LOGICALIS
Architects of Change

Logicalis Global CIO Report 2024

The Future Face of Tech Leadership

Emerging technologies and their impact on the CIO role

10 YEAR ANNIVERSARY SPECIAL EDITION

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Foreword

Jon Groves
CEO Logicalis US

It's been ten years since the Logicalis CIO report was launched. It was designed as a pulse check on the mood in the industry, to identify common CIO challenges and ambitions, and to serve as a reminder that we are part of an ever-changing ecosystem that evolves each year.

Back in 2013, CIOs were dealing with the legacy of the financial crisis, budgets being scrutinised for immediate ROI as well as long-term value to the business. Since then the CIO has had their fair share of ups and downs, from becoming business transformation experts overnight during COVID to operating on a shoestring in the aftermath.

Over the years, we've tracked the strategic influence of the CIO and just last year we celebrated the meteoric rise of technology leaders, from the basement to the boardroom. This year, that elevated responsibility, combined with emerging technologies, brings a new set of leadership challenges.

Disruptive forces, from the rise of AI and advancing security threats, to global economic uncertainty and the mounting need for climate action, are upending the status quo. Amid so much change, this year we're exploring the future face of the CIO, the attitude and actions that define modern technology leaders.

Our research among one thousand CIOs across the world, shows that the community is leaning into the changes ahead and rising to the challenges. An overwhelming number are actively grasping the opportunities of AI, taking a leading role in sustainability, and getting on the front foot against fierce new cyber threats. Today's CIO recognizes that safeguarding and steering their organizations into the future requires a decisive yet divergent leadership style.

Executive summary

Our tenth CIO Report comes at a time when the industry is heading towards an uncertain future. Slow growth in the global economy, increasingly sophisticated security threats and seismic technological advancements have collided to create a complex landscape for any technology leader.

As the remit of the CIO becomes even broader and more business-critical, there's a need to balance competing priorities to meet both short — and long — term business goals; maintaining stability while delivering change. Facing the disruptive forces within the technology arena requires a range of leadership qualities to address the opportunities and threats that the evolving landscape serves up.

The future tech leader must hone their unique style, so they can harness the opportunities driven by the disruptive forces at play and leave a lasting legacy.

Visionary

Generative AI's eruption into the public consciousness in 2023 was cause for concern and excitement in equal measure, a reaction mirrored among our CIOs. 89% of respondents are already actively seeking opportunities to incorporate AI into their business along with other next-generation technologies like Private 5G.

Despite economic caution being exercised elsewhere, certain projects are getting a free pass with 85% of CIOs earmarking budgets solely for AI development. This commitment to investment demonstrates just how significant AI could be in reshaping industry and how today's CIOs are putting themselves front and center in the fourth industrial revolution.

Hypervigilant

The security threats that have been building over the last decade have risen exponentially in recent months. The rise of quantum computing and AI, enabling more sophisticated attacks, are playing out for almost every business. A staggering 83% of CIOs reported experiencing a cyber hack in the last year and almost all of those surveyed experienced business damage as a consequence.

Despite the efforts businesses are putting into safeguarding their operations, less than half of respondents feel completely prepared to handle another major security breach. Technology leadership in today's security environment requires a level of hypervigilance somewhere between intense curiosity and paranoia.

Sustainable

Last year we highlighted the growing recognition among CIOs of their role in sustainability. This year, the dial has shifted further in the right direction and CIOs are moving from acknowledgement to action. 92% of respondents are increasing investment in environmental sustainability initiatives and, perhaps more importantly, 96% say their function has a voice in the company's overall sustainability planning and target setting. With technology being such a critical enabler of environmental progress, CIOs are leading with consideration, being decisive in the balance between profit and purpose in delivering sustainable IT for future generations.

Adaptive

One of the biggest challenges for the CIO throughout the year ahead will be balancing priorities.

A slow global economy continues to constrain spending but, with once in a generation opportunities and fundamental threats on the horizon, CIOs need to identify where their time and resources can deliver the most value and where efficiencies can be sought.

Strong technology leadership throughout 2024 requires CIOs to become masters of the balancing act, thinking long-term, short-term, and immediate, as well as recognizing the importance of strategically identifying the resources to execute and whether they're insourced or outsourced. ■

Visionary leadership in the face of the fourth industrial revolution

The explosion of next-generation technologies fueling the fourth industrial revolution requires CIOs to become visionary leaders, able to clearly see future opportunities and guide their organizations confidently through disruption.

AI is the number one priority area for CIOs in 2024

Causing equal concern and excitement, AI has launched global debate, new businesses, and whole industries in the space of just a few months. The research found that AI is the number one priority area for CIOs in 2024 and 89% are actively seeking opportunities to incorporate AI capabilities into their companies.
The enthusiasm for AI integration goes beyond the IT function, with 87% of respondents reporting substantial demand from across their organizations for the technology. In response, CIOs are moving rapidly:

- 87% have established working groups dedicated wholly to AI
- 86% have committed to developing stronger AI skill sets among employees
- 85% have earmarked budgets solely for AI development and implementation

According to a recent study from Gartner, one in ten businesses have already put generative AI solutions into production showing that CIOs recognize there's no time to waste.

With perceived benefits including improved efficiency, better customer experiences, and higher productivity, this holistic commitment demonstrates the significance AI could have in revolutionizing industries.

93% of CIOs reported investing in or planning to invest in Private 5G

A quieter revolution

While AI dominates the headlines, a broader wave of innovations is quietly changing the business landscape. The standout is IoT, which almost every CIO surveyed had invested in. Its applications, from enhancing workplace safety, remote monitoring, and asset tracking, have the potential to deliver huge business benefits.

However, 75% of respondents cited connectivity infrastructure as a key barrier still to overcome.

According to the research, the advent of Private 5G to provide faster, more

> The role of the CIO is rapidly evolving to spearhead the integration of AI within IT, navigating the landscape of emerging AI solutions, while capitalizing, on opportunities for innovation and efficiency.
>
> While challenges such as data governance and talent acquisition may arise, CIOs are strategically positioning their departments to navigate these hurdles and unlock future opportunities, ensuring their organizations, remain at the forefront of technological advancement.
>
> — **Fadi Barghouthy**, Senior Director Partner Technology, Microsoft

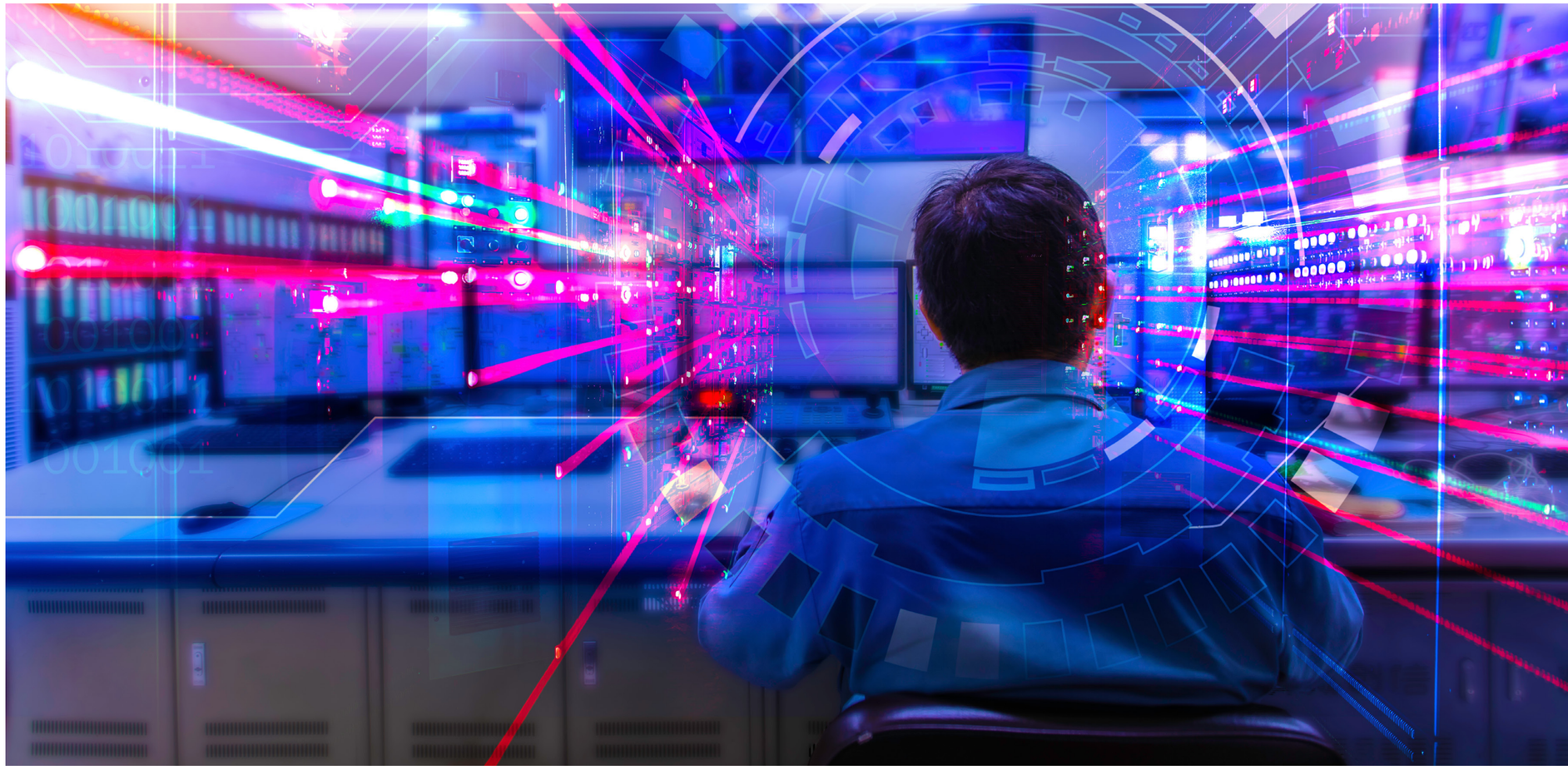
72% of CIOs are apprehensive about the challenges of regulating AI

dependable connectivity is a key area of focus. Strikingly, 93% of CIOs reported investing in or planning to invest in Private 5G for uses including improving customer and employee experiences, real-time inventory and asset oversight, connecting remote areas, and even enabling new monetization models.

Healthy caution

To be truly visionary, tech leaders must also acknowledge legitimate complexities. AI is in its infancy and as with all revolutions, the scale of change is likely to create winners as well as losers. Our research found 64% of technology leaders expressed worries about AI threatening their core business propositions, and 72% were apprehensive about the challenges of effectively regulating AI use internally. With the use of public generative AI posing a privacy risk this is a valid concern. Prudently, in response, 86% have kicked off formal AI policies.

As the public face of tech innovations, visionary CIOs must take responsibility for educating executives and boards on the nuances of AI and 4IR advances. This includes transparently conveying implementation challenges, ethical concerns, and risks of inaction.



In addition to the inherent risks, other downsides need to be considered such as the environmental impact. According to analysis from data scientist Alex de Vries, a continuation of the current trends in demand for AI would require more electricity usage annually than some small countries.

The statistics paint a picture of cautious optimism regarding AI's unfolding potential. While the lasting impacts on businesses are unknown, it's clear that CIOs have a considerable task assessing all the critical considerations.

Generative AI's launch is not an isolated event, it's the frontman of a much larger technology revolution on the horizon. While controls remain necessary, leaders are charging ahead assertively to harness this emerging age of acceleration across AI, Private 5G, IoT, robotics, and more, to transform their businesses. Where it ultimately leads is still to be seen but the statistics suggest CIOs believe the opportunities outweigh the risks. With disruption ahead, the time is now for CIOs to unleash their inner visionary. ■

Navigating the next era of security with hypervigilant curiosity

Cyber security threats have been steadily growing over the past decade, but in recent months these threats have risen exponentially, putting businesses of all sizes at risk and escalating security issues from the basement to the boardroom. Today's CIO can't afford to be any less than hypervigilant in the face of such severe and relentless attacks.

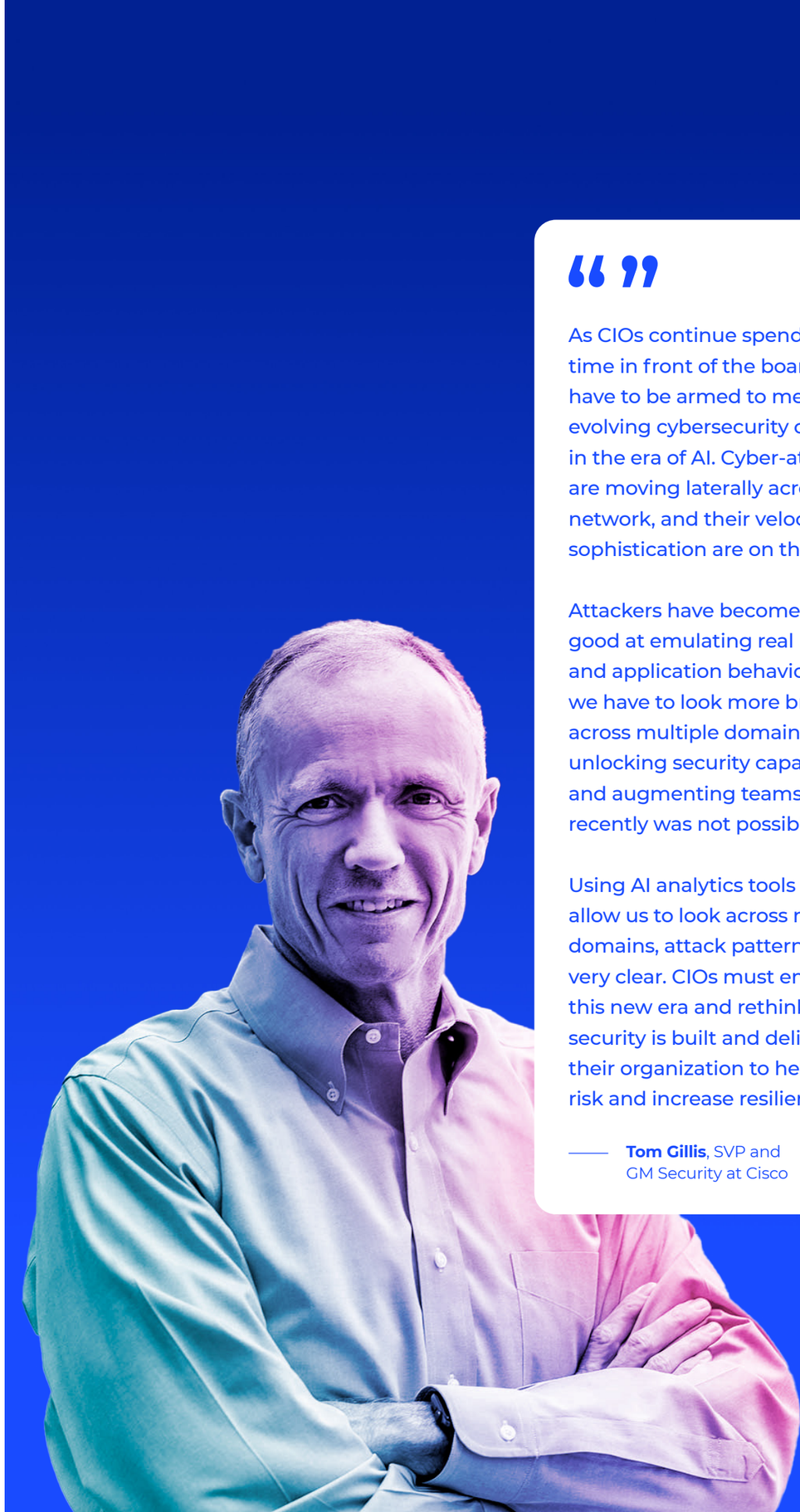
According to our research, a staggering 83% of CIOs reported that their business experienced a cyber-attack within the past year. With the rise of more advanced hacking technologies like quantum computing and AI, attackers have more sophisticated tools at their disposal than ever before.

The most common types of attacks businesses faced were almost equally distributed among fraud, third party-related compromises, hacktivism and digital defacement, denial of service, data exfiltration, ransomware and cryptojacking. So while the old mainstay of malware is still prevalent, new attack vectors like ransomware and cryptojacking also make up a significant portion of cyber incidents today.

83% of CIOs reported that their business experienced a cyber-attack within the past year

Regardless of the specific type of attack, the consequences faced by victim companies were similarly severe. Almost all those who experienced cyber-attacks dealt with issues like unscheduled downtime, reputation damage, loss of revenue, and loss of both customer and employee data. Some companies even suffered regulatory fines. Many of these consequences have long-lasting effects and recovery is expensive..

With AI offering criminals the tools to make attacks more precise and automated and quantum computing



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As CIOs continue spending more time in front of the board, they have to be armed to meet the evolving cybersecurity challenges in the era of AI. Cyber-attacks are moving laterally across the network, and their velocity and sophistication are on the rise.

Attackers have become too good at emulating real user and application behavior that we have to look more broadly across multiple domains. AI is unlocking security capabilities and augmenting teams, that until recently was not possible.

Using AI analytics tools that allow us to look across multiple domains, attack patterns become very clear. CIOs must embrace this new era and rethink the way security is built and delivered in their organization to help reduce risk and increase resiliency.

— **Tom Gillis**, SVP and GM Security at Cisco

Top three threats in the year ahead:

1. Malware and ransomware
2. Data breaches
3. Phishing attacks

providing the ability to break current encryption standards, it's unsurprising that only 43% of CIOs reported feeling their business was fully equipped. These concerns are not unfounded, with recent high-profile cyber events like the MOVEit ransomware attack affecting supply chains globally and millions of individuals' data being compromised.

The increasing digitalization of business opens more vulnerabilities and requires a level of hypervigilance from the CIO, somewhere between intense curiosity and paranoia.

In a period of economic pressure and with so many competing priorities, this can feel like a heavy insurance burden.

But deprioritizing security at a time of intensified risk almost guarantees even costlier breaches down the line. This is where the CIO can use insights to determine their security posture and weigh up between costs pre- or post-incident. A key factor here is understanding if they have the skills and capacity in-house to deliver an adequate level of protection for the organization, or if leaning on a managed service partner is the way to go, to have the confidence their business is in safe hands while internal teams focus on delivering business value. ■

Balancing profit and purpose in sustainable tech leadership

89% of CIOs have clear targets to reduce carbon emissions from IT

With sustainability ascending strategic agendas, CIOs now face growing pressures to limit environmental impacts amid traditional demands to control costs. Navigating this dichotomy requires tech leaders to embrace their emerging role as champions for sustainability through decisive action.

By assertively supporting the business in balancing environmental priorities with profits, tech leaders demonstrate the belief that what is good for the planet can align with business performance. This year, that recognition has shifted into action with 92% of CIOs ramping up sustainability investments.

Perhaps the most encouraging finding is that 96% of CIOs say their function is involved in their company's overall sustainability planning and target setting, and a significant 59% say their function is integral to the process. This shows that CIOs are no longer on the sidelines of sustainability. They are at the table, driving the conversation and making decisions.

The optimism of CIOs in their capacity to drive sustainability is palpable. According to the research, 93% believe IT is core to the success of their organization's sustainability goals and respondents are walking the talk, with 89% confirming they have clear targets to reduce carbon emissions from IT along with a roadmap to actually achieve those reductions. But despite the progress, there are still barriers standing in the way, including lack of clarity on priorities and difficulties in collecting comprehensive data.

Toby Alcock, CTO, Logicalis, says: "Data is the key to both benchmarking and target setting across all sustainability initiatives including assessing the energy consumption and carbon emissions of the digital estate. Visibility of performance over time is critical to driving improvements."

With complex, scope 3 emission regulations incoming, collaboration within the technology industry will prove critical. No single company can tackle this alone, so it's encouraging that almost all respondents are alive to the need for collaboration and see the value in assessing the sustainability credentials of new suppliers.

By working closely with vendors who share their environmental priorities, companies can pool resources and brain power to map out strategies to reduce emissions throughout the value chain.

With CIOs demonstrating both readiness and capability to drive sustainability results through action and collaboration, organizations that leverage IT strengths will pull ahead of the pack. ■

Mastering the balancing act

A slow global economy continues to limit technology spending, so effectively balancing priorities and resources will be vital as CIOs are pulled between innovating and protecting the business.

Despite ambition among tech leaders to tackle everything, there are practical barriers, beyond budget, that could stand in the way of success: time, talent and visibility.

Our respondents report splitting their time almost equally between strategic direction and day-to-day technology management. With AI presenting such a complex challenge of opportunity and risk, it will be necessary for CIOs to be close to the detail, but with AI just one aspect of the job, additional support will be needed.

The skills gap continues to grow, leaving CIOs without the specialized expertise needed for emerging technologies. With tight budgets, hiring more staff may not be feasible.

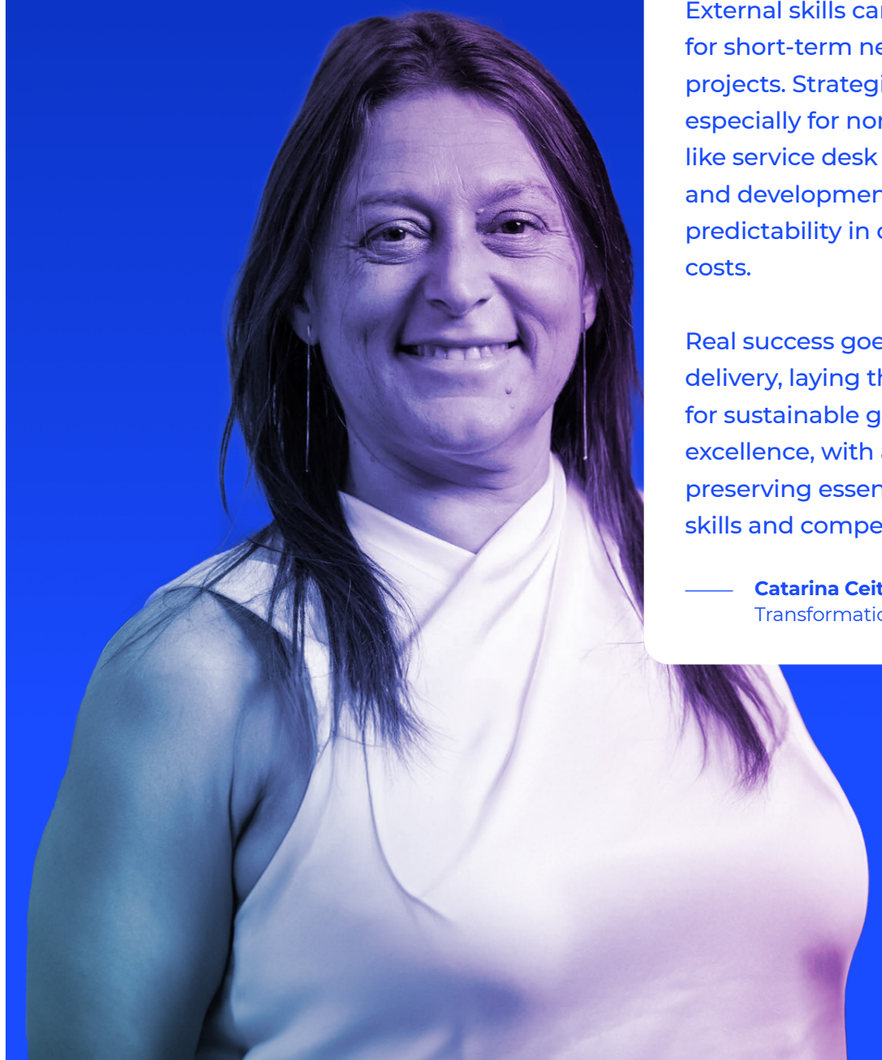
To find areas for improvement, you have to know where to look and the data deluge continues to make this a challenge. Our research shows 80% of technology leaders struggle to analyze performance across their digital footprint. This lack of visibility is not only a time drain but a barrier to finding opportunities to bring down cost, enhance service, and deliver maximum value back to the business.

62% of CIOs said that they'd experienced or anticipated digital transformation projects being cancelled or delayed due to cost constraints

A key question for the adaptive CIO needs to be What skills do I build, and what do I buy?

Toby Alcock, CTO, Logicalis says: "At such a major digital juncture for businesses, now's the time for CIOs to bring in support from partners that can enhance their existing digital ecosystem and free up time by taking on complex or time consuming projects and digital management."

Moving forward, Digital MSPs can act as the CIO's enablers of change, not just cost optimization. Offering visibility into infrastructure performance, filling



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In today's dynamic IT landscape, success hinges on skillful resource management and a collaboration of internal and external expertise.

Crucial roles like enterprise architecture, business enhancement, demand management, and cybersecurity should be handled in-house. External skills can be engaged for short-term needs and specific projects. Strategic outsourcing, especially for non-core functions like service desk operations and development, ensures predictability in outcomes and costs.

Real success goes beyond delivery, laying the foundation for sustainable growth and excellence, with a focus on preserving essential in-house skills and competencies.

— **Catarina Ceitil**, CIO, Data and Transformation at Galp

80% of technology leaders struggle to analyse performance across their digital footprint

skill gaps and managing connectivity infrastructure for innovations like IoT, this type of partnership gives CIOs the ability to scale and develop new digital business models efficiently.

By outsourcing the coordination of complex technology partnerships, CIOs can trust providers to get the most from their vendor relationships instead of wrestling with multiple fragmented contracts.

Likewise, with security pressures mounting, CIOs need to know they are on the front foot and sufficiently equipped to combat the latest threats.
The future demands a master of all trades, by carefully deciding where and when to partner, CIOs can secure their organization's future footing while coping with constraints. ■

LOGICALIS
Architects of Change

We are Architects of Change. We help organizations succeed in a digital-first world.

At Logicalis, we harness our collective technology expertise to help our clients build a blueprint for success, so they can deliver sustainable outcomes that matter.

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