KPMG Global tech report 2026: Telecommunications

Scaling intelligent networks: From technology investment to operational impact

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Foreword

Our latest findings show the telecom sector continues to lead in technology maturity, with nearly half of organizations (forty-seven percent) identifying as innovators or early adopters.

This maturity is consistent across core capabilities — including governance and strategy, network and cloud infrastructure, cybersecurity, and enterprise data management — reflecting the sector's role as critical infrastructure and the discipline this demands. However, the findings also highlight a growing gap between capability and execution. The data also shows that maturity is not yet translating into consistent outcomes.

That said, investment in technology and digital is delivering measurable value. Seventy-four percent of telecom organizations report realizing $50 million or more from digital technologies over the past year, and AI and intelligent technologies are already contributing a meaningful share of that value. But outcomes vary significantly. While fifty-four percent are investing strategically in AI and delivering value from use cases, only twenty-two percent have achieved scaled deployment with consistent returns. The challenge is less about adoption, and more about repeatability. And, the pressures are expected to intensify. When asked about concerns about AI adoption, respondents identified cybersecurity, rising costs and regulatory risk as among the most significant over the next two years.

Other challenges telecom companies are facing are with operational realities. Poor forecasting (seventy-seven percent), cost and speed trade-offs (seventy-seven), and ongoing funding challenges (sixty-five percent) are making it harder to consistently deliver value from technology investments — perhaps helping to explain why fifty-eight percent of organizations now see technology as a greater source of risk than resilience.

These dynamics are being amplified by broader structural shifts. Geopolitics, regulation, and sovereignty are directly reshaping network architecture, vendor choices, and capital allocation, often forcing transformation at pace and at scale.

At the same time, the role of satellite and space-based connectivity is becoming more embedded in how operators think about coverage, resilience, and partnership models — reinforcing a shift in how and where value is created across networks.

Taken together, the findings suggest that telecom organizations are not limited by ambition, but by the complexity of execution within an increasingly constrained environment. Legacy environments, regulatory expectations, and operational risk continue to shape the pace at which change can be delivered.

Looking ahead, the ability to translate strong technology foundations into consistent, scalable outcomes will be the key differentiator. Those that can align strategy, investment and execution in a more disciplined way should be better positioned to navigate ongoing structural change and capture the next phase of growth.

Anna Scally
Global Head of Technology, Media and Telecommunications
KPMG International

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Key findings

Growth confidence is high.

89% are confident revenue will grow over the next **twenty-four months,** and

88% report revenue has grown over the past five years

Technology adoption posture is polarized.

47% describe their organizations as innovators or early adopters, 40% as fast followers, and 13% as slow followers

Maturity is consistently strong across core functions.

Across capabilities, approximately **82–87% of telecom** organizations are managed or optimized

Digital value is material and measurable.

74% report realizing **US$50 million** or more in value from digital technologies over the past 12 months, including 8% realizing one billion US dollars or more

80% report that foundational and core platforms contribute between **31% and 50%** of total digital value

88% report AI and intelligent technologies contribute between **21% and 40%** of total digital value

AI scaling expectations are high.

22% report deploying AI at scale with return across multiple use cases today

Operational pressure points are prominent.

77% report poor forecasting leads to negative consequences;

77% report cost and speed trade-offs negatively impact other areas;

65% report difficulty securing adequate business sponsorship or funding

Risk perceptions are rising.

58% agree technology is now a greater source of risk than resilience; if budgets were cut, top concerns include increased operational inefficiencies (30%) and lower system reliability and availability (26%)

Workforce transformation is accelerating.

91% are investing in agentic AI for a hybrid human–digital workforce;

83% say talent acquisition includes AI-native roles;

58% report hiring only if tasks cannot be completed by AI

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Technology maturity and strategy

The telecom sector reports high maturity across the technology operating model. Across every core capability assessed — including governance and strategy, network and cloud infrastructure, cybersecurity, and enterprise data management — telecom organizations cluster heavily at managed or optimized levels.

Technology compliance stands out as a particularly mature area, with fifty percent of organizations reporting optimized maturity. This aligns with the sector's critical infrastructure role and regulatory expectations and suggests many organizations have already institutionalized strong control frameworks. However, high maturity does not remove execution strain. Half of respondents agree that technology plans quickly become outdated, indicating that planning and governance cycles are under pressure as technology shifts faster than many legacy environments can absorb.

This tension is reinforced by the sector's adoption posture: while forty-seven percent see themselves as innovators or early adopters, thirteen percent still self-identify as slow followers — implying uneven readiness and different appetites for risk and speed across the market.

Which of these terms best describes your organization's approach to adopting new technologies?

	Telecom	Average across all industries
Innovators/ early adopters	47%	38%
Fast followers	40%	52%
Slow followers	13%	9%

> **"Telecom operators are scaling cloud, edge and AI at pace — but the real challenge is simplifying legacy environments fast enough to convert that investment into consistent, repeatable value."**
>
> **Aseem Sharma**
> **ASPAC Head of Telecommunications, KPMG in Singapore**

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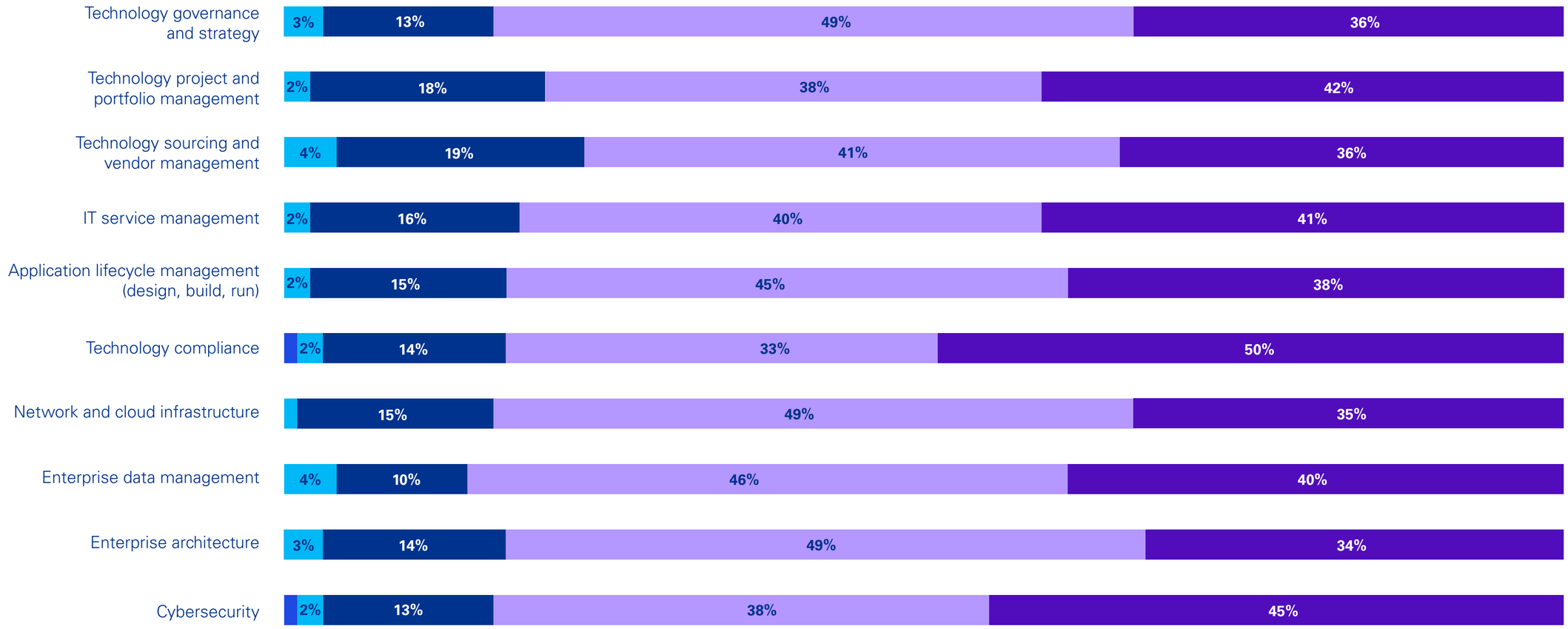
Which of the following best describes your organization's maturity across the following core technology functions?



- Initial/Ad Hoc — Processes are informal, undocumented, and reactive
- Developing — Some processes are defined, but execution is inconsistent
- Defined — Processes are documented and standardized across teams
- Managed — Processes are monitored, measured and actively managed
- Optimized — Processes are continuously improved through innovation, automation and best practices

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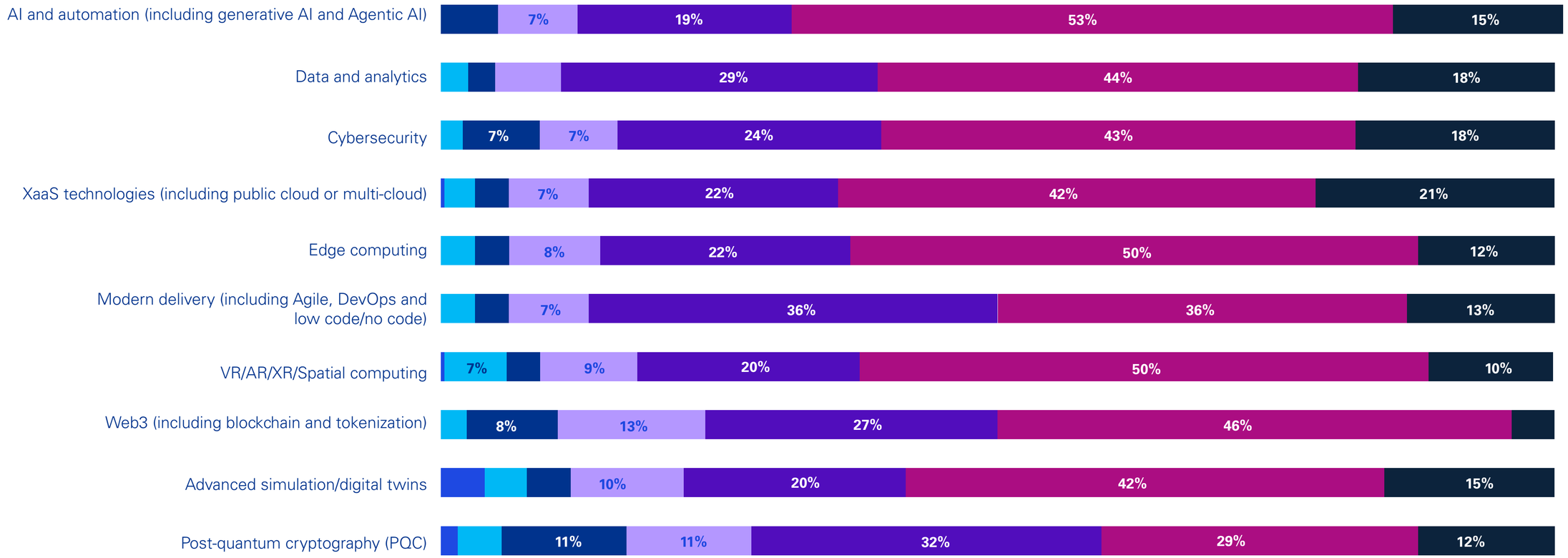
For each of the following technologies, how would you describe your organization's position today?



- No active focus in this area
- Aware of the need, but not action taken yet
- Strategy is being designed and pilot testing is underway
- Strategic vision exists, but limited by executive buy-in or funding
- Strategy is funded and supported, but we are hitting blocks with scaling-up
- Strategy is funded and supported, and we are on track with scaling-up
- Fully scaled and continually evolving our approach

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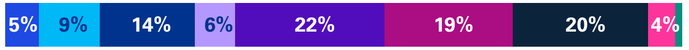
Tech investment

Telecom respondents report that digital investment is delivering measurable value, though outcomes vary significantly between organizations. In the survey, seventy-four percent of telecom respondents reported realizing $50 million or more in value from digital technologies, with a notable eight percent realizing $1 billion or more over the past twelve months. This indicates that digital programs are not simply experimental. Return profiles, however, are split. Forty-six percent report returns at or near breakeven (ninety-one percent to one hundred percent return), while forty-seven percent report net value creation above one hundred percent. This suggests a divide between organizations that are capturing efficiency and cost benefits without compounding value, and those that have found repeatable models that scale into stronger multiples.

The budget allocation data provides important context. Telecom companies are structurally maintenance-heavy: sixty-six percent allocate between forty-one percent and sixty percent of their technology budget to maintaining existing systems and infrastructure. This reflects the reality of network operations, uptime obligations and large legacy estates. Within this constraint, the sector still maintains a balanced investment profile: seventy-eight percent allocate between twenty-one percent and forty percent to growth initiatives, while sixty-eight percent allocate between eleven percent and thirty percent to transformation. Foundational platforms (such as cloud infrastructure, ERP and CRM) remain important contributors to value, but they are rarely the sole engine. Eighty percent of telecom organizations report that foundational platforms account for between thirty-one percent and fifty percent of total digital value — suggesting that material value is also being generated above the platform layer (for example, through automation, AI-enabled operations, and new digital service models).

Your organization's typical annual investment in digital technologies



The total financial value your organization realized from digital technologies over the past 12 months

- $1 million–$4.99 million
- $5 million–$9.99 million
- $10 million–$24.99 million
- $25 million–$49.99 million
- $50 million–$99.99 million
- $100 million–$249.99 million
- $250 million–$499.99 million
- $500 million–$999.99 million
- $1 billion or more

> **"Telecom organizations are realizing significant digital value, but the data shows the difference is execution — how quickly leaders convert investment into repeatable outcomes while managing reliability and operational risk."**

Dan Krausz
National Sector Leader - Telecommunications
KPMG in Canada

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AI and emerging technologies

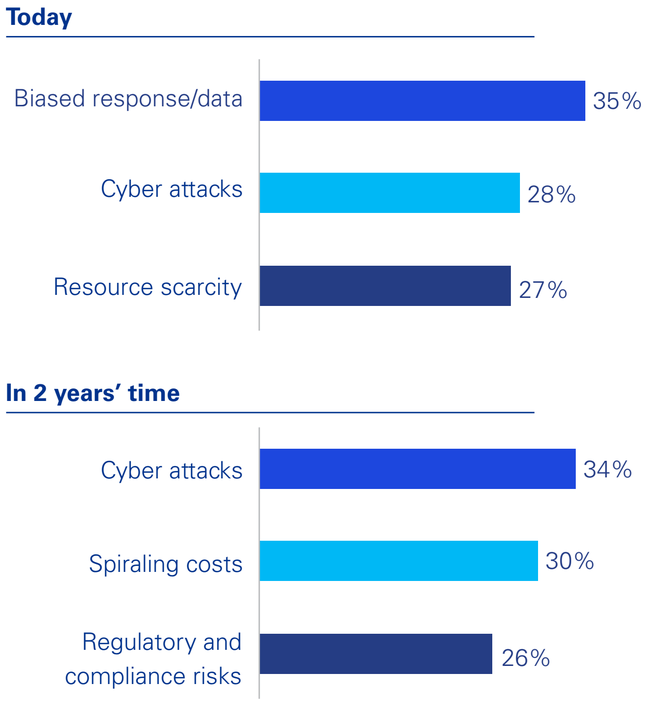
All telecom respondents report some level of AI activity, ranging from proof-of-concept testing to scaled deployment. Today, the largest share of respondents — fifty-four percent — describe their position as strategic investment in core capabilities with some AI use cases delivering value. Twenty-two percent report deploying AI at scale with return across multiple use cases today. Looking ahead, seventy-six percent expect to be deploying AI at scale with returns across multiple use cases within twelve months.

AI is also a material contributor to value today. Eighty-eight percent of respondents attribute between twenty-one percent and forty percent of total digital value to AI and intelligent technologies. This survey shows that AI is embedded across operating models, even if it is not yet the dominant source of digital value for most organizations.

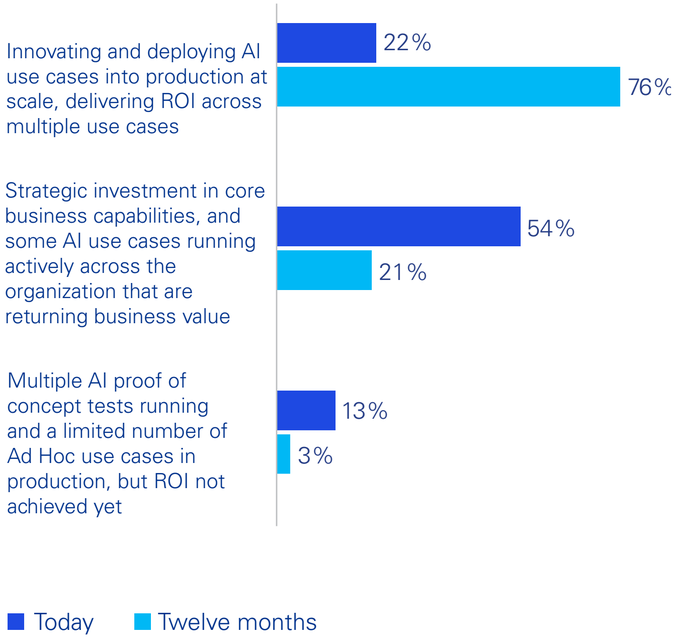
"With AI already contributing a meaningful share of digital value for most telecom companies, the next step is to scale responsibly — embedding governance, cost control, and workforce enablement into day-to-day operations."

Diogo Sousa
Telco Center of Excellence Lead,
KPMG in Portugal

Top three concerns of AI today and in two years' time



Current and future levels of AI adoption



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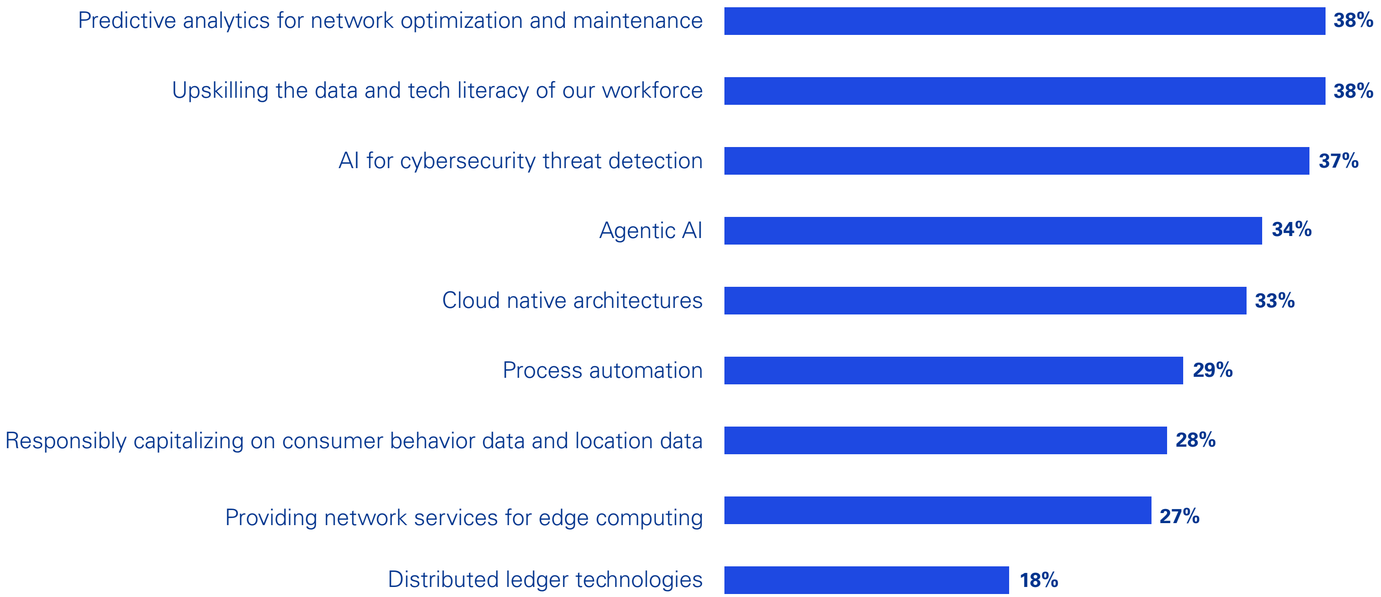
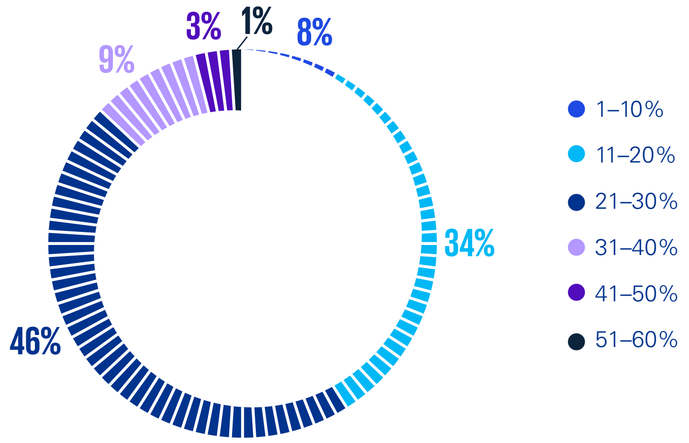
The findings also point to significant workforce implications. Ninety-one percent report investing in agentic AI for a hybrid human–digital workforce, and eighty-three percent say talent acquisition includes AI-native roles. At the same time, thirty-seven percent report too many disconnected AI projects with limited governance, and forty-seven percent say some employees are feeling left behind — highlighting the need for coordinated scaling, governance, and workforce enablement as AI becomes more operationally embedded. Beyond AI, the telecoms sector shows strong intent across a broad emerging technology agenda over the next twelve months. Priorities include cybersecurity (seventy-eight percent), data and analytics (seventy-six percent), AI and automation (seventy-four percent), cloud and multi-cloud (seventy-four percent), post-quantum cryptography (seventy-three percent), advanced simulation and digital twins (seventy-two percent), edge computing (seventy-one percent), and modern delivery approaches (seventy-two percent). Leaders may also need to consider the potential evolution toward more advanced forms of AI, such as Artificial General Intelligence (AGI) and, over time Artificial Super Intelligence (ASI), and the implications for decision-making, operations, and governance. However, the main barriers to collaborating on emerging tech include integration complexity and incompatible tech stacks (forty-four percent), cost constraints (thirty-nine percent) and lack of strategy and roadmap for strategic partnerships (thirty-eight percent).

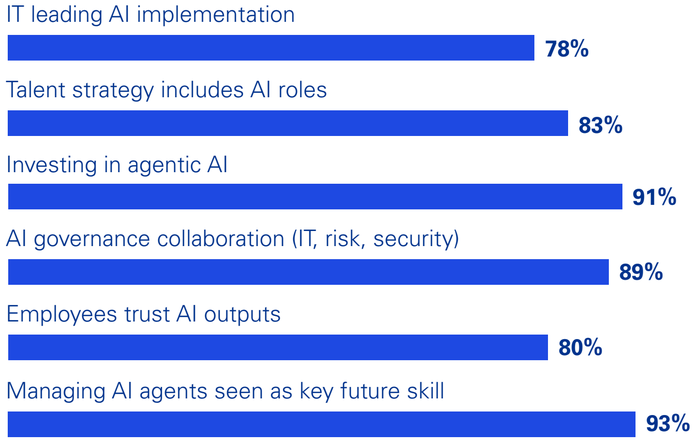
Which of the following do you believe will be most influential for upgrading your company's competitive edge through to 2027?



Percentage of the total financial value that the organization realized from emerging technologies



AI attitudes and workforce impact



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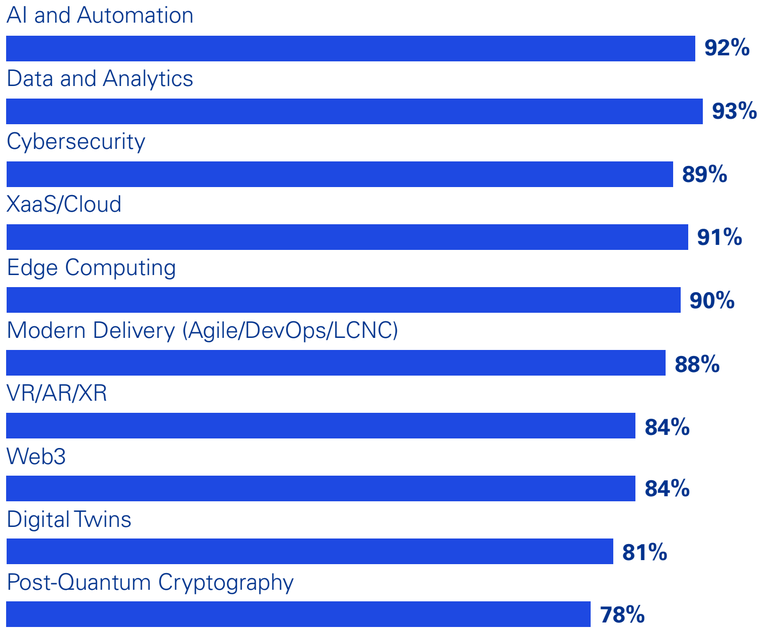
Tech trends and future outlook

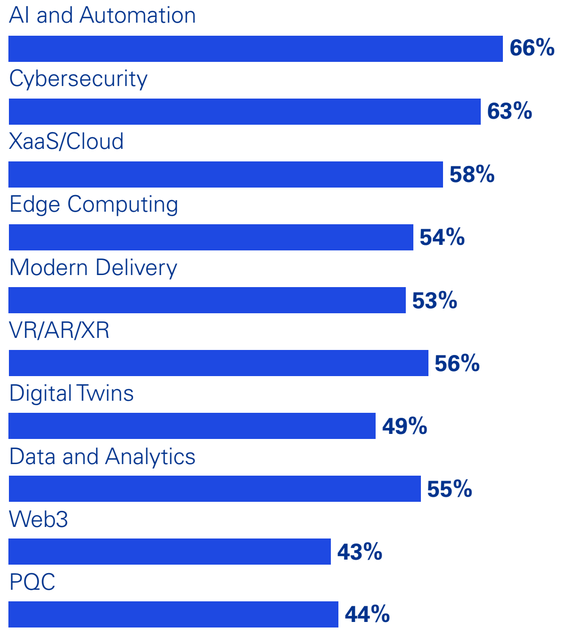
Looking ahead, telecom respondents show strong confidence in both the direction of technology change and the pace of implementation. Ninety-three percent identified a technology trend they believe will have the biggest impact in the coming year, with only seven percent selecting "don't know." This level of directional clarity is higher than the total sample and suggests telecom leaders have a clear line of sight on the forces shaping the next twelve months.

Across a broad set of technologies, telecom respondents expect to be ahead of the market in twelve months. The sector also reports higher expected implementation levels than the total survey sample across eight of ten technologies. For example, cloud/XaaS implementation started is ninety-one percent for telecom organizations versus eighty percent in the total sample, and edge computing implementation started is ninety percent versus eighty-four percent.

The sector also shows strong "fully scaled" expectations in areas closely linked to infrastructure and operations. In twelve months, AI and automation is expected to be fully scaled for sixty-six percent (versus fifty-four percent total), cloud/XaaS for fifty-eight percent (versus forty-six percent total), cybersecurity for sixty-three percent (versus fifty-eight percent total), and modern delivery approaches for fifty-three percent (versus forty-seven percent total).

For each of the following technologies, how would you describe your organization's position in 12 months?





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At the same time, the findings point to persistent constraints that could shape outcomes. Operational pressures are pronounced — particularly around forecasting and cost/speed trade-offs — and sixty-five percent report challenges securing adequate sponsorship or funding. Additionally, fifty-eight percent agree technology is now a greater source of risk than resilience, and concerns about post-quantum cryptography and quantum threats are elevated. These signals suggest that future advantage may depend on combining technology adoption with stronger execution discipline, value measurement, and risk controls that scale as quickly as the technologies themselves.

Top three actions organizations are most likely to pursue over the next twelve months:

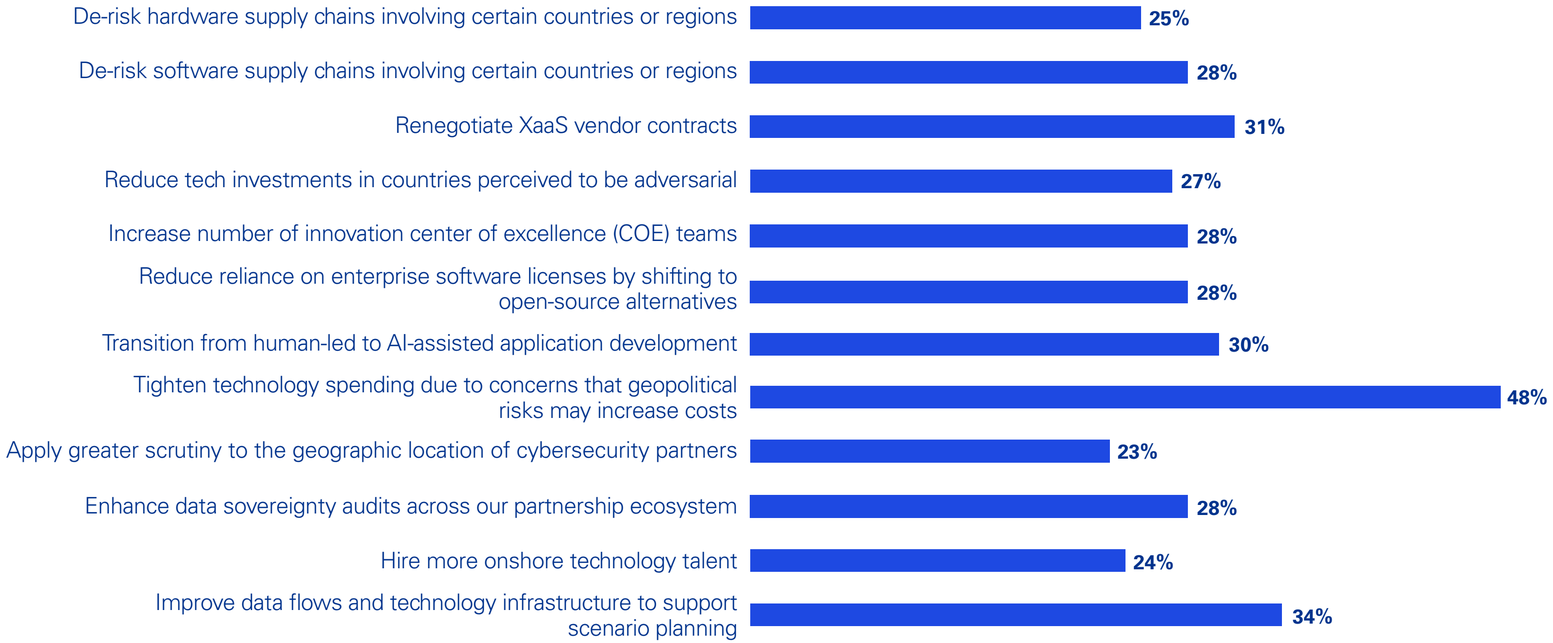
48% Tighten spend amid geopolitical cost risks

34% Strengthen data flows for scenario planning

31% Renegotiate XaaS vendor contracts

> **"In a sector undergoing large-scale network transformation, you can't separate technology decisions from the broader environment. Geopolitics and sourcing strategies are now central to how telecom organizations manage risk, prioritize investment, and plan for the future."**
>
> **Joe Cassidy**
> **EMA Head of Technology, Media and Telecommunications**
> **KPMG in the UK**

Which of the following actions is your organization likely to pursue over the next 12 months as part of its digital transformation efforts, in response to external macro environment changes?



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Looking ahead: Your 2026 agenda

01

Accelerate learning to build your new competitive moat

Be ready for the immense pace by treating organizational knowledge as strategic currency. Institutionalize rapid learning loops and shared knowledge.

02

Maximize value through data-driven investment

Make evidence-based decisions grounded in maturity assessments and external benchmarks, while continuously tracking and forecasting performance. Ensure KPIs are aligned with today's technology landscape and reflect the need for new approaches.

03

Build in adaptability through frameworks and culture

Streamline decision-making, and pivot if tools are superseded. Build adaptable teams and an innovative culture that can support this ethos.

04

Build a future-ready, agent-empowered workforce

Redesign a talent strategy that is focused on upskilling, building AI fluency, and cultivating the next generation of leaders who can effectively use, manage, and master AI.

05

Adopt an AI-first, trust-by-design mindset

Begin every design and decision with an AI-first mindset, and embed trust, transparency, and responsibility by design. Turn responsible AI into a competitive advantage, not just a compliance exercise.

06

Strengthen your data foundation and modernize your tech stack

AI can only be as powerful as the data powering it. Rationalize and modernize your tech stack, retire low-value legacy systems, and build modular and dynamic architectures ready for rapid iteration and AI-native applications.

07

Drive strategic ecosystem partnerships

Select ecosystem partners with purpose. Move from transactional relationships to strategic co-creation that enhances flexibility, fosters interoperability, accelerates innovation, and delivers better customer outcomes.

08

Have one eye on the future

Quantum computing, AGI, and ASI might be closer than we think. Even as you deliver on current needs, maintain focus on preparing for what's next.

As organizations enter the Intelligence Age, ambitions to elevate technology maturity and maximize ROI are high. Achieving this requires a strong strategic foundation, shifting from AI experimentation to scaled deployment, redefining ROI metrics, balancing investments, and fostering adaptive strategies and decision-making structures. Success also depends on cultivating a culture ready for change and optimizing a human-AI workforce through agentic AI, while preparing for emerging breakthroughs in quantum computing, AGI, and ASI.

Clearly, there will be no easy ride through 2026 for tech executives if they want technology to genuinely empower their organizations to grow, and their people to embrace technology and thrive. It will likely be a challenging, complex year, the outcomes of which we look forward to reflecting on in surveys to come.

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How KPMG can help

New opportunities

KPMG supports telecom organizations as they shift from adoption to execution at scale — helping leaders convert sustained technology investment into measurable outcomes across operations, customer platforms, and new digital services.

Methodology

This year's report is based on insights from 104 leaders from telecom companies with $1 billion revenue or more. Respondents represent both private (69 percent) and public (31 percent) organizations and hold senior leadership roles such as Chief Data Officer, Chief Technology Officer, Chief Information Officer, IT Director or Technology Director, and EVP, SVP, or VP of Technology. Geographically, respondents are based across EMEA (51 percent), the Americas (28 percent), and APAC (21 percent).

Note: Figures may not total 100 percent due to rounding.

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