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The potential to revolutionise software development, resource management, and overall business operations

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VIEWPOINT



By Alex Mayo, Multimedia Manager, Angel Business Communications

Managed Services Summit London 2024: A day of insight, innovation, and networking

THE 2024 Managed Services Summit London on 11th September delivered a packed agenda of insightful keynotes, engaging panel discussions, and valuable networking opportunities. The event once again solidified its position as the go-to gathering for IT channel professionals, managed service providers (MSPs), and industry leaders, setting the tone for the future of managed services.

Here's a look back at the key highlights from the day:
Setting the Stage: A Dive into the UK MSP Landscape
The day kicked off with an engaging panel session exploring the current state of the MSP sector in the UK. Panelists from Pax8, Kaseya, GFI Software, BlackFog, Lenovo, and ConnectWise dove deep into the challenges and opportunities in sales, marketing, and service delivery, offering actionable strategies to thrive in a competitive landscape.

Keynote: Unleashing Your Inner Sat Nav

A major highlight was the keynote by Derek Redmond, the renowned Olympic athlete, who shared valuable lessons on resilience and adapting to change. His talk, *Unleashing Your Inner Sat Nav*, inspired attendees to embrace challenges, adapt in the face of disruption, and stay resilient in today's unpredictable business climate.

Future-Proofing: Looking Ahead to the Next Five Years
As technology rapidly evolves, staying ahead of trends is critical for success. The second panel session of the day focused on long-term strategies, exploring how MSPs can future-proof their businesses by incorporating AI, navigating regulatory changes, and adapting to market forces. Experts from Stellar Cyber, SonicWall, Good Sign, Atera, and Giacom shared invaluable insights.

Breakout Sessions: Tailored Insights for Every MSP

With a wide array of breakout sessions led by top industry experts, attendees had the opportunity to deep-dive into a variety of critical topics. From leadership and cybersecurity to compliance and the role of AI in IT, the sessions offered something for every attendee, ensuring that MSPs left with actionable strategies tailored to their needs.

Exploring AI's Impact on the Future

In the afternoon keynote, Professor Lisa Wilson captivated the audience with her presentation on the role of AI in shaping the future of the IT sector. She discussed the evolving role of AI, its potential to transform business processes, and how it can enhance productivity while raising critical questions about its societal impact.

The Big Debate: Closing with Industry Insights

The day wrapped up with "The Big Debate", a lively and interactive panel session featuring industry leaders from Ghost Enterprises, Cobweb, SHARP, and AirIT. Audience members had the chance to ask questions and share their views, providing valuable insights into the evolving role of MSPs in a fast-changing digital world.

Networking and Prizes


Throughout the day, there were ample opportunities for networking, with attendees connecting with peers, vendors, and potential business partners over coffee breaks and the post-event networking drinks reception. The day closed with exciting prize giveaways, including Apple AirPods Pro and hospitality tickets for the England vs. Scotland Six Nations match.

Looking Ahead

The Managed Services Summit London 2024 was an outstanding success, leaving attendees with fresh perspectives, new connections, and clear strategies to drive their businesses forward. As we reflect on the insights and conversations from this year's summit, it's clear that the MSP sector is set for continued innovation and growth.

We look forward to seeing you at future events, including the MSS Nordics in Stockholm and the MSS Manchester in November 2024. Stay tuned for more opportunities to engage, learn, and grow within the managed services industry.

Until next time!



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Modernisation challenges hinder IT team productivity

While modernisation challenges impact productivity and business success, survey finds that all IT decision makers are turning to experienced partners for support.

ROCKET SOFTWARE has published the findings from its survey, IT Modernisation Without Disruption. Rocket Software commissioned Forrester Consulting in this survey of over 300 global decision makers, including CIOs, VPs and Directors, responsible for modernising their company's IT environment to explore strategies and the value external partners provided.

Key survey findings include:

Modernisation challenges are disruptive to businesses, with one-third (33%) of respondents reporting that these roadblocks led to reduced productivity. Successful IT modernisation strategies are tied to both stronger technological and business outcomes, which is why many C-suite executives (42%) are championing these efforts, recognising their transformative potential. For businesses, modernisation is not just about staying relevant; it's essential for staying agile and competitive.

The key to successful transformation is how an organisation strategically aligns their technology to their business and the context it operates in, whether that be healthcare, financial services, manufacturing or retail. Though it

can be daunting, businesses are not backing down. Sixty-nine (69%) percent of respondents believe IT modernisation is crucial for achieving their business goals over the next 12 months.

However, these modernisation journeys are not without roadblocks. Modernisation challenges include costly and time-consuming application re-write projects, with over half of respondents (51%) attempting at least six re-write projects as part of their cloud migration strategy due to multiple failures. Rewriting applications can be a costly mistake for businesses, as it often leads to extended timelines, operational disruptions, and frequently fails to deliver the expected outcomes. Challenges also include concerns over security (41%), talent shortages/skills gap (38%), and inadequate tools (30%).

These challenges are negatively impacting business – 38% said modernisation challenges have hurt their ability to recruit new talent, 35% stated that these challenges reduce their ability to compete, and 44% said that these obstacles have led to delayed timelines.

However, the survey found that organisations who work with external partners (e.g., hyperscalers, managed service providers, trusted software vendors, system integrators, or external consultants) to supplement internal shortcomings reduce these modernisation challenges.

“Modernisation is an imperative for achieving both business and technology goals, yet it comes with a range of challenges,” said Phil Buckellew, President, Infrastructure Modernisation Business Unit, at Rocket Software. “At Rocket Software, we are

committed to supporting enterprises through this complex process, ensuring that modernisation is seamless and effective. We recognise that modernisation goes beyond technology upgrades - it involves a strategic transformation of an organisation's entire operation.

Our focus is on enhancing efficiency, improving customer experiences, and driving competitive innovation. The key to a successful modernisation journey is partnering with a team that not only understands the intricacies of the process but also provides the solutions, expertise and personalised support to meet you at every stage of your journey.”

Additional survey findings include: Modernisation is a continuous journey. The survey found that priorities differ for organisations at different points in their modernisation journeys. Fifty one (51%) percent of respondents who have been on their IT modernising journey for more than one year selected “improved ability to take advantage of cloud-native, scalable applications” as a top desired outcome, compared to only 37% of those who are just starting out.

Experienced IT modernisation decision makers were also more likely to select “competitive parity or advantage” as a top outcome compared to beginners.

These insights demonstrate how those with greater maturity are making IT modernisation a more strategic advantage for their business. Every journey needs good company. All respondents confirmed that they rely on a partner for their transformation journey. The right partnership can make IT modernisation faster, less disruptive, and more aligned with business and IT goals.



Lack of data quality and governance seen as major AI obstacles

Data integrity study from Precisely and Drexel University's LeBow College of Business exposes widespread data trust issues and its impact on data and AI initiatives.

PRECISELY has released a new study conducted in collaboration with the Center for Applied AI and Business Analytics at Drexel University's LeBow College of Business (Drexel LeBow). Key findings from this year's 2025 Outlook: Data Integrity Trends and Insights report shed light on the most pressing challenges businesses face in achieving AI readiness and other data initiatives, and how they're prioritising investments in data integrity to overcome them.

The report reveals that, despite 60 percent of organisations stating AI is a key influence on data programmes (a 46 percent increase from 2023), only 12 percent report that their data is of sufficient quality and accessibility for effective AI implementation. For years, companies have grappled with poor-quality data, leading to a deeply rooted distrust in the data used for analytics and AI. While 76 percent of organisations say data-driven decision-making is a top goal for their data programmes, 67 percent still don't completely trust the data they rely on for these decisions, a rise from 55 percent in 2023.

A lack of data governance is the primary data challenge inhibiting AI initiatives, cited by 62 percent of organisations. This is likely due to the role that data governance programmes play in managing an organisation's data usage – including where it's stored, its lineage, who has access to it, whether it has personally identifiable information (PII) attributes, and more. Skills gap further impede AI adoption. With more companies prioritising data-driven decision-making, the shortage of skills and resources needed for data management, analytics, and AI has also grown this year. Forty-two percent (42 percent) say a shortage of skills and resources continues to be one of their biggest challenges to data



programmes, up from 37 percent in 2023. "While organisations are eager to benefit from AI's capabilities, a talent shortfall impedes AI integration," said Murugan Anandarajan, PhD, professor and academic director at the Center for Applied AI and Business Analytics at Drexel University's LeBow College of Business. "Our research findings highlight that gap, with 60 percent of respondents citing a lack of AI skills and training as a significant challenge in launching AI initiatives – a signal to business leaders that upskilling must be a strategic imperative."

Data quality remains the top data integrity challenge and priority. Given the findings relating to AI, it's unsurprising to see data quality reported as a primary focus for organisations worldwide. This year, 64 percent of respondents identified data quality as their top data integrity challenge, up from 50 percent in 2023.

Additionally, the overall perceptions of data quality have declined, with 77 percent of respondents rating the quality of their data as average or worse, compared to 66 percent in the previous year. The most significant barrier to achieving high-quality data is the lack of adequate tools for automating data quality processes, cited by 49 percent of respondents. Inconsistent data definitions and formats (45 percent), and data volume (43 percent) are also top concerns.

The research also shows that poor data quality continues to have a ripple effect across all aspects of data integrity, with 50 percent of respondents reporting that data quality is the number one issue impacting their organisation's data integration projects. To combat challenges with data trust, quality, and AI success, organisations are increasingly realising the importance of robust data governance programmes. This year, 51 percent of organisations identified data governance as a top challenge to data integrity, second only to data quality, marking a dramatic 89 percent increase from the previous year (up from 27 percent in 2023). In line with this, adoption has increased with 71 percent reporting that their organisation has a data governance programme, compared to 60 percent in 2023.

This increased investment is paying off. Organisations that invested in data governance programmes report benefiting from improved data quality (58 percent), improved quality of data analytics and insights (58 percent), increased collaboration (57 percent), increased regulatory compliance (50 percent) and faster access to relevant data (36 percent).

The 2023 report predicted the emergence of data enrichment and spatial analytics as business-critical technologies, and this year's report demonstrates a significant leap forward in adoption. In 2024, 28 percent report data enrichment as a priority for data integrity, up from 23 percent in 2023. Organisations are now seeking to reveal maximum context from their data for enhanced innovation, operational efficiencies, and competitive advantage. Similarly, 21 percent of organisations say spatial analytics is a priority for data integrity initiatives, up from 13 percent the previous year.

AI cited as the biggest challenge C-Suite must react to in coming years

A new report from change and transformation specialist, Grayce, highlights AI as a major priority for C-Suite professionals and their teams, with over a third (39%) saying that capitalising on AI is a top transformation priority

RESEARCH RESPONDENTS cited AI as the biggest challenge their business will need to react to in the short-to-medium term.

Based on research with over 100 UK C-Suite professionals from FTSE 350 companies, the report found that AI has helped to significantly streamline organisational processes for 37% of respondents, with 35% actively using AI to support their change and transformation projects.

Almost half of respondents claimed to be clear on who within their business was responsible for AI, with 2 in 5 saying that their business has a dedicated head of AI.

Miranda Di Rosa, Chief Development Officer at Grayce, said: "With AI only really gaining pace over the past couple of years, it is interesting to see how quickly C-Suite professionals have incorporated AI into their workflows. It's also promising that so many

businesses are clear on who is responsible for AI, as clarity is a crucial aspect of ensuring that AI strategies are effective and impactful."

Over a third of respondents said they have already implemented an AI strategy, while 36% have invested in briefing and educating their employees on this strategy.

However, 38% claimed that their organisation doesn't have enough skilled AI professionals and 41% said that they are worried about the ethical implications of AI.

Miranda continued: "While our research shows that many C-Suite professionals have been quick to implement AI strategies and are recognising the benefits the technology can have on efficiency and productivity, there's still a degree of caution. Understandably, many are still apprehensive about



AI, which for some will result in a reluctance to embrace it.

"However, with our research demonstrating the benefits of AI integration, there is a real possibility that those who adapt to such technological advancements will overtake the rest. For effective AI integration, leaders must invest in training and development to equip employees with proper AI skills, as well as promoting cross-functional teams to create a mix of AI expertise.

Hybrid hosting now preferred choice for IT leaders

THE REPORT, commissioned by Asanti, one of the UK's leading colocation data centre providers, and conducted by VansonBourne, indicates that many organisations now view blending public cloud with on-premise solutions as the optimal approach to managing IT infrastructure.

Over the last decade, many organisations adopted a cloud-first approach, however as the research findings reveal the realisation that a hybrid strategy, combining on-premise and cloud, would have helped to avoid some of the critical challenges shared in the report. The research, which surveyed 100 senior IT decision

makers across public and private sectors in the UK, revealed key drivers for this change in thinking:

- **Unexpected costs:** 77% of respondents reported that operating costs in the public cloud were higher than anticipated, with 63% stating these costs exceeded those of their previous non-public cloud models.
- **Security and compliance concerns:** Ensuring security and meeting regulatory compliance proved challenging for 62% of organisations. As a result, many are reconsidering the public cloud for their critical and sensitive data.
- **Prolonged migration times:** 98%

said that they faced difficulties during their migration to the public cloud with more than half (57%) reporting that the move to public cloud took longer than expected, often leading to disruptions in business operations and escalating costs.

These challenges have led to widespread repatriation of applications from public cloud platforms, with a staggering 91% of those surveyed reporting that they are now moving applications back to on-premise or colocation data centres. Performance issues, downtime, and the need for more control over infrastructure are additional reasons for this shift.

Threat landscape intensifies

Technology companies drastically trail other industries in overall security posture.

ARCTIC WOLF has published its 2024 Security Operations Report, which explores data and insights gathered from more than 250 trillion security events analysed by the Arctic Wolf Platform over the past year. The report provides actionable insights for security leaders looking to leverage the security operations expertise of one of the largest security operations centers (SOCs) in the world.

With a growing number of security tools and vendors, and record high cybersecurity budgets, the frequency of cyberattacks continues to outpace these investments. Coupled with other significant threats that organisations have faced over the past year, such as widescale IT outages, thousands of new critical vulnerabilities, and the malicious efforts of nation-state actors, many organisations find themselves struggling to manage their cyber risk effectively. Based on real-world observations from more than 6,500 organisations, the 2024 Arctic Wolf

Security Operations Report provides an unrivaled deep-dive into the modern threat landscape, arming organisations with the security operations best practices they need to achieve better security outcomes.

Key findings from the report include: 24x7 coverage is key. Nearly half (45%) of security events now occur outside traditional working hours, highlighting how the mass adoption of cloud-based application requires organisation to enable 24x7x365 security monitoring. The sprawl of security tools overwhelms teams. Identity and access management (IAM) tools have become the leading source of alerts of security operations teams, with identity telemetry accounting for seven of the top ten indicators of compromise during security events

Many industries remain under constant attack. Technology companies have the worst average security posture of all industries examined, while highly



regulated industries like Banking, Legal, and Healthcare have the best overall security postures.

Leading business applications remain most targeted. Some of the most commonly used critical business software from Microsoft accounted for three of the top four applications most leveraged by attackers, underscoring the prevalence of cyber risk and the importance for IT and security teams to quickly identify and patch potentially devastating vulnerabilities.

Security incidents for large enterprises on the increase

NETWRIX has revealed additional findings for the enterprise sector (organisations with more than 1,000 employees) from its annual global 2024 Hybrid Security Trends Report.

According to the survey, 84% of organisations in the enterprise sector spotted a cyberattack within the last 12 months, compared to only 65% in 2023. The most common security incidents are phishing, user or admin account compromise, and ransomware or other malware attacks.

“The surge in the attack rates across organisations of all sizes, including the enterprise sector, may indicate that threat actors found AI automation extremely beneficial. With the

introduction of AI, sending a massive number of phishing emails and probing systems and services for vulnerabilities is only a matter of orchestration on those platforms operated by cybercriminals. Constant pressure stresses the security teams and might lead to reduced and worn-out protection levels. To ease this burden, organisations should consider involving third-party investigators as a part of their incident response plan. It will help offload the internal security team when dealing with an ongoing attack,” says Dirk Schrader, VP of Security Research and Field CISO EMEA at Netwrix.

For 53% of attacked large organisations, a security incident resulted in additional unexpected expenses to fix security

gaps. Each fifth enterprise faced compliance fines (22%) and a reduced competitive edge (21%). Moreover, 30% of enterprises estimated their financial damage from cyber threats to be at least \$50,000, compared to just 17% among organisations overall.

“Typically, large enterprises have already implemented the basic security controls and thus must address more complex and costly issues in the aftermath of an attack. Where a smaller organisation may have a quick fix available and can accept certain risks, enterprises must invest in the security team, process changes, and tooling to close even the smallest gaps exploited by the attacker,” says Ilia Sotnikov, Security Strategist at Netwrix.

Senior AI professionals see positive returns on active GenAI investments

Dataiku and Databricks market research report highlights a decisive financial shift among organizations to invest in GenAI to actively shape operations and strategies.

DATAIKU has released survey findings that explore how GenAI has reshaped operations as it becomes a cornerstone of enterprises' business strategy. The findings underscore a wave of growing optimism, as 65% of respondents verified that they are experiencing positive returns on the GenAI projects they have put into production, demonstrating that these initiatives are not only guided by strategic foresight but are also financially rewarding. Nearly all leaders surveyed (90%) are investing in GenAI, highlighting a decisive shift, as 57% of respondents include GenAI as part of their IT and data science budgets, while 33% are creating new budget lines specifically for GenAI projects.

In May 2024, Dataiku and Databricks surveyed 400 global senior AI professionals to uncover year-over-year trends in GenAI utilization, perceptions, investment strategies, and operational challenges since its 2023 report: Extreme worries over AI dropped sharply from 10% to 4%, suggesting an industry shift to a more moderate perspective.

Over half (56%) of AI leaders believe the C-suite better understands the risks and benefits of AI, a 17% year-over-year increase, which closely correlates to increased budget allocations. Despite growing enthusiasm and strategic investments in GenAI, foundational obstacles to extracting the most value from analytics and AI continue to persist, with data quality leading at 58%.

Foundational obstacles have been compounded with emerging GenAI-specific barriers. The biggest and most present GenAI challenges for respondents include a lack of necessary resources (44%), employee



knowledge deficiencies (28%), and IT and policy constraints (22%). "As an industry, we've long talked about the last mile of AI and how to deliver value from the products that will drive the space forward. More than a third of companies now have a dedicated budget for GenAI, and it's become evident how quickly they are embracing the technology and realizing strong returns on their investments," said Conor Jensen, Global Field CDO of Dataiku. "Our survey reveals that AI leaders are starting to think broadly about where they apply analytics and AI across the organization not only to improve but accelerate business outcomes."

"These findings reaffirm that interest in GenAI continues to grow stronger. Yet, organizations face challenges in delivering high-quality GenAI apps," said Prem Prakash, Head of AI Marketing at Databricks. "To solve these challenges, we want to help every business unlock the power of data intelligence by helping them build

domain-specific, secure AI systems leveraging their data. Together with Dataiku, we will continue to help every enterprise benefit from GenAI and deliver positive outcomes for their business."

LLM Variety Sustains Competitive Edge
The survey also looked closely at AI leaders' approaches to GenAI model adoption and found a multi-large language model strategy pushes the boundaries of innovation and provides the biggest competitive advantage: Hosted LLM services are the most popular for ease of integration and broad acceptance, with 85% of respondents either using these services in production or exploring their potential.

Self-hosted open-source LLMs, which provide flexibility and can address security and privacy concerns, are gaining popularity. More than half of the participants (56%) said they are experimenting with or have put these models into production. AI leaders are committed to trialing other GenAI models like multimodal, video, image, and more. Over half (65%) reported experimenting with or using these LLMs in production to gain a competitive edge.

Our survey reveals that AI leaders are starting to think broadly about where they apply analytics and AI across the organization not only to improve but accelerate business outcomes

Skills shortage tops list of AI challenges for IT leaders in 2024

New research from Confluent sees IT leaders share their biggest AI implementation challenges.

SKILLS SHORTAGES are the #1 challenge facing IT leaders looking to implement artificial intelligence in 2024. That's according to research from Confluent, released ahead of this year's BigData LDN event.

The research, which surveyed over 500 UK IT leaders, explores the top challenges facing IT departments when it comes to adopting and implementing AI. It found that 68% of IT leaders believe "insufficient skills and expertise" are a challenge when it comes to rolling out AI. More than a quarter (28%) go as far as to say this skills shortage will pose a "major" challenge in the year ahead.

According to Confluent's data, the UK's top AI challenges include:

- Insufficient skills and expertise (68%)
- Inability to integrate data /

fragmented systems (66%)

- Insufficient infrastructure for real-time data processing (65%)
- Poor data timeliness and quality (62%)

Addressing these challenges will be critical, with 79% of IT leaders saying they expect the demand for Generative AI and similar technologies to grow over the next two years.

As a result, many IT leaders are rethinking their approach to data, switching to more real-time processing methods. Over two thirds (68%) say that feeding AI and machine learning (ML) via real-time data streams will be an important part of their strategy in the year ahead, while 29% say it will be their "top priority".

Commenting on the research, Richard Jones, data expert at Confluent said,



"AI has been a marketing buzzword and not a technological reality for most companies — until now. But as AI becomes mainstream for businesses, many find they are still in the early stages of AI implementation. An AI skills shortage, coupled with a lack of infrastructure for real-time data processing, mean businesses are grappling with a complex, evolving technology.

Preparedness pays off

THE COMMVault SURVEY, done in collaboration with GigaOm, shows that organisations that have endured cyber incidents in the past don't want to get burned again. Consequently, they often reassess and invest in cyber resilience and recovery strategies in very meaningful ways. According to the survey:

- **Investments in cyber resilience increase:** Organisations that have been breached spend nearly 30% more on cybersecurity measures than those that haven't.

More attention is given to understanding data risk profiles: Breached organisations are nearly 2.5 times more likely to prioritise understanding their data risk profiles, which highlight data types and relative

levels of risk. Cyber readiness testing is prioritised: Breached organisations conduct more testing to find gaps in their cyber preparedness plans. Twenty percent of organisations that haven't been breached do not test their recovery plan at all, that number drops to just 2% for organisations that have been breached.

The impact of these added investments and focus on cyber resilience is significant. According to the survey, breached organisations that have invested in comprehensive cyber recovery plans recover 41% faster than their less-prepared counterparts. In terms of specific recovery times, breached organisations state that they are 32% more likely to recover within 48 hours compared to those that have

not been breached – a much better outcome than the recovery times noted by other respondents, which could be three weeks or more. This reduced downtime can translate to significant savings, both in terms of direct financial losses and the preservation of customer trust and brand reputation.

"We've all heard the expression hindsight is 20/20, and that could not be more applicable when it comes to the findings of this survey," said Brian Brockway, Chief Technology Officer at Commvault. "Our survey shows that the most resilient organisations are those that continuously test and refine their recovery strategies, learning from each incident to strengthen their defences. It's this proactive mindset, rather than reactive spending, that makes the difference."

Cynomi's State of the Virtual CISO Report 2024 reveals service provider opportunities

Offering vCISO service provided substantial financial gains for service providers, with the majority increasing revenue according to the report.

CYNOMI has published the results of its 2024 State of the Virtual CISO report, highlighting a growing market opportunity between what service providers are offering and what their small-to-medium business (SMB) customers want.

At a time when 75% of service providers report high demand from their customers for vCISO functionality, the report reveals that only 21% are actively offering them – opening a window onto a growth-area for service providers, while emphasizing the growing centrality of vCISO services to today's cybersecurity operations.

This increased demand for vCISO services on the part of SMB customers can be attributed to a number of factors. Compliance frameworks and regulations are proliferating; cyberattacks continue to escalate in number and intensity; and the global supply chain is increasingly tangled. Meanwhile, the cybersecurity skill gap keeps growing, and those few SMBs that can afford dedicated CISOs often struggle to find them. Cornerstones of contemporary cybersecurity like compliance assessments and security remediation are increasingly difficult for SMBs to navigate on their own. In this context, the expertise and guidance offered by vCISOs have grown substantially in importance, according to Cynomi's report.

vCISO services unlock a range of opportunities for MSPs, including ease of upselling and enhanced differentiation. Accordingly, the financial gains reported by service providers offering vCISO functionality were significant: 37% increased their margins as a result of offering vCISO services and 34% increased their revenue, with the majority of them reporting an increase of 20% or higher. The benefits



extend to the end-customer as well: 46% of respondents said their customer security was improved, while 44% noticed a marked upswing in customer engagement.

Beyond upselling, the report suggests that these financial gains can be attributed to reduced headcount: through the use of a vCISO platform, many service providers are optimizing and automating key strategic operations, such as accessing and managing security and compliance frameworks. Many service providers are already carrying out similar operations without using a vCISO platform, suggesting significant cost and time-saving benefits to adoption.

“This report testifies to a desperate need on the part of SMBs and SMEs for vCISO services,” said David Primor, Ph.D., co-founder and CEO of Cynomi. “These businesses are sinking under the weight of countless new regulations and are more eager than ever for the kind of guidance only vCISOs can provide. Service providers who are already offering these services have seen operational costs shrink and revenue soar – and so it's no surprise that so many more intend to offer vCISO services in the months and years ahead.”

Cybersecurity compliance is a notable pain point for service providers, with 93% of respondents feeling overwhelmed by regulatory compliance frameworks as PCI-DSS or GDPR and 74% feeling overwhelmed by cybersecurity frameworks like NIST and ISO. “Service providers today are operating in an ultra-competitive market in which the need to differentiate is a must,” added David Primor. “The results of this report underline just how essential vCISO services are to this differentiation. The gap between the number of SMBs who want vCISO services and the number of service providers who offer them is alarmingly wide, but this gap presents a significant opportunity for enterprising MSPs and MSSPs. Closing that gap is one of the chief tasks facing service providers today.”

According to the report, those resistant to vCISO services cite issues such as technology or knowledge gaps in cybersecurity or compliance, as well as a lack of skilled personnel or a high initial investment. Increasingly, though, service providers are aware that vCISO platforms actually solve all of these issues. Accordingly, the vast majority of service providers – 98% – intend to offer vCISO services to their clients in the future, and 39% plan to offer them by the end of this year.



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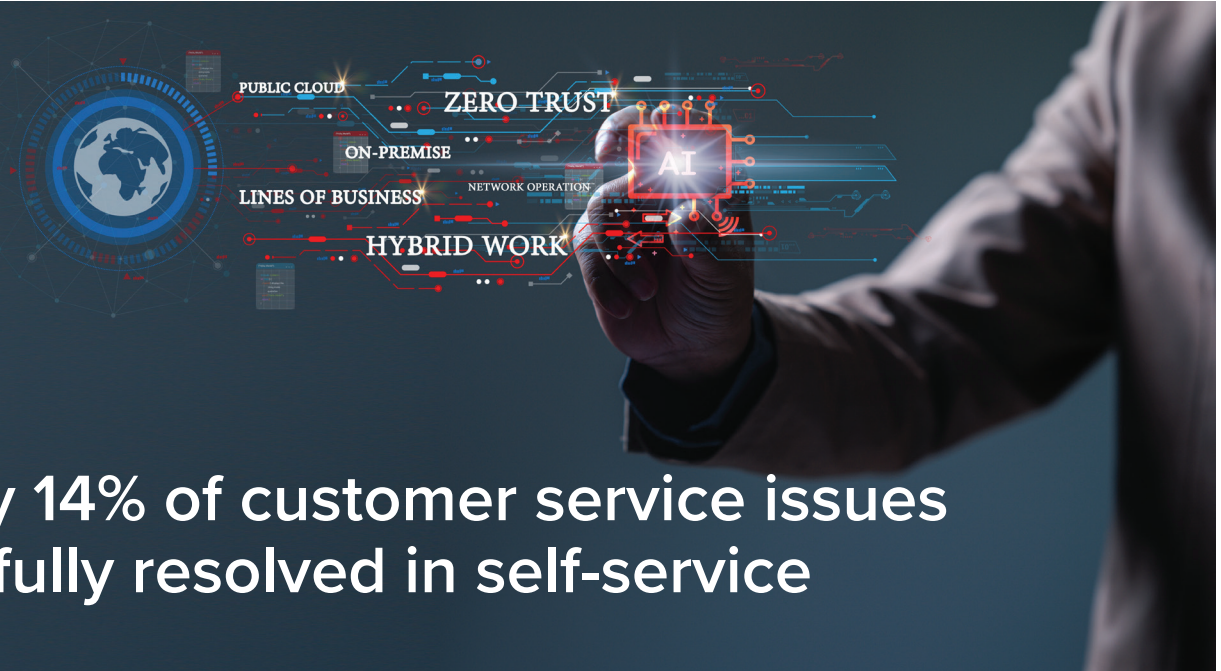
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Only 14% of customer service issues are fully resolved in self-service

Only 14% of customer service and support issues are fully resolved in self-service, according to a survey by **Gartner, Inc.** Even for issues that customers describe as “very simple”, only 36% resolve fully in self-service.

WHILE MANY ORGANIZATIONS have made considerable investments in self-service capabilities, a Gartner survey of 5,728 customers conducted in December 2023 revealed that resolution rates remain low.

“While 73% of customers use self-service at some point in their customer service journey, it’s concerning to see that so few fully resolve there,” said Eric Keller, Senior Director, Research in the Gartner Customer Service & Support Practice. “It’s imperative that customer service and support leaders work to resolve the issues customers face in order to fully realize the value of their self-service investments.”

Customers Frustrated by Ineffective Self-Service Solutions

Customers feel a disconnect between the issues they want to solve and the capabilities that self-service can offer. Forty-five percent of customers who started in self-service said the company didn’t understand what they were trying to do. Furthermore, the most common reason for self-service failure was that in 43% of cases, customers couldn’t find content relevant to their issue. “Customers feel frustrated by self-service journeys that feel too rigid to deal with the complexities of their service issues,” said Keller. “Self-service can offer substantial benefits for organizations and customers, but work is required to

ensure that customers’ needs are understood and responded to.”

In order to improve self-service resolution, customer service and support leaders should:

- Scale and maintain self-service content by expanding content creation responsibilities to reps, enabling them to create knowledge as part of the issue resolution workflow, rather than as a separate process.
- Invest in proactive delivery of self-service solutions by using customer account, interaction and product usage data to predict customer needs.
- Simplify the resolution path on their website with a single digital concierge, such as a GenAI chatbot, positioned as the most prominent entry point to the customer journey.
- Assess and improve the performance of self-service content continuously – for example, by allowing both customers and reps to flag ineffective content and establishing ongoing processes for improving content quality.

“The realities of self-service journeys, which have many potential paths to a solution, varying expectations for content, and constantly evolving issue types – have limited the success of organizations’ self-service investments,” said Keller. “Organizations need to capture, diagnose and predict customer intent in self-service, and match them with the best-fit solution.”

30% of enterprises to automate more than half of their network activities by 2026

By 2026, 30% of enterprises will automate more than half of their network activities, an increase from under 10% in mid-2023, according to Gartner, Inc. “Infrastructure and operations (I&O) leaders are increasingly looking to AI-based analytics and augmented decision making, including intelligent

automation (IA), to improve operational resilience and responsiveness, address complexity and process increasingly large amounts of data through automation,” said Chris Saunderson, Sr Director Analyst at Gartner.

IA for I&O is the application of AI techniques, including generative AI (GenAI) to automate decision making and execute actions for I&O initiatives. It is increasingly being used to empower business agility and is driving more advanced I&O service enablement. IA is an emerging technology that is in the Trough of Disillusionment on the Gartner Hype Cycle for I&O Automation, 2024 and is expected to reach mainstream adoption in the next five to ten years (See Figure 1).

The addition of GenAI capabilities has increased demand in the market for IA platforms. Through the use of analysis and automation, IA enables capabilities that deliver improved operations, efficiency and insight generation.

“Technology providers that offer best-of-breed tools for AI for IT operations (AIOps), application performance monitoring and GenAI will influence IA,” said Saunderson. “AIOps and stand-alone automation technology providers may expand their offerings to IA, through acquisitions or organic development.”

Hyperautomation Continues to be A Staple Discipline for 90% of Large Enterprises

“Along with IA, hyperautomation has seen a resurgence in interest and demand since the fervor of GenAI that launched in November 2022,” said Frances Karamouzis, Distinguished VP Analyst at Gartner. “Hyperautomation involves the use

of multiple technologies and tools including AI, machine learning, event-driven software architecture and robotic process automation, among others.” Less than 20% of organizations have mastered the measurement of hyperautomation initiatives. “Hyperautomation initiatives are often an integral part of a larger technology roadmap that includes systems of record on one end of the spectrum, and AI and GenAI on the other,” said Karamouzis. The demand for hyperautomation is driven by the mandate for operational excellence across processes and functions to support resilience. This demand only continues to increase the growth of offerings provided by hyperautomation.

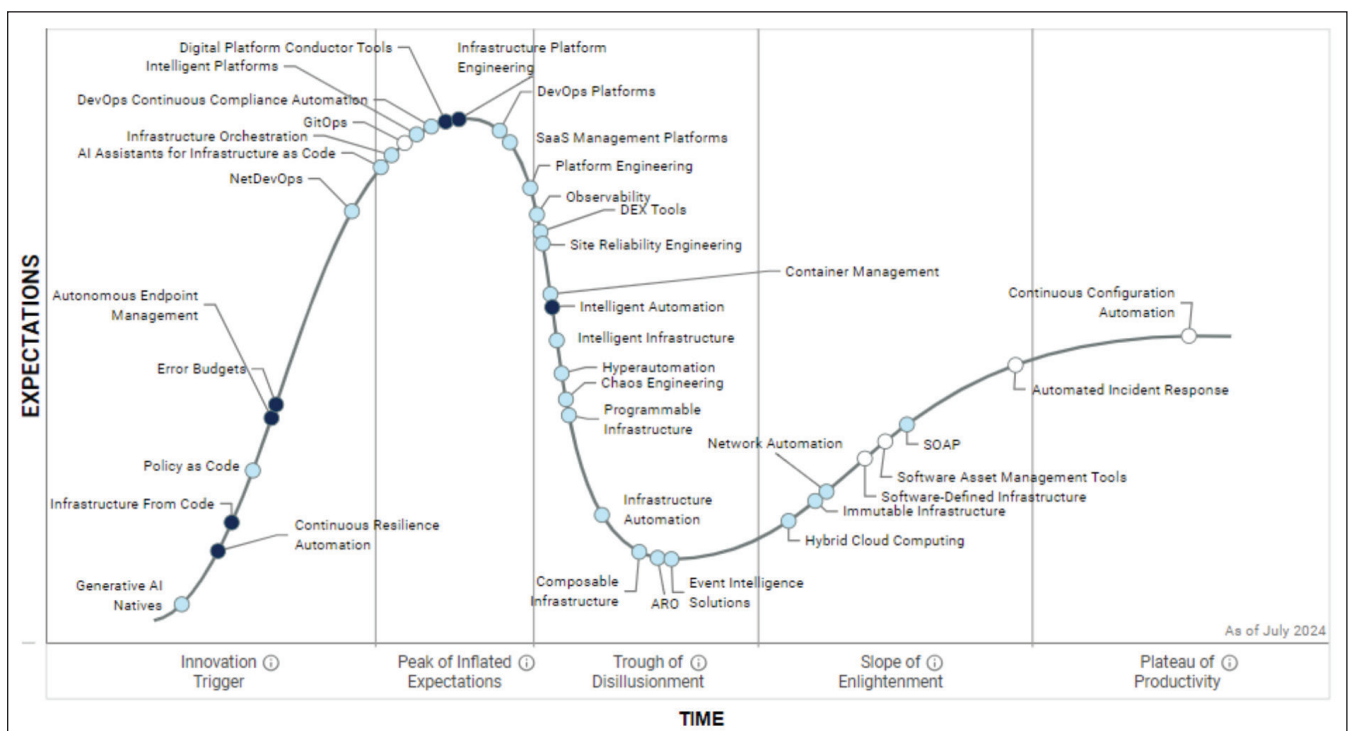
Only 33% of employees say their organizations consistently deliver on promises

Just 33% of employees report that their organization is consistently delivering on the employee value proposition (EVP) promises it makes, according to a survey by Gartner, Inc. The latest findings were announced during the recent Gartner ReimagineHR Conference.

A March 2024 Gartner survey of more than 1,300 employees found that only 21% of employees said their organization communicates about their EVP enough.

“Organizations are pouring resources into their EVP – increasing salaries, promoting people, and offering better benefits – but employees are not seeing these upgrades,” said Keyia Burton, Senior Principal, Advisory in the Gartner HR practice. “Communication is the biggest barrier for HR leaders when it comes to EVPs. Our survey found that 75% of HR leaders admitted they are not doing

➤ Figure 1: Hype Cycle for I&O Automation, 2024. Source: Gartner (September 2024).



a great job of communicating their EVP internally.” There are three key challenges currently hindering EVP delivery for employees that HR leaders must address when revamping their EVP communication strategy:

- Understanding the EVP
- Connecting to the EVP
- Believing in the EVP improvements

Help Employees Understand: Position EVP in the Context of the Employee Journey

The March 2024 survey of 1,300 employees found that just 16% of employees reported knowing what makes up their organization’s EVP. To help combat employees’ lack of understanding, HR leaders should communicate the EVP at the most relevant moments in an employee’s experience.

HR leaders have a variety of channels through which they can communicate about their EVP – job descriptions, career websites, job interviews, onboarding, team meetings, the company intranet, employee working groups and more. Among 3,500 respondents to the March 2024 Gartner survey, for each additional channel through which employees learn about their EVP, they are 24% more likely to agree that their organization delivers on its EVP promises.

“It is imperative that HR leaders are thoughtful about which channels they are using and when,” explained Burton. “EVP communication should occur at all stages of the employee lifecycle, starting from the interview process all the way through the alumni experience.”

Make Employees Feel Connected: Embed EVP Communication Into Workflows

Managers are the day-to-day touchpoints for employees, but they don’t often communicate with employees about EVP. Yet, among the 3,500 respondents in the March 2024 survey, Gartner

found that employees who believe they can depend on their manager to deliver on EVP promises are five times more likely to agree that their organization delivers on its promises.


Unfortunately, managers today are already overburdened and don’t necessarily have the capacity, or the knowledge, to communicate about and help deliver on EVP to their direct reports. “A great way to ease the burden for managers is to encourage them to signal EVP during their existing touchpoints with employees. This could be during a team meeting, a mentoring session, or during development conversations,” noted Burton. “By discussing EVP in their existing touchpoints, managers are creating connective tissue for employees to be able to connect things that they are doing in their day-to-day back to the organization’s EVP promises.”

Build Employee Trust: Demonstrate Responsiveness and Intent to Act

The March 2024 Gartner survey revealed just 38% of the 1,300 employees surveyed anticipated EVP offerings would improve in the future, showing a lack of trust in their organization.

“Employees are wondering if their employer is taking their feedback seriously,” explained Burton. “HR must show that they are responsive and intend to act on any hiccups or missteps that happen throughout the employee experience.”


One way that organizations can show they are responsive to employees is through greater transparency. Organizations can share information at greater depth by going beyond just defining their EVP and aligning it with the organization’s mission. This shows up by taking action on employee feedback, as well as addressing feedback that the organization cannot act on or speaking to challenges faced when delivering on EVP.



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Artificial Intelligence will contribute \$19.9 trillion to the global economy through 2030

New research from IDC entitled, *The Global Impact of Artificial Intelligence on the Economy and Jobs*, predicts that business spending to adopt artificial intelligence (AI), to use AI in existing business operations, and to deliver better products/services to business and consumer customers will have a cumulative global economic impact of \$19.9 trillion through 2030 and drive 3.5% of global GDP in 2030.

AS A RESULT, AI will affect jobs across every region of the world, impacting industries like contact center operations, translation, accounting, and machinery inspection. Helping to trigger this shift are business leaders who almost unanimously, 98%, view AI as a priority for their organizations.

AI's Net Positive Global Economic Impact

According to the research, in 2030, every new dollar spent on business-related AI solutions and services will generate \$4.60 into the global economy, in terms of indirect and induced effects. This is determined by:

- Increased spending on AI solutions and services driven by accelerated AI adoption
- Economic stimulus among AI adopters, seeing benefits in terms of increased production and new revenue streams
- Impact along the whole AI providers supply chain, increasing revenue for the providers of essential supplies to AI solutions and services providers

"In 2024, AI entered a phase of accelerated development and deployment defined by widespread integration that's led to a surge in enterprise investments aimed at significantly optimizing operational costs and timelines," said Lapo Fioretti, senior research analyst, Emerging Technologies and Macroeconomics, IDC. "By automating routine tasks and unlocking new efficiencies, AI will have profound economic consequences, reshaping industries, creating new markets, and altering the competitive landscape."

Impact on Employment - New Roles Emerge While Others Remain Resilient

The majority of respondents to IDC's Future of Work Employees Survey expect some (48%) or most (15%) parts of their work to be automated by AI and other tech over the next two years, while only a minority (3%) of employees expect their jobs to be fully automated by AI.

While some work will be negatively impacted by the proliferation of AI, new positions such as AI Ethics Specialists and AI Prompt Engineers will emerge as dedicated roles within global organizations.

The research further indicates that a “human touch intensity,” combined with the level of “task repetitiveness” by which each job is characterized, will inform organizations about roles that are subject to a full AI and automation replacement, versus those where tech’s role will be to augment human capabilities. As such, positions where human social and emotional capabilities are critical, such as nursing and roles where decision-making encompasses ethics and comprehension beyond numbers will remain robust.

“Understandably, we’re all curious to know if AI will replace our jobs,” said Rick Villars, group vice president, Worldwide Research, IDC. “As a CEO interviewed by IDC’s Andrea Siviero said, ‘Based on this research it’s clear that we should be asking ourselves how our jobs can be made easier and better by AI. AI will not replace your job but someone who knows how to use AI better than you will.’”

Research Methodology

To estimate the overall economic impact of a technology or a service, IDC developed an economic impact methodology that combines IDC knowledge of the market and internal data with a standard analytical framework, known as an Economic Impact Analysis. It leverages an input-output (I/O) framework, using the most updated input-output official tables of a specific economy: through I/O tables, specific multipliers are determined and applied to the specific technologies to calculate the related effect. This IDC Economic Impact Analysis evaluates three types of impact on the economy. In this AI-specific model, these are:

- **Direct Effect** - includes revenues from artificial intelligence business solutions/services providers directly selling their products to end users.
- **Indirect Effect** - refers to the economic impact related to the AI supply chain and AI adopters’ benefits. It includes the effects that organizations/tech providers have on the region or country due to their operations related to AI provision.
 - Backward indirect effects refer to the economic effects on supply chains and industries that provide inputs to AI-driven sectors — in other words, revenues generated in local industries impacted by AI.
 - Forward indirect effects refer to the effects on AI adopters, excluding consumers, that benefit from the adoption of AI technology, in terms of productivity, revenue growth, and other business parameters.
- **Induced Effect** - these are effects induced by the increase in production. It refers to the impact, due to economic stimulus, from an increase in household income, including existing and new

employees linked to the AI value chain across direct and indirect effects layers. People will spend part of their wages in the economy, thus generating additional economic impact.

“The importance of economic impact models is increasing. This type of analysis can be of importance for any vendor who wants to understand the impact of its specific products or services in a short or medium-term period. It helps not only businesses but also governments and other stakeholders make informed decisions by evaluating the potential benefits of a technology investment, for example, to the economy,” said Carla La Croce, research manager, Data and Analytics, IDC.

Understanding and managing enterprise technical debt

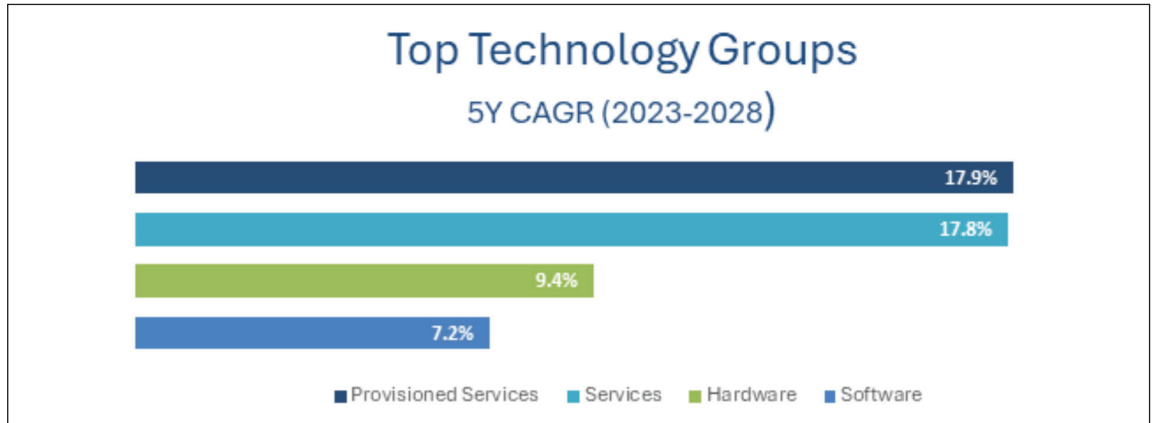
Enterprise technical debt has evolved into a multifaceted challenge that demands the attention of all executive leadership, from the CIOs responsible for technology strategy to the CEOs focused on the organization’s bottom line. To help executives understand the profound impact of enterprise technical debt on their organizations, International Data Corporation (IDC) has developed a framework that outlines the critical steps required to measure and manage technical debt.

In its earliest form, technical debt was synonymous with coding shortcuts: hasty decisions that aimed to meet deadlines but often led to messy, difficult-to-maintain code bases. The concept of technical debt resonated with software developers and became a valuable metaphor for explaining the trade-offs involved in software development. It highlighted the importance of balancing short-term gains with long-term sustainability and quality.

Over time, the idea of technical debt expanded beyond custom code to encompass broader technology-related decisions within organizations, giving rise to the concept of enterprise tech debt. Organizations began to realize that tech debt can manifest in infrastructure, architectural choices, data management, and even the use of third-party software solutions.

Technical debt encompasses hidden IT costs, increased operational risks, compromised security, hindered innovation, and challenges in adapting to change. However, much like financial debt, tech debt can be the result of a conscious decision as well. Just as organizations can take on financial debt for strategic business reasons, they may also (mindfully) accept some levels of technical debt. The problem arises when it accumulates without making technological payments against that debt over time. “As companies become more digital, they need to actively measure and manage their tech debt leverage in the same way that they pay attention to their financial debt leverage, and they need to ensure that they are making regular payments against that debt to keep from becoming too highly

Source: IDC
Worldwide
Edge
Computing
Spending
Guide, V2
2024, August
2024 (Values
in constant
annual)



leveraged in their tech stack,” said Daniel Saroff, group vice president, Consulting and Research at IDC. “The concept of technical debt leverage is intended to help executives understand the impact of high enterprise tech debt to their operations and to help establish a common vernacular for addressing, measuring, and managing that tech debt so that the appropriate tech debt payments can be made over time.”

By proactively measuring and managing enterprise tech debt and establishing a common business language with which to contain that measurement, CIOs can elevate the discussion of tech debt within their organization. This approach allows tech debt to become a strategic lever that can help achieve business objectives, while enabling the executive team to consciously prioritize efforts to address tech debt interest.

To effectively measure tech debt leverage, organizations should evaluate each technology within the enterprise tech stack based on several operational and strategic factors. Key components include the supportability of the system, which is reflected in the time spent maintaining it, and the solution’s remaining life expectancy, which indicates how long the technology will remain viable and useful in the enterprise environment.

Once the tech stack is evaluated and scored, the results should show where an organization is highly leveraged, and which specific technological components need some attention to reduce that leverage. This creates a framework for managing tech debt that the board and executive team can use to understand its impact. It also offers a single ratio to measure, manage, and track tech debt across the organization over time.

Worldwide Spending on Edge Computing forecast to reach \$378 billion in 2028

According to the International Data Corporation (IDC) Worldwide Edge Spending Guide, global spending on edge computing is estimated to reach \$228 billion in 2024, marking a 14% increase from 2023. This includes combined enterprise and service provider spending on hardware, software,

professional services, and provisioned services for edge solutions. The forecast anticipates sustained strong growth through 2028, with spending expected to be near \$378 billion, growing at a solid double-digit CAGR.

According to IDC, the edge encompasses the technology-related actions outside of centralized data centers, serving as an intermediary between connected endpoints and the core IT environment. Edge is a crucial technology infrastructure that extends and innovates on the capabilities found in core datacenters, whether enterprise- or service-provider-oriented. The edge ecosystem comprises various technologies and services, including computing infrastructure (such as servers, storage, and networking equipment), diverse software (such as system infrastructure, security, and application development and deployment), as well as professional implementation and management services and provisioned services delivering cloud-based technologies.

“As the focus of AI shifts from training to inference, edge computing will be required to address the need for reduced latency and enhanced privacy,” said Dave McCarthy, research vice president, Cloud and Edge Services at IDC. “This trend not only optimizes operation efficiencies but also fosters new business models that were previously not possible with centralized infrastructure. Distributing applications and data to edge locations enables faster decision-making with reduced network congestion.”

The IDC Edge Spending Guide segments edge spending for more than 500 named enterprise use cases related to six domains – Artificial Intelligence (AI), Internet of Things (IoT), Augmented Reality (AR), Virtual Reality (VR), Drones, and Robotics – unlocking significant opportunities across various industries.

In manufacturing, accounting for the largest portion of spending, edge enables real-time monitoring of equipment and processes, reducing downtime and improving operational efficiency. Predictive maintenance use case, powered by AI at the edge,

helps companies avoid costly breakdowns by identifying issues before they escalate. In utilities, edge continues to enable smarter, more efficient, and real-time management of critical infrastructure such as electricity, water, and gas. With the increasing deployment of renewable energy sources, smart grids, and IoT-enabled devices, edge is a critical solution for utilities companies to help with processing vast amounts of data quickly and securely.

Banking is the fastest-growing industry in terms of spending. Driven by the rise of AI-powered services, edge transforms how banks handle data processing, fraud detection, and customer interactions. Examples of use cases include AI-optimized operations, augmented fraud analysis and investigation, and others.

IDC expects all 19 enterprise industries profiled in the spending guide will see five-year double-digit compound annual growth rates (CAGRs) over the forecast period.

However, the service provider segment will see the largest CAGR over the forecast period. In the service provider domain, investments in edge service delivery are built on infrastructure spending for multi-access edge computing (MEC), content delivery networks, and virtual network functions. Multi-access edge computing (MEC) represents the fastest growing area, becoming increasingly critical for supporting the ultra-reliable, low-latency communications required by next-generation applications steered by the widespread of 5G networks, IoT, and artificial intelligence.

“Enterprises are now accelerating their investments in edge and AI to drive real-time analytics, automation, and enhanced customer

experiences, particularly in manufacturing, utilities, healthcare, and retail. Key technologies like AI-powered devices, edge servers with GPUs, and 5G connectivity are gaining traction, enabling organizations to process data closer to the source and achieve higher performance,” said Alexandra Rotaru, manager, Data & Analytics, Europe. “In this journey, the service providers will play a critical role by offering tailored solutions, from infrastructure deployment to AI integration and edge management, helping enterprises seamlessly adopt edge and AI and unlock its full potential for advanced innovation.”

Regarding technology spending, the most significant investment will stay within hardware at the beginning of the forecast, driven by AI processors and accelerators in edge infrastructure systems that are projected to generate increased demand in the coming years. However, provisioned services are estimated to surpass the hardware share by 2028. Within provisioned services, infrastructure as a service will represent the fastest growth category as a great tool that facilitates rapid development, deployment, and iteration of AI models and edge computing applications. Although small in terms of overall spending, on-premises software will remain a critical component of edge infrastructure, driven by accelerated demand for analytics and AI software.

A close-up of a graph Description automatically generated

From a geographic perspective, North America will remain the edge spending leader throughout the forecast period, followed by Western Europe, with Germany and the United Kingdom leading the spending. China, Latin America and Asia/Pacific (excluding Japan and China) will experience the fastest spending growth over the five-year forecast.



APT and Schneider Electric transform The Pirbright Institute's data centre to fast-track advanced viral research

Seeking a new strategy to modernise its IT and legacy comms rooms and deploy them away from its existing buildings, a suggestion was made to explore the benefits of a modular, containerised data centre solution. The containerised data centre also includes complete monitoring and management systems, delivered via Schneider Electric EcoStruxure IT Expert data centre infrastructure management (DCIM) software. This is supported by Netbotz environmental monitoring, with over 60 data parameters measured and managed.

THE PIRBRIGHT INSTITUTE is at the forefront of global viral research, operating as one of the UK's leading virus diagnostics and surveillance centres. Pirbright is a worldleading centre of excellence for research into the control and surveillance of virus diseases of farm animals, and viruses that spread from animals to humans. It plays a pivotal role in controlling and preventing some of the world's most destructive diseases through the development of new and improved diagnostics and vaccines.

Recently, the Institute's campus has undergone significant development and investment, incorporating a state-of-the-art high containment (SAPO 4) laboratory – the BBSRC National Virology Centre: The Plowright Building and the low containment facility, The BBSRC National Vaccinology Centre, The Jenner Building. These facilities have enabled a unique combination of fundamental and applied research into pathogenic diseases with potentially devastating impact, enabling the Institute to maintain its cutting edge viral research.

Challenges

Pirbright has embarked on an exciting journey, modernising its campus to maintain high standard of infrastructure and research. In fact, its distributed and legacy IT facilities have played an essential role in housing its critical research applications, helping to ensure that the UK maintains its ability to monitor epizootic viral diseases of farm animals and control unexpected outbreaks.

Developing its campus was, therefore, imperative for maintaining its Reference Laboratory status - enabling the Institute to provide a world-leading

facility for research and training, while making its data available to researchers from other institutions around the world.

Its campus also provides laboratories with facilities capable of identifying and meeting the future demands of diseases which have not yet become a problem here in the UK, but with the advent of climate change, could soon become more widespread.

A critical part of its campus modernisation strategy has been the Institute's IT and data centre infrastructure systems, which not only provide a home for the massive amounts of data generated by its researchers, but deliver the processing power to analyse and turn it into actionable intelligence. Due to the mission-critical nature of its research applications, and the need to provide continuity of service during any modernisation, the Institute had to identify a new strategy to build out its infrastructure to support future technological requirements within high performance computing (HPC) and artificial intelligence (AI).

To deliver its new modernisation strategy it had to look beyond its legacy facilities, which had not been specifically designed for modern data storage requirements, and build a scalable, advanced and dedicated data centre environment for its research applications.

Once completed, the site would provide a unique and vital diagnosis and research facility within the UK, and one which will have international significance for the future.

Tim Haywood, IT infrastructure manager at The Pirbright Institute, a veteran of decades with multinationals, said "A host of new resources were available from the expansive investment, and there was a need to modernise our infrastructure to meet evolving needs."

"The challenge for IT was to find suitable accommodation for the data centre, while modernising to provide services such as secure backup, and Virtual Desktop Infrastructure (VDI) computing for the researchers and scientists using both our high and low containment laboratories. Some existing space was available in older buildings, but these spaces were designated for scientific usage, and could not be changed." "Furthermore, some of the buildings were scheduled for demolition in five to 10 years, meaning it made little sense to house the newly modernised infrastructure there," Tim Haywood observed, reflecting on the importance of value for taxpayers."

The Solution

Seeking a new strategy to modernise its IT and legacy comms rooms and deploy them away from its existing buildings, a suggestion was made to explore the benefits of a modular, containerised

data centre solution. With no prior relationship, Tim Haywood engaged with Advanced Power Technology (APT), an EcoXpert Partner and former Elite Data Centre Partner to Schneider Electric. APT has established a leading reputation as an independent supplier of energy efficient, critical power and cooling systems, and as a specialist in designing, building and maintaining data centres, server rooms and comms rooms.

Followed by a visit to an existing customer site not far from Pirbright's campus, the company quickly established a fruitful relationship and identified for what became known as the CDC – the Institute's new 'Containerised Data Centre'.

Built using key components from Schneider Electric's EcoStruxure for Data Centers solutions portfolio, including its EcoStruxure Row Data Center solution, formerly a Hot Aisle Containment System, APC NetShelter racks, cooling, Galaxy range UPSs, specifically the Symmetra UPSs, and APC NetBotz environmental monitoring, APT was quickly able to preconfigure its modular units with Schneider Electric equipment, enabling the solution to be pre-tested for faster deployment, installation, and greater predictability. Seeing the benefits immediately, Tim Haywood worked with his team to build out a strong business case for the solution. This was a significant process, as there had been a growing realisation that the Institutes IT infrastructure needed to evolve beyond network and storage into a centralised solution housed in a fully-secure and customised data centre.

"After engaging with APT and undertaking a detailed site survey, we were able to build the business case and the costs together quickly," said Tim. "Looking back, the approval to proceed went through with very little friction because it presented a valuable solution, and because it was fully customised."





Once the modular solution was selected, the project was delivered in three phases to meet a strict timeline of 12-weeks, ensuring minimal impact on the Institute's business or its critical applications. Phase 1 of the project, for example, required detailed site preparation and connection of utilities, and new foundations were laid to support the data centre modules.

Phase 2 required the data centre to be built, pre-configured and pre-integrated off-site, and migrating the existing infrastructure and IT systems which were to be retained by the Institute. Phase 3 was deployment, and with tight physical access, the containerised modules were delivered to site via low-loader, and craned into position in June 2023. By the end of July, the project was completed and commissioned well ahead of schedule. The new data centre delivered 80kW of scalable, optimised



and future-proofed capacity in an N+1 configuration, allowing the Institute to increase the resiliency and availability of its critical systems.

The new infrastructure, with the containerised data centre at its core, now supports high-tech research equipment such as sequencers, and diamond-light processes for virus analysis, that can generate data sets of 700GB each. It also allows the Institute to leverage new advancements in HPC, AI and GPU-powered computing, allowing them to identify breakthroughs in viral research at a far faster rate. This, in turn, drove the need for greater bandwidth, low latency data transfer, increased capacity and more secure storage. As such, its network connectivity was expanded to two 10Gb links, and it uses 1 petabyte storage arrays for onsite back up, with additional redundancy offsite.

The containerised, modular data centre also provides the flexibility needed for the Institute's researchers and supporting services, while delivering key advantages in areas such as physical security. For example, parts of the cooling equipment were elevated and installed on top of its modular architecture, allowing APT to deploy a highly effective, heavy-duty enclosure outside the facility, which prevents unwanted access and physical intrusion.

Employing an EcoStruxure Row Data Center solution also ensured the Institute would benefit from a highly efficient and scalable system that facilitates future growth. This approach, coupled with Schneider Electric InRow cooling units, means cooling efficiency is maintained even at lower rack densities.

The new ata centre now hosts a high-performance computing (HPC) cluster, used by scientists on a regular basis. Virtual desktop infrastructure (VDI) allows researchers and scientists to log onto their work whether they are inside the high containment (SAPO 4) laboratory, or sitting at a desk in the office. From a power perspective, Schneider Electric's Galaxy (the Symmetra) range of Uninterruptible Power Supplies (UPS) were deployed in an N+1 configuration, delivering leading levels of resilience and efficiency.

"High availability and business continuity are vital to the Institute, and outages whether scheduled or unscheduled, are undesirable. All maintenance and development, therefore, is undertaken with this need at the forefront of our strategy, and everything is dual connected with twice the power protection for high availability, which is our mantra," said Tim. The containerised data centre also includes complete monitoring and management systems, delivered via Schneider Electric EcoStruxure IT Expert data centre infrastructure management (DCIM) software. This is supported by Netbotz environmental monitoring, with over 60 data parameters measured and managed, including

temperature, humidity, leak detection, and multiple cameras providing real-time information via one complete platform.

“Cyber and physical security is paramount to the work of the Institute and it’s essential that we have continuous and proactive protection against phishing, malware, ransomware, and more. In fact, security is one of the biggest drivers we have, after science,” said Tim. “The investments we’ve made in EcoStruxure IT Expert DCIM and in data centre physical security have paid dividends - allowing us to leverage automation and remote monitoring to help protect against a host of threats.”

The results

The new data centre provides a dedicated, and world-class IT function that allows The Pirbright Institute to compete for groundbreaking research projects on a global basis. Its scalable, modular architecture, and its N+1 configuration also provides the highest levels of availability, resiliency and efficiency.

“One result of the new data centre and IT systems is the flexibility it provides for new research projects,” said Tim Haywood. “If a researcher has an urgent requirement, we’ve got the space to spin up more servers and have populated the system with the equipment from our previous data centre, so there’s plenty of potential.”

Tim Haywood said that the new capability, both in terms of capacity and flexibility, has allowed the Institute to contemplate new projects and ambitions, and further supports collaborations vital to its ethos, with active links to facilities in Guildford, Scotland, and around the world.

Furthermore, the new and futureproofed data centre environment enables the Institute to deploy new HPC and GPU technologies in line with the latest technological advancements, and its extended life cycle will help to deliver a 50 year life span.

“The unique set of challenges we encountered at The Pirbright Institute required a customised and tailor-made data centre, meeting its requirements for fast deployment, increased security, availability and efficiency,” said John Thompson, managing director of APT. “As such, it will provide a long-term, collaborative and scalable solution, which enables its endusers to deliver the highest standards of research, while meeting future demands for security and sustainability.”

“The scalable, sustainable and futureproofed solution, managed using Schneider Electric EcoStruxure IT Expert and bolstered by Netbotz environmental monitoring, also gives Pirbright the foundation to be even more ambitious with their future IT infrastructure and research demands,” he continued.



The data centre has allowed The Pirbright Institute to bring its IT infrastructure in line with its development master plans, ensuring it retains its place as the UK’s foremost centre of excellence in research and surveillance of viral diseases.

Future plans include new laboratories, scientific and administrative facilities that will see three centres of computing, comprising the two main mirror sites and a third, smaller control facility. Furthermore, the Institute now has the flexibility and capacity to support scientists and researchers as they leverage the state-of-the-art laboratories, and the specialised requirements of high-tech virology, HPC, and the vast data it produces.

What’s more, the Institute can further fast-track its knowledge and contributions to global health and welfare for animals, building on a solid IT foundation on which to develop ground-breaking research for decades to come.



➤ Caption here



From potential to power

Turn information into insights and get your organization ready for AI.

BY MITHU BHARGAVA - EXECUTIVE VICE PRESIDENT AND GENERAL MANAGER, IRON MOUNTAIN DIGITAL SOLUTIONS

ONE OF the main drivers of digital transformation is using technology to extract insights from information to enhance decision-making and improve customer experience. However, manual processes, disparate systems and various media formats - including audio, images and paper - strain employee resources, hide valuable insights, and make regulatory compliance challenging.

Imagine this.

You've implemented a digital experience platform (DXP), which enables you to access, manage, govern, and monetize both physical and digital content in a unified, automated, and secure platform. You're an HR leader at a global company and have been told you have 48 hours to ensure all employee personnel records are up to date and in compliance. Manually checking a mix of physical and digital information makes it challenging to comply quickly with these last-minute audits.



Now you can leverage AI to quickly view digital dashboards to see if items are missing and/or incomplete, and automatically send reminders to employees to update their files as needed, enabling audit-ready compliance. By streamlining your HR processes, you're directly contributing to a better employee experience and allowing your HR team to

focus on more strategic initiatives that better serve your employees, customers, and shareholders. You work in the legal team at a media and entertainment company with thousands of contracts that contain valuable information about media assets. It takes weeks of manual work to comb through lengthy contracts to find the licensing terms you need to know your digital rights.

Now you can take advantage of AI-infused intelligent document processing (IDP) to find the licensing terms buried in your contracts within seconds, making it easier to protect and enforce intellectual property rights and contractual obligations for your media assets.

You're a mortgage originator manually reviewing trailing documents to be sure that they have the appropriate signatures and are complete. Complex, slow delivery cycles create the potential for unsaleable loans and penalties if deadlines are not met.

Now you can transform physical documents into meaningful structured data that is easily found and used to fuel and accelerate loan salability in the secondary market, giving peace of mind that all collateral documents are accounted for and satisfying stringent investor and regulatory requirements.

Sounds like a futuristic state, doesn't it? Well, today, the future is here.

The potential that lies in unstructured data

As I speak to IT and data decision-makers around the world, I hear time and again that their organizations face challenges accessing relevant, high-quality, unstructured data to streamline workflows and enhance customer retention and loyalty. Equally important is the need to have documents stored in a secure location that complies with organizational and regulatory policies and standards.

IT leaders know the potential that lives in this data, which has become even more apparent as they grapple with the acceleration of generative AI in our workplaces and juggle managing physical and digital information. A survey by Iron Mountain found that 96% of IT and data leaders agreed that a unified asset strategy for managing digital and physical information is critical to the success of generative AI in their organization.

To get AI-ready, organizations need a scalable platform that ingests and processes unstructured content so it can integrate with existing systems. They need a low-code, modular solution that enables users to customize quickly and easily with the ability to design, build, and publish solutions in real time. They need to be able to access, manage, govern, and monetize physical and digital content in a unified, automated, and secure platform. At Iron Mountain, we bring all that to customers with our new platform, Iron Mountain InSight® Digital Experience Platform (DXP).

The benefits of making data more available

As organizations accelerate their digital transformation, they often need to make a case for investing resources in digitizing legacy assets. Storing data in one place and removing silos helps improve insights and enhance customer experience. By turning physical and digital information into data for AI, organizations can make more informed decisions and improve the end customer experience.

Now, imagine this.

You're the Senior Vice President of Loan Operations at a bank whose team manually handles auto loan funding, involving several labor-intensive tasks such as data entry, verification, and filing. Delays during document review create long turnaround times, damaging customer and dealer relationships. Think of the time and cost this could save.

With Iron Mountain's new InSight® Digital Experience Platform (DXP), you could leverage advanced AI technologies to automate your manual processes and enhance efficiency and accuracy. The platform

includes secure generative AI to enable fast access to data trapped within documents.

The importance of audit-ready compliance

One of the challenges with logging and cataloging data is the risk associated with manual processes—the propensity for human error and the time that manual compliance checks take are prohibitive for organizations.

What if a digital platform could provide jurisdiction-specific retention and privacy obligations and enforce them on all relevant content?

Now, imagine this.

You've hired a new employee and must ensure they complete their new hire forms and training. The digitized forms are auto-tagged with metadata and categorized to easily identify what they are. To check the progress toward completing the onboarding forms, you go to the employer dashboard to see what items are outstanding. The system automatically sends an email to the employee reminding them to identify missing data and complete the missing forms by the required date.

This new process enables audit-ready compliance, minimizes the risk of fines for non-compliance, and makes auditing much easier by using role-based access to ensure sensitive data is protected but accessible in a secure cloud platform that complies with industry standards.

The value of efficiency

Organizations often have to navigate complex physical and digital data ecosystems to source relevant information. This situation leads to slower operations and workplace inefficiencies, which in turn causes employee dissatisfaction and burnout at work when they could be prioritizing strategic tasks. Research from Forrester shows that users of InSight spend 25% less time auditing work.

With Iron Mountain's new InSight® Digital Experience Platform (DXP), workers can upload digital scans of legacy documents, which are then combined with electronic records into a consolidated dashboard. By using a digital platform, your teams can work more efficiently, freeing up time to take on more rewarding tasks that benefit the organization overall.

Going beyond technical upgrades

Luckily, organizations no longer have to imagine a world without a digital platform that cannot ingest, process, and integrate unstructured content into existing systems. Iron Mountain's InSight® Digital Experience Platform (DXP) can accomplish all these actions. Its introduction is more than just a technical upgrade - it offers a transformative solution that provides workers instant comprehensive access to their documents, regardless of format. The ability to scale and adapt to organizations as they evolve makes InSight DXP a valuable asset that can transform their information experience.

Creating your own AI factory: an enterprise guide

Earlier this year, NVIDIA CEO Jensen Huang brought new terminology to the forefront of the ever-evolving AI conversation by referring to the growth of AI factories and foundries in his keynote address at the GTC Conference in March. Typically associated with the development of products and transformation of raw materials, Huang's addition of 'AI' to these words presented a new concept: a modern means of product development and innovation, representing the potential to revolutionise software development, resource management, and overall business operations. Businesses already implementing and looking to implement AI into their operations should take note of this new approach to growing business value.

BY OCTAVIAN TANASE, CHIEF PRODUCT OFFICER, HITACHI VANTARA



GENAI is fast becoming a key productivity tool for many organisations. In fact, when focused on customer service, software and development, and creative and knowledge-based work, GenAI could enable more than \$1 trillion in annual US productivity gains by 2026, according to a 2023 report from IDC. Many of us already see this technology making huge strides in the customer service space, thanks to its

ability to mimic human-like interactions, providing speedy and personalised support and allowing businesses to interact with their customers in real time.

GenAI can hugely enhance the productivity of software engineers too, enabling them to complete coding tasks up to twice as fast, write new code in



nearly half the time, and optimize, refactor, or find defects in existing code in nearly two-thirds the time, according to McKinsey. Furthermore, enterprises are also beginning to incorporate AI and machine learning (ML) into their software, carrying through GenAI's ability to enable better decision-making by leveraging a dynamic comprehension of customers and use cases, rather than using problem-solving shortcuts.

For businesses looking to implement more AI and ML-enhanced software, having the right IT infrastructure that is properly set up to withstand this technology is crucial. This infrastructure must be extremely powerful and enable a high level of flexibility in order to keep up with enterprises' expanding use of GenAI and the enhancements it brings. In this highly digitised world, it's never been more important for organisations to upgrade and modernise their infrastructure to meet these demands – something that can be achieved with the support of trusted partners.

Collaborating for AI success

It's no easy task to power AI and GenAI within your business. To harness the power of these technologies, companies require essential underlying hardware and software components, leading to a need for tightly integrated processes across each step of product lifecycle, as well as within overall business operations.

Another consideration for enterprises is that they and their partners must ensure governance and compliance. This goes for all relevant requirements and requires the enforcement of best practices which must align with the company's AI deployment model. Compliance will be needed in areas such as the selection of materials used, the manufacturing processes, software design, and solution delivery and transportation. This is particularly important when it comes to GenAI, which demands substantial compute and storage resources and, if not properly managed, can result in sky-rocketing compute expenses, increased power consumption, and higher carbon emissions.

An inescapable truth of implementing GenAI applications is the amount of power required to do so. AI foundries and factories that enable these applications will demand a significant amount of compute, storage, and interconnected networks to link hefty datasets to the compute infrastructure needed to both develop and maintain these models. Organisations must also choose optimised avenues for the timely delivery of services, all while keeping the need to lower carbon emissions and gas consumption in mind.

Understanding how to tackle GenAI

When considering AI as a workload or suite of workloads, it's essential to recognise that GenAI introduces different workloads compared to traditional IT scenarios. To successfully navigate the

GenAI landscape, businesses must be able to adapt their infrastructure strategies to accommodate these new workloads, which can be a challenging task. Significant portions of this infrastructure will need to reside in the cloud, but on-premises systems also play a crucial part. To maximise efficiency, it's essential for businesses to carefully choose and construct the right systems for both cloud and on-premises environments, which can be enabled by collaborating with partners who have the right expertise in deploying and managing this mission-critical infrastructure. These partners are highly important to help organisations achieve the best possible results from their GenAI initiatives, both now and in the future.

This infrastructure must be extremely powerful and enable a high level of flexibility in order to keep up with enterprises' expanding use of GenAI and the enhancements it brings

Organisations should also keep in mind that optimising GenAI is a gradual, iterative journey, and not one that comes with instant solutions. In order to get there, they should look to streamlined infrastructure and automation solutions, and collaborate with partners who can assist them across the entire spectrum of the process. This can range from data preparation (including pruning, to remove any unnecessary data, and safeguarding sensitive information such as personally identifiable information); to consolidating data using adaptable, scalable, and cost-efficient storage, to AI model training and inference, which is when the requirements on infrastructure are very different: are require low-latency processing; to model training which is extremely compute intensive. Businesses should prioritise building relationships with trusted partners that have extensive experience in their specific business domain, as well as the data-centric workflows they will encounter.

What's key to remember is that all AI and GenAI applications start with data. That's why it's so crucial that organisations use the right dataset – meaning the most relevant and complete – as well as being set up with the right data infrastructure, enabling them to keep their data safe and accessible for whenever they need it. With these considerations in mind, enterprises can start the journey of building their own AI factory or foundry, alongside the support of the right software to optimise operations, make business offerings more unique, and ultimately drive business value and growth.



The advantages of AI powered clouds

As AI continues to revolutionize industries across the globe, enterprises are harnessing its power by implementing their own AI-powered private clouds. These cloud environments are designed to handle the complex computational needs of AI workloads, offering a range of benefits that can enhance business operations. However, along with these advantages come challenges, particularly in ensuring data sovereignty and security in AI Inference use cases.

BY YORAM NOVICK, CEO, ZADARA

THE ADOPTION of private AI-powered clouds is a natural progression as enterprises look to utilize AI for competitive advantage. Traditional public cloud environments are a great fit for general AI training but are not always optimized for the specific requirements of AI Inference which may require less computing power than training but should be fine-tuned and tailored to a specific organization via integration with that organization's proprietary data. AI-powered private clouds are tailored to meet these demands, offering enhanced processing power, scalability, and storage that are essential for AI-driven innovation.



One of the key motivations for enterprises to develop their own private AI-powered clouds is the ability to customize according to their unique needs. This way organizations can optimize their AI initiatives whether they are focused on improving

customer experiences, enhancing decision-making processes, or automating routine tasks. Owning the cloud infrastructure allows enterprises to have greater control over their data, which is increasingly important in a world where data privacy and security are primary concerns.

Performance and Scalability

AI-powered private clouds are built to handle the high demands of AI workloads. They provide enterprises with the necessary processing power and storage capacity to deploy AI applications at scale. While they may not be the best fit for training complex LLMs, they are a great fit for fine tuning existing LLMs and performing Inferences. The ability to scale resources up or down based on demand ensures that enterprises can efficiently manage their AI projects without incurring unnecessary costs.

The performance and scalability benefits of AI-powered clouds extend to real-time data retrieval and analytics, enabling organizations to derive insights that are accurate and up to date. This is crucial in today's fast-paced business environment, where timely decision-making can be the difference between success and failure.

Improved Data Management

Data powers AI, and effective data management is critical to the success of AI initiatives. AI-powered private clouds offer advanced data management capabilities, including seamless integration with various data sources, automated data processing, and sophisticated data storage solutions. These features ensure that data is readily available when needed, reducing latency and improving the overall efficiency of AI operations.

AI-powered clouds often come equipped with tools that facilitate data governance, helping enterprises maintain compliance with regulatory requirements and internal policies. By centralizing data management in a secure private cloud environment, organizations can better control access to sensitive information and ensure that data is used responsibly across the enterprise.

Customization and Flexibility

One of the key advantages of AI-powered clouds is the ability to customize the infrastructure to meet specific business needs. Enterprises can tailor their AI environments to optimize performance for particular workloads, whether it is natural language processing, facial or image recognition, or predictive analytics. This flexibility allows organizations to experiment with different AI models and algorithms, fine-tuning their approaches to achieve the best outcomes. And AI-powered private clouds enable enterprises to integrate AI seamlessly into their existing IT ecosystems. This integration is essential for organizations that want to leverage AI without disrupting their current operations or requiring extensive reconfiguration of their IT infrastructure.

Challenges in Implementing AI-Powered Clouds

One of the most significant challenges enterprises face when implementing private AI-powered clouds is ensuring the security and privacy of their data. As AI applications often involve the processing of sensitive information, including personal data, financial records, and intellectual property, protecting this data from cyber threats and unauthorized access is paramount.

AI-powered clouds must be equipped with robust security measures, such as encryption, multi-factor authentication, and intrusion detection systems, to safeguard data from unauthorized access and breaches. Additionally, enterprises must ensure compliance with data protection regulations, such as GDPR, which imposes strict requirements on how personal data is handled. The centralization of

data in private AI-powered clouds can make these environments attractive targets for cybercriminals. Enterprises must implement comprehensive security strategies that include regular vulnerability assessments, penetration testing, and continuous monitoring to detect and respond to threats in real time.

Data Integration and Interoperability

For AI-powered private clouds to be effective, they must be able to integrate seamlessly with an enterprise's existing data sources and IT systems. Achieving integration can be challenging, especially when dealing with legacy systems that may not be compatible with modern AI technologies. Ensuring interoperability between different platforms, databases, and applications requires careful planning and the use of integration tools that can bridge these gaps.

Data silos within an organization can really hinder the effectiveness of AI-powered clouds. Enterprises must develop strategies to break down these silos and enable the free flow of data across departments and functions. This may involve adopting new data management practices, such as data lakes or data fabrics, which can provide a unified view of enterprise data and facilitate AI-driven insights.

Bias

AI applications are only as good as the data they are trained on, and biases in data can lead to biased AI models that produce unfair or inaccurate outcomes. Enterprises must be vigilant in ensuring that their AI-powered clouds are not perpetuating biases, whether they are related to race, gender, socioeconomic status, or other factors.

To limit this risk organizations should implement practices that promote fairness and transparency in AI development, such as bias audits, diverse data sets, and explainable AI techniques. Additionally, enterprises should establish ethical guidelines for AI usage, ensuring that AI-powered decisions align with the organization's values and do not harm individuals or communities. AI-powered private clouds are a transformative opportunity for enterprises, offering enhanced performance, scalability, and customization options that can drive innovation and competitive advantage. But the implementation of these cloud environments also presents significant challenges, particularly in the areas of data security, infrastructure management, and ethical AI use.

To successfully navigate these challenges, enterprises must adopt a strategic approach that includes robust security measures, skilled infrastructure management, seamless data integration, and a commitment to ethical AI practices. By doing so, they can fully leverage the power of AI-powered private clouds while ensuring that their data remains secure, available, and used responsibly.

Containing cloud costs while accelerating AI deployments

Organisations everywhere are exploring the benefits of AI. However, as a notoriously data-hungry technology, its deployment requires greater cloud storage and compute capacity. But, in a rush to implement this, many companies have seen a rise in cloud costs. And this can present a significant risk to already stretched IT budgets. It's vital, then, that organisations take steps to contain such costs when utilising the cloud to accelerate their AI deployments.

BY RUPERT COLBOURNE, CHIEF TECHNOLOGY OFFICER, ORBUS SOFTWARE

ACCORDING TO IBM's Global AI Adoption Index 2023, about 42 per cent of enterprises have actively deployed AI in their business, with a similar number (40%) currently exploring or experimenting with the technology. And the speed of AI adoption is increasing. Three in five of those companies (59%) that have either deployed or are exploring AI say they have accelerated their rollout or investments in the technology.

This is hardly surprising. From predicting market trends to enhancing decision-making processes and optimising operations, the application of AI offers a range of potentially transformative capabilities. Embedding AI into the very fabric of its business operations allows an enterprise to not only anticipate changes in the market but also adapt and react to them with unprecedented speed and efficiency. And its ability to analyse vast amounts of data at breakneck speeds enables organisations to make informed decisions in real time, ensuring they remain agile in a constantly shifting business landscape.

AI is only as good as the data used to train and inform it. Without it, an organisation's AI initiatives are unlikely to provide the competitive advantage they seek. The long running struggle to derive value from exponential rises in data is further amplified in the context of AI. Accenture has found that just 32% of companies are able to realise tangible and measurable value from their data, even less (27%) say their data and analytics projects produce highly actionable insights and recommendations.

This leaves the majority of companies struggling to harness the full potential of their data. To ensure they have sufficient storage and compute power for the volume of data required, organisations are turning to the cloud. Indeed, according to Gartner, 50 per cent of CIOs and technology executives increased their investment in cloud platforms in 2023.

There is often an expectation among businesses that moving applications to the cloud will resolve all their issues. The reality, though, is that every decision concerning the cloud has cost consequences that must be managed if AI is to be deployed successfully and cost-effectively.

Proactive cost management

Building cloud-native applications, and creating the architecture needed to accommodate and manage the processing power, memory, and storage necessary for training and running AI models can drive up cloud costs. Without careful management, these can quickly spiral out of control, and lower the return on investment of implementing AI.

The issue, according to Gartner, is that what are commonly considered to be the most beneficial characteristics of the cloud – shared and dynamic infrastructure, on-demand as a service, elasticity and scalability, consumption metering, and cross-network availability – are not actually infrastructure features. They only emerge from architecture built with cloud-native principles. And every architecture has cloud cost consequences - it needs to be built, and that will cost money over time.



Therefore, when building the cloud-native architecture required for data management and AI deployment - as with any digital transformation exercise – proactive cost management and architecture strategies are essential. Every decision must be coupled with considerations of its impact on the organisation's overall IT architecture, its management practices and, of course, costs. One example of an increasingly common management practice is data meshing.

Tactics and practices

There are a number of tactics and practices an organisation can employ as part of its strategy to bring cloud costs under control. Efficient data storage practices, for instance, like eliminating silos and redundant storage, can optimise existing cloud usage to open up resources for AI implementation. According to Sysdig, organisations of all sizes could be overspending by up to 40 per cent due to misallocated storage. Its recent analysis found that 59 per cent of cloud containers have no CPU limits and 69 per cent of requested CPU resources were underused. Developers need to be aware of where their cloud resources are over- or under-allocated, otherwise cloud costs will remain unpredictable. The use of rightsizing and autoscaling can reduce the consumption of cloud computing and storage. These techniques are based on analysing where provisioned cloud compute exceeds the peak requirements of a given application, where storage is over-provisioned or where unnecessary data volumes are being retained.

In addition, a strict IT portfolio management approach based on asset lifecycle management practices will enable the retirement of redundant or rarely-used cloud-hosted applications. Organisations can look at where cloud services can be replaced by lower cost equivalents, or whether the same service could be provided by an alternative – and less expensive – cloud provider.

Data meshing – an attractive option

To get a handle on cloud costs and accelerate the tactics to do so – organisations can look to put a data mesh in place – which is an architectural framework that solves advanced data security challenges through distributed, decentralised ownership.

A data mesh architecture effectively unites the disparate data sources from different lines of business and links them together through centrally managed data sharing and governance guidelines for the end purpose of analytics.

Working in a data mesh architecture, business functions can better maintain control over their storage costs and how shared data is accessed, who accesses it, and in what formats it's accessed. A data mesh adds complexities to architecture but also brings efficiency by improving data access, security and scalability.



For a data mesh implementation to be successful, every domain team needs to apply product thinking to the datasets they provide. They must consider their data assets as their products and dimension the compute and storage requirements locally. In short, making data meshing a success requires strong levels of internal buy-in and prioritisation. But there's serious gains for the taking for organisations that pull it off.

Greater visibility

Whichever techniques or practices it employs to consolidate its cloud costs, an organisation will benefit from a digital blueprint of its whole IT infrastructure. With greater visibility over the use of cloud across the entire organisation, it can see where resources are being under- or over-utilised, which resources are redundant, and where more efficient replacements can be made.

As such, it will be better able to ensure its cloud resources are best utilised to support the implementation of AI technologies without drastically increasing costs.

Shifting to the cloud is a logical move for organisations looking to capitalise on the many advantages offered by deploying AI across their business, but it can come at a cost. A strategic approach to managing cloud resources can help companies realise the benefits of their AI deployments while making the management of cloud costs as pain-free as possible.



Working together for smoother enterprise cloud transformation

Cloud transformation stands alongside AI in terms of dominating the discussion amongst organisations looking to achieve leaner, slicker operations.

BY LEE MCCLENDON, CHIEF DIGITAL AND TECHNOLOGY OFFICER AT TRICENTIS, AND MARC THIER (BOTTOM LEFT), SVP APPLICATION LIFECYCLE MANAGEMENT AT SAP

DEMAND FOR THE CLOUD is driven by several factors, including the desire to be more agile, make faster decisions, and build supply chain resilience in the face of turbulence and geopolitical issues. Meanwhile as sustainability becomes a more significant focus with impending legal obligations such as the Corporate Sustainability Reporting Directive (CSRD), the potential of a lower carbon footprint with the cloud is also evident.



For most enterprises, it's less of a question of whether or not they shift from on-prem to cloud, but more a matter of how and when. Cloud-native businesses and applications have demonstrated how sleek modern software can be. But for enterprises with established systems of legacy, on-premise applications, migrating to the cloud is a more challenging road to tread.



Modernising an organisation's IT environment through cloud transformation is a complicated,

high-risk, high-cost, and resource-intensive process - and typically, the bigger the enterprise, the higher the mountain to climb. It must be managed with the right methodology and tools to ensure speed, confidence, and minimal business disruption.

Making the case for the cloud

For larger companies, cloud transformation is not just a matter of moving one single application to the cloud. Rather, it's about moving an entire business' capability, often comprised of multiple intertwined applications that logically belong together.

This makes the process, by default, a lot more complex. It has to be fully scoped, with a business case fully identified. It's not enough, for example, to move to the cloud simply to get rid of a physical data centre. Replacing on-prem technology without changing business processes, which enables greater automation to enhance the performance, cost-efficiency, and reliability of cloud resources

With strategy and business process changes in place, the right software solution implementation is required to harmonise the undertaking. New applications must be ramped up, brought to life, looked after, and eventually sunsetted

and services, will not deliver the value required for reduced costs or increased flexibility. But this means that cloud transformation cannot just be about the tech: business processes must also be updated, and teams must be equipped with the right skills and understanding for success.

The recipe for success

Four key ingredients are fundamental to cloud transformation success. The first is to have a clear strategy identifying the unique capabilities required for the business moving forward. Next comes business process analysis and design to determine how processes are operated to identify inefficiencies and map out how they need to change to ensure best practices.

With strategy and business process changes in place, the right software solution implementation is required to harmonise the undertaking. New applications must be ramped up, brought to life, looked after, and eventually sunsetted. Troublemaker applications that might be out of maintenance and need attention to reduce the total cost of ownership and free up time for innovation have to be identified.

Next, there needs to be a project plan for all software, including a thorough testing strategy that ensures quality through production and ongoing operational maintenance to keep the lights on after the product goes live. And, of course, this will only have the desired impact if users are trained to understand the new processes and solutions thoroughly.

Remove risk

Risk is often top of mind for executives embarking on cloud transformation projects. The concern that transformation could create errors that will damage the business is very real. However, it's possible to limit risk and provide transparency by ensuring that quality engineering is integrated throughout the transformation journey, building mature testing and multiple checkpoints into the process.

If testing is left until the end, it's a case of returning to the start to fix the issues. By embedding quality at every stage, the transformation process can be made far more efficient, faster and with a higher level of confidence at the leadership level from the very beginning. Indeed, by building in testing from the start it's possible to establish what needs to be tested based on the identified process and architecture changes. This level of change impact analysis on an existing IT landscape means that a

very targeted approach can be taken, identifying critical gaps that expose the business to risk and focusing testing efforts where they matter.

This quality-led approach can be carried through to the end with acceptance tests and even non-functional requirements such as load speed and usability. With faster deployment cycles, including daily deployment, this approach assures quality for the future, creating test assets that manage the ripple effect of update impact.

Looking ahead

As large organisations everywhere ride the cloud wave, we expect most enterprise applications to move to the cloud in the next ten years.

But cloud transformation demands more than just technological migration—it requires a holistic overhaul of an organisation's capabilities and processes. Success hinges on a clear strategy aligned with business goals, meticulous planning, optimised processes and robust execution that includes user training and change management for seamless adoption. Organisations must proactively integrate the right software solutions and a quality engineering approach throughout the transformation journey to mitigate risks, ensure efficiency, and instil stakeholder confidence.

Cloud transformation signifies a shift towards agility and innovation. A well-considered strategic and quality-led approach ensures success in the current transformation and prepares organisations for future growth in a dynamic digital landscape.



An introduction to Infinidat's next-generation G4 storage solutions

We are in the midst of a data driven revolution. The IT landscape is evolving more rapidly than ever before and so are the needs among enterprises for advanced storage solutions.

BY ERIC HERZOG, CMO, INFINIDAT



OUR CHANNEL PARTNERS, who to date have excelled at selling Infinidat's previous generations of enterprise storage solutions, are now at a crossroads. They have been instrumental in our journey to becoming a leading enterprise storage vendor. The proven reliability of the InfiniBox® has made it a trusted workhorse in the industry. But as we continue to innovate, the introduction

of our new InfiniBox G4 family of next-generation storage arrays for all-flash and hybrid configurations opens-up masterful new avenues for the growth and advancement of our channel partners.

Embrace the future with InfiniBox G4

Praised by industry analysts, the IT media and Infinidat users alike, the InfiniBox G4 represents a true, evolutionary leap in storage technology. It's much more than an upgrade and more akin to a complete re-imagining of what enterprise storage can offer.

The G4 series is faster, more energy-efficient, higher capacity, and more flexible than ever before. It is designed to seamlessly integrate with hybrid multi-cloud environments and is fortified with advanced cybersecurity features.

For our channel partners, this evolution means they can now offer their customers a cutting-edge storage

solution that truly meets the demands of modern IT infrastructure. The G4 series provides up to a 2.5x performance improvement and advanced cyber resilience, integrating seamlessly with existing data centre-wide cybersecurity applications.

Strategic move for channel partners

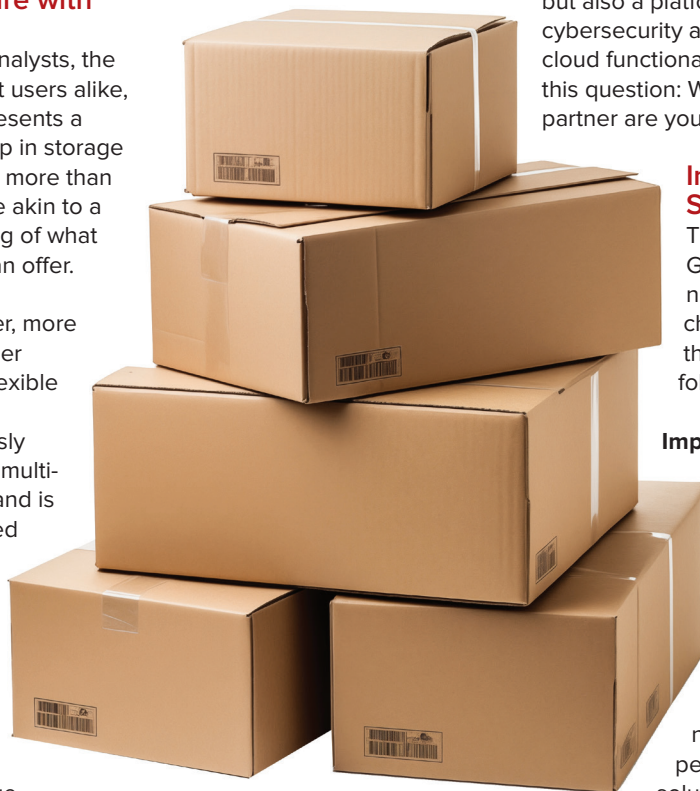
Channel partners now have a choice - they can either stick to what they already know, selling familiar solutions or embrace the future, with the outstanding G4 family of InfiniBox solutions. The latter offers new sales opportunities and requires proactive engagement and strategic thinking. The G4 series is not only a performance powerhouse, but also a platform for enhanced cybersecurity and hybrid multi-cloud functionality. Ask yourself this question: What type of channel partner are you?

InfiniBox G4 Series benefits

The InfiniBox G4 series offers numerous benefits for channel partners and their customers as follows:

Improved Performance and Efficiency:

The G4 series delivers up to 2.5x the performance of its predecessors, making it a compelling choice for enterprises needing high-performance storage solutions.



Energy Efficiency and Space Savings: With higher capacity in less rack space and improved energy efficiency, the G4 series helps enterprises reduce their operational costs and carbon footprints, delivering to their enterprise customers both environmental advantages and economic advantages.

Cybersecurity Integration: The G4 series is packed with innovative cybersecurity features, including InfiniSafe® Cyber Detection and Automated Cyber Protection (ACP), which can be seamlessly integrated with data centre-wide cybersecurity applications. Industry analysts have hailed InfiniSafe ACP as the missing link in a comprehensive cybersecurity strategy for the enterprise.

Hybrid Multi-Cloud Capability: InfuzeOS™ Cloud Edition supports seamless integration with Amazon AWS and Microsoft Azure, enabling hybrid multi-cloud solutions.

New use cases: The new family of solutions of the all-flash InfiniBox SSA includes the InfiniBox G4 F1400T, a small form-factor storage array that can be easily installed in any industry-standard rack and has all the high-end enterprise features of the InfiniBox G4. With this new compact form factor, channel partners can provide new solutions for co-location opportunities, distributed/edge data centre deployments, and the ability to fill our partially populated existing racks in their customers' data centres.

Capitalising on new opportunities

With the introduction of the G4 series, partners have a golden opportunity to initiate discussions about a complete storage refresh for their enterprise customers. The new InfiniBox G4 can serve as a powerful upgrade to existing Infinidat systems, but especially as a replacement for competitive storage products.

InfiniVerse® Mobius controller upgrade program

One of the most attractive aspects of the G4 launch for channel partners is the complementary InfiniVerse® Mobius controller upgrade program, which allows partners to offer non-disruptive controller upgrades to their customers. This ensures that customers can upgrade to future generations without the complexities of data migration, providing an upsell opportunity for partners and guaranteeing continuous performance and availability.

Expanding revenue streams with cyber resilience

The InfiniBox G4 family also introduces new revenue streams through cybersecurity enhancements. InfiniSafe Cyber Detection, offered as a Software-as-a-Service (SaaS), provides an additional revenue opportunity for partners with its expansion into VMware environments. Integrating InfiniSafe Automated Cyber Protection with existing



cybersecurity software packages provides the chance to develop a unique co-selling proposition, combining storage and security in a single, comprehensive solution. It is truly differentiated, as no other enterprise storage vendor offers this as a package.

Exciting future for channel partners

The excitement among our channel partners is evident and for many powerful reasons. The G4 series not only delivers powerful technical and business value, but also drives significant revenue opportunities. With the launch of G4, Infinidat has set new standards in performance, cyber resilience, and hybrid multi-cloud integration.

Channel partners working with Infinidat can leverage these advancements to benefit their businesses and their customers. They have an unsurpassed opportunity to expand their businesses, win new customers, and increase their market share. The future of enterprise storage is here, and it's a G4 world. There is no better time for channel partners to embrace these opportunities and capitalise on the potential that the InfiniBox G4 series brings.

One of the most attractive aspects of the G4 launch for channel partners is the complementary InfiniVerse® Mobius controller upgrade program, which allows partners to offer non-disruptive controller upgrades to their customers. This ensures that customers can upgrade to future generations without the complexities of data migration, providing an upsell opportunity for partners and guaranteeing continuous performance and availability.

The next wave:

CIOs in a post-digital transformation era

In our digital-first world, IT evolves at an unprecedented pace. To stay ahead, the vast majority of businesses have focused on digital transformation to ensure they remain competitive over the past decades.

BY TOBY ALCOCK, CTO LOGICALIS

HOWEVER, today, digital transformation no longer holds the weight it once did. A recent groundswell of change, from the way we work to the technologies we can access, means this approach no longer has the same impact and, instead, has become business as usual.

Now the focus for IT leaders needs to be on the emerging technologies that have the power to implement real change in this dynamic environment. The integration of new technologies, when strategically aligned with business objectives, will be crucial in achieving the next level of competitive advantage.

When Digital Transformation Becomes Routine
Digital transformation initially represented a profound and revolutionary shift for businesses. It was a period marked by significant opportunity, improving businesses by streamlining operations, enhancing customer experiences, and much more.

However, the changing nature of work, supercharged by the pandemic, forced everyone and everything online almost overnight. This transformed once long-term digital strategies,

designed to gain a competitive edge, into a normal and necessary function. Digitalisation has matured and many initiatives that once seemed groundbreaking, are now ubiquitous tools in the corporate toolkit.

Evaluating emerging technologies

In this post-digital transformation era, CIOs need to focus on what will drive real business change. It is here that the role of technology as a driver of business outcomes becomes most apparent. Whilst digital transformation is now a standard business function, new technologies are promising to take businesses to new heights - but adoption needs to make economic and strategic sense.

The Logicalis 2024 CIO report uncovered that while CIOs recognise the need to rapidly assess and adopt new technologies, many are facing challenges when it comes to investment.

For example, whilst 89% of CIOs are actively seeking opportunities to incorporate Artificial Intelligence (AI) into their business, the majority (80%) of respondents indicated they are not yet realising a return on investment in AI.



AI is just one example. Other emerging technologies, such as quantum computing, blockchain, and advanced data analytics, are also capturing the interest of businesses. Despite their promising capabilities, these technologies present similar challenges. For instance, quantum computing promises to solve complex problems at unprecedented speeds, but it requires specialised infrastructure and expertise which many businesses lack.

The misalignment between investment and impact is particularly detrimental as globally, businesses are rocked by economic uncertainty, so failed investments will hit companies hard and that is where the role of the CIO becomes more crucial. Aligning Technology with Business Outcomes What is encouraging is that the vast majority of CIOs now have a seat at the table when it comes to business goal setting. Instead of a backroom function that businesses worked around, today technology is recognised as a core business imperative.

However, with digital transformation not always as revolutionary as anticipated and some new technologies failing to consistently yield productive outcomes, the question for CIOs will remain focused on how they can ensure meaningful progress and tangible results:

- **Align technology with business strategy:** CIOs must take the time to align technology investments with overarching business goals. Only then can they ensure that the technology adopted is not just a novelty but a strategic asset that contributes to the organisation's near and long-term vision and efficiency.
- **Reduce complexity:** In order to truly accelerate, tech leaders need to have visibility across the entire estate and understand how technology is performing. Many CIOs struggle to measure performance but by leaning into the data, they can swiftly make decisions to refocus

At a time when the opportunity for innovation is exponential, the key for organisations is identifying and advancing technologies that will give them the most competitive edge

investments, deprioritise, outsource or simply drop activities that do not align with desired business outcomes.

- **Keep an eye on innovation:** Technology continues to advance at pace and the potential is huge. By watching early adopters, tracking progress, assessing regulatory requirements or challenges, and reviewing security threats, CIOs can make strategic moves whilst limiting the potential for complications. Staying at the forefront of technological innovation while being vigilant about its application is essential for ensuring that new tech investments translate into real business gains.

What was once considered transformative has become standard practice for most businesses. At a time when the opportunity for innovation is exponential, the key for organisations is identifying and advancing technologies that will give them the most competitive edge. This focus on technology as a key enabler of business outcomes will be critical in navigating today's dynamic environment.

That's where CIOs will become even more integral to their organisation's future success. Bridging the gap between corporate strategy and tech, they are uniquely positioned to advise the board and direct businesses into making the investments that will have maximum benefit. The ability to pivot and embrace technology, focusing on results, will define businesses with visionary leadership in our digital-first world.

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M&A: What does “good fit” really mean?

The MSP business model thrives on scale. The good news for MSPs is that the sector continues to grow, with Canals predicting revenues to increase 12% in 2024. With the greater need for MSPs over the pandemic, followed by economic uncertainty, we might have expected a big rise in revenues followed by a correction – but the reality has been remarkably stable.

BY DAVID WEEKS, VP OF PARTNER EXPERIENCE AT N-ABLE

ONE CHANGE has been in the number of mergers and acquisitions (M&A). Our research found a 60% decline in M&A activity in 2023 compared to the previous year. While the MSP market continued to grow, the appetite for the risk of acquiring a whole other company did not.

By the end of this year, we’re likely to see this change. But there is a disparity in the market. Also found in the MSP Horizons Report, 44% of MSPs are looking to acquire, but only 13% are actively seeking to sell. Demand is outstripping supply, meaning buyers will have less choice than they might hope. Finding the right MSP to acquire requires careful consideration, making finding the right fit even more difficult.

Why acquire?

Consolidation can be a sign of a maturing market, one where businesses with good recurring revenues have been built and make for tempting targets for acquisition. It can also be a sign of a sector in

trouble, as failing businesses with valuable assets are snapped up by competitors who think they can make these work.

For the MSP market, it’s the former – successful MSPs are looking to increase their headcount, acquire new customers and improve their technology, and the easiest way to do this can be to acquire or merge with another business. Despite the growth in the MSP market, many struggle to land new customers – not because of the value they offer—but simply because marketing can be difficult if they don’t have the required funds or staff, and word of mouth and referrals can only scale so far. Recruitment in order to scale is also tough, and buying another MSP increases headcount at a stroke. It also has the potential to bring in new technologies and expertise. If an MSP is failing to provide the level of security its customers demand, it can train up staff and invest in onboarding new technology – or spend money on a security specialist.



Of course, it's not really that simple. M&A is complicated, from exhaustive due diligence processes to the contractual details. And no one MSP is the same as another. It's vital to figure out if one being considered is a "good fit".

What is a good fit?

There is rarely going to be such a thing as a perfect fit. The trick is figuring out if the compromises and pain are worth the rewards. These are the main areas to think about:

- **Technology and expertise:** One compelling reason to buy another MSP is to create a larger MSP with a wider portfolio of services, and staff who know how to make the most of this technology. The obvious consideration is where the two MSPs overlap, and where they do not. Will cross-selling be simple? If the MSPs are using competing technologies, will it be possible to migrate customers to one of them? An acquisition or merger needs to be just that to be effective, rather than simply putting two different companies with essentially separate customers under the same name. It's also worth looking beyond technical expertise. A bigger company will need more effective non-technical departments, for example in sales and marketing. Is the expertise there or will it need to be added? When new business is the biggest problem, creating a bigger business with the same issue isn't ideal.
- **Customers:** One of the most compelling reasons to acquire an MSP is to acquire the customers that come with it. But how closely do these customers resemble the customers of the acquiring business? Again, the idea is to eventually integrate two businesses into one, and while MSPs are able to service a wide range of customers, there is always a certain amount of specialisation. An MSP that, for example, works mainly with small retailers may struggle to meet the needs of a new set of customers that are mainly in petrochemicals. Their needs will be different, and the more different they are, the tougher it will be to integrate these customers under one MSP.
- **Business objectives:** If the two MSPs were to continue as separate businesses, what would their plans be? Would they align? Is a fast-growing, ambitious MSP buying one that has a more slow-and-steady approach to growth? When integrating these two businesses, will it be possible to keep that ambition, or will it need to be tempered somewhat? This overlaps with the thorny issue of culture.
- **Timing:** Businesses would benefit from keeping in mind the timing of the integration. If integrating the new company lingers on, costs associated with it could start to add up. Costs such as consulting fees, travel, and other expenses relating to the integration process should be considered.
- **Culture:** If an M&A deal was to go badly, there's a good chance that culture will be at the heart of

the problem. Due diligence focuses on the finances and prospects of the business, but the same care needs to be taken on potential culture clashes. Some of these are more obvious than others. If it's an international deal, there will be regulations and cultural expectations around working hours that will differ. These aren't unsurmountable, but they need to be recognised. There are also more subtle differences that need to be taken into account.

Culture is a word that covers many different aspects of a business. One business may have a CEO that is very sales-focused and hands-off when it comes to the technical side of the business, while another may have built the MSP from a small business and retains a close relationship with customers, sometimes getting involved in fixing problems. Neither of these approaches are wrong, but if integration is handled badly there could be problems handling employee and customer expectations.

This is important as even minor changes can lead to resentment, and ultimately employee and customer churn, chipping away at the reasons MSPs consider M&A in the first place.

All of this is not just relevant for the acquirer, but the business being acquired too. The process of consolidation takes time, and it's common for the owners of an acquired business to have a stake in the success of the new business. A tempting offer needs to be considered carefully. Owners need to consider if the values and principles they have built in their company will continue – it's a practical consideration, not mere sentimentalism.

There will always be compromises to be made when two businesses consolidate. The key to ensuring a good fit is to consider these ahead of time, and to ensure due diligence goes far beyond the commercial aspects.

Due diligence focuses on the finances and prospects of the business, but the same care needs to be taken on potential culture clashes. Some of these are more obvious than others. If it's an international deal, there will be regulations and cultural expectations around working hours that will differ

Moving from frustrating to frictionless IT experiences

Today's employees expect their corporate technology to be as seamless and intuitive as their personal tech. Yet, clunky IT systems and outdated software often create a frustrating reality – a world of slow downloads, application crashes and endless troubleshooting and how 'digital friction' wastes valuable time, disrupts workflows and ultimately leads to a poor employee experience.

BY JUSTIN RUTHERFORD, CTO OF MANAGED SERVICE PROVIDER ORYXALIGN



THE TRADITIONAL APPROACH to solving digital friction, the Service Level Agreement (SLA), focuses on technical aspects like uptime guarantees and response times for resolving incidents. However, SLAs often neglect the user's perspective on how easy it is to use the technology. Now, a new paradigm is emerging: Experience Level Agreements (XLAs).

XLAs go beyond uptime metrics, focusing on employee sentiment and proactive problem-solving, in addition to areas like application performance and security posture. SLAs measure deliverables, XLAs measure impact. Imagine constantly rebooting your computer due to application crashes – a frustration many employees face. On average, users experience this issue seven times before reporting it to IT. By leveraging telemetry data collected from user devices, XLAs gain insights into a wide range of issues that can hinder productivity. This data can include everything from boot times and application crashes to connectivity issues and even the number of times a user hits the enter key or encounters blue screens. This telemetry can also provide

valuable clues about underlying hardware problems. For instance, frequent Microsoft Teams crashes accompanied by blue screens could indicate a device overheating or nearing hardware failure. Similarly, a spike in dropped calls during meetings, coupled with a high number of blue screens, might suggest a device on the verge of failure.

XLAs set clear expectations for the user experience, focusing on metrics like ease of use, resolution times and self-service capabilities. I believe XLAs can significantly improve employee experience by proactively addressing issues and streamlining IT support.

OryxAlign is making the shift to XLAs and thereby focussing on the digital employee experience (DEX). Our approach to DEX tackles digital friction across four key areas: device, applications, network, and security. These areas form the foundation for what we call "guaranteed states" – essentially, the normal operating limits for your device.

By continuously monitoring these areas, we can identify potential problems before they disrupt your workflow. Imagine this: you're working on a project when Stephen, a member of our IT team, sends you a notification. "Hi Justin," it reads, "we can see that your machine hasn't rebooted in 15 days, and you've had three applications crashing. We can schedule a reboot that will restart these systems and bring your device back to a guaranteed state, potentially improving performance."

This is the power of DEX in action – identifying issues, automating fixes where possible and empowering you to take control through user-friendly notifications. The shift towards automation and user engagement is key. It enables IT staff to focus on more complex issues while giving you the tools and information you need to maintain a smooth and productive work environment. No more waiting on hold or feeling like IT is a distant entity – DEX fosters a collaborative approach to digital wellbeing.





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Maximizing MSP efficiency: leveraging RMM for better client outcomes

Discover how remote monitoring and management (RMM) tools help MSPs improve client services and boost operational efficiency.

BY PULSEWAY

MANAGED SERVICE PROVIDERS (MSPs) are constantly seeking ways to improve efficiency and deliver better outcomes for their clients. One of the most effective solutions to help them achieve this goal is a remote monitoring and management (RMM) tool. Our blog explores how the right RMM solution can help MSPs achieve peak efficiency and enhance client outcomes easily.

The role of RMM in modern MSP operations

RMM tools are designed to give MSPs full oversight and control over their clients' IT infrastructure. With these solutions, MSPs can monitor systems in real time, perform routine maintenance, deploy software updates, manage patching and handle various administrative tasks, all from a remote location.

Automating tasks like fixing low disk space, high CPU usage and network outages or executing

scripts to perform maintenance tasks like clearing caches, defragmenting disks and rebooting systems ensures that routine issues are fixed without anyone lifting a finger. On the other hand, real-time monitoring catches potential problems early.

It helps when advanced RMM tools come with detailed reporting and analytics features, helping MSPs track performance and optimize resources. By using these features, MSPs can boost their efficiency, improve response times and deliver proactive service, making their clients happier and winning their continued business.

Key benefits of RMM for MSPs

RMM tools offer significant advantages for MSPs. Some of the key perks are:

Improved client satisfaction

Client satisfaction is a top priority for MSPs. With RMM solutions, MSPs can offer higher levels of

service by ensuring that client systems are always operational and secure. The ability to resolve issues before they impact the client translates into increased trust and loyalty. Furthermore, clients appreciate the transparency and communication facilitated by RMM tools, which often include detailed reporting and performance analytics.

Enhanced operational efficiency

Operational efficiency is essential for the success of any MSP. RMM tools streamline many of the tasks that would otherwise require significant time and resources. By automating routine maintenance and monitoring tasks, MSPs can reduce the workload on their technicians, allowing them to focus on more complex and value-added activities. This efficiency not only lowers operational costs but also enables MSPs to scale their services without a proportional increase in overhead.

Proactive issue resolution

Proactive issue resolution is a hallmark of effective IT management. RMM tools empower MSPs to detect anomalies and potential issues early. For instance, RMM solutions can identify unusual network traffic patterns, detect failing hardware components or flag outdated software versions before they cause significant problems. By addressing these issues proactively, MSPs can prevent disruptions and maintain high levels of system performance for their clients. This proactive stance also reduces the frequency and severity of critical incidents, leading to fewer emergency interventions and more predictable service delivery.

Cost savings

By automating many routine tasks, such as software updates, system monitoring and security patches, MSPs can reduce the need for manual intervention and minimize labor costs. Additionally, the proactive nature of RMM helps prevent costly downtime and reduces the number of emergency repairs, further lowering expenses. These savings can be passed on to clients or reinvested in the business to drive growth and innovation.

Enhanced security

Security is a critical concern for MSPs and their clients. RMM tools provide robust security features that help protect client systems from cyberthreats. Through inbuilt features or integration with other security tools, RMMs enable continuous monitoring of networks and devices, allowing MSPs to detect and respond to security incidents in real time.

RMM solutions often include automated patch management and vulnerability scanning, ensuring that client systems are always up-to-date and protected against the latest threats. This enhanced security not only safeguards client data but also builds trust and confidence in the MSP's services. Implementing RMM for optimal results
Getting the best results from your RMM begins with choosing the right solution.

Choosing the right RMM tool

Selecting the right RMM tool is crucial for maximizing its benefits. MSPs should evaluate RMM solutions based on their specific needs, such as the size of their client base, the complexity of client environments and the features offered by the RMM platform. Key considerations include ease of use, integration capabilities and support services provided by the vendor.

Training your team

MSPs must invest in comprehensive training programs to ensure that their technicians are proficient in using RMM software. This training should cover all aspects of the RMM tool, from basic monitoring and alerting to advanced automation and reporting functions. Ongoing training and professional development are also important to keep the team updated on the latest features and best practices.

By automating many routine tasks, such as software updates, system monitoring and security patches, MSPs can reduce the need for manual intervention and minimize labor costs. Additionally, the proactive nature of RMM helps prevent costly downtime and reduces the number of emergency repairs, further lowering expenses

Continuous monitoring and optimization

RMM tools are most effective when they are continuously monitored and optimized. MSPs should regularly review their RMM configurations and processes to ensure they are aligned with current best practices and client needs. This includes updating monitoring thresholds, refining alerting mechanisms and integrating new functionalities as they become available. Continuous improvement ensures that the RMM solution remains effective and delivers maximum value.

The path forward for MSPs

RMM tools are essential for MSPs to ensure optimal performance, meet client demands and stay competitive as technology evolves.

Pulseway is the ultimate RMM solution for MSPs. Its mobile-first approach allows you to work efficiently and effectively from anywhere. The platform is easy to navigate, so you spend less time managing the platform and more time running your business. The highlight is its customizable policy-setting feature, which allows MSPs to tailor their services to meet the specific needs of each customer.

Additionally, Pulseway's state-of-the-art features seamlessly integrate with top-tier security operations and backup solutions, offering a holistic approach to IT management and security.

When the world comes to a standstill, MSSPs are your safety blanket

We all know that digital security is paramount in a world where threats are constantly evolving, and threat actors are continuously probing businesses for weak spots. To counteract this, businesses are recommended to immediately update their systems and services the moment an update become available. 99% of the time, this is sound advice and can drastically decrease the chances of an organisation becoming victim to a cyber attack. But every now and then, 1% of the time, companies are thrown into chaos.

BY ROB POCOCK, TECHNOLOGY DIRECTOR, RED HELIX



TAKE, FOR INSTANCE, the recent CrowdStrike incident, where an untested update caused widespread disruptions across the globe. For many businesses, this and other similar (though generally less far-reaching) scenarios can quickly turn into a nightmare. Small-to-medium-sized companies (SMEs) in particular can be hit hardest, as they often lack a dedicated IT department. When these crises occur, businesses find themselves scrambling to fix issues while their operations grind to a halt, frequently falling to the back of the queue when seeking support from the very providers that caused the problem.

In these critical moments, Managed Security

Service Providers (MSSPs) prove to be the safety net that SMEs desperately need.

The threat of going it alone

Consider a small company that feels secure after investing in a solution from a reputable cyber security vendor. They reasonably trust that they're well-protected against potential threats. But when something like an untested software update is rolled out and leads to a cascade of system failures, they are caught completely off guard. With no dedicated IT team to manage the crisis, SMEs find themselves entangled in technical chaos, waiting in line with countless other businesses for support from their vendor. This is the harsh reality for many SMEs that try to manage cyber security services on their own.

Now, contrast this with companies that have chosen to work with an MSSP. Regular contact with numerous clients, who may have all reported the same issue to them, means an MSSP is much more likely to be able to identify the issue and





relay crucial information back to their customers. In addition, MSSPs are far more likely to have good contacts with the cyber security solution vendor in question, so they can often discover the root cause of the issue quickly, similarly to how a large organisation with a dedicated account manager would be able to swiftly receive updates directly from the vendor.

With their extensive expertise and broader industry insights, MSSPs can guide clients through the recovery process, helping them get back online as soon as possible. While companies without this support might struggle to recover, or even ascertain what the problem is, those with an MSSP have the advantage of expert assistance, significantly reducing downtime and potential losses.

This stark contrast highlights a crucial point: SMEs are particularly vulnerable when facing cyber threats, even when these threats do not involve threat actors or targeted hacks. They often lack the in-house IT staff and robust infrastructure needed to respond effectively. When something goes wrong, the consequences can be severe, leading to significant operational disruptions and financial setbacks. Without an MSSP, these businesses are sometimes left isolated and underprepared, forced to navigate a complex and hostile digital environment on their own.

MSSPs provide essential support

MSSPs offer far more than just advice during a crisis—they act as a crucial safety net, ensuring that when an IT service provider rolls out an untested update, small businesses aren't left to deal with the fallout alone.

Another benefit of working with an MSSP is access to advanced testing capabilities. Large companies usually have the resources to conduct comprehensive regression testing—a process in

which new security updates are rigorously tested in a controlled environment before being rolled out to ensure they don't negatively impact existing systems. For smaller companies, replicating this kind of testing environment is often financially and technically unfeasible.

MSSPs can bridge this gap by offering testing as-a-service. Before an update is rolled out, the MSSP can simulate the update in a test environment, evaluate its impact, and only then push it live. This approach is particularly important in the realm of network infrastructure, where an untested update can lead to widespread system failures. When issues do arise, having a robust testing process in place can mean the difference between a minor inconvenience and a full-scale operational disaster.

While this approach is not appropriate to the CrowdStrike issue, it is a service that can be used for many updates and patches in your security stack.

The value of an MSSP in an uncertain world

SMEs often cannot afford to navigate cyber security challenges alone. MSSPs offer more than just cyber security tools—they provide peace of mind. They are the safety net that ensures when the digital world comes to a standstill, the business isn't left to fend for itself. They can provide the same level of service that larger companies receive in-house. While on their own, smaller companies might never get through to the help desk when a problem occurs, an MSSP offers a much louder voice.

By partnering with an MSSP, smaller companies gain access to the expertise, resources, and support they need to navigate complex and ever-changing threats. Ultimately, it's not just about having the right tools; it's about having the right partner to help you use them effectively, especially when it matters most.



How to fight back against rising DDoS attacks

One of the most common cyber threats, DDoS (Distributed Denial of Service) attacks target an organisation's online presence by flooding its Internet service with traffic, preventing user access. These attacks can completely shut down a business's Internet connectivity and often serve as a smokescreen for more malicious incursions, such as ransomware.

BY TEMA HASSAN, SENIOR PRODUCT MANAGER AT ZAYO EUROPE

YOU ONLY HAVE to look at the data to understand the scope of the problem at hand. Our findings reveal a significant increase in the intensity of DDoS attacks and their impact on businesses in the second half of 2023.

The average DDoS attack lasted 68 minutes, with unprotected organisations facing a staggering cost of £4,700 per minute. This translates to an average of £325,000 per attack, highlighting the severe financial implications of these attacks.



The escalation is particularly evident in the surge in the duration of these attacks. From Q1 to Q4 of 2023, the average length of attacks increased by more than 400%, rising from 24 minutes to 121 minutes. This trend signals growing concerns from both security and cost perspectives.

Telecoms hit the hardest

Our data also revealed the telecommunications sector as the primary target, accounting for nearly half (49%) of all DDoS attacks in 2023. The severity of attacks on telecoms grew substantially, with the average duration jumping 104% to 33 minutes per attack from Q1 to Q4. The second half of 2023 witnessed an alarming 13,000 attacks on this industry. These findings demonstrate the urgent need for robust cybersecurity measures across all sectors, but particularly in telecommunications.

Why are DDoS attacks intensifying?

DDoS attacks are increasing for several reasons, one of which, AI, is a double-edged sword. On the one hand, criminals are using AI to enhance the sophistication of their attacks and circumvent traditional defence mechanisms.

On the other hand, mitigation platforms can use AI to dynamically identify and defend against new and emerging threats. As DDoS remains a profitable model for cybercriminals, attacks will continue to be a brutal inevitability for businesses.

Political tensions are also seemingly contributing to the rise in DDoS attacks. State actors and political activists often use these attacks to make statements or signal intentions. For instance, Imperva's new DDoS report found notable surges in DDoS attacks in Ukraine (519%), Israel (118%), and China (84%).

What should businesses be doing to protect themselves?

While it's not possible to stop criminals from targeting businesses with DDoS attacks, it is possible to reduce the duration of an attack to the point where it is nearly imperceptible with an automated redirect of traffic to a system known as a 'DDoS scrubber'. These DDoS scrubbers ensure that only legitimate traffic passes through.

No matter how long or how severe the attack is, a business that takes this zero-tolerance approach will be properly defended. The attack could last for hours - much like those experienced by governments - but the automated DDoS protection will frustrate the attackers as their efforts will have limited impact.

A robust network infrastructure is also crucial for telecoms to combat DDoS attacks effectively. With increased traffic from 5G, AI, and other technological advancements, threat detection becomes more critical.

Organisations need agile and modern networks as the backbone for connectivity and security. Telecoms must adopt these modern, flexible networks and phase out legacy and outdated technologies that create vulnerabilities. Without a flexible, up-to-date infrastructure, effective security becomes impossible.

Act before it's too late

As the data highlights, cybercrime is on the rise and that is unlikely to change any time soon. There are sectors that are under threat more than others - manufacturing, telcos and cloud providers for example - but DDoS attacks can and will impact any digital business.

Any business that holds potentially sensitive data about customers or clients could find themselves being targeted, even in the relative infancy of its digital journey. But waiting to find out if you'll be targeted, is like leaving the key in your front door at night. Businesses must be proactive and take the necessary steps to protect the organisation, the employees and clients. Otherwise, there's a risk that they'll find out just how impactful DDoS attacks can be the hard way.

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