KPMG global tech report 2024

Beyond the hype: Balancing speed, security and value

KPMG. Make the Difference.

Contents

03 Foreword

06 Identifying value amid the hype

12 Optimizing value through evidence-based decisions

18 Delivering resilient solutions

22 Scaling AI with confidence

28 Conclusion and key recommendations

Foreword

The relentless speed of technology innovation is undeniable. When combined with a natural fear of missing out, ideas that may once have seemed like science fiction are rapidly converting into tangible reality. From generative AI to quantum computing, the potential benefits are huge, and so is the risk of making costly mistakes.

A key theme from this year's research is the perception among tech executives that they are struggling to keep up with the pace of change. In response to this sense of falling behind, organizations may be tempted to make a hurried response. However, this can lead to misguided investments that may prove both risky and expensive, potentially increasing the burden of technical debt which many well-established organizations are already struggling with.

Our research suggests that organizations are increasingly aware of this dilemma, and they are looking to pivot from imitating others to becoming leaders themselves. Typically, technology leaders are paving the way by bringing structure, discipline and an enterprise mindset to the adoption of new technology.

In doing so, they are looking to evidence-based investment decisions that align to the broader business and technology strategies and balance value creation with appetite for risk.

Overall, the sense from our respondents is that organizations are doing well with measurable improvement in many areas over the past year. Mistakes provide great learning opportunities for the future, and the positive perspective on progress shared by our survey participants is encouraging.

By taking a measured approach to technology investment, executives are already benefiting from key advancements while keeping a firm hold on their business models and successfully running the enterprise. A willingness to enter the realm of science fiction does not mean leaving the facts of sound business management behind.

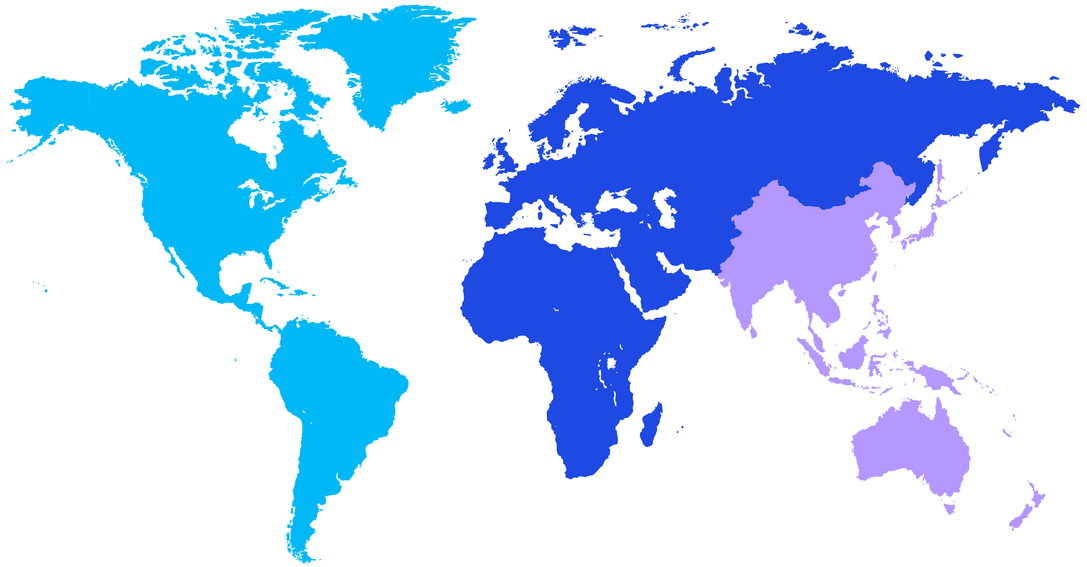
2,450

technology professionals worldwide from a variety of industries

Guy Holland
Global Leader, CIO Centre of Excellence
KPMG International

Guy Holland is the global leader of KPMG's CIO Center of Excellence, a board member of KPMG Australia, and he leads KPMG Australia's Technology Advisory practice. Guy's career in technology spans over 30 years and he has worked in senior leadership roles for global consulting and technology companies in Europe and ASPAC. Working with senior business leaders and C-suite executives he helps organizations across a wide range of industries to harness technology and data to transform, innovate and create business advantage.

About the research



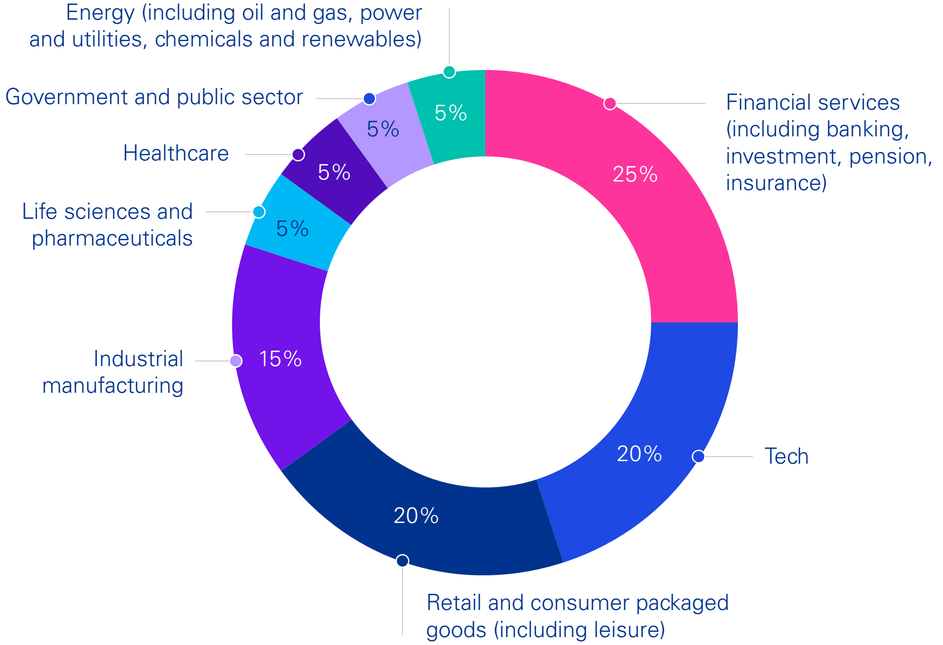
The study is based on a survey of **2,450 executives** from **26 countries**:

29%
Americas

44%
Europe, Middle East and Africa (EMEA)

27%
Asia Pacific (ASPAC)

There are representatives of eight industries: financial services, tech, retail and consumer packaged goods, industrial manufacturing, life sciences and pharmaceuticals, healthcare, government and public sector, and energy.



This report brings together valuable insights from a diverse group of technology leaders, including Chief Digital Officers, CIOs, CTOs, CISOs, Chief AI Officers, and others.

A significant proportion of the sample is composed of senior leadership:

50% are board members or members of the C-suite

35% are either at VP level or head of department

15% are at director or senior manager level

In terms of the size of these organizations, annual revenues sit above

US$100 million

We also interviewed five senior corporate leaders and experts:

Michelle Chang
CFO/CVP, Microsoft Customer and Partner Solutions

Gavin Munroe
Group Executive of Technology and Group Chief Information Officer, Commonwealth Bank of Australia

Polly Sumner
Chief Adoption Officer, Salesforce

Michael Wagner
CISO, Kenvue

Naveen Zutshi
CIO, Databricks

We would like to thank them for their time and insights, which helped in putting this report together.

Meet the high performers

In our research, there is a group of organizations that stand out. These digital transformation high performers represent less than 10 percent of the tech professionals we surveyed. With a growing list of diverse demands, their organizations are making smarter decisions and basing their tech initiatives on evidence and measurability.

In this year's report, we define these leaders based on these two important criteria:

In the highest maturity stage of implementation across most of the tech categories measured

Registering profitability increases through their advances in the majority of tech categories measured

Identifying value amid the hype

To harness the full potential of the wave of new tech advancements, organizations must sustain a measured, strategic approach to investment.

Rapid change is driving fear of missing out (FOMO)

Our research shows that the rapidly accelerated technology innovation over the past year has amplified a strong sense of FOMO among organizations.

The flood of AI-related news entering the mainstream has stirred a collective interest in AI that transcends seniority and technical expertise. This has only served to stoke the fires of 'tech-envy' and could encourage a 'spend now, ask questions later' attitude.

Digital transformation can bring many exciting benefits, and ambition to progress is only healthy, but organizations must not let it distort their judgement. Progress paranoia could lead to misguided investments and disjointed implementation initiatives.

Despite FOMO, organizations are taking a more balanced approach to investment decisions

While execs continue to look at the trends set by their market peers for guidance, this year sees more of them basing investment decisions on their own primary evidence.

This year, executives are drawing on a wider range of sources to inform their investment decisions. All investment drivers measured in 2023 have seen an increase in prevalence for 2024 by an average of 15 percentage points.

That said, the drivers have shifted in terms of which has the strongest influence on tech choices. While following competitors is still a top decision driver in 2024, it has fallen to third behind looking to third-party guidance (89 percent) and in-house trials and proof of concept (PoC; 83 percent of the base). This may reflect the desire for organizations to overtake competitors in getting emerging tech to market.

Still, for many, FOMO remains a strong influence on investment decisions: 82 percent are still choosing tech investments such as virtual and augmented reality (VR and AR) in order to follow in their competitors' footsteps. In comparison, the study's digital transformation high performers are 22 percentage points more likely than other organizations to rely on customer feedback. And these leading organizations place following competitors outside of their top three motivations for investing in certain tech.

> "Tapping into the pace of change is something we are focused on and excited about, all in the context of doing so in a safe and secure way."

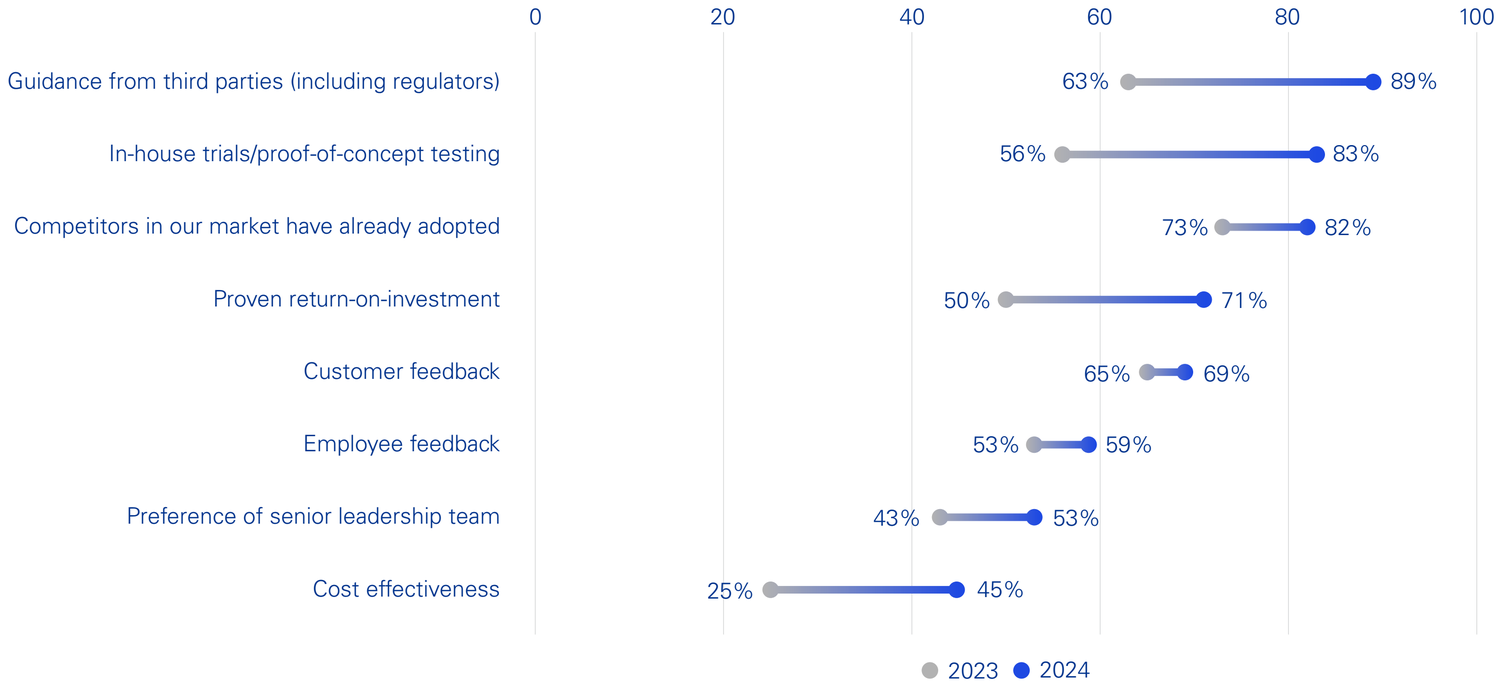
Gavin Munroe
Group Executive of Technology and Group Chief Information Officer, Commonwealth Bank of Australia

78% worry that they are struggling to keep up with the pace of change

80% complain that their senior leadership's risk aversion means their organization is slower than competitors to embrace new technology

Figure 1: Fast following is no longer the top reason to invest in tech

Why is your organization prioritizing these technologies to support its ambitions?



Metric	2024 ranking	2023 ranking	YoY movement (%)
Guidance from third parties (including regulators)	**1st**	3rd	+26%
In-house trials/ proof-of-concept testing	**2nd**	4th	+27%
Competitors in our market have already adopted	**3rd**	1st	+9%
Proven return-on-investment	4th	6th	+21%
Customer feedback	5th	2nd	+4%
Employee feedback	6th	5th	+6%
Preference of senior leadership team	7th	7th	+10%
Cost effectiveness	8th	8th	+20%
Enabler of ESG outcomes	9th	Not measured	N/A

Organizations are spreading their bets across the tech portfolio

Compared to 2023, tech implementation maturity has improved across the board, with the biggest increases seen in data analytics and XaaS.

In the 2023 tech report the most common implementation stage for XaaS was that companies had a strategic vision but were limited because of low buy-in or investment approvals. This year, the majority of organizations are proactive in progressing against their XaaS strategies.

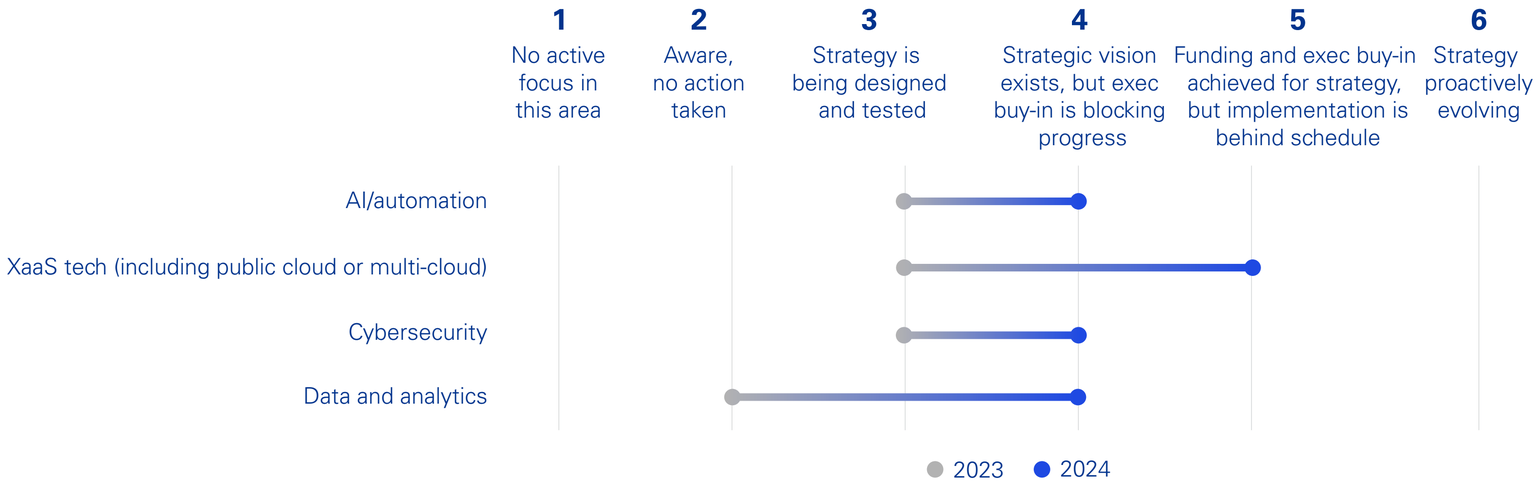
Across all tech, ASPAC is the region that is most likely to be at the proactive implementation stage, with India and China leading the way.

Priorities for further investment over the next year include XaaS, which 86 percent chose, as organizations focus on the agility and cost reductions enabled by cloud computing. Other priorities include cybersecurity (68 percent), AI/automation (65 percent) and edge computing (61 percent). These investment appetites indicate that many organizations put tech at the core of their business strategies.

Figure 2: All categories measured in 2023 have seen an improvement in 2024

How would you describe your organization's position today in each of the following areas?

Most common implementation stage:



Priorities for further investment over the next year include XaaS, which

86%

chose, as organizations focus on the agility and cost reductions enabled by cloud computing.

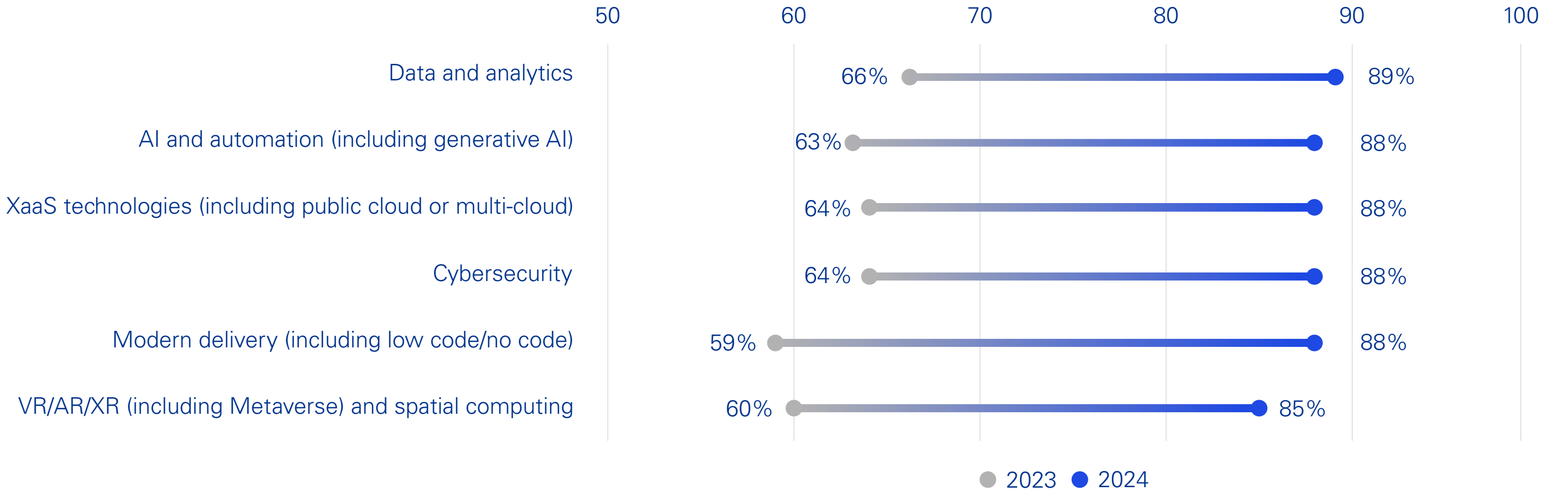
Organizations are getting better at delivering value from tech investments

For many organizations, tech adoption is paying off. Most (72 percent) agree that their digital transformation decision-making processes usually lead to outcomes that generate business value. In fact, 69 percent of those surveyed are broadly satisfied with the value they generate from their tech — especially in China (90 percent), Netherlands (83 percent), Nigeria (80 percent) and Israel (79 percent).

Across tech categories, an average of 87 percent of organizations have managed to use tech to increase profits over the past 24 months. Across those categories surveyed in both 2023 and 2024, there has been a 25 percentage point year-on-year increase in the number of execs who say these systems have had a positive impact on their company's profitability. So there is an uplift in the number of organizations seeing tech initiatives boost profitability.

Figure 3: Proportion of execs reporting a positive impact on profitability from tech has risen by 25 percentage points on average

Over the past 24 months, our digital transformation efforts with the following tech have positively impacted our organization's profitability



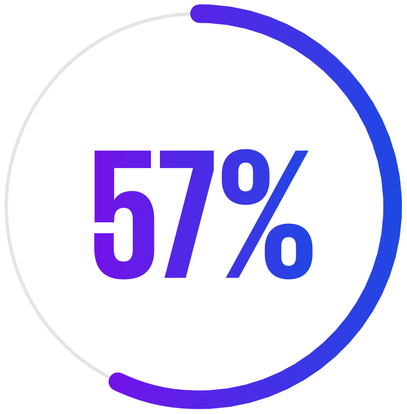
an average of

87%

of organizations have managed to use tech to increase profits over the past 24 months.

of respondents have achieved profit uplifts of **at least 11 percent** from their digital transformation efforts over the past 24 months.

The most common profit increase from digital transformation efforts in the past 24 months falls within the **11–15 percent range**.



of organizations say that flaws in their foundational enterprise IT systems disrupt business-as-usual on a weekly basis.

Neglecting legacy systems can compromise new tech investments

The desire to accelerate transformation appears to be favored: 74 percent of organizations say that over the next 12 months, they plan to focus on investing in new tech rather than on enhancing the value of their existing tech suite.

There is a risk that the allure of new technologies distracts organizations from addressing flaws and technical debt in their existing systems. This approach can, in turn, undermine transformation progress.

Often, unresolved issues in current tech infrastructure can obstruct the implementation of emerging tech.

In fact, unaddressed tech debt blocking the path to new upgrades is one of the top challenges holding back the digital transformation progress of the study's digital transformation high performers. Further, 57 percent of organizations overall say that flaws in their foundational enterprise IT systems disrupt business-as-usual on a weekly basis.

"The longer you delay addressing tech debt, the higher the costs and risks become," says Commonwealth Bank of Australia's Gavin Munroe. "Continuous investment is crucial. Accumulated tech debt often results in embedded business rules and logic, which can make future replacements costly and complex. So, it's essential to consistently invest in unraveling tech debt to avoid escalating surprise costs and complexity over time."

Organizations must strike a healthy balance between new and existing tech investments. Executives' intentions to prioritize XaaS investments will help here. By replacing outdated systems and consolidating multiple functions into centralized hubs, XaaS platforms can reduce the complexity of infrastructures and the volume of redundant tech.

What do the high performers do?

How are leading organizations advancing more quickly along their digital transformation journeys? Our research suggests these high performers are:

Less likely to be gripped by FOMO:

In comparison to non-leaders, our leader group is 23 percentage points less likely to worry about keeping up with the pace of change. Also, they are five percentage points less likely than the mainstream group to be choosing technologies because their competitors have already done so.

Iteratively course-correcting:

High-performing organizations are adopting a more proactive and adaptive approach to evaluating tech investments. As many as 83 percent of leaders continuously evaluate the business value and outcomes of all tech investments, which is 17 percentage points higher than non-leaders. This always-on approach will provide organizations with more opportunity to intervene and optimize where required.

Utilizing primary empirical evidence:

Leaders are 21 percentage points more likely than non-leaders to run calculations to forecast the potential value of tech initiative before they invest.

Leaning on external sources of expertise:

To enhance their digital transformation decision-making, 93 percent of our leader group plan to expand and strengthen their ecosystem and partnerships, compared with 70 percent of the mainstream sample.

Aware of tech debt:

In contrast with non-leaders, leading organizations place unaddressed tech debt as one of the top challenges holding back digital transformation progress. To avoid escalating surprise costs and complexity over time, organizations must consistently invest in unraveling tech debt.

Optimizing value through evidence-based decisions

On balance, organizations are content with the outcomes of their digital transformation investments, mostly thanks to their ability to make sound decisions along the journey.

With the pace of change pressuring tech execs, organizations must ensure haste does not compromise the quality of their judgment calls.

Investing for the long term is still a good discipline to follow

With execs fearing that their organizations are struggling to keep up with the pace of change, planning for the long term can be difficult when balancing the needs of the latest technological advancements. To maximize progress, tech execs should channel digital transformation efforts towards what matters most strategically to their organizations.

"Where we've seen organizations achieving the most value from tech is where they step away from the habit of just following a tech trend for the sake of it," says Michelle Chang, CFO/CVP of Microsoft Customer and Partner Solutions. "And, instead, start with, 'What is our business trying to accomplish, what's our purpose and what problems are blocking us from achieving our purpose?' The answers to these questions will indicate how tech can help them move forward in a meaningful way."

Our study's top performers get this, with 53 percent strategically evaluating their tech investment portfolio to ensure it is aligned with their long-term goals (compared with 41 percent of other organizations). The good news is that most execs want to imbue their tech initiatives to provide value in non-tech areas; 70 percent ensure that their tech investments directly target their sustainability and social responsibilities.

Executives understand that the value of tech goes beyond financial gain. "One of the lessons we've learnt is that tech initiatives cannot just be anchored in financial ROI — that's not the only win available," says Chang. "You must have other anchors of improvement in the KPIs, such as creating a better customer experience."

> When measuring the effectiveness of digital transformation or the adoption of a certain piece of tech, it's important not to get fixated on just one metric. You have to think about the implications a metric may have on other metrics, and adjust your approach accordingly.

Naveen Zutshi
CIO, Databricks

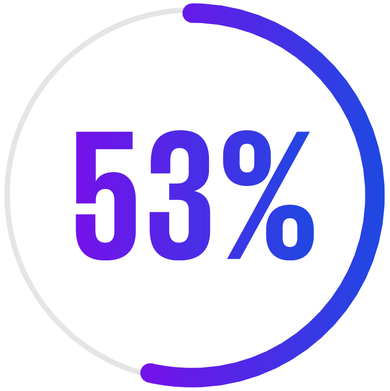
Organizations are raising the bar on data maturity

According to the group of high performers in our research, frequent data-centric evaluation is one of the two effective tactics for achieving quick wins from tech investments. And the wins from data-centric approaches are stacking up. Organizations that are in the top two data maturity categories across the factors measured are more likely to be satisfied with the value generated across all their tech investments. For example, these organizations are likely to achieve better service reliability, as they are 18 percentage points less likely to say that flaws in their foundational IT systems disrupt business as usual on a weekly basis.

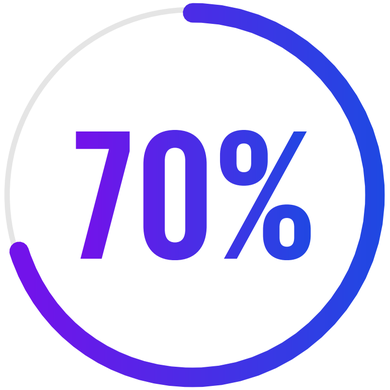
The data management maturity of many organizations is now strengthening across the board, setting a new corporate benchmark.

> Every business needs to accelerate from end-to-end. The only way that is going to happen is through faster, data-driven decisions and by empowering every employee to figure out how they're going to redesign the work they do.

Polly Sumner
Chief Adoption Officer, Salesforce



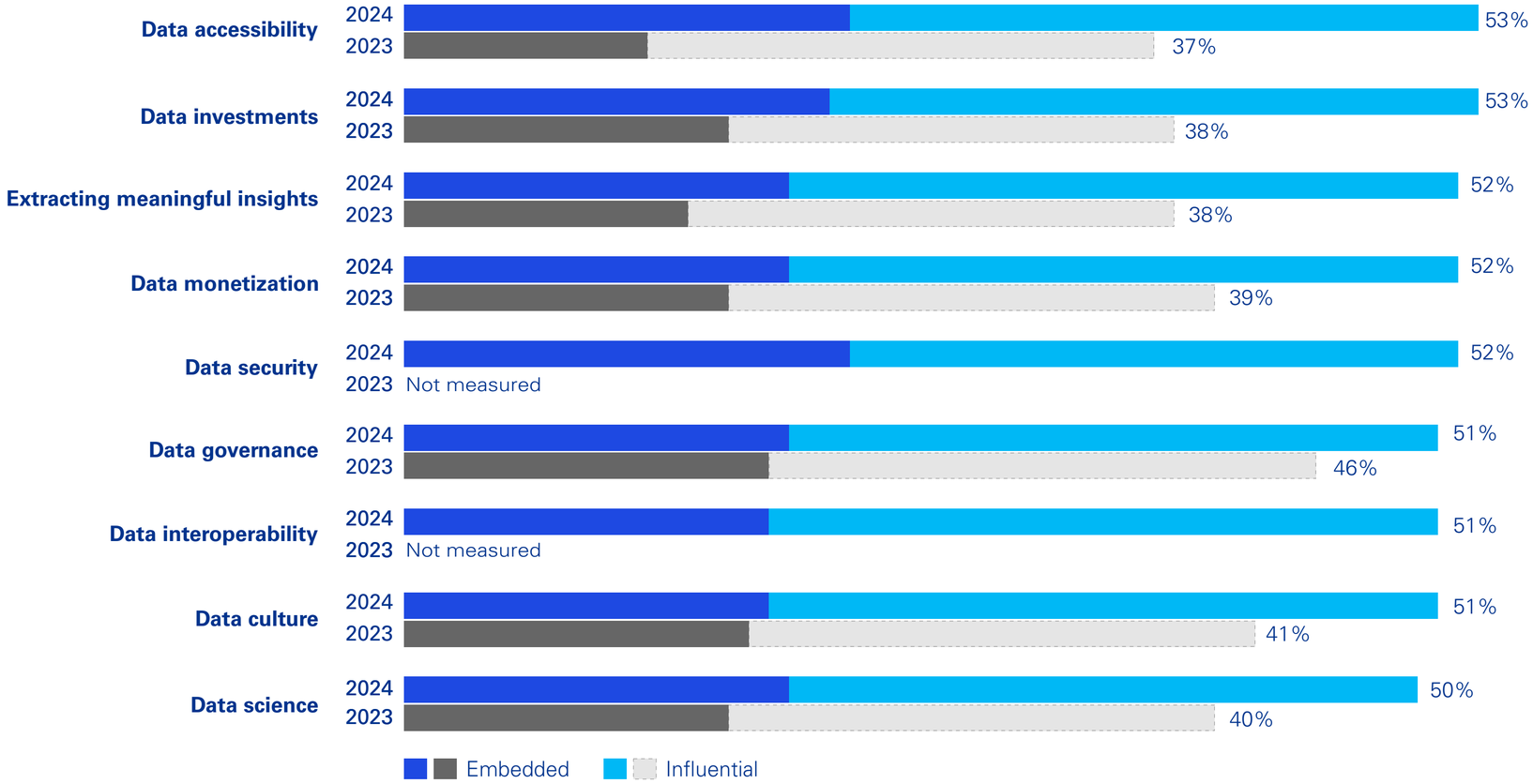
53 percent are strategically evaluating their tech investment portfolio to ensure it is aligned with their long-term goals (compared with **41 percent** of other organizations).



Most executives want their technology initiatives to have a broader sense of purpose: **70 percent** ensure that their tech investments directly target their sustainability and social responsibilities.

Figure 4: More organizations are in the top two categories of data maturity in 2024 (influential/embedded)

How effective are your data and analytics activities in the following areas? — Influential/Embedded



Respondents were asked to evaluate their organizations across a number of categories of data maturity. The two highest levels of maturity were:

Embedded — This is fully integrated into our daily operations and often generates returns.

Influential — This is a fundamental part of our business strategy. Our well-defined processes are mostly adhered to.

The other available options were:

Cohesive — A structured yet agile approach is in place with guidelines available.

Experimental — Pilot testing is underway, and expertise is being built but processes are ad hoc.

Aware — A need is acknowledged but there are no dedicated processes in place.

The purpose of this figure is to highlight the percentage of organizations with relatively high data maturity, the lower maturity levels have been excluded to enhance readability.

In general, data maturity has increased, with over half of respondents (52 percent on average) now at one of the two highest levels of data proficiency — the influential/embedded stages, up from 40 percent in 2023.

Cloud platforms play a key role in enhancing proficiency in this area. Better data management and integration is the most commonly identified gain from increased use of XaaS tech.

Organizations can do much more with customer feedback

According to our execs, directing tech investments towards the service pain points flagged by customers and employees is the most influential tactic for generating quick wins from IT investments. For instance, process points that have multiple handoffs between stakeholders and multiple systems of record, with complex contracts can often be riddled with human-error related execution issues resulting in delays for customers. As an example, using data mining to identify opportunities to employ smart contracts, supported by blockchain or tokenization, can target these pain points to speed up processing times and reduce the need for intervention from intermediaries, while ensuring strong transparency and security levels.

"Look at your major business processes and ask: Where are inefficiencies dragging you down and keeping your organization from achieving its purpose?" says Microsoft's Chang. "These are the points where technology is likely to be uniquely helpful."

However, customer insights tend to be wasted: 78 percent of execs say their business fails to use customer feedback effectively. Perhaps this is because organizations are struggling to decide on the required action to address the user feedback, or there may be communication issues between front and back office. Ultimately, unless organizations get better at using customer insights, tech execs risk wasting their investments on low-value areas.

Value must be quantifiable and comparable

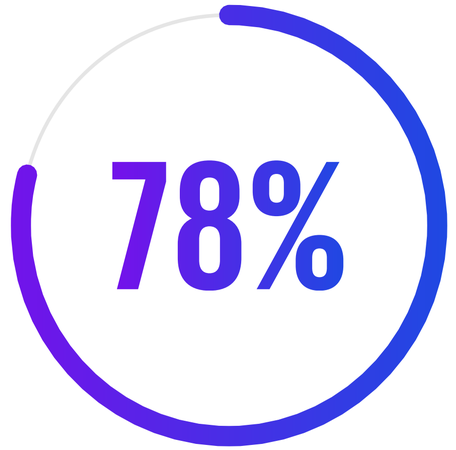
Once executives have identified the problem areas that require support from tech, they need to deliver and measure value.

For the executives in our research, the three most popular ways of measuring value are:

Business growth metrics, such as number of new products launched

Financial metrics, such as cost-to-serve and profitability

Customer-centric metrics, such as customer satisfaction and customer base growth



of execs say their business fails to use customer feedback effectively.

Developing data-backed measurements tailored to the business helps organizations establish cause and effect when they choose and implement tech. Predictive modeling capabilities, when used alongside these metrics, can advance the value creation journey by enabling proactive decision-making, forecasting demand and internal performance changes, identifying growth and cost optimization opportunities, and mitigating potential risks.

Metrics forecasts are a helpful reference point for tracking investment performance, enabling informed course correction where required. For instance, 73 percent of execs say they perform accurate cost forecasts in their digital transformation projects. It also follows that the majority (67 percent) manage to prevent hidden costs from disrupting their digital transformation journeys.

But our leading organizations go further. Compared with other organizations, the top performers are more likely to use both qualitative and quantitative metrics to establish causal trends, and are more likely to use real-time data to guide decision-making.

By continuously monitoring performance, organizations spot where to adjust in response to internal and external influences. As such, the high performers in the research are 10 percentage points more likely than the mainstream group to regularly review and update their value-tracking metrics to stay aligned with market changes.

What do the high performers do?

Which behaviors set leading organizations apart when it comes to defining and delivering value? Our research suggests they are more likely to:

Make value-driven decisions aligned with their long-term goals:

Leaders are dedicated to ensuring their daily decisions contribute to long-term strategic goals and organizational definitions of success. Over half (53 percent) of leading organizations strategically evaluate their tech investment portfolio to ensure it aligns with their long-term goals, 12 percentage points higher than non-leaders.

Get everyone on the same page:

Despite the challenge of managing a growing number of priorities and stakeholders, high performers achieve speed to action by ensuring they have strong alignment across the organization. For instance, 90 percent of leaders can efficiently achieve consensus between stakeholders, whereas other organizations are 18 percentage points less likely to be able to do so.

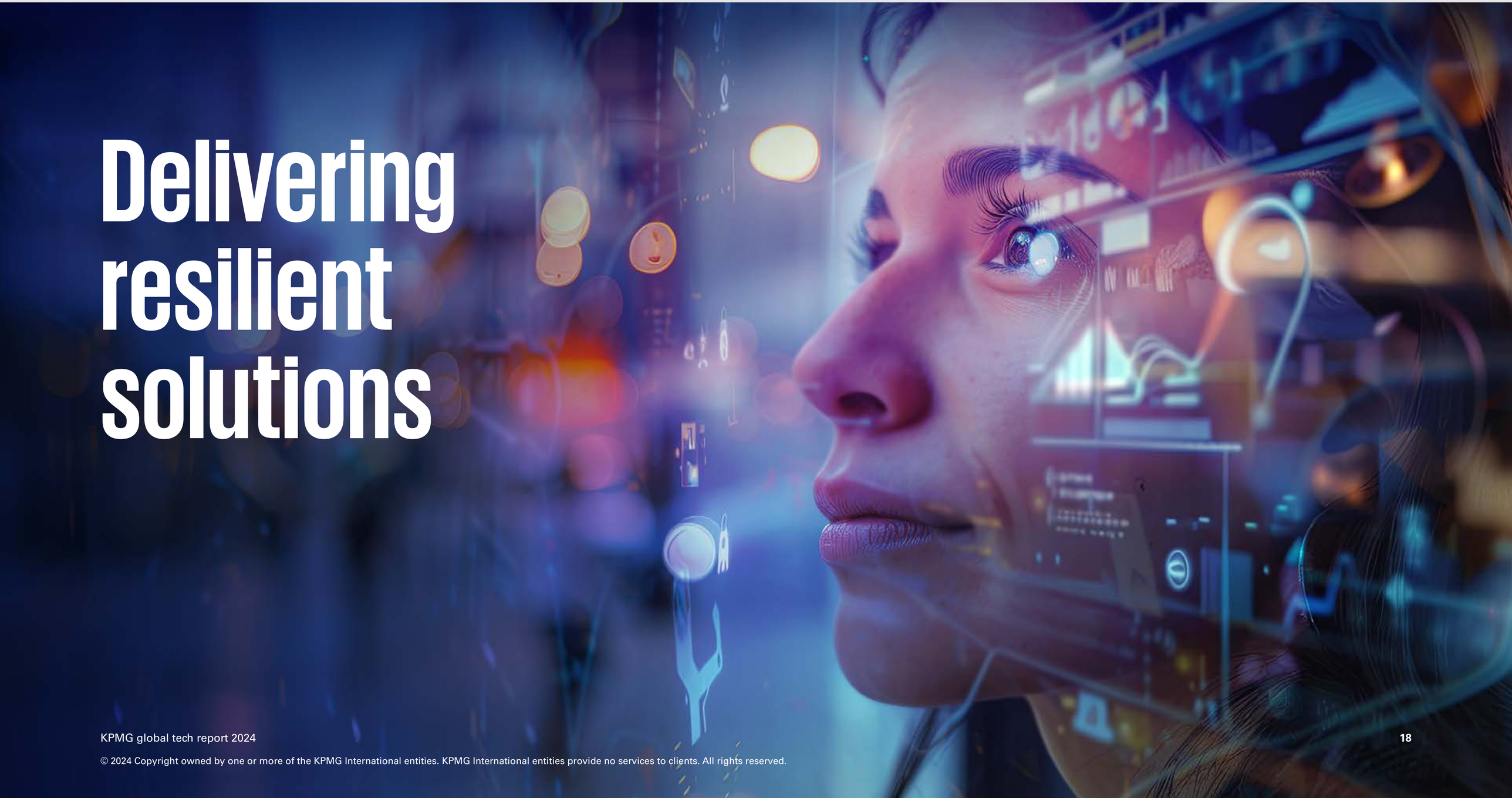
Adopt an “always-on” approach to performance management:

Leading organizations continually develop the quality and breadth of the inputs that are informing their decisions. For instance, leaders are more likely to regularly review and update their value-tracking metrics as the market changes and use qualitative and quantitative insights to assess their digital transformation plans.

Master the balance between acting as a risk guardian and a transformation accelerator:

Leading organizations rank risk and cybersecurity metrics as most important for evaluating tech investments; 87 percent are confident in their ability to measure this type of value (compared with just 66 percent of other organizations). Also these leaders are 21 percentage points more likely to ensure their portfolio of tech investments are balanced from a risk perspective.

Delivering resilient solutions



Securing the most value from identified opportunities relies on robust data-driven processes, security and governance. As they troubleshoot the problems that threaten their resilience, organizations are placing cybersecurity and data proficiency at the top of their priority lists.

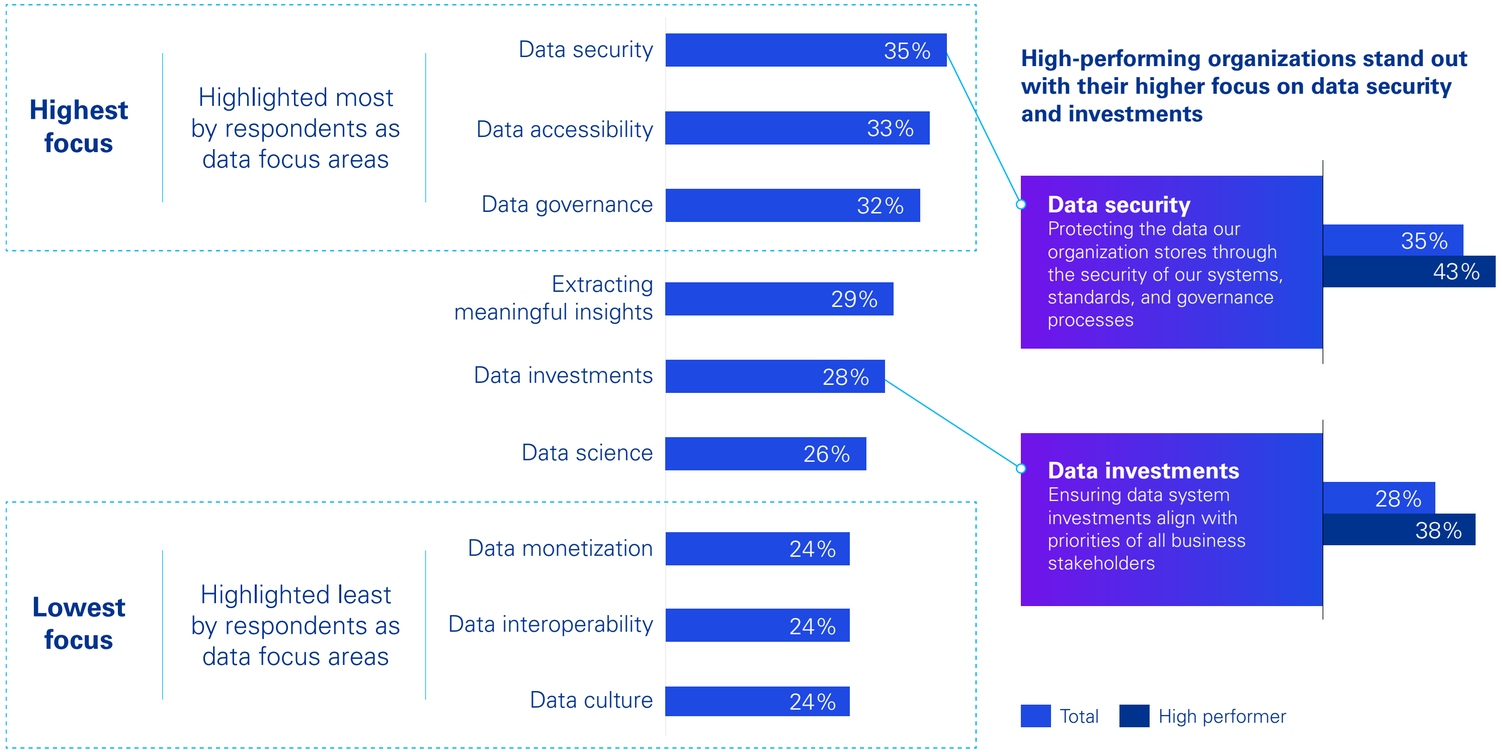
Data both drives and sustains digital transformation. Data maturity, security, and governance enable the pace of innovation, and can help improve customer experiences. Insufficiently secure solutions create the risk of data breaches, inefficiencies, or missed opportunities, which can erode business value and customer trust. Data security and governance form a robust transformation delivery infrastructure that underpins an organization's strategic ability to differentiate, maintain cost effectiveness and manage risk in the digital era.

Organizations are prioritizing data security, governance and accessibility

To achieve this level of data proficiency, organizations are pursuing a high level of data security, governance and accessibility through stronger compliance programs, frameworks and clear ownership and accountability of roles.

Figure 5: Data security, accessibility and governance are the top areas of focus for improving data proficiency

Which data management areas will your organization focus on improving in the next 12 months?



Data proficiency should be a core competency for the organization

While organizations are investing in data accessibility, research indicates that only 24 percent are focusing on nurturing a data-centric culture and ensuring data interoperability in the near term. This oversight presents a substantial barrier to fully harnessing technology's potential and undermines the ability to effectively use and understand data across all levels of the organization.

In a landscape increasingly dominated by data, it's crucial that organizations break down these silos and cultivate a deep, enterprise-wide appreciation of data strategy. By doing so, they can accelerate digital transformation towards success by optimizing processes, and dynamically enhancing their products and services to meet customers' evolving needs.

For sustainable innovation, execs need to prioritize trust and security

Execs must ensure that pace of innovation is sustainable, secure and that they can communicate value to stakeholders. The high performers in our research rate risk and cybersecurity metrics, including reduced frequency of cybersecurity incidents, improved compliance and lower failure rates, as the most important lenses through which to evaluate tech. They are also more likely to be confident that they can track their performance in these areas.

> "When data is embedded and people are empowered, tools like AI are adopted very quickly and this creates value super-fast.
>
> Start with automation and free up people to do what they do best, more quickly and in more interesting ways."

Polly Sumner
Chief Adoption Officer, Salesforce

This security-led stance of the leader group underlines the wider importance of trust, and how to pursue it. Overall, for the executives surveyed, cybersecurity and privacy are the biggest concerns for achieving a successful digital transformation. They also maintain that the top skill organizations need to thrive in a digital economy is the ability to ensure such considerations are front and center of business and tech priorities of the organization. 72 percent of organizations are embracing a secure-by-design mindset by involving and empowering cybersecurity teams in the early stages of tech investment projects.

In fact, cybersecurity and privacy can enable organizations to pursue their business objectives securely and confidently, and embrace new opportunities. Organizations need to learn from our high performers group and do more to evaluate tech investments against risk and cybersecurity factors. For this to be comprehensive, cybersecurity experts need a seat at the table from the outset so they can advise on how security can be embedded to build resilience and trust.

In doing so, cybersecurity and privacy can support the organization, as a trust enhancer and protector of brand reputation, by minimizing the need for costly retrofitting of security fixes and the risk of data breaches.

For many organizations, there is a disconnect between intentions and reality regarding the security-related habits of their workforces. Almost 8 in 10 (78 percent) respondents overall say that their staff training treats cybersecurity as a box-ticking exercise and it is not embedded as required.

Rather than rely exclusively on formal training sessions, organizations should focus on implementing controls and operational features that make cybersecurity easy for employees to embrace in their daily work. For instance, strategies such as automating DevSecOps processes or providing access to password manager platforms can promote more secure employee behaviors.

Michael Wagner, CISO at Kenvue, agrees that cybersecurity and resilience must be at the forefront of daily tech usage. This includes maintaining business continuity plans, having a retainer with an incident response firm, testing backups and conducting regular recovery exercises.

"Incident exercises, where different scenarios are presented, are vital so that we can be prepared should the worst occur," says Wagner. "For instance, the CrowdStrike patch update issue [in July 2024] caused widespread IT outages around the globe."

The wider picture here is that tech innovation is not the enemy of risk management — rather, they should reinforce each other.

By starting with a clear definition of success that is rooted in their organization's purpose, tech execs will be able to direct tech initiatives towards areas that will bring meaningful value. An insight-led approach will enable execs to prioritize and make decisions when it comes to delivering value.

What do the high performers do?

How are the high-performing organizations strengthening their data backbones and using data as an asset to deliver secure digital transformation outcomes? Our research suggests these organizations are more likely to:

Tie investment to value:

Leaders consider it a top two priority to ensure data system investments align with the priorities of key business stakeholders, whereas other organizations place this outside of their top three focus areas.

Perform routine data-hygiene audits:

Eighty percent of leaders conduct routine data hygiene audits to address gaps in data integrity and create data ownership frameworks. Other organizations are 31 percentage points less likely to have this as a fundamental part of their strategies.

Use data and internal knowledge sharing to respond to market risks:

Leaders say data-centric decision-making (61 percent) and internal knowledge sharing (48 percent) enable them to adjust their digital transformation strategies in response to evolving market risks (compared with 43 and 38 percent, respectively, of non-leaders). While data insights can sharpen risk resilience, internal knowledge sharing is crucial. By educating employees and keeping them informed of developments, organizations will empower them to adapt and contribute to positive change.

Prioritize data security:

Leaders are 9 percentage points more likely than non-leaders to cite security as a key area of focus for improvement over the next 12 months.

How to overcome threats to digital transformation

Executives are keen to speed up their tech progress, but to do so reliably, effective risk management is essential. Consider the following tactics to manage the most common threats to digital transformation velocity and quality.

01

Involve security teams from the outset: Executives maintain that cybersecurity and privacy are the biggest concerns for achieving a successful digital transformation but, when it comes to security, moving at a measured pace is important. Involving cybersecurity and information governance teams from the outset of digital transformation initiatives will help minimize delays and enable businesses to progress investments confidently. To reduce security-related downtime, battle test your organization's threat response reflexes. Kenvue's Wagner suggests that business continuity plans, having a retainer with an incident response firm, backups testing and regular recovery exercises will prove vital here.

02

Challenge risk aversion by articulating the costs of inaction: A high 80 percent of executives say that a risk averse attitude leads senior leadership to respond to market forces more slowly than competitors. When faced with a scenario where risk aversion is influencing senior leadership towards gridlock, one helpful tactic to kick-start movement is to evaluate the risks of inaction against the change being considered. For instance, losing market share to competitors because of a failure to adapt your product offering. If analysis reveals that the threats associated with staying idle are too concerning to ignore, this can stimulate forward momentum and creative thinking to tackle challenges and manage the risks that come with embracing the change.

03

Accelerate progress by removing governance bottlenecks: Poor governance and coordination appear in the top three toughest challenges that derail transformation progress. For instance, 58 percent say their centralized decision-making reduces their organization's ability to respond to market signals and embrace new tech, while 57 percent say that friction and communication breakdowns occur frequently between teams at times of high workload.

Scaling AI with confidence

Almost three-quarters of organizations are already achieving business value from their AI investments, but only one in three has been able to achieve this at scale.

Enthusiasm is being fueled by democratized experimentation approaches, but as use cases scale up many predict a tipping point marking a drive towards greater centralization.

The AI 'black-box' is causing workforce anxiety

It is positive that 74 percent of respondents say AI is already increasing the productivity of their knowledge workers, improving their organization's overall performance. Furthermore, just over 8 in 10 respondents expect automation efforts to shift the focus of knowledge workers towards more creative roles, and that AI will even redefine the future of knowledge itself.

However, AI is also fueling anxiety in the workforce. Consensus and trust will be the keys to progress. More than three-quarters of organizations (78 percent) are concerned that many users see AI as a 'black box'. Almost as many (77 percent) expect AI to pose challenges to their current operational structures, potentially leading to job reduction and ethical concerns.

Managing employee anxiety around change will be critical to AI adoption at speed. Those who navigate the evolving tech landscape with a focus on employee empowerment, and bringing everyone on board, will flourish amid rapid change. Organizations believe their workforce has an appetite for cutting-edge tech. But there is also fear that some individuals feel left behind by the rapidly evolving tech landscape.

In an era where AI's rapid evolution and adoption are reshaping the competitive landscape, tech execs need to rethink their strategic leadership roles. Three-quarters (76 percent) of tech execs surveyed feel that their role has evolved significantly over the past two years as the nature of tech and the workforce itself is changing. Tech execs must manage board level expectations during a period of hype cycles and cost sensitivity. At the same time, they must balance this against the need for a stable, coherent environment in which the workforce can harness AI, rather than stifling it. Tech execs play a critical role in steering their organizations through uncertain times, acting as a strategic innovator, adaptive pioneer, trend navigator and risk guardian.

Importantly, there are ways to address such concerns. KPMG's Trusted AI[1] framework, for example, emphasizes 10 pillars upon which to design, build, deploy and use AI solutions in an ethical manner. They include priorities such as fairness, sustainability, privacy, security and accountability.

> "Applying AI as an organization can unlock a lot of excitement for your workforce because it can really boost employee wellbeing.
>
> AI can take the pain out of longstanding problems that have previously sapped time and energy from employees and, in turn, enhance job satisfaction."

Michelle Chang
CFO/CVP, Microsoft Customer and Partner Solutions

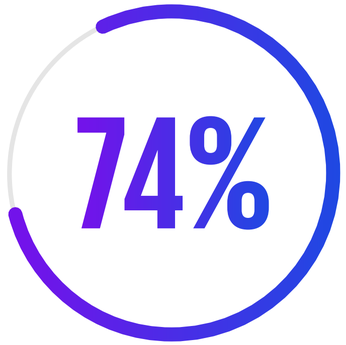
To find out more about the use cases for AI across the enterprise, **visit our website**.

[1] https://kpmg.com/xx/en/home/services/kpmg-trusted-ai.html

Most organizations are now seeing some return on AI, but value at scale remains more elusive

AI adoption is gathering speed, and so is the rate of return (three out of four organizations this year are already generating value from AI). However, only 31 percent of all organizations achieve this at scale.

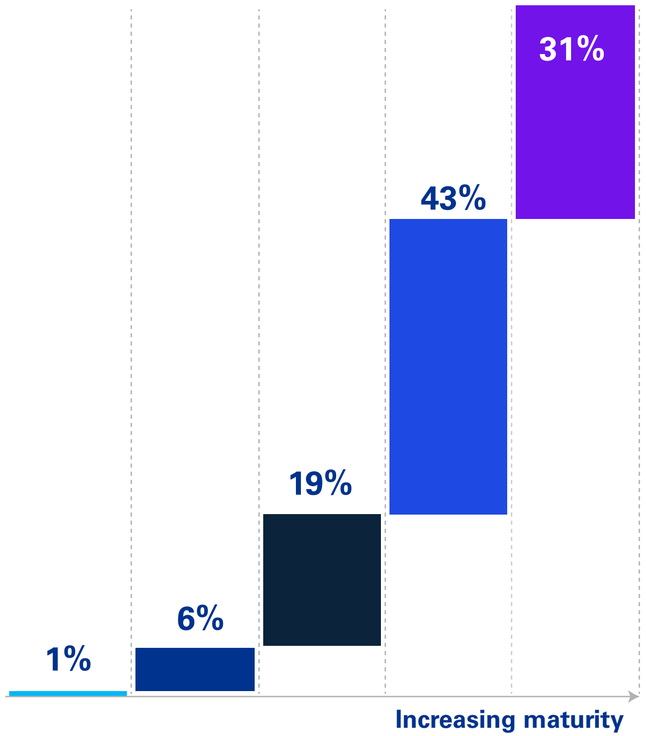
Given the expanding range of potential use cases for AI, it's essential to establish a strategy aligned with business goals, adopt a portfolio approach to explore a range of opportunities simultaneously, make trade-off decisions led by proven value, and employ an iterative process for consistent monitoring and enhancement.



of respondents say AI is already increasing the productivity of their knowledge workers, improving their organization's overall performance.

Figure 6: Just one-third of organizations have successfully scaled AI to production

Which of the following best describe your organization's current maturity level with AI adoption?



Scaling AI: We are innovating and deploying AI use cases into production at scale. We have achieved ROI on a number of our AI use cases.

Strategically investing in AI: We have invested strategically in core business capabilities and have AI use cases running actively across the organization that are returning business value.

Testing AI: We have a large number of AI proof-of-concept tests running but haven't achieved ROI yet. We have a limited number of ad hoc use cases in production.

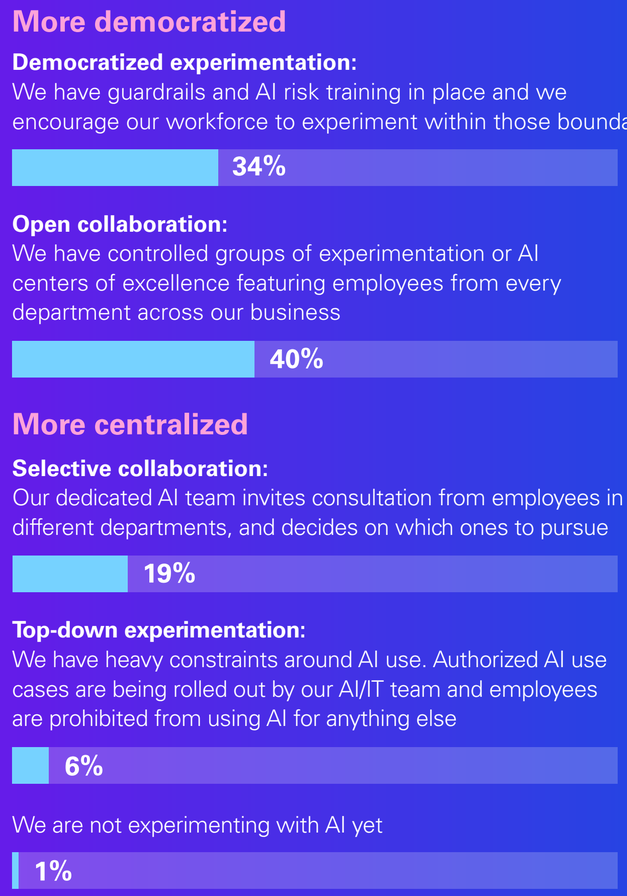
Early stage: We have a small number of AI proof-of-concept experiments.

Not started: We haven't implemented any AI yet but plan to at some point in the future.

Notably, organizations in certain countries — including China, the US, the UK, Germany, Israel and Saudi Arabia — are most likely to have mature AI investments already generating value. At sector level, industrial manufacturing, life sciences and healthcare appear to be leading.

Figure 7: Organizations are embracing a decentralized approach to AI innovation

Which of the following best describe how your company is experimenting with potential AI use cases?



Rather than a stringent centralized approach, organizations are adopting a more inclusive mindset around AI experimentation, crowdsourcing use cases from their workforces. The most popular approach is open collaboration, where diverse working groups conduct controlled experiments, sometimes supported by AI centers of excellence (CoEs) with representatives from every department. This approach is prioritized by organizations at the most mature level of AI implementation. Only 6 percent of organizations subscribe to a top-down approach to AI experimentation with heavy constraints around AI use from the outset.

While initially encouraging democratized experimentation, many respondents (40 percent) plan a shift to a more centralized approach once they reach a critical mass of ideas that require stricter management to control risk and reduce duplication. In doing so, organizations should apply a balanced approach and steer away from overly stringent approval processes to avoid stifling innovation. One way of balancing speed with risk is driving alignment through cross-functional CoEs or user groups, and only centrally managing AI initiatives that those groups identify as high-risk or high complexity.

Regardless of their chosen experimentation approach, organizations have the opportunity to consolidate underlying processing and data infrastructure leading to gains in efficiency, reduced technical debt and a more effective end solution.

A systematic approach is key to prioritizing AI investment in alignment with business goals

To ensure the use cases with the greatest potential receive the attention and cross-functional support they require, there must be a strong roadmap to scaling and a clear link to business value. Many organizations are chasing short-term value by implementing AI tools in discrete parts of the value chain — that is, identifying specific use cases for deployment — where they see potential to solve problems or drive value. This is an understandable approach, but they must be careful not to create a tangle of initiatives that become increasingly difficult to track and compare.

Tracking expenditure and return on poorly integrated initiatives is even more pressing, given organizations expect to increase investment in AI over the next 12 months. Their top short-term goals for AI over the next year are to drive increased operational efficiency via automation, improve product and service development and innovation, and enhance pattern detection and issue correction.

Data outlining customer behavior and feedback can help organizations understand where to apply AI for maximum effect. Salesforce's Sumner raises the example of insurance, where automating contact points with customers worked well until policyholders wanted to notify their insurer of a loss. "Insurers were never able to get more than 10 percent of customers to do that online. They realized people were looking for human empathy." This example shows how truly listening to customers can guide to the right path for delivering real value, and it's a reminder that AI should be a tool or collaborator for human workers, rather than a replacement.

Organizations should move away from disjointed AI use cases, and adopt a portfolio approach towards AI, focus on maximizing ROI while balancing innovation with risk mitigation.

Success that outlasts the hype will require consensus across the enterprise

The biggest barrier facing many organizations is moving from experimentation to production, says Naveen Zutshi, from Databricks. In scaling up an AI use case from a PoC to a more widespread production-level organizational practice, "the bottleneck is the confidence in the reliability, quality and safety of those AI models," Zutshi says. "That comes back to data quality. You need to understand how the data is flowing: do you have sovereignty rights over the data, are you doing the right masking and encryption, and how are you looking at access controls right down to row and column level?"

Generative AI is introducing a brand-new risk vector to the tech domain, such as 'hallucinations', 'jailbreaks' and 'adversarial prompting' that can manipulate AI. The unexpected consequences of generated content have appeared seemingly frequently in the news this year. In light of this, when scaling emerging tech, organizations will need to have the governance and processes in place to control emerging risks. Survey respondents highlight the importance of continually developing AI governance policies for ethical and fair use in line with the evolving regulatory landscape. The process of establishing trusted guardrails and controls requires a multi-lens end-to-end secure approach to designing, building and deployment that incorporates coding best practice, code reviews, staff training and red teaming exercises that test the performance and reliability of AI models.

The ongoing AI hype may tempt organizations to make hurried decisions. However, successful AI adoption requires an enterprise-wide multidisciplinary effort and a clear alignment across the enterprise, and a shared understanding of AI's role and its potential.

Organizations that can clearly define and communicate the value of AI to all stakeholders within the context of their business objectives, and execute through thoughtful collaboration, will have a greater chance of maximizing its impact across the enterprise.

As organizations embark on their AI transformation journeys, tech execs are at the forefront of navigating this complex and evolving landscape. In order to go beyond the hype and harness the potential of AI while balancing speed, risk, and value, they should focus on five key areas:

01 Delivering value from AI:
By aligning AI initiatives with overall business strategy, setting expectations for ROI, and allocating budget to AI transformation.

02 Unlocking AI capability:
By upskilling teams to work with AI, setting up organizational governance structures, and identifying capabilities required across the business.

03 Building trust in AI:
By identifying and addressing risks associated with AI, ensuring data quality and integrity, managing shadow AI and securing sensitive data used in AI.

04 Scaling AI with confidence:
By deciding whether to build or buy AI capabilities, identifying suitable partners and vendors, and focusing on interoperability with existing IT infrastructure.

05 Architecting AI transformation:
By engaging with the business and its various leaders to plan AI rollouts by value stream, function, or product, establishing an adoption roadmap, and integrating AI into existing business, digital, and tech strategies.

What do the high performers do?

How are leading organizations extracting maximum value from their AI investments? Our research suggests they are more likely to:

Encourage their wider workforce to contribute to AI experiments:

Nearly half of all high-performing organizations (47 percent) have consolidated AI expertise and innovation through creating CoEs as the sources of their AI experimentation. These working groups feature employees from every department of the organization.

Address skill gaps with AI:

Eighty-nine percent of high-performing organizations say their business is using AI to fill skill gaps among knowledge workers, which is 18 percentage points above other organizations.

Use AI to analyze performance:

Ninety-three percent of leaders are using AI or predictive analytics to measure tech performance, which is 23 percentage points above the rest.

Conclusion and key recommendations

The alchemy of successful digital transformation

While the pace of digital transformation can be daunting, our research shows that many organizations are taking considerable strides forward in their implementation journeys, especially with AI, XaaS and cybersecurity.

The additional profitability that transformation has yielded so far is certainly encouraging and organizations are seeking value beyond profits. Execs are calibrating their digital transformation formulas to supercharge progress across a range of strategic objectives, including ESG responsibilities and customer experience elevation.

This year's findings reveal that primary evidence, such as PoC tests and ROI, is taking precedence over a herd mentality. This empirical ethos will be integral to securing value and making wise choices, especially as tech execs try to balance the maintenance of legacy systems with a focus on new technology.

To help guard against stakeholder skepticism associated with the safety and viability of new digital transformation opportunities, organizations should also bring structure, discipline and an enterprise mindset to the adoption of new technology, to mitigate risks and optimize value realization.

The tech execs who make the superior decisions, safely steering their organization through various headwinds and risks, will be those that stay firmly rooted in a data-centric and value-led approach. These transformers will draw on both real-time and predictive data insights from a broad range of sources to make balanced judgment calls that align to the broader business and tech strategies, to drive sustainable value.

Organizations that consistently demonstrate these behaviors can outpace their competition and unlock the potential of their technology investments, securing and growing market share as they do so.

Our respondents demonstrate that AI is already living up to the hype, with the majority of executives confirming they have already achieved business value from AI systems. To maintain momentum, organizations should reinforce their data management foundations. As AI PoC experiments are scaled up to production level, data integrity and reliability among other criteria, will dictate whether these innovations result in breakthroughs or costly setbacks.

The attitudes and behaviors of high-performing organizations in this report provide many clues as to how to secure value from tech innovation.

01.

Resist being hypnotized by FOMO

While a desire to progress and outpace your competition is healthy, do not let this boil over and distort your judgment. Rather than blindly following the herd, anchor decisions in your organization's strategic objectives and look for tangible primary evidence of the right path to take.

02.

Be empirical about defining and delivering value

Align stakeholders around a clear definition of success that cascades into a set of tangible metrics. Adopt an "always-on" approach to performance management and continuously monitor and adjust metrics in accordance with internal and external changes. These steps will help the organization to confidently make decisions and deliver the value promised.

03.

Mitigate technical debt

Embrace structured technical debt management. Establish clear remediation plans and robust architecture principles to contain and rationalize the technology landscape.

04.

Harness the power of partnership

Innovation is not restricted to new technology. Explore new ways to collaborate, co-invest and share risk with your chosen partners. Use their networks to gain access to the latest technology and inventive ideas from around the globe.

05.

Prioritize trust and security

Ensure solutions are secure by design and embed trust and security assurance from the outset. Design, build, deploy and use AI and emerging tech solutions in a responsible and ethical manner so your organization can accelerate value with confidence.

06.

Build a strong data backbone

Establish a robust data management framework that combines data, people, processes and policies to ensure information is reliable, relevant and appropriately used. Drive a shared understanding across the organization of how to harness data more effectively to support rapid and informed decision-making.

07.

Develop AI proficiencies through knowledge sharing

Test your workforce competence and sentiment on AI, and use this to determine the best way to bridge knowledge gaps, facilitate continuous learning and encourage cross-functional collaboration.

How KPMG firms can help

Our research indicates that as tech execs look to harness the potential of various technological innovations, they must navigate a tangle of threats and demands, including cyber attackers, stubborn tech debt and complex value equations.

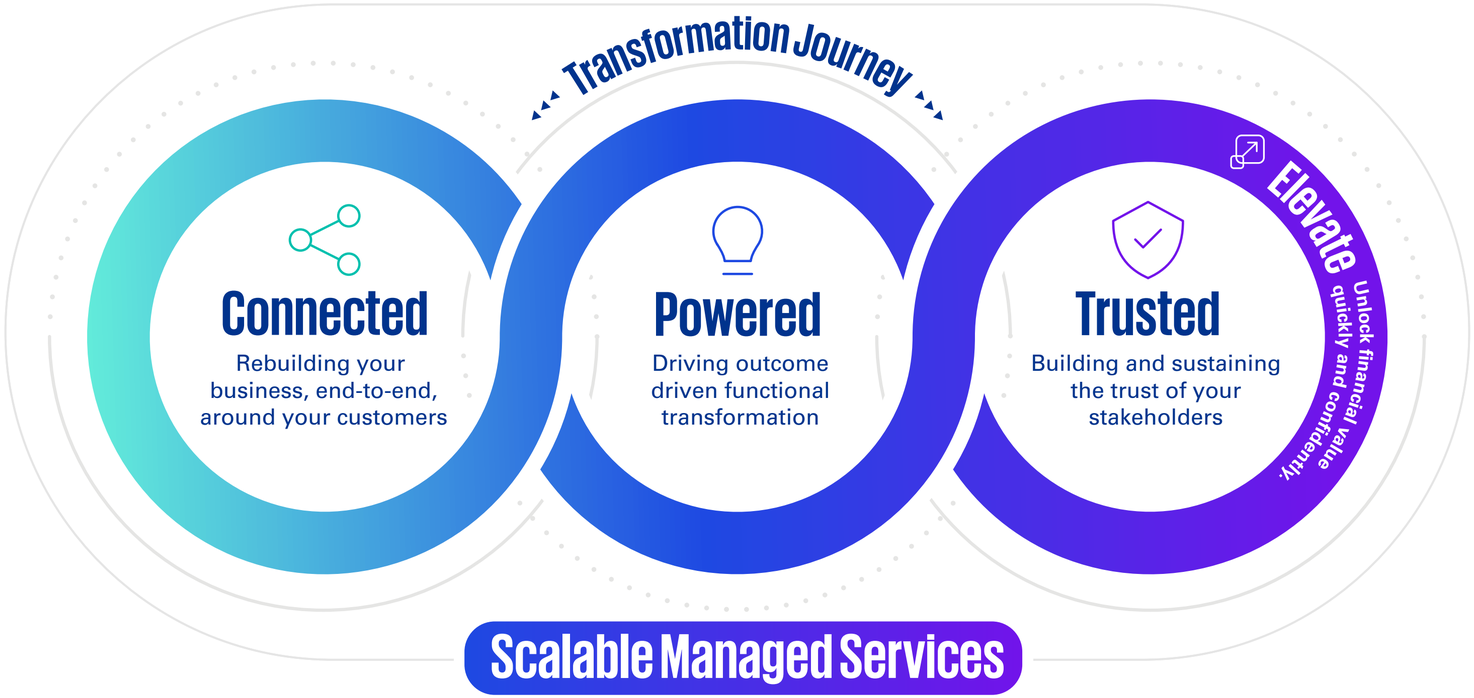
To assist you in combatting these concerns, KPMG professionals can help you set the vision for the future based on your organizational goals, execute digital transformation and deliver managed services. KPMG firms' tech consulting practices have extensive experience in key tech capability areas and a global delivery network to support your digital transformation.

We offer leading products, solutions, and accelerators to jump start your transformation and help leverage the latest tech.

We offer a broad set of tech services across strategy, platforms, cybersecurity, data, AI and emerging tech, cloud, and risk, so we can help deliver results that matter.

Our alliance partnerships allow us to approach your most pressing tech-based challenges and offer broad solutions and services via expanded product offerings and increased capabilities.

The KPMG digital transformation suite



Helping to sustain your business transformation across the front, middle, and back office.

Contacts

Bobby Soni
Global Technology Consulting Leader
KPMG International
bobbysoni@kpmg.com
+1 408 367 158

Guy Holland
Global Leader, CIO Centre of Excellence
KPMG International
guyholland@kpmg.com.au
+61 410 530 410

All images in this report have been created using artificial intelligence technology.

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

kpmg.com

Designed by Evalueserve.

Publication name: KPMG global tech report 2024 | Publication number: 139536-G | Publication date: September 2024