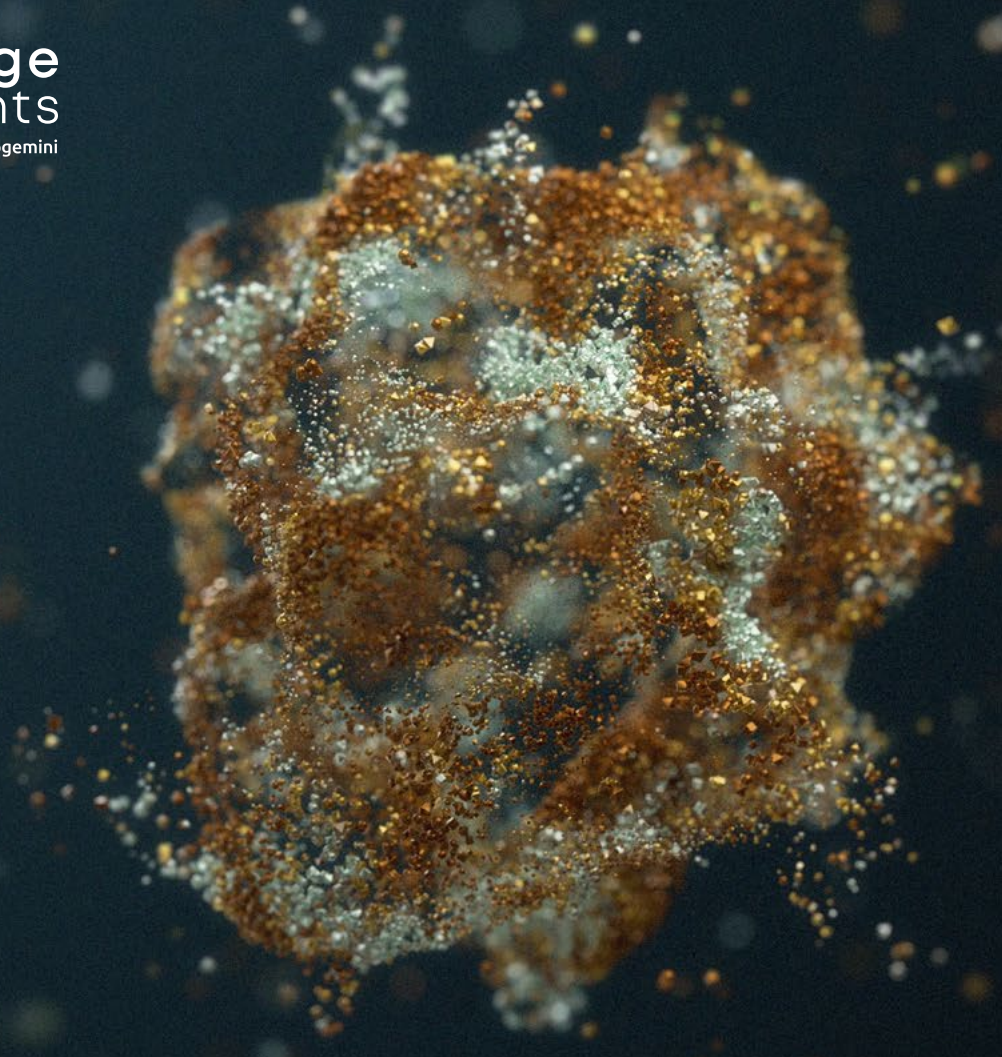




The Deep Tech Index 2026

What does it take to win with radical innovation?

In association with

CWCConnected

formerly Cambridge Wireless

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Foreword

This report presents unique research into the motivations, opportunities and challenges that business leaders face in delivering radical breakthrough innovation. Drawing on insights from 750 senior leaders across the globe, our Deep Tech Index reveals compelling findings and perspectives that inform how business and innovation decision-makers can succeed in today's fast-evolving innovation landscape.

Chief among these findings is that, although the hunger for radical innovation is voracious, many organisations are stymied by the very systems that should enable such progress. Perhaps the most succinct summary is that the will is strong, but the muscle is still developing.

What encouraged me most was that leaders recognise that the time for radical innovation is now. They are energised, optimistic and ready for the challenge. Ambition is in abundant supply, which makes it critical to understand the organisational and external barriers that stand in the way of progress. These can best be described as the culture, processes and pressures that determine whether bold ideas flourish or wither.

Why is radical innovation important? For me, the answer is clear. AI-enabled deep tech advances can underpin a powerful business strategy that will determine who wins and loses over the next decade and beyond. Such a strategy delivers compounding value at a time when incremental approaches alone are not enough. When companies invest in foundational platforms and capabilities rather than isolated projects, every breakthrough builds to the next.

With knowledge accumulating and expertise deepening, competitive advantage grows. The courage and vision behind an initial deep tech bet can generate value that multiplies over time.

Certainly, this requires investment, but it also demands the right leadership, culture and operational structures. Our Index highlights the need for environments where experimentation is encouraged and promising ideas are protected and actively supported. More than that, it points to a future where long-term outcomes are valued as highly as short-term performance. You might imagine that those accelerating fastest from concepts are the quickest to success. Instead, I believe that it is those who build strong foundations and proprietary platforms who will prevail.

The opportunities created by deep tech strategies are immense. But capturing them will depend less on technology creation than on the ability to build organisations capable of putting that technology to work at scale.

Why should you read this report? Quite simply because it reveals the gap between the ambition for radical innovation and the conditions required to make it succeed. It reflects the barriers, while illuminating the pathways being forged by those determined to move beyond them. In doing so, it exposes a radical disconnect that has yet to be resolved.

My hope is that the Deep Tech Index encourages you to think bigger, act with confidence and build the capabilities needed to compete on a frontier that is constantly moving. I firmly believe that the leaders who grasp the compounding value of deep tech will be the ones who discover new ways to win – and leave a legacy for the next era of progress.

“ “ ”

Richard Traherne,
Chief Executive Officer,
Cambridge Consultants



Introduction

Welcome to a different kind of report for a different kind of CXO. This is the Deep Tech Index 2026, created by Cambridge Consultants, part of Capgemini, in collaboration with The Editorial Institute. It is a benchmark for the corporate mavericks determined to shape tomorrow. Uniquely, the Index shines a light on what's standing between ambition and breakthrough – and what it takes to prevail. It is a first-of-a-kind study tracking the forces behind radical innovation worldwide. We invite you to digest it, measure yourself against it, and chart your progress on this moving frontier.

Chapter 1

Deep Tech Index

The radical disconnect

The Deep Tech Index gets under the skin of what it takes to make radical innovation happen. At the heart of our findings is what we are calling the radical disconnect – the chasm between ambition and execution. Leaders want breakthrough innovation, but too often the cultures, structures and systems around them stand in the way of turning bold ideas into meaningful impact.

While most innovation studies focus on the outputs around R&D investment, patents, product launches and so on, our Index takes a different approach. We wanted to hear directly from the leaders responsible for turning innovation ambition into business impact, to unpick their beliefs on innovation, what enables them to move bold ideas forward, and the challenges that get in their way.

We heard from 750 senior leaders with direct responsibility for innovation strategy and budgets across 11 industries and three global regions. Their answers give us a rare view from inside the boardroom, creating a landmark study that maps the attitudes, pressures and trade-offs C-suite decision-makers navigate day-to-day, zeroing in on the moments when they can give a radical idea oxygen, or stop it in its tracks.

The Deep Tech Index 2026 covers six interconnected areas that shape a business' readiness for innovation:

- Leadership mindset
- Organisational commitment
- Financial and boardroom dynamics
- Company culture
- Structural and process execution
- External and technical factors

When these areas align, a company is set up for innovation success. When they don't, even the boldest ambitions can struggle to survive.

Each chapter features an individual index examining these factors and how they affect readiness, created based on answers to the quantitative survey questions where respondents assessed their own performance and the blockers they face. The higher the readiness score in the Index, the more likely a business is to capture the lasting, compounding value of deep tech.

Unlocking deep tech through radical innovation

Deep tech is a bold strategy and mindset that harnesses radical science, technology and engineering to achieve things no-one else can. It offers transformative potential for business, people and the planet – not by reacting to emerging technologies, but by actively seizing the opportunities they create.

It is about combining first-principle science, technology and engineering to create technologies, products and services that offer differentiation in a competitive landscape. Through technology breakthroughs and IP that competitors can't replicate, deep tech can transform markets to build a defensible competitive advantage.

Radical innovation approaches are how the value of deep tech can be realised by actively anticipating and shaping the opportunities frontier technology creates. In this way, deep tech has the power to redefine industries and create lasting, compounding value for those ambitious enough and prepared to pursue it.

SURVEY DEMOGRAPHICS*



750

Senior leaders surveyed



25

Executive interviews



11

Industries



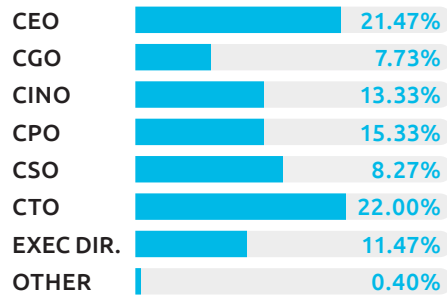
3

Global regions

LEADERSHIP REPRESENTATION

88.1%

C-SUITE



DECISION-MAKING AUTHORITY

50.5%

Strategy owners



49.5%

Senior co-owners & key influencers

GEOGRAPHIC DISTRIBUTION



NORTH AMERICA

36.8%

276 respondents



EUROPE

37.6%

282 respondents



ASIA-PACIFIC

25.6%

192 respondents

COMPANY SIZE



Large Enterprise (5k-9.9k) **36.8%**



Global Enterprise (10k+) **30.7%**

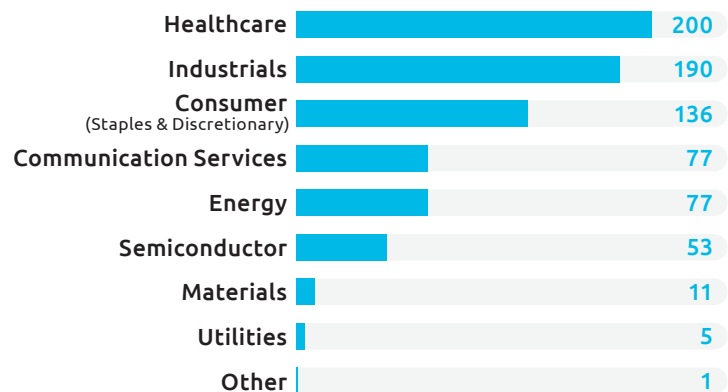


Small-Mid (250-4.9k) **22.4%**



Startup (<249) **10.1%**

RESPONDENTS PER INDUSTRY



*Percentages may not sum to exactly 100% due to rounding.

Chapter 2

Leadership Index

Understanding the ambition gap

You might think radical innovation fails because leaders lack courage, conviction or vision. The Leadership Index suggests otherwise. Our data reveals a cohort that is highly energised, optimistic and willing to champion innovation. The highest-scoring area concerns the importance of innovation, highlighting a strong consensus around its value.

As well as the clear consensus around the value of innovation, radical innovation was decisively chosen with 59.33% of the vote as the type of innovation that excites CXOs most. This sends a clear signal that leaders are not looking to innovate by degrees – they are hungry for transformative change.

Along with this appetite, the data also revealed a strong confidence among leaders in their ability to take on the uncertainty that comes with it. Despite it being the lowest-scoring area in the Leadership Index, participants nevertheless claim to be comfortable with the risk – in terms of uncertainty and ambiguity – that innovation demands. The question, then, is not whether today's C-suite wants radical innovation, but whether they are able to actively pursue it.

This is the radical disconnect writ large. It is the point at which leadership ambition clashes with business reality as leaders navigate complex operational structures, competing investment priorities and entrenched decision-making norms. It is a theme we'll return to in the following chapters.

**59.33% of CXOs
chose 'radical'
as the form of
innovation that
excites them most**

"I have to create the fire and also keep the fire burning."

Jibin Jeffery Dhanaraj, Chief Technology Officer, ResearchSat

INSIDE THE INDEX

We asked leaders to rate how they felt about radical innovation, covering personal drives and motivations. The Likert scale below shows the average response across all participants.

The higher the score, the more likely a business is to capture the lasting compounding value of radical innovation.

	1	2	3	4	5	6	7
1 How energised does innovation make you?	Not at all energised	Slightly energised	Somewhat energised	Moderately energised	Quite energised	Very energised	Extremely energised
2 Are you willing to challenge the norms?	Not at all willing	Slightly willing	Somewhat willing	Moderately willing	Quite willing	Very willing	Extremely willing
3 How important is innovation to you?	Not at all important	Slightly important	Somewhat important	Moderately important	Quite important	Very important	Extremely important
4 How innovative are you as a leader?	Not at all innovative	Slightly innovative	Somewhat innovative	Moderately innovative	Quite innovative	Very innovative	Extremely innovative
5 Are you confident in championing innovation?	Not at all confident	Slightly confident	Somewhat confident	Moderately confident	Quite confident	Very confident	Extremely confident
6 How accountable do you feel for innovation?	Not at all accountable	Slightly accountable	Somewhat accountable	Moderately accountable	Quite accountable	Very accountable	Extremely accountable
7 How comfortable are you with risk?	Very uncomfortable	Uncomfortable	Slightly uncomfortable	Neutral	Comfortable	Very comfortable	Extremely comfortable

Proportion of responses:

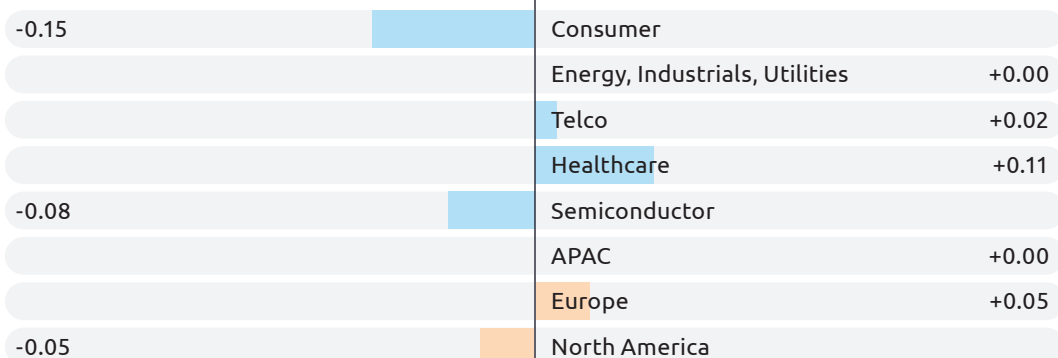


Leadership psyche categories scored on average

5.33

OUT OF 7

SECTOR AND REGIONAL VARIANCE



● SECTOR VARIANCE (vs overall) ● REGIONAL VARIANCE (vs overall)

FIGURE 1. Proportion of companies allocating >70% of innovation budget to radical innovation

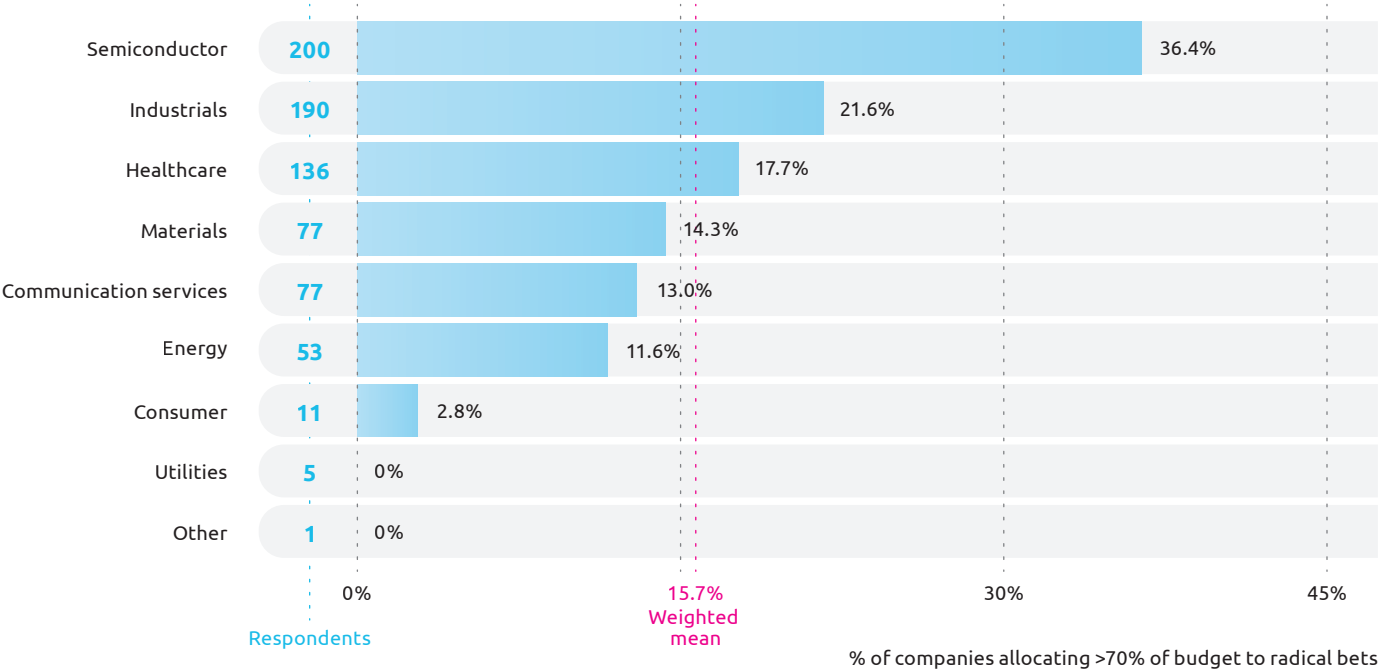
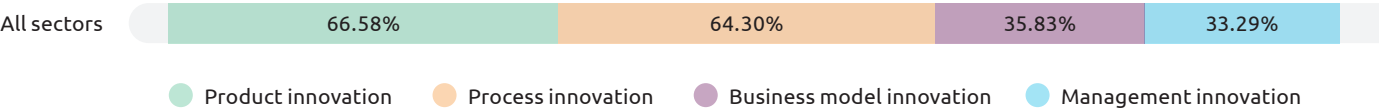


FIGURE 1. Across all respondents, a weighted average of 15.7% claimed to allocate >70% of their innovation budget to radical bets, although it's important to note this varies widely by market sector. Each sector is represented by a different number of respondents.

FIGURE 2. Which areas of the business would you most like to innovate in?



“Early in my career, I had leaned more toward controlled, incremental innovation, but as I’ve grown into leadership, I’ve realised that real impact often comes from more radical bets.”

Chief Technology Officer, global pharmaceutical company

The corporate swashbuckler

"One of the most encouraging findings in the Index is that leaders are not short of ambition. Across industries, there is an overwhelming belief in the importance of innovation and a strong sense of personal responsibility for making it happen. The focus now is on translating that intent into outcomes.

"The most effective innovators are rarely defined by a single mindset. They know when to challenge assumptions and when to build consensus. They can imagine boldly, navigate complexity and maintain momentum when uncertainty starts to slow progress. Different situations demand different strengths.

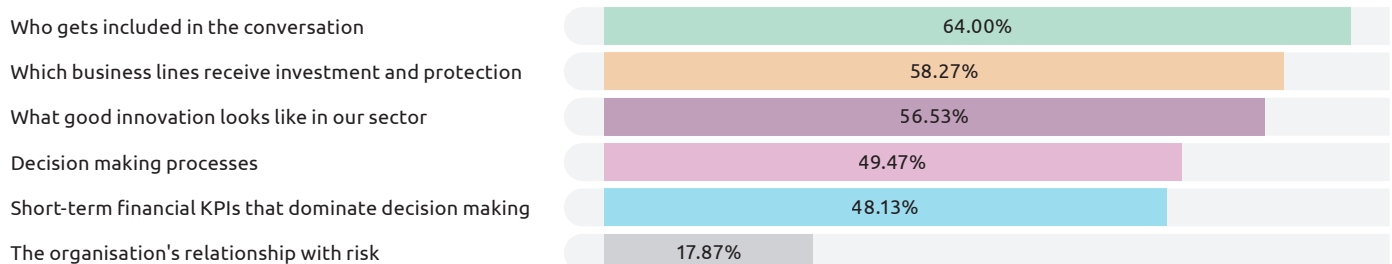
"This is the corporate maverick, or corporate swashbuckler as we like to call them. Daring individuals with the courage to venture into uncharted territory, exploring new possibilities and turning bold ideas into real-world impact. Vision, ambition and action are all essential, but the leaders who shape tomorrow understand when each is needed most."



MIKE DUNKLEY

Executive Vice President & President,
North America, Cambridge Consultants

FIGURE 3. Which of the following are hardest to challenge in your business? (select all that apply)



CHAPTER 3

Organisational Index

From thinking to doing

In the Organisational Index, respondents saw their organisations as generally well placed to champion innovation through investment decisions, portfolio choices and business model change. It paints a picture of leaders who are willing to explore radical innovation, who rate their organisations as ready, and who have a solid understanding of the emerging technologies that might offer opportunities to their business.

Innovation is everyone's business

When asked whether technology innovation is only relevant to tech companies or something they can pursue themselves, leaders across industries rejected the idea that innovation is the preserve of tech firms. 46.6% said that every company across all sectors should actively engage with technology innovation, not just adopt what others build.

This challenges the assumption that businesses can leave technology innovation to others and then incorporate it once it becomes available. Our findings suggest leaders instead see technology innovation as essential to growth, competitiveness and long-term survival, making it an active priority. This is reinforced by the vast majority of respondents flagging that defensible technological IP is important in capturing long term value for their businesses (see Figure 4).



What leaders are changing

Our C-suite interviews reveal a broader shift in how organisations think about innovation, moving from an activity to be funded towards a strategic capability expected to deliver measurable outcomes. The following points consistently surfaced:

- **Innovation as business strategy:** CXOs increasingly see radical innovation as essential to achieving the growth targets demanded by shareholders
- **Move from activity to outcomes:** Leaders are moving away from funding 'innovation for its own sake' towards profitability and market readiness
- **Partnership models:** Leaders increasingly favour models where partners invest and share in the results. As one interviewee put it, "both sides are on the hook"

Build, buy or partner?

Approaches to acquiring innovation capability vary by sector and leadership philosophy, but the Organisational Index shows that very few organisations pursue radical innovation as a solo endeavour (see Figure 5 and Figure 6).

In fact, building capabilities entirely in-house is rare, with most taking a balanced approach, combining internal capability with external partnerships, bringing in the expertise of consultancies, academia and other innovation providers. This approach allows organisations to access rapidly evolving technologies, fill capability gaps and share risk.

INSIDE THE INDEX

This Index rates how organisations approach innovation, covering the balance between radical and incremental innovation, spotting emerging tech and build/buy/partner. The Likert scale below shows the average response across all participants.

The higher the score, the more likely a business is to capture the lasting compounding value of radical innovation.

	1	2	3	4	5	6	7
1 How often does your organisation challenge existing business models?	Never	Rarely	Occasionally	Sometimes	Often	Very often	Always
2 How important is it for you to produce defensible IP?	Not at all important	Slightly important	Somewhat important	Moderately important	Important	Very important	Critically important
3 How confident are you in identifying high value emerging technologies?	Not at all confident	Slightly confident	Somewhat confident	Moderately confident	Confident	Very confident	Extremely confident
4 How mature is your build/partner/acquire process?	Not at all mature	Slightly mature	Somewhat mature	Moderately mature	Mature	Very mature	Fully mature
5 Does your organisation lean more towards incremental or radical innovation?	Almost entirely incremental	Mostly incremental	More incremental	Balanced	More radical	Mostly radical	Almost entirely radical
6 How often does your business invest in exploratory innovation?	Never	Rarely	Occasionally	Sometimes	Often	Very often	Always

Proportion of responses:

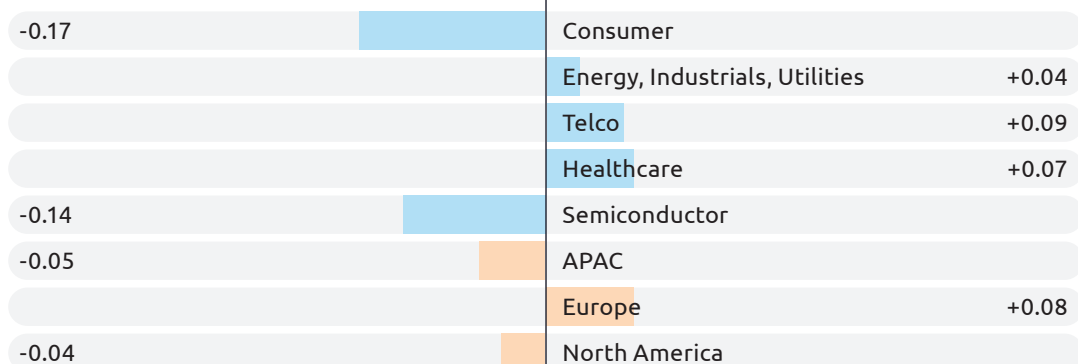


Organisational categories
scored on average

5.28

OUT OF 7

SECTOR AND REGIONAL VARIANCE



● SECTOR VARIANCE (vs overall)
 ● REGIONAL VARIANCE (vs overall)

FIGURE 4. The importance of intellectual property

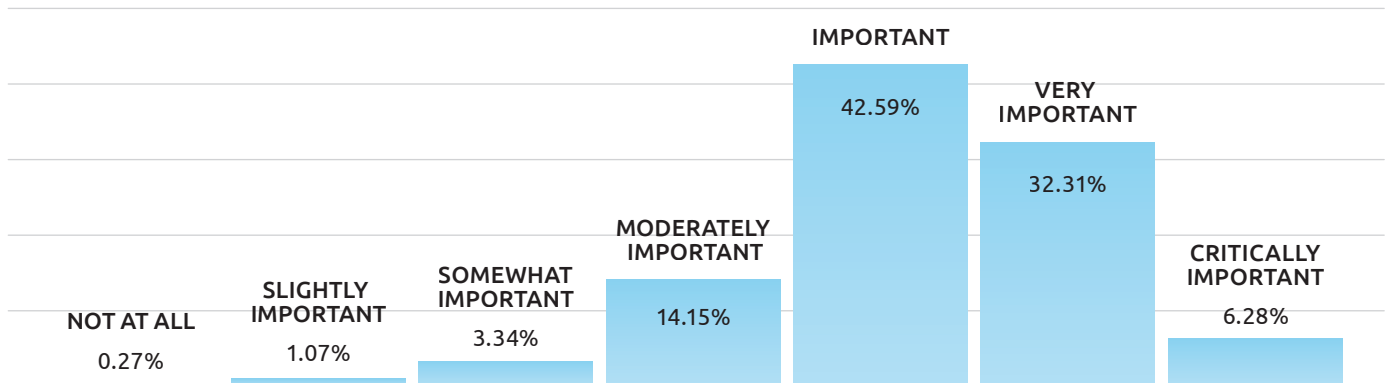


FIGURE 5. Build, buy, partner (by sector)

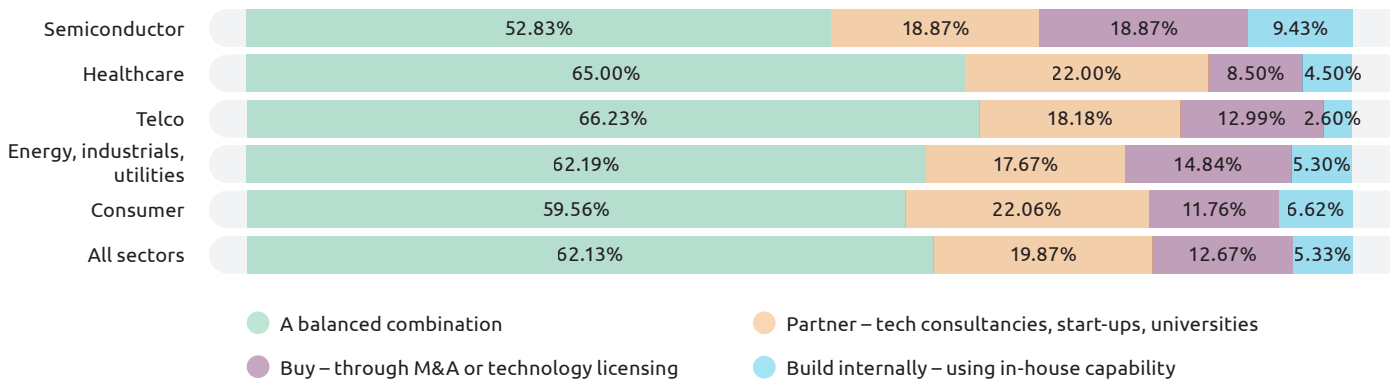
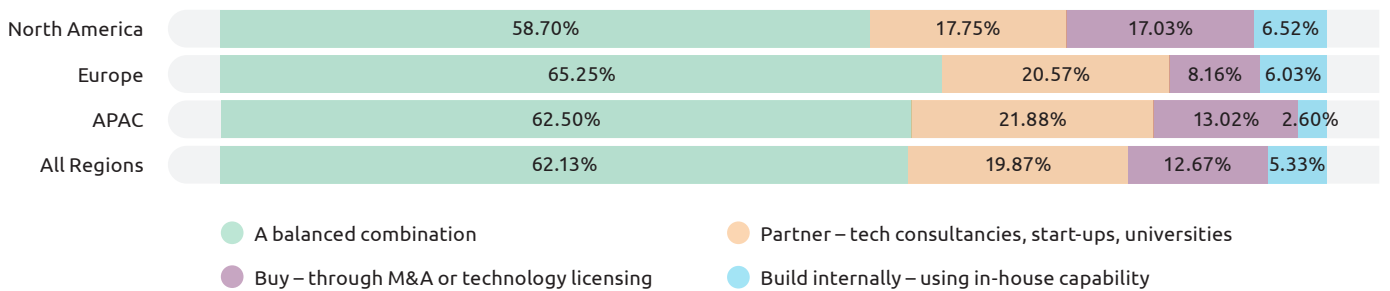


FIGURE 6. Build, buy, partner (by region)



“We partner where we can’t build fast enough internally.”

Chief Technology Officer, global pharmaceutical company

This ecosystem mindset is particularly important for radical innovation. First-of-a-kind technologies rarely fit neatly within existing capabilities or value chains, often requiring new combinations of expertise, technology and infrastructure. Strategic partnerships can therefore be vital to both success and speed.

The maturity of an organisation’s approach to building, buying or partnering is the second-highest scoring area in the Organisational Index (see Figure 5 and Figure 6), suggesting leaders are developing more deliberate approaches to accessing external expertise.

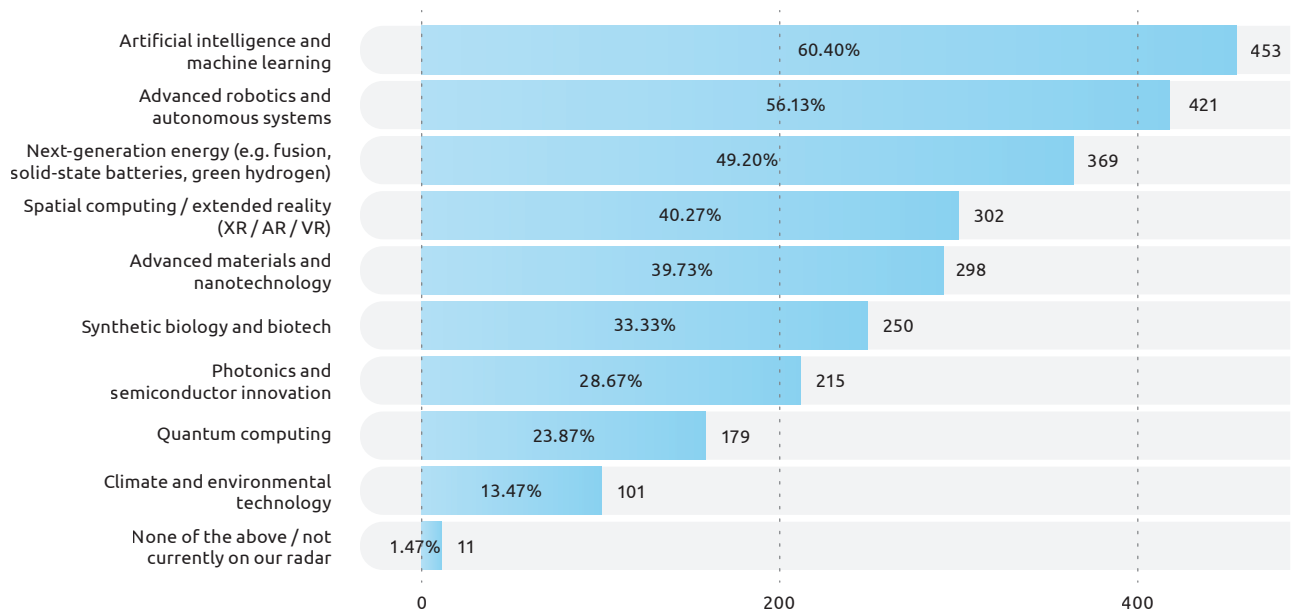
Together, these findings point to a broader shift towards innovation ecosystems, where competitive advantage depends not only on what organisations can build themselves, but how effectively they connect with capabilities beyond their own walls.

Priority frontier technologies

This ecosystem is both organisational and technological. Survey respondents identify a wide range of relevant and exciting technologies they want to explore, with priorities varying by sector. The standout theme is, unsurprisingly, AI and machine learning, which is becoming an accelerator across areas from telecoms to robotics and automation (see Figure 7).

As our interviewees agree, radical innovation rarely comes from a single technology. It is through convergence that new possibilities emerge, with AI increasingly central to the mix. Its value is unlocked only when integrated into a wider technology stack alongside complementary capabilities.

FIGURE 7. Top technologies identified by survey respondents (select all that apply)



This convergence plays out in several ways:

- **Systems integration:** Combining software, hardware, cybersecurity and wider systems engineering
- **Cross-technical synergy:** Connecting AI and digital technologies with low-power edge hardware, advanced materials, cybersecurity and quantum computing
- **Value chain convergence:** Blurring traditional industry boundaries as technologies combine to create new products, markets and business models
- **Compounding ecosystem effects:** Value increases as adoption scales across users, partners and sectors, further accelerating innovation

Beyond this technology convergence, the interviews highlighted other frontier technologies and approaches that may be undervalued by the market. Leaders repeatedly cited digital twins, a technology being explored to reduce uncertainty across industries. For example, in healthcare digital twins could be used as a way to reduce the cost, duration and size of clinical trials, while for industrial applications digital twins can help to shorten development cycles using virtual simulations of manufacturing and operational environments. Sustainability and climate challenges – where frontier technologies may be combined with business model innovation to transform industries with circularity approaches – were also repeatedly highlighted as an area of undervalued opportunity.

Taken together, the findings suggest that the next wave of radical innovation will depend less on individual technologies and more on how effectively organisations combine technologies, capabilities and disciplines to create something new.

When capabilities connect

“What stands out to me is that the real challenge in radical deep tech is not having access to individual technologies or areas of expertise. It is having the depth and breadth of capability to bring them together in the right way.

“That starts with highly specialised people who combine deep technical knowledge with practical experience of invention, development and commercialisation. Across technology strategy, complex systems, science, engineering, design and user-centred methods, these disciplines combine into capabilities, which then come together into deep tech problem domains that solve whole classes of problems.

“For us, those include connected and distributed systems, science and engineering, autonomous and decision systems, advanced sensing and edge systems, and regulated and safety critical systems.

“What becomes particularly interesting is the multidisciplinary workflows within these problem domains. To be truly AI native in R&D, AI cannot be confined to the digital domain. It needs to work across the physical and digital worlds, connecting scientific reasoning, simulation, engineering, sensing, experimentation, design and decision making in new ways.

“I see this as the next frontier for radical innovation: AI native R&D across these problem domains, with AI becoming part of the multidisciplinary workflow rather than simply another tool within it.

“The advantage then comes from knowing how to connect the capabilities within and across these domains, anticipate what is emerging, and bring the right people, disciplines, technologies and partners together around the problem. That is where you can create things that none could create alone.”



ASHLEY HAWSON

Executive Vice President,
Global Research and Development,
Cambridge Consultants

Innovation thrives in ecosystems

By Michaela Eschbach,
Chief Executive Officer, CWConnected

(formerly Cambridge Wireless)



At a time when demand for deep tech solutions is accelerating globally, understanding how to unlock innovation has never been more critical.

Supplementary research by The Editorial Institute for Cambridge Consultants in support of this report examined four deep tech domains leaders are most enthused about, namely biotechnology, 5G and wireless, advanced computing and AI. They highlighted that the combined market opportunity across these four domains was projected to grow from \$2.1 trillion in 2024 to \$6.85 trillion by 2030, more than tripling in value within six years.

Particularly significant for many of our members is the projected growth of 5G and advanced wireless technologies, forecast to reach a \$2.2 trillion market by 2030, underlining the scale of opportunity ahead. We are therefore delighted to see both the continued confidence in deep tech markets and the growing recognition of their potential to drive economic growth and solve some of the world's most pressing challenges.

Around the world, organisations are facing unprecedented challenges. Economic uncertainty, geopolitical tensions, rapid advances in technology and growing pressure to deliver sustainable growth are forcing business leaders to think differently about the future. Increasingly, many are recognising that the answers will not come from incremental improvements alone. They will come from bold ideas, radical innovation and the application of deep technology to solve complex problems.

Yet the Index also highlights a reality that many of us working in innovation ecosystems are familiar with. The challenge is no longer understanding the value of deep tech, but creating the conditions that allow it to thrive. Many organisations remain constrained by structural and cultural barriers, from short-term decision making and complex approval processes to risk aversion and competing priorities.

The research reinforces the importance of collaboration in overcoming these challenges, with most organisations identifying a balanced approach combining partnerships with technology acquisition and building in-house capabilities as their preferred route to radical innovation. Breakthrough innovation rarely happens in isolation. Strong ecosystems help organisations access expertise, attract investment and bring innovation to market more effectively.

That is why the findings in the Deep Tech Index 2026 are so important to us. As a leading technology membership organisation, CWConnected (formerly Cambridge Wireless) brings together innovators, researchers, technology leaders, investors, policymakers and entrepreneurs who are shaping the future of deep technology. From advanced wireless and AI to semiconductors and emerging communications technologies, our community sits at the intersection of the people, organisations and partnerships needed to turn breakthrough ideas into real-world impact.

The city of Cambridge has demonstrated the power of this approach for decades. Its success is built not only on world-class science and engineering, but on a culture of collaboration that connects academia, industry, investors and entrepreneurs. Through events such as Cambridge Tech Week, CWConnected is proud to support the partnerships that help innovation grow and bring together global leaders exploring the opportunities deep technology presents.

The message from this report is positive and really encouraging. The insights it provides can help shine a light on where organisations hit blockers, and where to focus to overcome these challenges and unlock the opportunity ahead.

The ambition, talent and technology exist. The potential is enormous. Now is the time to create the environments, cultures and partnerships that allow deep innovation to thrive. The organisations and regions that succeed will be those that invest not only in breakthrough technologies, but also in the ecosystems needed to bring them to life.

CHAPTER 4

Financial and Boardroom Index

Innovation under pressure

Once inside the boardroom, radical ideas must compete with budgets, governance processes, shareholder expectations and quarterly performance demands.

They rarely arrive with the evidence demanded by traditional funding models. While their potential may be considerable, radical ideas often lack the financial proof points needed to compete with business-as-usual costs. Further removed from existing products, revenues and performance metrics, they are harder to justify and fund. This challenge is reflected in the Financial and Boardroom Index.

The challenge is not simply one of budget. As we saw in the Leadership Index, short-term KPIs were surprisingly considered one of the less significant challenges faced by those surveyed (see Figure 3), and a significant overall budget is allocated to radical innovation, though it varies widely by sector (see Figure 1).

When asked how flexible their organisation is in funding early-stage ideas, responses were evenly spread, suggesting a possible segmentation of approaches to funding early-stage ideas and a lack of consensus on the right one. While these ideas might generally be funded, they often require sponsorship and a clear case for investment, and do not typically benefit from strongly protected investment.



The impossible balancing act

CXOs are expected to protect today's business while simultaneously building tomorrow's. This creates a natural tension because boards and investors demand predictability while radical innovation is characterised by uncertainty. Finance leaders understandably seek confidence that is rarely provided by breakthrough thinking. This reveals another layer to the radical disconnect as leaders grapple between immediate performance and long-term possibility.

"I think the most effective way to kill an innovation is to ask for a five-year ROI forecast at gate one."

Chief Business Officer, global automotive manufacturer

Interviewees describe a system designed to support certainty rather than exploration. Pointing at a product line's P&L is a much simpler argument for investment than a business case for radical bets.

One interviewee noted that established corporate entities fund innovation out of operational income rather than risk capital. Because of this, boards default to short-term business case justifications and risk mitigation, creating a multi-million-dollar compounding competitive disadvantage.

Another pointed out that boards frequently cap investment horizons at one-and-a-half to two years, tying resource allocation to immediate product delivery milestones. This forces short-term, resource-consuming projects that deviate from long-term strategy into the R&D pipeline.

"Industrial innovation has a 20-year payback. Cutting R&D in a crisis kills future differentiation."

Chief Executive Officer, industrial technology company

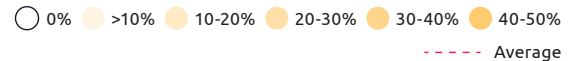
INSIDE THE INDEX

This Index explores the financial and boardroom pressures that shape an organisation's ability to invest in radical bets and govern innovation projects. The Likert scale below shows the average response across all participants.

The higher the score, the more likely a business is to capture the lasting compounding value of radical innovation.

	1	2	3	4	5	6	7
1 How flexible is your organisation in funding early stage ideas?	Not at all flexible	Slightly flexible	Somewhat flexible	Moderately flexible	Flexible	Very flexible	Extremely flexible
2 How easy is it for your company to justify longer term innovation investment?	Extremely difficult	Very difficult	Difficult	Moderately easy	Easy	Very easy	Extremely easy
3 How disciplined are you in stopping weak projects?	Not at all disciplined	Slightly disciplined	Somewhat disciplined	Moderately disciplined	Disciplined	Very disciplined	Extremely disciplined
4 How reliable are your commercial indicators for scale/pause/pivot decisions?	Not at all reliable	Slightly reliable	Somewhat reliable	Moderately reliable	Reliable	Very reliable	Extremely reliable
5 How comfortable is your organisation with uncertain innovation timelines?	Very uncomfortable	Uncomfortable	Slightly uncomfortable	Moderately comfortable	Comfortable	Very comfortable	Extremely comfortable

Proportion of responses:

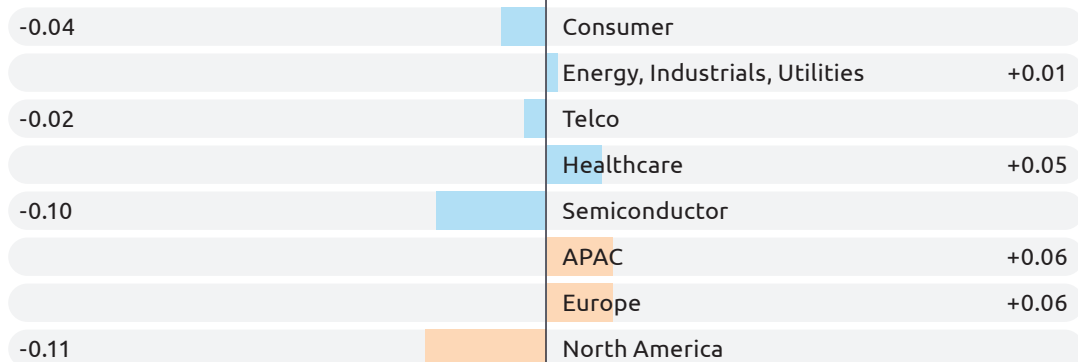


Financial and boardroom categories scored on average

4.99

OUT OF 7

SECTOR AND REGIONAL VARIANCE



● SECTOR VARIANCE (vs overall)
 ● REGIONAL VARIANCE (vs overall)

For many interviewees, this is the central challenge. Deep tech rarely conforms to short investment horizons, yet it is often the source of the next generation of competitive advantage. Organisations that prioritise long-term capability building over near-term optimisation are ultimately better placed to create defensible technologies, shape emerging markets and capture compounding value over time.

A shared view among many of the interviewed CXOs was that investors and CFOs are rarely culturally aligned with risk-tolerant, start-up investment thinking. Instead, they chase surface-level metrics and quarterly presentation quality rather than genuinely understanding the cost, time and complexity of true innovation.

The politics of stopping

Another challenge in innovation leadership is when to kill weak ideas. Our interviews suggest organisations often struggle more with stopping than starting. Projects tend to persist because of annual budget planning cycles, sunk costs, internal sponsors and organisational politics. So, while many leaders know when to end initiatives, fewer possess the political capital required to end them.

“The most critical blocker is the inability to decide when to stop a stalled project.”

Alberto Abate, Executive Director, BioMérieux



Investing beyond the decision

"The investment decision is often treated as the finish line for innovation. The findings agree with our long-held view that it is only one step in a much longer journey. It's exciting to see a cross-sector average of 15.7% allocating 70% or more of their innovation budgets to radical bets in [Figure 1](#), but funding alone does not determine success or we would see much more radical innovation landing commercially.

"Ownership, decision-making and organisational support all influence whether promising ideas progress or stall. Even when investment is available, momentum can be lost through

uncertainty, competing priorities and the practical challenges of turning ambition into action.

"Success in deep tech requires conviction. Investment is part of that commitment, but so is the willingness to support ambitious ideas through uncertainty. Funding is important, but so are the conditions that allow innovation to thrive. Organisations that sustain both commitment and momentum give themselves the best chance of turning breakthrough ideas into meaningful impact."



TIM FOWLER

Chief Commercial Officer,
Cambridge Consultants

Making room for the long-term

Interviewees offered several ways to navigate short-term pressures and give deep tech strategies the space to thrive. They include:

- **The internal start-up:** A funded, time-boxed venture operating independently of corporate oversight and traditional manufacturing, regulatory and financial constraints. Acting as a low-friction internal start-up, it gives employees the freedom to experiment, fail safely and iterate without threatening the core business. One interviewee argued that innovation units should be completely isolated from standard processes. By housing a small, dedicated team in an autonomous spin-off, organisations can operate outside standard processes, move faster and test ideas without the overhead of traditional corporate cycles
- **Protected bets:** Several executives argued that innovation budgets should be ring-fenced. By creating an investment fund independent of core business performance and operational budgets, CFOs can become champions of disruption rather than gatekeepers
- **Measurable milestones:** Board risk aversion can be reduced by breaking five to 10-year investments into a series of achievable milestones. Positioning early stages as essential capability building, supported by clear decision gates, gives boards the confidence to back long-term deep tech platforms

The diplomat leader

Radical innovation is rarely constrained by technology alone. More often, the challenge is winning support for ideas that may take years to prove themselves. Successful innovation leaders must therefore act as diplomats, balancing long-term opportunity with short-term expectations while aligning diverse stakeholders behind a common vision.

CHAPTER 5

Cultural Index

Where innovation rhetoric outpaces behaviour

No matter how strong the ambition for radical innovation in theory, company culture determines whether people feel able to act on it. The Cultural Index explores how respondents perceive the cultural conditions for innovation, from risk-taking and psychological safety to whose ideas get heard.

The credibility gap within the radical disconnect

Looking at the Cultural Index, we see some encouraging signs. C-suite leaders feel their organisations have high levels of psychological safety around proposing new ideas. And yet, when asked “What are the main reasons employees hold back from taking risks”, the clearest response was that other leaders in the organisation with the power to block new ideas do not visibly model risk-taking (see Figure 8).

The observation is particularly striking given it comes from the C-suite itself. They recognise that culture is shaped from the top, yet also acknowledge that the behaviours needed to support innovation are not consistently demonstrated by leaders across all management layers throughout the business.

This credibility gap creates an underlying culture of hesitation, reinforced by wider system barriers such as slow approvals, unclear boundaries, lack of time and resource and limited recognition for taking initiative. If employees don't see senior managers visibly taking risks, embracing uncertainty and learning from failure, they may think: “I could take a risk, but it'll take too long, I'm not sure what's allowed, I don't have time, and there's little reward if it works.” Instead, they may opt for what feels safest to them and stay quiet.

“What really makes the difference is whether they feel safe to speak up and whether they believe the idea will actually be taken seriously.”

Chief Technology Officer, global consumer brand

Our C-suite respondents all signalled a personal appetite for radical innovation, but a single innovation champion cannot create an innovation culture on their own. They need a wider leadership coalition across finance, operations, manufacturing, IT along with the C-suite all demonstrating the curiosity and openness required to get behind new ideas.

“The intent is a psychologically safe environment... whether we achieve that or not is a byproduct of institutional inertia.”

Chief Scientific Officer, industrial technology company

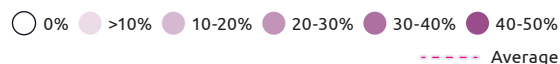
THE CULTURE INDEX

This Index explores the cultural dynamics of innovation, covering psychological safety, attitudes towards risk, and behaviour when it comes to radical innovation. The Likert scale below shows the average response across all participants.

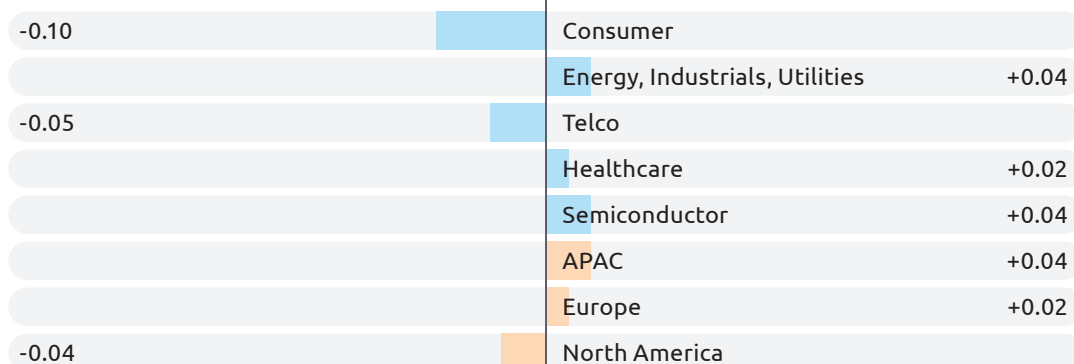
The higher the score, the more likely a business is to capture the lasting compounding value of radical innovation.

	1	2	3	4	5	6	7
1 How much does fear of cannibalisation impact innovation?	Extremely	Very	Considerably	Moderately	Somewhat	Slightly	Not at all
2 How inclusive is your organisation to quieter contributors?	Not at all inclusive	Slightly inclusive	Somewhat inclusive	Moderately inclusive	Inclusive	Very inclusive	Extremely inclusive
3 How safe, psychologically, do your employees feel about proposing new ideas?	Very unsafe	Unsafe	Somewhat unsafe	Moderately safe	Safe	Very safe	Extremely safe
4 How willing are your employees to take risks?	Not at all willing	Slightly willing	Somewhat willing	Moderately willing	Willing	Very willing	Extremely willing
5 How much do other decision makers and leaders in your organisation exhibit curiosity and openness?	Not at all	Slightly	Somewhat	Moderately	Considerably	Very	Extremely

Proportion of responses:



SECTOR AND REGIONAL VARIANCE



● SECTOR VARIANCE (vs overall)
 ● REGIONAL VARIANCE (vs overall)

Hidden suppressors of bold bets

Another significant factor to impact culture is a fear of cannibalisation. The data shows a tension between pursuing radical innovation and protecting established revenue models, which creates a systemic drag on innovation confidence. Interviewees describe innovation culture as a “battlefield” of internal politics, where radical ideas can threaten existing investments and meet resistance.

The striking difference between the C-suite’s views on company culture versus the fear of cannibalisation suggests a disconnect between how organisations present themselves and how they approach innovation. While innovation may be championed culturally, concerns about eroding existing product lines and a bias towards enhancing current offerings can prevent new ideas from being fully integrated into business units, commercial strategies and market-facing activities.

“Projects that cannibalise profitable legacy lines without a clear migration plan are resisted. Commercial and regulatory stakeholders often act as the first line of scepticism.”

Chief Technology Officer, global pharmaceutical company

“The investors want to see a return on their investment. They’re focused less now on innovation – they just want to build on what we’ve got.”

Adam Eckersley, Chief Technology Officer, Oxford Flow



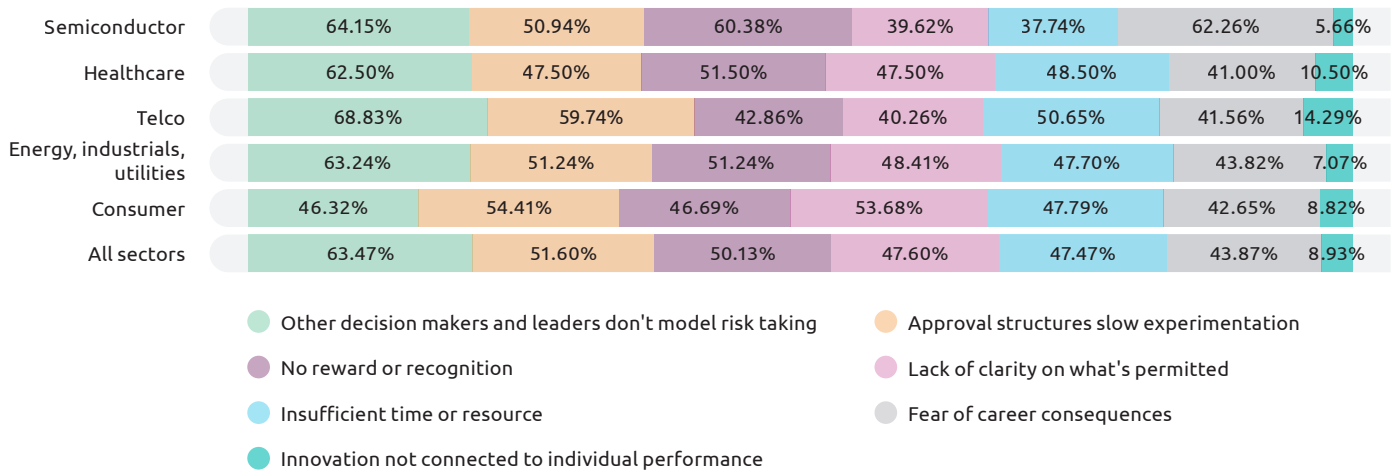
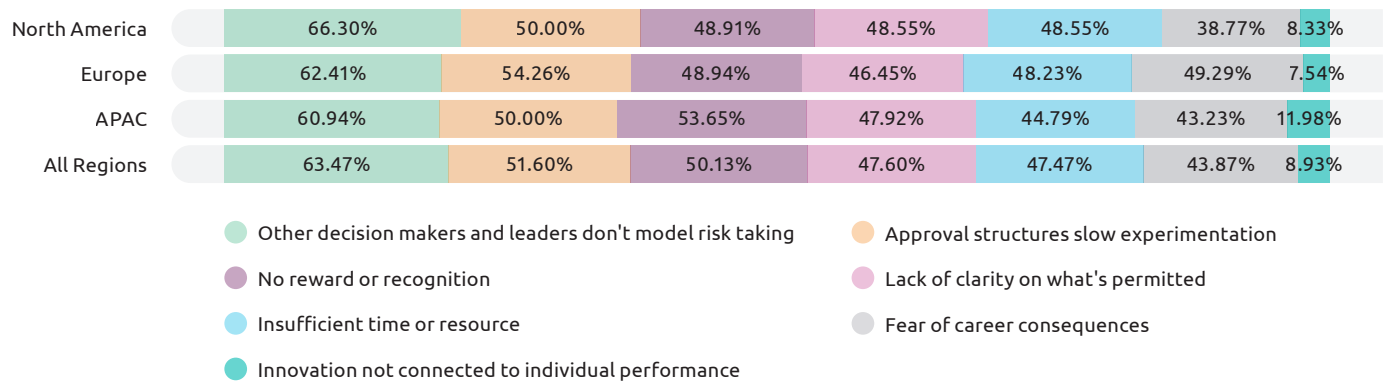
Building the right culture

A true culture of innovation needs to feel safe, clearly structured and go all the way to the top with active leadership modelling. But where to start? Across our interviews, three approaches emerged:

- **Lead, don’t rule:** Leaders must visibly back bold bets to create a ripple effect throughout the organisation. When teams see that calculated risks are tolerated and that early, small-scale failures are accepted as valuable learning opportunities, creative courage is released across the enterprise
- **Build psychological safety:** Formally communicating that failure carries no negative job repercussions is cited as the single most important mechanism for unleashing radical thinking. A supportive culture incentivises this by publicly celebrating early pilot signals and fast-tracking successful innovators through career opportunities
- **Connect innovation to customers:** The most effective way to bridge the gap between the radical innovators and revenue protectionists is through direct communication with customers. Our interviewees believe that staff who spend significant time interacting directly with end users are far more likely to propose viable, adoptable innovations that align customer needs with technical breakthroughs

There are positive signs that organisations are moving in the right direction when it comes to building a culture of innovation – at least in the minds of the C-suite. Most believe they’re inclusive to quieter contributors, and either have or are in the process of building formal mechanisms for surfacing ideas from frontline or non-management employees. These mechanisms can help close the gap between innovation ambition and employee behaviour, creating routes for ideas to emerge and defined parameters for experimentation.

But formal mechanisms can only create the space for ideas to surface. Culture depends on whether people feel confident enough to use it. Radical innovation needs more than permission on paper – it needs leaders who visibly back risk, embrace uncertainty and give people the confidence to step forward.

FIGURE 8. Main reasons employees hold back from taking risks (by sector)**FIGURE 9. Main reasons employees hold back from taking risks (by region)**

CHAPTER 6

Structure and Process Index

The operational handoff problem

This Index looks at several aspects of operational reality and the challenges faced when scaling innovation and converting ambition into execution. Essentially, it is concerned with how structure and processes can stand in the way of innovation.

A key theme is that even after an idea is voiced and gains traction, it can still be lost in organisational bureaucracy. As we've shown in previous chapters, what stands between ambition and breakthrough is rarely a lack of ideas. More often, innovation loses momentum as it moves between leadership and execution, technology and business functions, or central and regional teams, dying in organisational handoffs rather than at the point of creation.

This shows the radical disconnect translated into operational reality. Leaders may champion bold ideas, teams may generate them, but between conception and execution sits a complex web of approvals, handoffs and competing priorities that gradually drains momentum from innovation initiatives.

"Even good ideas don't necessarily fail on merit. They slow down because decision-making becomes distributed. By the time consensus is reached, the urgency or momentum can fade."

Chief Technology Officer, global consumer brand

The Index examines bureaucracy in two ways. The first is its impact on innovation projects, exploring how stage gates, approval layers and governance processes can slow or stop radical ideas on their journey from lab bench to launch. The second is how organisations are set up to counter these effects (see [Cutting the red tape on page 26](#)). Leaders must balance managing the risks and uncertainties of deep tech with providing the time, investment and stakeholder support needed for radical ideas to gain traction and deliver impact.

The findings are clear. Bureaucracy remains a significant obstacle to radical innovation (see [Figure 10](#)). Interviewed CXOs repeatedly cited approval layers, governance processes and slow decision-making as major barriers to momentum. At the same time, many leaders believe their organisations are effective at preventing ideas from dying in bureaucracy, despite also recognising the impact that bureaucracy can have on innovation projects.

Interviewed CXOs also agreed that traditional stage-gate development processes are often too rigid to accommodate the uncertainty inherent in radical innovation. Too many milestones, constraints and scenarios can make radical innovation overly complex and restrictive to manage.

"In a big company the process is so long... it is not aligned with the speed that we need today."

Chief Innovation Officer, aerospace and defence company

They noted that even when an idea carried significant technical merit, the need to align digital merchandising, legal, privacy and regional operations diluted accountability, causing urgency and momentum to fade. The result is death by a thousand cuts, where promising ideas were overwhelmed by organisational complexity rather than stopped by any single decision.

"Early-stage ideas stall for months due to layers of approval across legal, regulatory and finance."

Chief Technology Officer, global pharmaceutical company

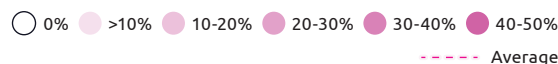
THE OPERATIONAL & STRUCTURAL INDEX

This Index explores how leaders rate their structural and operational innovation set-up, covering processes, governance, bureaucracy and collaboration. The Likert scale below shows the average response across all participants.

The higher the score, the more likely a business is to capture the lasting compounding value of radical innovation.

	1	2	3	4	5	6	7
1 Does the level of bureaucracy on your business stifle innovation	Completely	Very	Considerably	Moderately	Somewhat	Slightly	Not at all
2 How closely does your company link innovation to performance?	Not at all closely	Slightly closely	Somewhat closely	Moderately	Closely	Very closely	Extremely closely
3 How well does your organisation balance speed vs governance in terms of innovation?	Governance heavy	Strongly governance-led	Mostly governance-led	Balanced	Mostly agile	Strongly agile	Fully agile
4 How effective is your organisation in preventing ideas from dying in bureaucracy?	Not at all effective	Slightly effective	Somewhat effective	Moderately effective	Effective	Very effective	Extremely effective
5 To what degree does your business structure enable innovation?	Not at all	Slightly	Somewhat	Moderately	Considerably	Very	Extremely
6 How good is cross functional collaboration in your business?	Very poor	Poor	Below average	Average	Good	Very good	Excellent

Proportion of responses:

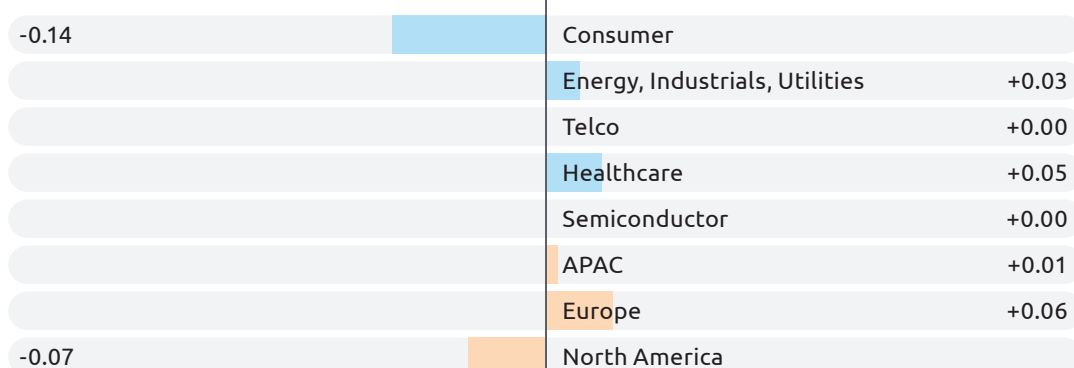


Structure and process categories scored on average

4.88

OUT OF 7

SECTOR AND REGIONAL VARIANCE



● SECTOR VARIANCE (vs overall) ● REGIONAL VARIANCE (vs overall)

Cutting the red tape

Organisations that perform best in this category are those that have learned how to move ideas through complex systems into real-world deployment. Our CXO interviews suggest creating dedicated innovation committees to bring together R&D, commercial, strategy, business development and other functions to identify, evaluate and mature innovation opportunities before implementation.

While structures and systems matter, interviewees repeatedly returned to a simpler point. Innovation ultimately depends on talented people and strong leadership. Talent, leadership support and organisational commitment were all seen as more important than any individual process or framework.

Our interviewees offered several practical ways to cut through bureaucracy:

- **Evaluate ideas, not hierarchy:** Senior leaders must actively flatten traditional bureaucratic dynamics. Respondents consistently argued that the most successful innovation cultures are those where ideas take precedence over process. Companies should create channels that connect frontline concepts directly with executive sponsors
- **Internal start-ups:** As also referred to in the Financial and Boardroom chapter, interviewees recommended dedicated internal ventures with tight timelines that are exempt from the burden of traditional operational processes. Some suggested physically and operationally isolating small teams within autonomous spin-offs to shield them from bureaucracy
- **Single-point accountability:** Creating flat corporate pathways, where a project owner bypasses conventional hierarchy and reports directly to the CEO, prevents middle-management gatekeepers from filtering out radical proposals

The entropy of innovation

In discussing operational factors, interviewees rarely described radical ideas being rejected outright. Instead, they described them gradually losing momentum through approval layers, governance processes and competing priorities.

Leaders identified cumulative friction from legal, regulatory, sales and marketing, and finance functions as one of the biggest barriers to progress. Others pointed to the continued pressure to operate within short investment horizons. Even in the aerospace and industrial sectors, where breakthrough innovation may require a decade or more to mature, boards are increasingly most comfortable planning over one to three years.

The solutions offered are simple in principle, but they require radical changes to processes which, as discussed in the Financial and Boardroom chapter, are often themselves in need of innovation. As a result, they can also end up mired in red tape.

Time itself emerged as another constraint. Several senior leaders described innovation as competing with the demands of the day job. When teams are consumed by operational priorities and 'busy work', long-term innovation can struggle to secure the attention and resources it needs.

"When you're spending your time putting out fires, you just don't have time. That is a killer of innovation."

Chief Innovation Officer, biotech company

The metrics problem

The in-depth interviews suggested that many organisations evaluate radical innovation using the tools designed for incremental improvement, such as return on innovation investment or revenue from recently launched products or services, measures that tend to favour short-term predictable outcomes. Whilst these are effective for assessing optimisation and incremental gains, they are much weaker indicators for breakthrough innovation, and although many leaders recognise the mismatch, few have solved it.

To preserve the momentum of radical bets, our forward-thinking technology leaders advocate for replacing lagging financial metrics with leading indicators that measure the health and velocity of the experimentation process itself:

- **Speed of idea testing:** Measuring how quickly a concept can transition from a frontline suggestion to a functional, low-cost prototype or a safe milestone-driven pilot
- **Diversity of experimentation:** Tracking the variety and breadth of parallel technical probes running simultaneously, rather than tracking a singular sequential path
- **Knowledge generation:** Formally evaluating the structural insights and technical capability gained from an initiative, even if the project ultimately fails to scale or is deliberately stopped

Innovating through constraints

"The findings are encouraging in parts. I'm pleased to see enthusiasm for radical innovation is widespread alongside a cross-sector weighted average of 15.7% of organisations allocating 70% or more of their innovation budget to radical bets.

"The barriers are more sobering. Bureaucracy is cited as a leading blocker where innovation can break down, while 63.47% say leaders across layers of the business do not consistently or visibly model risk-taking. Where senior behaviour does not back innovation, employees may stop putting ideas forward at all.

"These problems are compounded by how radical ideas are measured. ROI, payback and efficiency are only useful once an innovation is

established. Applied too early to a breakthrough bet, they kill radical innovation before it has a chance to live.

"The sectors scoring highest on innovation readiness – healthcare, energy and industrials – are also among the most heavily regulated. Constraint appears to drive the governance and decision-making that structuring radical innovation depends on.

"This tells me that what's missing here is not appetite for innovation, but the right governance around big bets. In a soft environment, these big bets don't fail with a bang but fizzle out slowly. Governance is what gives ambitious ideas the protection they need to become something bigger."



JOE CORRIGAN

Chief Technology Officer,
Cambridge Consultants

FIGURE 10. Where cross-functional collaboration breaks down

1	Central and group functions / regional or country operations
2	Senior leadership and those accountable for execution
3	Tech teams and operation or delivery functions
4	Strategy and finance during investment phase
5	R&D / Innovation teams and business units responsible for the outcome

Figure 10. When asking "How good is cross functional collaboration in your business?", we went on to ask: "Where does collaboration most commonly break down?" This figure shows the top five most common communication breakdowns, with the most often reported area being "Central and group functions/regional or country operations." Cross-functional collaboration isn't just a nice-to-have – it's a critical delivery mechanism.

FIGURE 11. How do you track innovation?

1	Employee participation in innovation activities
2	Innovation revenue as a share of total
3	Return on innovation investment
4	Rate of ideas progressing through development stream
5	Revenue from products or services launch in the past three years
6	Time from initial concept to working prototype or pilot
7	Number of ideas generated and formally submitted
8	Speed of new technology adoption
9	We do not track innovation using formal metrics

Figure 11. Following the question "How useful are your innovation metrics?", we went on to ask: "Which of the following does your organisation track (select all that apply)?" This figure shows the top factors given by respondents, with the most often reported area being "Employee participation in innovation activities". Organisations that track only financial output metrics from innovation are, knowingly or not, at risk of optimising for short-term returns at the expense of the longer horizon work that drives real competitive advantage.

CHAPTER 7

External and Technical Index

Preparing for the unknown

This Index covers how well organisations are set up to deliver radical innovation when faced with influences largely outside of their control. It covers everything from geopolitical shifts to changing regulatory, economic and environmental factors, as well as awareness around emerging frontier tech and emerging competitors.

It is here that we find arguably the largest contributor to the radical disconnect. When asked how much or how little external factors impacted innovation, they were flagged in the External and Technical Index as one of the biggest influences on innovation (see Figure 12). Progress can be significantly shaped and potentially derailed by factors beyond an organisation's control – whether that is a change in political administration, a shift in the competitive landscape or a surprise technological breakthrough.

Through this lens, the ability to sustain radical innovation depends as much on navigating and responding to external forces as it does on the innovation itself.

Awareness outpaces action

Leaders are acutely aware of this fact, and in response, say they devote considerable time and effort to monitoring emerging competitors and technological developments – areas in which the Index shows they see themselves as strong performers. They consistently point to macroeconomic volatility and geopolitical instability not as background market conditions, but as structural forces that can significantly impact innovation activity.

Yet this market awareness often outpaces an organisation's capacity to respond, invest and adapt at the same speed. Leaders may see change coming, but are not always equipped to act on it quickly enough, constrained by the same forces highlighted in the Structure and Process Index.

Sudden shifts in demand

Unsurprisingly, customer mindsets greatly influence innovation outcomes. As shown in Figure 12, respondents rated customer or market readiness as the biggest barrier constraining innovation. Even where technologies are technically feasible, adoption can be constrained if customers don't see them as valuable or trustworthy.

In other words, customer demand and market pull matters. This should come as a shock to no one, but does highlight a need for organisations to invest and prioritise demand creation alongside radical innovation to build sufficient customer interest and support successful commercialisation.

"Customers didn't trust AI initially. After ChatGPT they became receptive."

Chief Executive Officer, AgriTech company

The reverse is also true. Leaps in customer sentiment can leave companies scrambling to catch up. When customers actively demand technological evolution, companies have no choice but to follow, making an external, customer-focused stance the primary driver of commercially viable innovation.

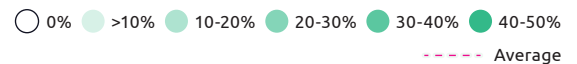
INSIDE THE INDEX

This Index explores an organisation's ability to respond to external influences and their readiness to adapt to and adopt emerging technology. The Likert scale below shows the average response across all participants.

The higher the score, the more likely a business is to capture the lasting compounding value of radical innovation.

	1	2	3	4	5	6	7
1 How much do external factors constrain innovation?	Completely	A great deal	Considerably	Moderately	Somewhat	Slightly	Not at all
2 How confident are you in your technical capabilities for future innovation?	Not at all confident	Slightly confident	Somewhat confident	Moderately confident	Confident	Very confident	Extremely confident
3 How easily can your organisation integrate new tech with legacy systems?	With great difficulty	With difficulty	With some difficulty	With moderate ease	Quite easily	Very easily	Extremely easily
4 How ready are you technically to adopt frontier tech?	Not at all ready	Slightly ready	Somewhat ready	Moderately ready	Quite ready	Very ready	Fully ready
5 How effective are you at monitoring emerging competitors?	Not at all effective	Slightly effective	Somewhat effective	Moderately effective	Quite effective	Very effective	Extremely effective

Proportion of responses:

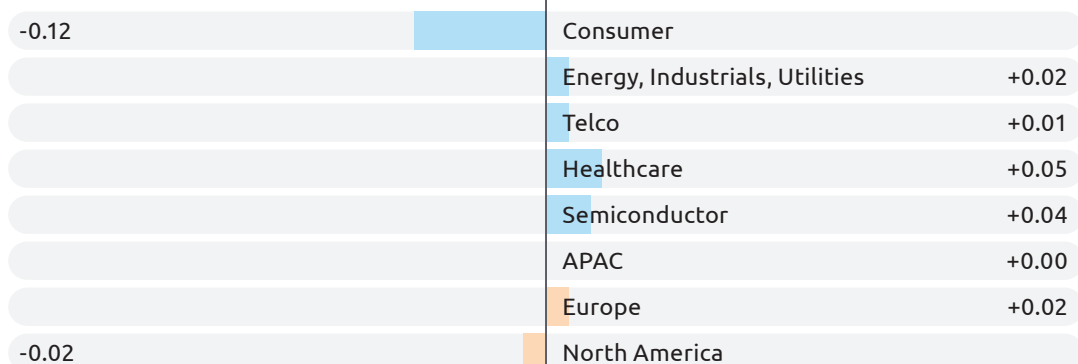


External and technical categories scored on average

4.59

OUT OF 7

SECTOR AND REGIONAL VARIANCE



● SECTOR VARIANCE (vs overall) ● REGIONAL VARIANCE (vs overall)

Geopolitics and volatility

In several cases, interviewees signalled that external shocks from geopolitical instability triggered cost-containment measures that reduced funding for long-term exploratory innovation in favour of nearer-term financial priorities.

Within this, respondents cited challenges around trade tariffs, supply chain fragility – felt particularly strongly in Asia-Pacific – and technology sovereignty. The latter is keenly felt in defence and mission-critical cybersecurity sectors, where an over-reliance on non-sovereign technology giants is flagged as a major systemic risk.

Shifting administrations and policy volatility

Long-horizon deep tech projects often require multiple years of development, making them highly vulnerable to changing political landscapes. Leaders in industrial sectors warn that long-term regulatory and ESG (Environmental, Social, and Governance) trends pose a unique risk. Because multi-year projects are designed around anticipated regulations, a shifting political administration can change policy directions overnight, rendering expensive innovation initiatives suddenly unviable before they even hit the market.

“Even if there is a wind of change... it can be destroyed by a change in administration.”

Chief Scientific Officer, industrial technology company



Innovation is the first casualty

When markets become volatile, innovation leaders report that budgets are rarely cut outright. External volatility often pushes boards and investors towards shorter-term priorities and faster returns. As a result, budgets for radical innovation are often held flat if external factors cause operational costs to increase. As resources tighten, long-term exploratory projects are squeezed out in favour of nearer-term priorities, with radical innovation projects gradually becoming deprioritised.

Building resilience to change

Ultimately, resilience is less about predicting what comes next than ensuring the organisation can move with it. The strongest innovators build enough flexibility into their strategies, structures and investments to absorb disruption without losing sight of the longer-term opportunities that radical innovation creates.

Our interviewees are intimately aware of the challenges external factors pose, advising several approaches to mitigate the impact of external and technological shifts:

- **Customer insight as a strategic focus:** Companies should connect innovation to market and end-users. Our interviewees believe that innovators who spend dedicated time on the ground interacting directly with customers are more likely to propose highly viable, adoptable innovations. Regular focus groups help balance innovation excitement with strict market realism
- **Deploy modular product designs:** While regulatory fragmentation (such as conflicting regional rules and export controls) is often completely outside of a single organisation's control, leaders advise using modular product designs. Our interviewees suggest this structural approach allows organisations to isolate core technologies and adjust specific modules to meet varying cross-jurisdictional compliance rules without redesigning entire platforms
- **Anticipate regulatory requirements from the outset:** Rather than treating regulation as a late-stage hurdle, leaders suggest organisations can integrate relevant expertise throughout the innovation process. This helps identify validation requirements early, reduces development risk and supports more efficient market entry
- **Shape the external environment collectively:** Rather than adapting to regulatory constraints individually, interviewees suggest that organisations can work through industry coalitions to engage policymakers, regulators and standards bodies. A coordinated approach can accelerate standards development, improve interoperability and create more effective pathways for technology adoption and approval

From awareness to action

“Leaders need to consider how emerging technologies, competitive threats, geopolitical shifts and changing customer expectations will impact on their organisation and its innovation strategy. External forces rarely arrive one at a time or with complete certainty. They create competing priorities, difficult investment choices and pressure to act before all the answers are available.

“External trends can provide important signals about the future, but they do not prescribe a strategy. The opportunity lies in what happens next. Making informed and deliberate choices about where and how to act in response to change provides a powerful source of advantage.”



CATHERINE JOCE

Global Head of Advisory Services,
Cambridge Consultants

FIGURE 12. Most significant external factors

1	Customer or market readiness – the world is not yet ready to adopt what we are building
2	IP, data, privacy and cyber security concerns
3	Talent scarcity – shortage of specialists in frontier fields
4	Sustainability and ESG commitments constraining certain innovation directions
5	Geopolitical instability, trade restrictions, or technology export controls
6	Supply chain fragility or critical material access challenges
7	Economic volatility or capital market pressure
8	Regulatory and compliance requirements
9	We do not track innovation using formal metrics

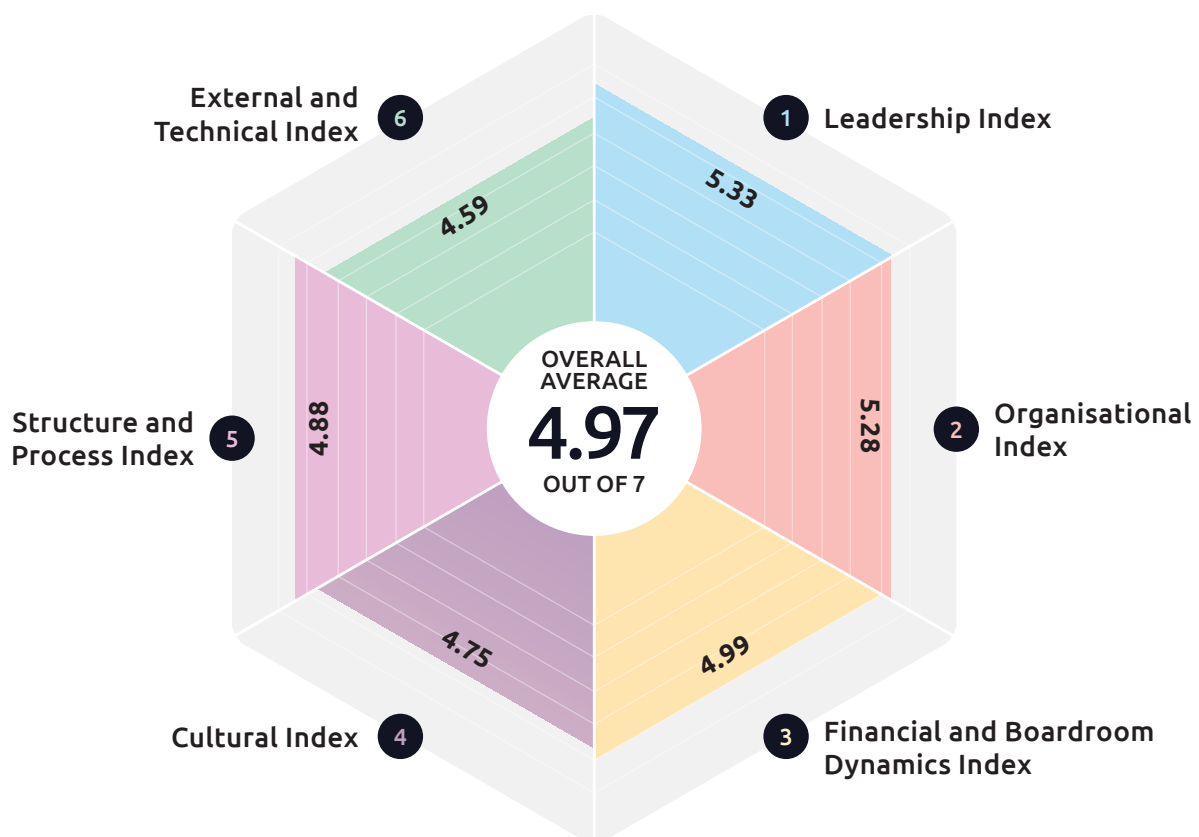
Figure 12. When asking “How much do external factors constrain innovation”, we went on to ask: “Which external factors most significantly constrain your ability to innovate?” This figure shows the top factors given by respondents, with the most often reported area being “Customer or market readiness – the world is not yet ready to adopt what we are building.” Some of these factors are slow-moving and predictable, whereas others land without warning and reshape the innovation agenda overnight.

CHAPTER 8

Overall Index

The final readiness score

Bringing together all six readiness factors, the Overall Index shows Leadership Index as the strongest-performing area and External and Technical as the most significant blockers to capturing the lasting compounding value of radical innovation. The challenge, and opportunity, lies in closing the radical disconnect. This can only be achieved by strengthening every stage of the innovation journey, from ambition and investment through to execution and external adoption, while building the foresight and adaptability needed to navigate future market, regulatory and technological shifts.



Conclusion

You'll find no shortage of ambition in this report. Across the world, across industries, geographies and leadership teams, the desire to seize the power of radical deep tech innovation is unmistakable. More than that, the Deep Tech Index makes it clear that CXOs recognise its potential and are willing to champion it. This should give us reason for true optimism.

The barriers identified in the report are real. They appear in funding decisions, organisational structures, operational processes and external pressures. They slow momentum, dilute focus and make breakthrough innovation harder than it should be – and certainly harder than it needs to be.

The key point is that these blockers are not insurmountable. Unlike technological shifts, competitive threats or geopolitical events, they sit within an organisation's sphere of influence. They are shaped by leadership decisions, investment priorities and cultural choices. And there's the rub. They can be challenged, they can be reimaged, they can be overcome.

This is the radical disconnect in its purest form. Not a lack of ambition, vision or opportunity, but a gap between the will to innovate and the organisational and external conditions needed to make innovation happen. Bridging it may be the defining leadership challenge of the deep tech era.

Which brings us to what is undoubtedly the most significant interpretation of this report. Advances in science, engineering and technology will continue to create extraordinary opportunities over the next decade. Some organisations will turn those opportunities into enduring advantage by creating the conditions in which breakthrough ideas can survive, mature and scale. Others will simply remain onlookers.

Many of the leaders we spoke to already recognise this. They know that incremental improvement alone is unlikely to deliver the growth, resilience and competitive advantage required in the years ahead. Increasingly, deep tech is being viewed not as a bold technology play, but as a strategic capability. It should not be judged as a single investment decision, but as a source of transformative value that compounds over time.

Many pages in this report have been devoted to barriers. Yet the more important story for us all is what lies beyond them.

About Cambridge Consultants

Cambridge Consultants (CC) is the deep tech powerhouse of Capgemini. Deep tech is a mindset, a bold strategy that harnesses radical science and engineering to achieve things no-one else can. It delivers transformative business value and growth for our clients, who gain defendable commercial and operational advantage from new-to-the-world products, services and processes that they own. We overcome the ultimate business challenge: turning something that doesn't yet exist into a reality. Our advice is built on practice, with over 750 scientists, engineers, designers and consultants working globally across more than 20,000 sq. m of state-of-the-art R&D facilities. As part of Capgemini, CC is backed by 410,000+ Capgemini team members in more than 50 countries.

**For more information about the Deep Tech Index
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