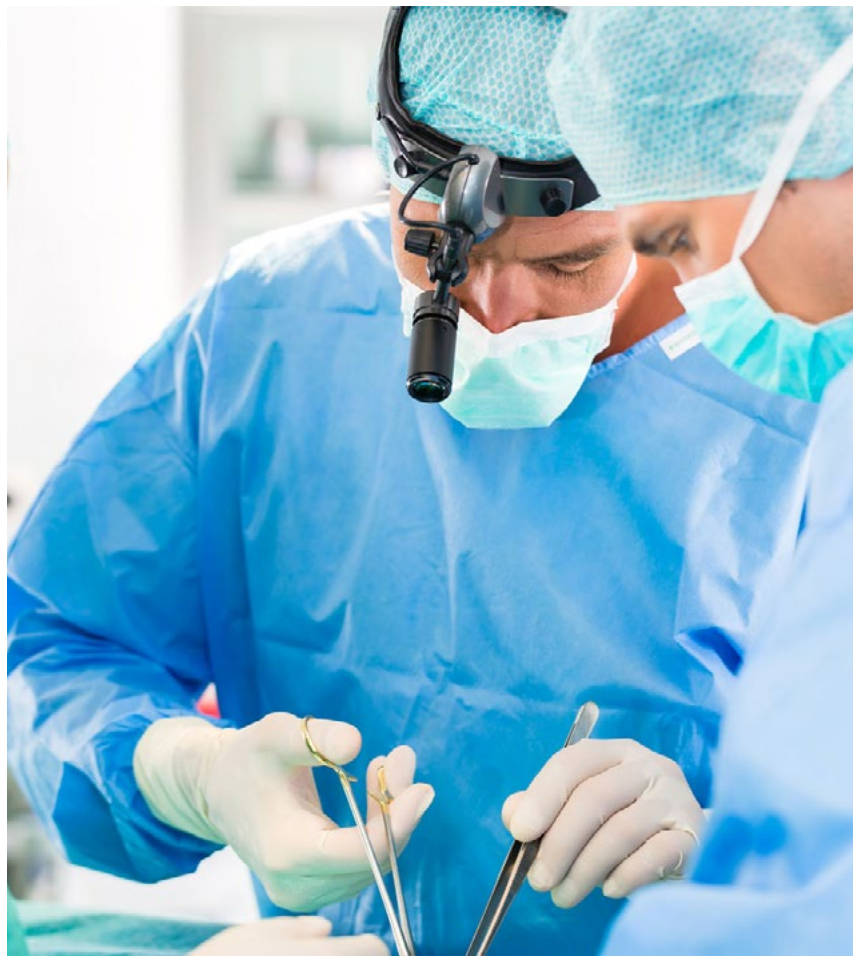
In many cases, outdated telephony systems are a root cause, with limited lines, high abandonment rates, and no integration with clinical systems.

Replacing these systems with a cloud-based UC solution enables a more flexible, scalable, and patient-centric approach. Features such as intelligent queuing, automated callbacks, and system integration with electronic health records allow staff to handle high call volumes more effectively and respond to patient needs faster. This not only improves patient satisfaction but also reduces the burden on administrative teams.

Wavenet worked with Conisborough Group Practice Doctor's Surgery to modernise its communication infrastructure. As a result, call wait times and abandonment rates were significantly reduced, complaint resolution increased in efficiency and staff were empowered to adapt system settings in-house without relying on external support. Most importantly, the new solution allowed for real-time performance monitoring, which is essential for meeting CQC compliance standards and maintaining service quality.

The path to a fully connected healthcare system doesn't come without its challenges. Infrastructure gaps, funding limitations, and organisational silos still exist, but clever UC solutions are already demonstrating that meaningful, measurable change is entirely achievable.

By connecting people, processes, and platforms, UC enables a more agile, resilient, and compassionate healthcare system. Whether in a GP surgery, an acute hospital, or a community mental health team, the goal remains the same: to provide the right care, at the right time, in the most effective way possible. ■



Effective network monitoring in a hyper-connected world

Martin Saunders, COO of Highlight

In today's digital-first businesses, network performance is vital for operational stability and success. If the network falters, so does productivity, communication, and in many cases, customer experience. Having an effective tool to monitor and deliver full oversight across the whole network is essential.

Prioritise a user experience that matches your use case

The interface of a network monitoring tool is not just about aesthetics, it's about functionality. An intuitive, clean user interface (UI) helps network managers to access the right information quickly, make informed decisions, and take action without delay. With key metrics and alerts presented clearly, network teams can respond faster and with greater confidence.

The best platforms bring high-priority issues to the forefront, eliminating noise and reducing the time spent digging for insights. In addition, the latest tools offer dark and light modes, along with compliance to WCAG 2.0 Level AA accessibility standards. This ensures that network and IT professionals with disabilities can interact with monitoring dashboards effectively.

Embrace AI for anomaly detection and predictive insights

AI is revolutionising network monitoring and observability. By incorporating machine learning, AI-driven platforms can now detect unusual patterns or step changes in network performance that human eyes might miss. These anomalies, distinct from normal spikes, could indicate security threats, bandwidth constraints or faulty hardware.

AI doesn't stop at real-time alerts. Sophisticated platforms also analyse historical data to forecast future trends. For instance, they can predict when a broadband or Wi-Fi connection might hit capacity, allowing managers to plan upgrades in advance and avoid unexpected costs or outages.

Maximise the power of APIs for scalability and efficiency

As networks scale, manual configuration and monitoring can become inefficient and error prone. This is where APIs (Application Programming Interfaces) shine. By enabling automation of deployment, configuration and performance tracking, APIs streamline network operations and reduce human error.

Through APIs, network and IT teams can automate everything from provisioning new services to pulling real-time performance data across distributed environments. For instance, API access can instantly report whether a branch location is online, how many devices are connected and current throughput, all without manual checks.

Support for IoT and remote infrastructure is a must

With the growth in IoT (Internet of Things) devices, network teams need to manage more endpoints than ever before. These devices, ranging from smart cameras to air quality sensors, require the same level of oversight as traditional infrastructure.

Modern platforms must unify the visibility of traditional networks and IoT devices into a single pane of glass. This means consolidating device health, connectivity status, and sensor data across all locations. Real-time alerts for power issues, Wi-Fi drops, or cloud disconnections are essential to ensure operational reliability. Additionally, knowing that a device is "online" is not enough. Managers must verify that it's powered, connected, and fully functional. With integrated IoT observability, IT professionals can quickly diagnose and resolve issues, minimising downtime and security blind spots.

In brief: Choose platforms that treat IoT as first-class citizens in network infrastructure and support proactive, remote management.

Adopt platforms that offer unified, rapid deployment

The future of network monitoring and observability lies in simplification, standardisation, and speed. Traditional tools can be clunky and slow to deploy, requiring weeks or months to configure. Modern observability platforms provide a unified "first pane of glass" view across multiple vendors and technologies, with rapid deployment and intuitive self-service capabilities.

By standardising data presentation and integrating AI, APIs, and IoT visibility, modern platforms allow businesses, whether global enterprises or SMEs, to scale with confidence. Network and IT teams gain clearer insights, faster responses, and better alignment with external vendors and internal stakeholders.

In brief: Look for platforms that balance robust functionality with ease of use, enabling instant observability and reduced onboarding time.

In a world where digital infrastructure underpins every facet of business, network monitoring and observability must give network and IT teams clear, actionable insights and provide comprehensive visibility across both traditional networks and emerging devices. ■

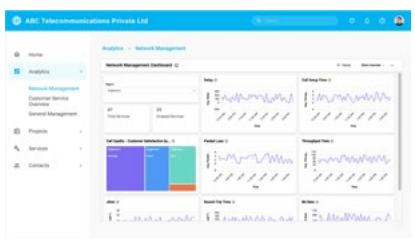
PRODUCTS

Bold IT offers a comprehensive network monitoring solution designed to ensure optimal performance, security, and reliability of IT infrastructure. The platform features real-time monitoring with extensive visibility into network devices, servers, and applications. It supports SNMP, ICMP, and WMI protocols, enabling seamless detection and management of network nodes across diverse environments.

The solution's core includes a scalable architecture supporting up to thousands of devices, with customisable dashboards and alerting systems. It utilises advanced analytics and machine learning algorithms to identify anomalies, predict potential failures, and reduce downtime proactively. The platform provides detailed metrics such as bandwidth utilisation, latency, packet loss, CPU and memory usage, and interface status.

Bold IT's network monitoring solution integrates with existing infrastructure via REST APIs and supports multi-vendor hardware from Cisco, Juniper, HP, and others. Its automated discovery feature maps the entire network topology, simplifying asset management. Furthermore, it offers multi-layered alerting via email, SMS, and integration with third-party tools like Slack or PagerDuty to ensure rapid incident response.

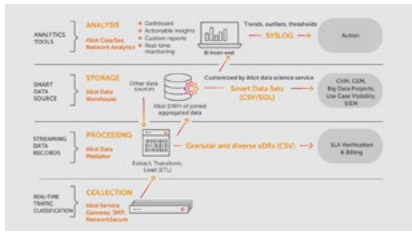
Security is prioritised through continuous vulnerability scanning and compliance reporting. The system also features customisable report generation, offering insights into network health, performance trends, and capacity planning. With user role management and audit logs, the platform maintains high standards of security and accountability.



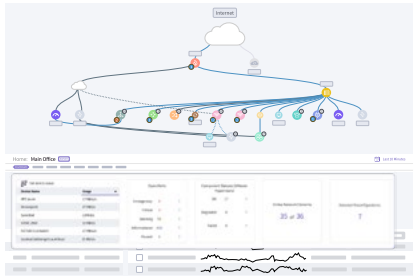
Allot provides comprehensive network monitoring solutions that enable enterprises to gain deep insights into their network traffic and application usage.

The platform supports real-time monitoring with advanced deep packet inspection (DPI) technology, allowing for precise traffic classification, application identification, and user activity analysis across fixed and mobile networks. It offers customisable dashboards and real-time alerts to detect anomalies, security threats, and capacity issues promptly. The system includes detailed analytics, historical reporting, and capacity planning tools to optimise network performance and ensure service quality.

Allot's network monitoring supports multi-layered security features such as threat detection and policy enforcement, helping organisations prevent cyber threats and maintain compliance. Its robust performance monitoring, combined with automated reporting and policy management, empowers organisations to proactively manage their networks, enhance security, and deliver reliable, high-quality connectivity.



Auvik is a comprehensive cloud-based network management software designed to simplify and automate network monitoring and management tasks. It provides real-time visibility into network performance, enabling IT teams to quickly identify and resolve issues before they impact users.



The software supports a wide range of network devices, including switches, routers, firewalls, and wireless access points, ensuring seamless integration across diverse environments. The platform offers detailed network topology mapping, allowing administrators to visualise the entire network infrastructure and understand device relationships. It features automatic device discovery, configuration backup, and change tracking to enhance security and compliance.

Auvik's performance monitoring includes bandwidth usage statistics, device health checks, and alert notifications for network anomalies. Its user-friendly dashboard consolidates critical metrics, making troubleshooting efficient.

Transitiv Technologies' advanced enterprise network monitoring solution is designed to ensure optimal performance, security, and reliability across complex network environments.

The system provides comprehensive visibility into all network devices, including routers, switches, servers, and endpoints, enabling IT teams to monitor real-time traffic, device health, and network usage. It supports detailed traffic analysis, fault detection, and performance metrics, allowing for proactive management and quick troubleshooting of network issues. Transitiv Technologies' monitoring platform includes customisable dashboards and alert systems that notify administrators of potential problems before they impact business operations.

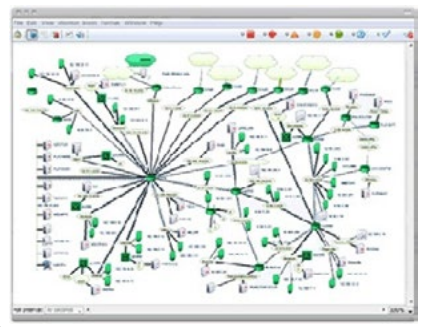
The solution also features automated device discovery, configuration management, and detailed reporting capabilities, which help maintain network integrity and compliance. Its scalable architecture makes it suitable for large enterprises with extensive networks, ensuring secure, continuous monitoring that adapts to evolving infrastructure needs.

Fortra's Intermapper is a robust network monitoring and mapping solution designed to provide real-time visibility into complex IT infrastructures. It offers comprehensive device discovery, mapping, and monitoring capabilities, supporting protocols such as SNMP, ICMP, WMI, and SSH, ensuring compatibility with a wide range of network hardware and systems.

Intermapper's architecture is scalable, capable of monitoring hundreds to thousands of devices across distributed locations. Its dynamic network maps visually represent network topology, allowing administrators to quickly identify issues and understand network relationships. The platform continuously tracks key metrics including bandwidth usage, device status, latency, packet loss, CPU load, and memory utilisation.

The software features customisable alerts, which notify users via email, SMS, or integrations with tools like Slack and PagerDuty, enabling rapid response to network events. Its auto-discovery feature simplifies initial setup and ongoing network changes by automatically detecting new devices and updating maps accordingly. Intermapper also offers historical data analysis, trend reports, and capacity planning tools to support proactive management.

Security features include role-based access controls, audit logs, and encryption of data in transit and at rest. The platform supports multi-vendor environments, with integrations for Cisco, Juniper, HP, and other major hardware providers. Additionally, it provides REST API support for automation and custom integrations.



Please meet...

Jon Fielding, Managing Director, EMEA, Apricorn

Who was your hero when you were growing up?

As a Manchester City fan, I idolised the late, great Colin Bell. I'd just started going to football and Colin was in a different class. Unfortunately, he was badly injured a couple of seasons later and was out for quite some time. I can still remember the crowd noise on his return, but he never fully recovered to the player he once was. I suffered some barren times in those early years and beyond. However, I now feel privileged to watch an exceptional team, both footballers and managerial staff, and can see some of Colin's attributes in different players – Rodri/ Bernardo's work rate and De Bruyne's vision for example. We still sing his name.

What was your big career break?

Moving into electronic payments and Public Key Infrastructure off the back of the Identrus(t) scheme when at IBM in the mid-90s. I ended up working on a huge global deal for a large bank where we needed to bring in a number of complementary technologies, most from pre-IPO start-ups as it was fairly cutting edge at the time. This opened the opportunity to consider a radically different work environment and, after 10 years at IBM, I felt the time was right to take the plunge and work one of these "new wave" businesses. This led to a number of first man on the ground in country/region roles; all of which have been great fun and packed with wonderful memories and experiences, leading up to where I am today.

What did you want to be when you were growing up?

I honestly can't remember. The first aspirational career move I recollect was applying to be the first British Astronaut in space, thinking that having done Russian at A-level would carry some weight. Needless to say I was unsuccessful with Helen Sharman taking the seat.

Where would you live if money was no object?

My wife would say Majorca, I'd say Portugal – so Majorca it is! To be honest, that would work for me too. We enjoy visiting both, as well as the Greek islands. We have simple tastes – sun, beach, relaxed way of living and good food.

If you could dine with any famous person, past or present, who would you choose?

It is so difficult to choose just one name as there are so many people that I would love to be able to sit down with and talk around whatever it is that makes them unique whether that be in sport, politics, the arts etc. So, to answer the question for today's choice I would have to say Pep Guardiola. I think he would be fascinating to talk to and try to get some sense of how his mind works

What's the best piece of advice you've been given?

Trust in you. That's not to say don't trust anyone else, but you need to back yourself first. I find myself passing this onto my kids now. Reminding them to have faith in themselves, bear in mind positive past experiences, trust in their gut and, 9 times out of 10 (or hopefully more), they will make the right decision for the right result.

If you had to work in a different industry, which would you choose?

Mobile catering – I've always fancied the idea of setting up a food truck that serves up high-quality food that is slightly different from the norm, then travelling round, building a loyal following and having fun - like in the film "Chef".

The Rolling Stones or The Beatles?

Both are great and have influenced a lot of the music I like but, if pushed, I would have to go for the Rolling Stones.

What would you do with £1 million?

I would put it towards helping my kids buy their first homes. I have 4, so the £1 million is easily spent. With the current state of the housing market, I'm not sure how else they will ever be in a position to own their own home before middle age at the earliest.

What's the greatest technological advancement in your lifetime?

It has to be the internet or smart phones that no only a portal into it, but offer so much more as evidence by the amount of time people spend on them and how much of their lives are stored on them.