TECHMONITOR

Technology Leaders Agenda 2021

Technology priorities for the post-pandemic economy

SPONSORED BY



Executive summary

After a year that thrust technology into the spotlight, technology executives are focusing on the leadership challenges around their people and culture ahead of IT project delivery.

Meanwhile, the CEO agenda of growth, business model transformation, sustainability, diversity and the future of work is shaping how chief information officers, chief technology officers and equivalent digital and IT execs are prioritising their time and investment.

These are the key findings of *Tech Monitor*'s Technology Leaders Agenda 2021 survey, a research project supported by global IT consulting and digital solution provider Hexaware Technologies, which is based on a survey of 611 digital, data, technology and IT leaders across EMEA, APAC and the US in March and April 2021. The survey confirms the crucial that tech executives are now play within their organisations.

It shows that the chief information officer remains the most senior role in the new tech C-suite, despite the emergence in the past decade of the chief digital officer and, more recently, the chief data officer.

But as tech leaders enjoy growing budgets and increasing proximity to CEOs and other senior leadership, *Tech Monitor*'s expert steering panel of CIOs and CTOs questioned whether they are being ambitious enough with their plans. More technology leaders are focused on IT-business alignment than on digitisation and improving the customer experience, for example.

The research reveals that tech leaders are directing significant levels of budget towards the 'big three': data, cyber and cloud computing, with respondents also expecting these investments to increase more than in any other areas. And after years of hype around artificial intelligence, tech leaders ranked AI and machine learning as the next fastest-growing investment, suggesting these technologies are finally reaching maturity.

Furthermore, skills related to cybersecurity, data and cloud are in greatest demand at the organisations, and these specialisms are defining how technology functions operate and are organised.

But it is their departmental colleagues where technology leaders' priorities lie. A year on from the severe disruption caused by the Covid-19 pandemic, respondents to the Technology Leaders Agenda survey cited keeping employees motivated and engaged, and attracting and retaining talent, as two of their top leadership challenges.

This was little surprise to the Technology Leaders Agenda steering panel, for whom the pandemic had merely cemented the need to develop skills and high-performing teams.

Technology leaders also confirm that sustainability and diversity initiatives will define their agendas for 2021 and beyond. More than 60% report that improving diversity and inclusion within the technology function is one of their greatest leadership challenges, while more than 70% say that their technology department have specific sustainability objectives.

But what is the role of the technology leader in the era of climate crisis? Our steering panel outlined why and how CIOs need to go beyond improving the energy efficiency of IT infrastructure at their organisations.

We hope you find the report useful as a benchmark and provocation for how to approach the technology, business and leadership challenges at your own organisation.

Foreword

It is not a stretch to say that the world is a markedly different place now from just a year-and-a-half ago. The lasting changes in our behaviour, the depth of the disruption and the steepness of the recovery, the global extent of the impact, have permeated every aspect of our lives.

Some changes will be shorter-term, but many will prove to be longer lasting. Both types are reflected in the findings of the Technology Leaders Agenda 2021.

The technology function is moving ever closer to the strategic heart of business and personal lives – and, in many cases, redefining what businesses are capable of achieving. Post-Covid, technology has now become an integral part of our present culture itself. And digital is the predominant meme in this culture.

Many trends in play prior to the pandemic – digital transformation, for example – have seen their significance become more deeply entrenched. Businesses that had not already made progress in these areas before the onset of Covid-19 have struggled to stay afloat.

We've also seen a number of tech trends accelerate to a speed previously beyond our imagination. Microsoft CEO Satya Nadella believes we witnessed two years' worth of digital transformation in the first two months of the pandemic. The pace has hardly let up since.

Such speed of change presents huge challenges to technology leaders as they also ensure their enterprises remain lean, agile, and ready to respond should crisis strike again. Many strategies now underway might previously have been executed across a span of years. Now, timeframes have been shortened and expectations are quite different. Hexaware's mantra is "Automate Everything; Cloudify Everything; Transform Customer Experience", so it is unsurprising to see AI and cloud feature so high on the leadership priority list. Hexaware foresaw the automation tsunami a few years ago and started investing, preparing ourselves through reskilling and retooling. The same applies to cloud.

I was also unsurprised to see that technology budgets are up in 2021. We have already witnessed significant investment in cloud this year, as well as plenty of spend around automation and AI. There is renewed focus on creating more usable and customer-centric products and platforms. Enterprises are engaged in digital leapfrogging – transformation at warp speed. The future is digital; the question for a number of tech leaders is how quickly they can get their businesses there.

It is also unsurprising to see cloud specialists proving particularly hard for enterprises to recruit. These newer skillsets mean that few have the requisite experience. You will struggle to find ready-made talent on the market, which means leaders need to develop it, helping their employees be fully ready to help shape this digital future.

It is promising that Technology Leaders Agenda respondents appear to recognise emerging requirements around softer skills, prioritising people, culture, and values above all else. Leaders must position themselves as employers of choice and understand what truly matters to their workforce. If you don't demonstrate that you share the values of your employees, from inclusivity and diversity to sustainability and environmental accountability, they will not stick around for long. In a war for talent, leaders need to offer more than just money.

People might be tempted to interpret such a strong focus on engagement and retention as being a direct result of the pandemic, but, as more leaders emerge from the millennial ranks, these softer skill trends will only grow in significance. Tech leaders must remain focused on these longer-term requirements, while still being able to adapt and react to an array of pressing concerns, priorities and developments. Hopefully, the Technology Leaders Agenda can help frame your thoughts about how to best strike a balance and meet those challenges.

Arun 'Rak' Ramchandran, EVP, Hexaware Technologies; global head, Hi-Tech & Professional Services and Digital Core Transformation

About the Technology Leaders Agenda

Tech Monitor's Technology Leaders Agenda 2021 is based on a global survey of 611 senior technology executives that was conducted in March and April 2021. Respondents were drawn from EMEA (43%), Asia Pacific (APAC, 28%) and the US (29%) and a range of industries.

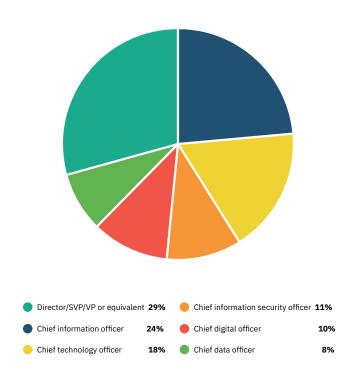
Half are from organisations with between \$50m and \$500m in annual revenues; the other half \$500m or more. They represent a mix of C-Suite executives and senior directors, all with technology-related responsibilities (see charts).

The questionnaire design and survey analysis drew on the support and guidance from the Technology Leaders Agenda steering panel, who are as follows:

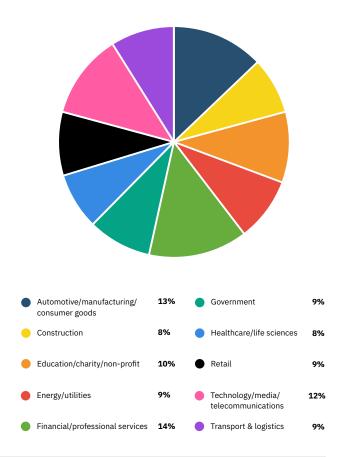
- Paul Coby, CIO, Johnson Matthey
- Rajat Dhawan, CTO, Soho House & Co
- Norma Dove-Edwin, CIO, National Grid ESO
- Sean Harley, CIO, Ascential
- Karl Hoods, chief digital and information officer, Department for Business, Energy and Industrial Strategy
- Dominic Howson, CIO, Viridor
- Nadine Thomson, CTO, MediaCom
- Åshild Hanne Larsen, CIO and SVP IT, Equinor

Tech Monitor would like to thank the steering panel for their time and insight, and our sponsors, global IT consulting and digital solutions provider Hexaware.

Survey respondents by job title



Survey respondents by industry



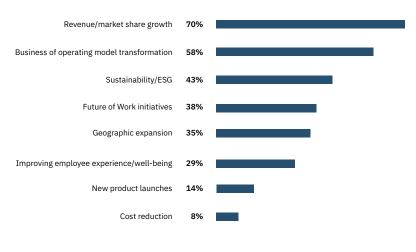
Chapter 1 The 2021 business & technology agenda

The Covid-19 pandemic was the defining issue that shaped 2020, and its impact will likely shape the remainder of the decade. It thrust technology leaders into the spotlight, accelerating the pace of technology transformation and digital adoption – the key enablers of the CEO agenda.

Respondents revealed that revenue or market share growth (70%), and business or operating model transformation (58%) are their organisations' strategic priorities over the coming year. This is followed by sustainability/ESG (43%) and Future of Work initiatives (39%). Cost-reduction was least likely to be cited as a strategic business or organisational objective.

Growth and transformation top the strategic agenda

Which three of the following strategic objectives will your organisation be prioritising over the coming year? (% of respondents)



Source: Tech Monitor, Technology Leaders Agenda 2021

"If we didn't know it before the pandemic, it is clear that all organisations need to be technology-driven to fulfil their purpose and beat the competition."

Norma Dove-Edwin, CIO, National Grid ESO Growth has been the perennial priority for chief executives not working in government and non-profit organisations, while the responses seem to confirm technology functions and their leaders are now intrinsically linked to the strategic objectives of organisations of all sizes and in all regions.

Members of the Technology Leaders Agenda 2021 steering panel suggested the technology leaders' role was now firmly cemented as an enabler of the CEO and business agenda. "If we didn't know it before the pandemic, it is clear that all organisations need to be technologydriven to fulfil their purpose and beat the competition," says Norma Dove-Edwin, CIO at the UK's National Grid ESO (electricity system operator).

Nadine Thomson is global CTO at WPPowned media agency MediaCom. "The technology leader's role is to know the business, to know the industry, to know what your competitors are doing, and to know technology," she says. "By connecting this complex web of information together, technology leaders can bring opportunities to the table around new business and operating models to support the CEO's agenda and overall business strategy."

The days of the technology leader as an IT delivery conduit are long gone, says Paul Coby, CIO at FTSE 100 sustainable technology company Johnson Matthey. "The 'tech leader' of today must be so much more than the expert technologist who manages teams to deliver IT," he says. "We must be strategic partners, enabling the purpose of our organisations, whilst, of course, sustaining existing competencies and developing new capabilities.

"The reputation of IT in the workplace has been greatly enhanced since the pandemic and there's recognition that IT is a critical component – it is the lifeblood of the business."

Respondents' business agenda varies little by company size or revenue, but the research does reveal stark regional variations. While US respondents cited ► business or operating model transformation as their top priority (83%), only one in ten stated geographic expansion as one of their top three strategic objectives. This contrasts with respondents from APAC, of whom 62% responded geographic expansion was a top business priority.

Indeed, this overwhelming focus on growth and business model transformation among US companies dragged down the global average of tech leaders who list sustainability and ESG initiatives among their top three priorities – just 30% in the US compared to 56% in APAC and 42% in EMEA.

Are tech leaders too focused on ITbusiness alignment?

But are technology leaders being ambitious enough in their support of an organisation's strategic priorities?

When asked about strategic technology objectives, 'improving operational efficiency/effectiveness' and 'improving technology and business alignment' are the most common answers, cited by 76% and 60% of respondents respectively.

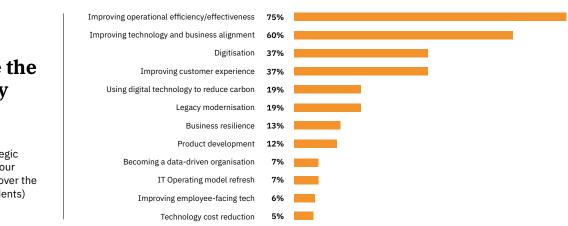
'Digitisation' and 'improving the customer experience' are the third and fourth most important strategic tech objectives respectively, each cited by 37% of respondents. Again, the US response severely distorted the global average; with 87% specifying operational efficiency as a priority compared to just 15% citing digitisation. Some 69% of APAC respondents, however, named digitisation as a strategic tech objective. The Technology Leaders Agenda steering panel suggests that tech execs should have moved beyond a focus on IT and business alignment by now. Rajat Dhawan, CTO at global network of members' clubs Soho House & Co, described this as "a very '90s view" and said that the focus needs to be on driving new revenue – or at the very least supporting it – through digital channels. "Efficiencies through technology, process and automation are table stakes," he says. For organisations which have not done either, Dhawan's recommendation is to focus on the customer-facing side of the business first before going on to fix your back office, or risk your business not being able to compete or even exist.

MediaCom CTO Thomson agrees: "The technology leader's role should have moved past alignment to embedding technology in the business," she says. "Where leaders are still focused on the alignment stage it suggests the business has not adopted technology as a strategic pillar of its overall strategy."

National Grid CIO Dove-Edwin summarises the challenge for tech leader as being bolder with their ambitions while running a tight ship. "It's hard for tech leaders to really shine and focus on the customer experience and innovation and scaling it to develop new technology-enabled revenue streams, if they're not getting the basics right – of which tangible alignment of technology to the business purpose is key," she says. "The conversation doesn't happen at that level if tech leaders are still stuck in the weeds talking about basic 101 IT like why it takes 15 days to provision a laptop for a new starter."

Efficiency and business alignment are the top technology objectives

Which of the following strategic technology objectives will your organisation be prioritising over the coming year? (% of respondents)



Dominic Howson is CIO at recycling, renewable energy and waste management company Viridor, which was purchased by private equity giants KKR in 2020 for £4.2bn. He argues that there is a shifting sand in terms of IT's position within a business. "If IT is considered a necessary cog in the wheel, the behaviour of the IT leader will reflect that – but where the IT leader wants to break the mould, adopt new tech, open doors and minds to the art of the possible, that should be the role of our future tech leaders."

For Karl Hoods, chief digital and information officer at the UK government's Department for Business, Energy and Industrial Strategy, the need for efficiency and business alignment is nothing new. Tech leaders should keep on top of them but they can hardly be considered strategic.

"As CIOs we are always under pressure to improve efficiency, which is generally cost for your own function, but there is usually more you can do to leverage efficiencies elsewhere in the organisation – whether that's through automation, new product development or new tools," he says. "This can be where the tech-business alignment challenge comes in, but that's nothing new in these scenarios – getting buy-in and people on board isn't a novel thing that's popped up in the last year or two, it's just what tech leaders should be doing day-in, day-out and you have to work at building those relationships and keep doing it."



CIOs see off CDO challenge

The last decade has seen a blossoming of new C-Suite technology roles, including chief digital officer and chief data officer. But the CIO is still the most senior technology position at the majority of organisations, the Technology Leaders Agenda 2021 survey reveals. The CIO is the most senior role technology role at 68% of organisations, the CTO at 46% [respondents could select multiple roles], and the chief digital officer at 13%.

The chief data officer was cited as the most senior technology role by just 1% of respondents. This is not a reflection of the significance of data, however – quite the opposite, in fact (see chapter 2).

"Data goes hand in hand with delivering technology," MediaCom global CTO Nadine Thomson says. "I spend a large portion of my time thinking and talking about data and creating technology products around data for decision making across the business. Data and technology are now so intertwined it is difficult and counterproductive to have them as separate functions."

For Viridor CIO Dominic Howson, responsibility for data should be shared between the technology function and other business units.

"There are two sides to 'data ownership'," he says. "Tech leaders are responsible for making data accessible, for its availability, its transformation and the capability to compare, contrast and layer different data sets. We cannot forget that the business should hold responsibility for their data quality and the inputs - it's a key discussion between IT and the business to understand the rulebook of data."

The survey also shows that CIOs, CTOs and equivalents enjoy significant proximity to CEOs and executive leadership teams. Over a third (37%) report directly into their CEO – and nearly half (49%) are on the executive leadership committee. Only 8% were not invited to attend executive meetings.

This reflects the now-widespread recognition that technology is central, not peripheral, to organisational performance. "Technology should be a critical pillar of a company's strategy," says Thomson. "Where strategic use of technology is not represented at board level then the organisation is very likely missing opportunities for business growth, business or operating model transformation, and increasing their business risk."

Chapter 2 **Technology priorities: data, cloud and cyber**

Data initiatives, innovations and skills look set to define the agenda for technology leaders for the foreseeable future. While the phrase "data is the new oil" has been liberally trotted out since the mid-2010s, the Technology Leaders Agenda 2021 survey reveals that data integration and infrastructure initiatives are the top technology priority for the year, cited by 68% of respondents.

Another prominent focus area is implementing AI or automation, as identified by 61% of tech leaders. This places it ahead of implementing or upgrading business applications (55%), cloud migration (44%), mobile app or website development (37%), data centre consolidation (25%), and employee device refreshes, with just 9% of respondents. After years of hype, this suggests, AI and automation initiatives are becoming mainstream – something echoed by the steering panel. And this is only possible with modern data platforms and integrations.

"AI and automation are now solidly delivering the use cases and value promised three years ago," MediaCom CTO Nadine Thomson says. "Success is dependent on establishing solid foundations which are clean data sets and consistent processes. "Don't underestimate the time and effort required to set good foundations," Thomson advises. "Eighty-percent of the time delivering an AI initiative is spent on crafting, connecting and cleaning data."

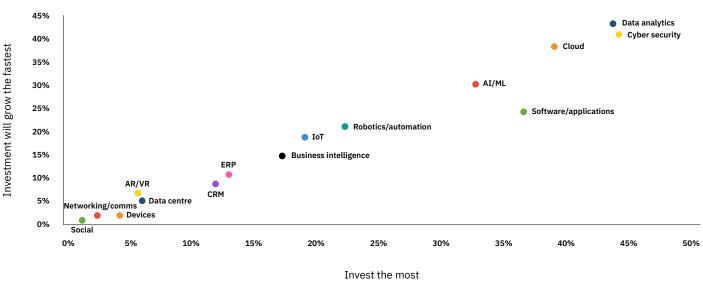
Before joining Viridor this year, Howson was the technology and supply chain leader at UK bread manufacturer and megabrand Hovis, where AI and automation technologies recently reached enterprise maturity.

"In the last 12 months, in my previous business we had delivered our AI-driven demand forecasting toolset, we had launched a trial of a complaint prediction toolset, and had various other solutions in development," Howson says.

"In the new business, we aren't ready with the underpinning data structure, but we will be there ▸

Cybersecurity, data and cloud dominate technology spending plans

In which three technology areas are you planning to invest the most in the coming year? And in which technology areas will your investment grow the fastest? (% of respondents)



shortly. The tools are there and it's just a case of whether it can be delivered internally, or with a partner."

The big three

Alongside data, cloud computing and cybersecurity round out the list of priority technology areas for 2021, the survey shows. These three areas dominate respondents' current spending, the survey reveals, and are also where they expect spending to increase the fastest in the coming year. By comparison, spending on data centres, devices, networking, and communications and social are the areas where tech leaders are least likely to grow their investment.

These 'big three' technology priorities are also reflected in respondents' skills requirement: cybersecurity, cloud specialists, business analysts and data scientists are the most in-demand technology professionals.

Cloud specialists are especially hard to recruit, respondents report, more so than enterprise architects, cyber experts and data scientists. "Cloud management is a new skill set: techsavvy and commercially aware," says Viridor's Howson. "[It requires] an infrastructure person who can be cost-conscious and have the ability to "Cloud management is a new skill set: tech savvy and commercially aware. [It requires] an infrastructure person who can be cost-conscious and have the ability to communicate that to all other departments within the IT function."

Dominic Howson, CIO, Viridor

communicate that to all other departments within the IT function."

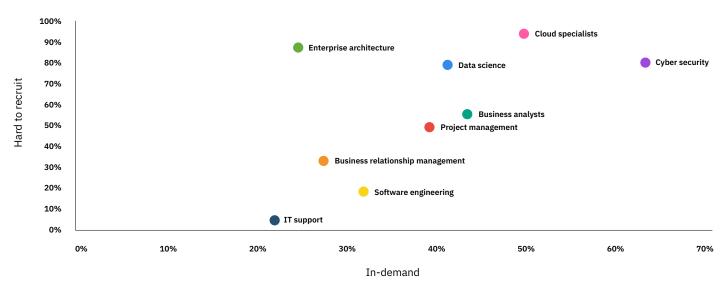
Meanwhile, the explosion of ransomware attacks and other cyber threats during the pandemic has made it a "candidate's market for security skills," Howson adds.

"Data skills have become more important as it is the foundation for our business and all of our technology products," explains MediaCom's Thomson. "Understanding the core principles of data architecture, data organisation and data management is a core skill for everyone in our technology function."

By contrast, IT support and infrastructure skills are easier to recruit, the survey reveals. Compared to digital and data skills, which are still evolving, these specialisations are more mature, explains Dhawan at Soho House & Co. This, he adds, could result in tech leaders taking new smart approaches to how they outsource or offshore in certain areas.

The 'big three' also define the most in-demand skills

Which technology, digital and IT skills are most in demand at your organisation? (% of respondents) And how difficult is it to recruit in each of these areas? (% of respondents who say 'somewhat or very difficult')





Investment in innovation

Technology's move on to the centre stage in 2020 translated into increased IT budgets in 2021 for the majority of survey respondents. And with the exception of those from the US, the majority expect that budgetary increase to last into next year too.

The average technology budget among respondents to the Technology Leaders Agenda 2021 survey is 12.8% of their organisation's overall budget. Budgets are higher among organisations in the US and EMEA, some two thirds of whom spend 10-20% of their total revenue on technology, while in APAC 5-10% was the most common response (39%).

Technology leaders in the US allocate more of their tech spend on 'new initiatives/innovation' compared to their peers in EMEA and APAC. Some 64% of US respondents dedicate 10-20% of their spend on innovation or new tech initiatives, compared to 28% in EMEA and just 10% in APAC.

However, it is a mistake to conflate big spending with impactful innovation, says Johnson Matthey CIO Paul Coby. "Innovation is about new business ideas and the technologies that can turn them into reality," he says. "You can do that with cost-effective and agile experiments, and proofs of concept. Innovation is about great ideas connecting with smart technology, not big bucks."

The days of large capital expenditure (CapEx) IT investments are no more, adds Viridor's Howson, as spending tilts towards operational expenditure (OpEx) and '-as-a-service' costs. "Tech leaders need to focus on delivering upside in their OpEx base, and spend CapEx wisely to free up historical chunks of IT OpEx spend," he says. "The days of tech refresh capital investment are a thing of the past in the majority of businesses, and the investment will come from intelligent re-use of existing OpEx budgets."

Hoods, from the UK's Department of Business, Energy and Industry Strategy, argues that technology leaders need to be looking for opportunities to innovate even within their operations. "Making sure [business as usual] BAU runs smoothly is what gives you the credit to do other things, so it will always be a focus, but you have to keep investing and innovating in that.

It's a balance between extracting as much value from those investments, and if on cloud, taking advantage of the evergreen nature and using that to innovate where possible – and at the same time looking for opportunities to collaborate and partner with colleagues across the business to jointly innovate using a pooled funding approach if your innovation budget is limited."

Chapter 3 The new agenda: people and planet

Understanding and implementing technology in the strategic interests of the organisation has historically been technology leaders' defining role. But today, their greatest challenges all relate to people, the survey reveals.

When asked to identify their greatest challenges, 61% of respondents cite 'improving diversity and inclusion within the technology function'. This is followed by 'keeping employees motivated and engaged' (37%), and 'recruiting and retaining technology talent' (32%). Only 15% cite 'technology project delivery' among their top challenges.

There is no doubt that these peoplefocused challenges came to the fore during the pandemic, when working relations were placed under pressure and employee engagement was put to the test. But Covid-19 merely accelerated a shift in tech leaders' focus towards management and business leadership that was already "I often remarked in 2020 how we had grown to know and understand each other better technology has never played such an essential role in our human connectivity."

Paul Coby, CIO, Johnson Matthey underway before the pandemic struck, the steering panel reports.

Technology executives have always been leaders, of course, "but what's made it more apparent over the last five years maybe more — is the pace of change," says Hoods, of the UK Department of Business, Energy and Industrial Strategy. "The pandemic has certainly amplified this and forced us to think more creatively about creating unity, encouraging different ways of collaboration and making sure those that have joined but never seen an office or colleagues feel welcome and productive from day one."

Johnson Matthey's Coby says that keeping employee engagement and motivation high is a top priority within his IT function. "In a time of unprecedented challenge, we have a strong sense in Johnson Matthey that many valuable and often emotional connections have been made over the last year and we need to maintain that," he says.

"A large driver of these new bonds was the immediate introduction of technology and policies that enabled global remote working," he explains. "I often remarked in 2020 how we had grown to know and understand each other better — technology has never played such an essential role in our human connectivity."

MediaCom global CTO Nadine Thomson describes the past year as "the greatest leadership challenge of the decade". •

People issues present the	Improving diversity and inclusion within technology function Keeping employees motivated and engaged	61% 37%	
greatest challenges for technology	Recruiting and retaining technology talent	32%	
leaders	Securing executive buy-in for technology investment Technology project delivery	31% 15%	
Which two of the following are the	Business engagement	15%	=
greatest technology leadership challenges at your organisation?	Change management	9%	

"To deliver and hold our teams together through the pandemic, we have had to pivot to developing an effective and inclusive remote team culture whilst sustaining the motivation and energy of our people," she says.

"At MediaCom, it feels like the team have delivered the world's largest project over the past year. They have delivered product innovation at breakneck speed whilst improving and maintaining existing technology. This has enabled the organisation to fast forward by five years in digital literacy and technology adoption. The team have done so well and I'm so proud of them, but we've been running at pace for a year and staff are tired."

"A key capability technology leaders will need to nurture going forward is staff resilience," she adds.

As organisation's move to a new, hybrid era of work, technology leaders need to become more cognisant of the mental well-being of their teams, Viridor's Howson believes.

"There is no doubt in my mind that the productivity of a technology function during the pandemic has in many respects benefited from a change in working practices, and we are now looking at a future where more of the workload will be remote and delivered with a flexible working patterns," he says.

"Our teams will be required to be more resilient to this style of working, and as tech leaders we will have to adapt to not only drive delivery but to be aware of the mental impact of working in a new world and be more mindful of our approach and potentially adapt our styles accordingly.

Developing diversity

Technology leaders cited a broad range of initiatives in place to plug the skills gap and develop the diversity of their tech departments. And while studies have found the gender and racial diversity of the tech sector to have remained broadly flat in recent years, survey respondents report that their teams are now "more diverse" than in previous years

"After years of talking, as influential organisational leaders we need to get on with it," says MediaCom CTO Thomson. "The business case is proven. Team diversity is not rocket science, it simply takes sustained focus and effort on team culture, inclusion and recruitment."

"Diversity is at the core of successful tech delivery," says Åshild Hanne Larsen, CIO and SVP of IT at Norwegian energy company Equinor. "Technology creates the opportunity set — and is positioned to shape how we collaborate, work and even live our lives."

"But to succeed we depend on collaboration between people who have different backgrounds, ideas and perspectives - because how can we develop the best solutions if the teams that make them do not reflect the diverse needs of our users or even the demographics in our societies? Finding new innovative ways of addressing challenges, new ways of working, new business opportunities and new technological advances - that all depends on our ability to innovate and think differently."

National Grid ESO's Dove-Edwin agrees its simply good business to better represent your customers. "Diversity, but more importantly inclusion, is important within all functions," she says. "In order to have real empathy for the community that \rightarrow

50%

48%

45%

45%

42%

39%

15%

Focus on improving inclusion and departmental culture

Apprenticeship schemes to broaden talent pool

Auditing/assessing recruitment processes

Mentoring, sponsorship programmes

Partnering with external bodies

Training for managers

Setting diversity, equity and inclusion targets

Diversity initiatives focus on inclusion and culture

What is your organisation doing to develop the diversity of its technology function? (% of respondents)

consume our products, it makes sense that the tech functions reflect and mirror the communities they're designing and coding for."

There is some hope that, should the widespread shift to remote working be permanent, it may allow employers to draw on a more diverse talent pool. Thomson reports that MediaCom is already looking further afield for technology talent. "As leaders we have developed confidence in our capability to run fully remote technology teams," she says. "This means we are hiring within countries and time zones rather than within cities centred around a HQ or office."

Sustainability

With 'sustainability/ESG' ranking third on the business agenda, it comes as little surprise that it is a growing focus for technology leaders: 71% of survey respondents say their technology function has specific departmental sustainability objectives. The most common lever for achieving these goals, by a considerable margin, is 'improving the energy efficiency of IT infrastructure'. Just under 40% include sustainability requirements for suppliers in their procurement process – a technique that was especially common among respondents from the construction industry (73%).

As a producer of sustainable materials itself, green IT is a core objective for Johnson Matthey. "The good news is that meeting carbon reduction targets for IT, supporting customers and our business users with more modern systems, and reducing IT costs – they all align," says CIO Coby. "We have had explicit carbon reduction targets for two years in Johnson Matthey IT, and these have been exceeded by our Infrastructure Improvement Programme."



Beyond cutting IT's own footprint, technology leaders can help their organisations meet their carbon objectives by supplying insight and information on energy consumption, the steering panel agrees. "CIOs and CTOs should ask themselves, what can we create that is unique for their industry that can help drive sustainability for their organisation?" says Thomson. "At MediaCom, we've created a carbon calculator, so the business and our clients understand the carbon cost of their media. Information is power as this helps clients and our business make informed decisions with sustainability information."

At Equinor, CIO Hanne Larsen says technology will be a key enabler of the energy transition, with IT helping realise significant sustainability and climate gains. "Remote operations using AR and VR reduce the need for travel and transportation, and digital twins let workers visit our installations virtually," she says. "Using data for predictive maintenance can optimise production, reduce carbon emission and remove waste by replacing equipment only when needed."

IT infrastructure is the primary focus of technology's contribution to sustainability goals

How is your technology function responding to help realise the organisation's sustainability goals? (% of respondents)

Improving energy efficiency of IT infrastructure	84%	
Using digital tools to reduce travel footprint	47%	
Developed/implemented sustainability management tools	45%	
Including sustainability requirements in tender/procurement process	39%	



Governing cyber risk

Cyber security issues and data breaches are the biggest risks technology leaders associate with running their functions, ahead of systems failure, realising business value from projects, overspending and 'shadow IT'.

With cyber security and an evolving threat profile a perennial concern for tech leaders globally, the Technology Leaders Agenda 2021 reveals how organisations are approaching information security leadership. At 60% of organisations the chief information security officer or equivalent reports into the CIO or most senior tech role, while at 27% of organisations the CISO is a peer.

Security is a specialised role, says Soho House & Co. CTO Dhawan, so appointing a CISO as a peer to the overall technology leader makes sense. But Howson at Viridor argues that, as long as the CISO has an outlet to raise concerns outside of the tech function, then reporting lines shouldn't matter.

"In my experience, if the most senior technology-focused individual within an organisation understands clearly the importance of the role of CISO and what its deliverables are then having a reporting line rather than a peer relationship would work," he says.

"The ability for a CISO to raise areas of weakness, highlight threats and justify changes to spend should not be filtered by the CIO or CTO, and they should have the ability to report to a risk or audit committee where there is conflict. vThe simple fact is in many organisations there is only room for one senior role from the technology group and internally within a department, multiple chiefs in the job title doesn't make for a cohesive unit."

Conclusion

Tech Monitor's Technology Leaders Agenda 2021 supported by partners Hexaware, shows that business transformation and digital innovation agendas are being balanced by the pragmatic priorities of operational efficiency and IT-business alignment.

Enjoying executive proximity and increasing budgets, barely a quarter of tech leaders are reporting into the CFO function and cost-cutting is not considered a strategic business priority compared to the lure of revenue growth and transformation initiatives - as well as the new CEO agenda of sustainability, diversity and the future of work.

This is good news for CIOs, CTOs and equivalent leaders of the tech, digital and IT function. But *Tech Monitor*'s expert steering panel suggest that while the Covid-19 pandemic has accelerated the push of tech leaders out of the IT department into a broader business role, they need to use the opportunity and circumstances to be bolder with their ambitions.

Viridor's Howson is forthright on what is and isn't part of the job description for C-suite technology executives. "No tech leaders should be spending time debating infrastructure," he says. "It's someone else's problem. Build services around those scalable platforms that are secure and cost beneficial.

"The change in the technology stack and how it's now being delivered over the last 10 years means the role of the tech leader must change with it. There are different challenges, but the opportunity is there to remove agenda items that took up valuable time.

"Tech leaders need to be solving an organisation's problems and greasing the wheels of business processes [and] perhaps even solving business problems that an organisation did not know it even had. That's what we have to aim for."

Tech leaders in recent years have only seemed to gain responsibilities. Whereas running a tight IT ship might have been the role of the IT director at the start of the millennium, modern tech leaders are expected to have been involved in technology, business, digital, and cultural transformation initiatives.

Indeed, the cultural and pastoral side of the role is the element that has grown most in the last year and the Technology Leaders Agenda steering board support the underlying theme of the survey that CIOs and CTOs are spending more time focusing on people, culture and skills than they are on technology delivery.

Thomson says tech leaders need to be acutely tuned in to what their teams can and can't achieve. "At MediaCom, it feels like the team have delivered the world's largest project over the past year," she says. "They have delivered product innovation at breakneck speed while improving and maintaining existing technology.

"This has enabled the organisation to fast-forward by five years in digital literacy and technology adoption. The team have done so well, but we've been running at pace for a year and staff are tired. A key capability technology leaders will need to nurture going forward is staff resilience."

Thomson adds that tech leaders need to lead the human side of technology and business transformation. The Technology Leaders Agenda shows that advanced data, AI and automation technologies are realising enterprise maturity and changing how businesses and technology functions operate. But, as Johnson Matthey CIO Coby notes "there are no IT projects; there are only business projects" - a view which resonates with Thomson.

"Change fatigue is also becoming a challenge in the business," Thomson says. "To ensure all the new technology changes are embedded long term and bring about business benefit, we as leaders need to help the organisation take a breath and ensure the changes we have delivered are adopted and embedded effectively."

Thank you for reading.

For all enquiries related to *Tech Monitor*'s research, including sponsorship opportunities, please contact <u>research@techmonitor.ai</u>.

© Copyright 2021 New Statesman Media Group Ltd