

The intelligent tech enterprise

A blueprint for creating value through Al-driven transformation

KPMG. Make the Difference.

KPMG International

kpmg.com/intelligenttechnology

Disruptive trends

Foreword

We write this report at a pivotal moment for the technology sector. Two years into the generative Al era, many companies face pressure to demonstrate returns on their Al investments and drive employee adoption of Al tools. At the same time, Al models are rapidly advancing, at a rate surpassing Moore's law, and are now poised for another significant capability leap as we enter the agentic era at full throttle.

Technology companies continue to be at the center of the Al journey, both as the builders of technology that enables other companies to evolve and as users of Al themselves.

The success or failure of technology executives in leading Al-enabled transformation will likely set the clock-speed of change for many industries, and may well shape the future of the world, in the transition from a digital to an intelligent economy.

This paper presents our view on the current state of AI for technology companies, the major barriers to change and key sector trends shaping the future. We outline a future-state blueprint of an intelligent technology company, the three key stages of transformation required to get there, and the potential value to be gained.

Our findings are based on multiple quantitative and qualitative studies. We surveyed 1,390 leaders across key global markets, gathered insights from leading AI specialists, e.g. Erik Brynjolfsson at Stanford, and tapped into our own experiences from helping KPMG clients on more than 500 AI engagements.

In parallel, we leveraged our extensive quantitative work over the last 18 months to estimate the value of adopting Gen Al¹ for 17 million companies across sectors. Among these, we quantified the value at stake for close to 832 public companies in the technology sector, where this value resides by function, and the top 10 areas of opportunity in a technology enterprise.

Our findings offer a clear path forward for unlocking Al-driven value and fostering enterprise-wide transformation. We conclude with five practical actions that tech executives can take now to enhance their chances of success and four ways KPMG can support this transformation. We look forward to hearing your views.



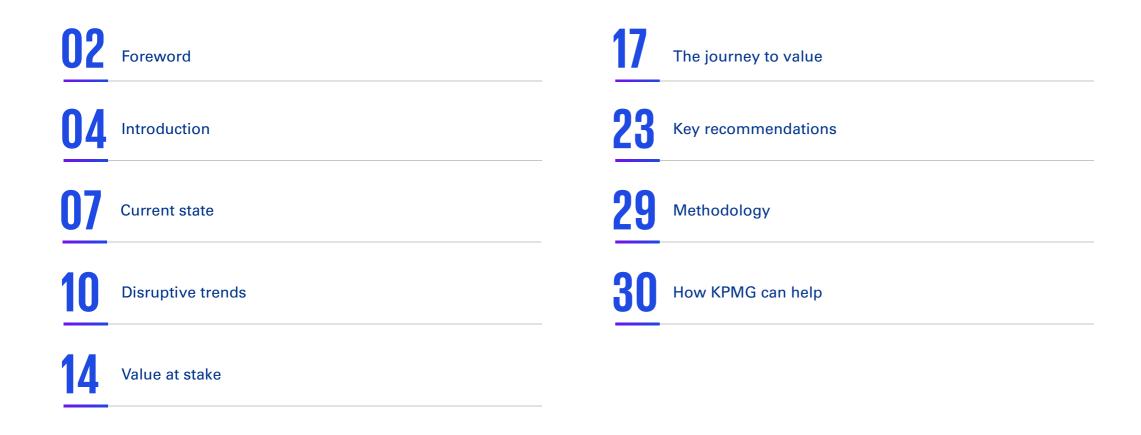
Chad Seiler Partner, Advisory TMT Sector lead for Consulting KPMG in the US



Pär Edin **Global AI Sales** Acceleration Leader **KPMG** International

¹ Quantifying the GenAl opportunity, KPMG International, March 2025

Contents



Introduction

Introduction

Of all sectors, tech companies face the biggest opportunities and threats from Al. Many play a pivotal dual role, as users of Al and providers of Al to all other sectors. They now hold the pole position in the race towards an intelligent enterprise and set the pace for others to follow, but risk obsolescence at every turn.

Tech executives are no strangers to disruption, but AI is stretching their ability to navigate a fast-moving market while facing disruption and uncertainty. Some are leading the charge, building the AI that enables others to transform. Others are focusing on integrating AI into their current products and services. Fewer still have deployed AI fully in their own operations.

Al also threatens their current business models, as software development costs plummet, Al-native startups emerge and agents make it possible to deliver "serviceas-software" (new SaaS).

To make this a perfect storm, add rapidly falling usage costs for frontier models, agentic AI expanding the

opportunities for automation, multiple "battles" for leadership at every level of the tech stack, and along the value-chain, uncertainty on future power needs and rising geopolitical tension.

Tech executives need to solve at least three AI challenges in parallel. First, they must master the use of available AI tools to boost productivity in their own organization. Next, they need to embed AI into their products and services faster and better than their competitors. Finally, executives must prepare to adapt their business model to a world where all their customers and suppliers have adopted AI, while considering the role that agents will play in the near future.

To help our clients navigate this once-in-a-generation journey, KPMG conducted multiple studies over 12 months, collecting quantitative and qualitative input from specialists in industry and academia. We analyzed 500 KPMG AI client engagements, surveyed 1,390 global decision-makers and quantified the potential value of adopting generative AI for 17 million companies, analyzing three billion data points in total. Our research reveals a sector in rapid transition, marked by significant untapped opportunity, an accelerated pace of innovation and fluid competitive dynamics. Even within the industry, many companies still lack a clear AI strategy, adoption program, tech infrastructure and trust framework. We hope our blueprint for an intelligent enterprise can be of help in navigating your journey to value with AI.



Al is triggering the biggest transformation wave the economy has ever seen. You want to be on the right side of that. **99**

Erik Brynjolfsson

Professor and Senior Fellow at the Stanford Institute for Human-Centered AI (HAI), Director of the Stanford Digital Economy Lab Introduction

Key recommendations summary

In this report, we explore the current state of AI in the tech sector, highlighting both the challenges and opportunities that lie ahead. We examine how tech companies can lead by example, using AI to enhance their own operational efficiency and agility, while simultaneously navigating the complexities of being both producers and consumers of AI technology. The size of the opportunity is too significant for any company to ignore, equating to between 2 percent and 16 percent of EBITDA² for the average company in our sample.

Addressing the following key areas can help tech companies unlock the value of AI within their own organizations while continuing to innovate for their customers.



Architect a coherent, Al-centric vision and strategy

Articulate the vision and how the organization will use Al to achieve its business objectives. Assess adoption maturity and design a transformation program with a portfolio of initiatives that helps the business transition through each stage.



Build trust from the outset

Building trust in AI requires moving beyond foundational transparency to proactive governance, continuous explainability and security. Use trust to build momentum, enabling faster transformation, and design governance and compliance processes to solve risk and regulatory challenges as they emerge. Building trust in Al requires moving beyond foundational transparency to proactive governance, continuous explainability and security.



Supercharge product intelligence

The success of Al-driven products depends on a continuous innovation cycle. Embedding Al into existing offerings isn't enough — instead, create products where embedding AI solves pain points and enhances the customer experience.



Scale Al operations with next-gen tech and data management

Let data and rising technologies such as agents accelerate transformative operating model change. Get data into a scalable cloud infrastructure and bring LLMs as close to the source data as possible, empowering employees to experiment and test.



Operationalize and evangelize Al-enabled flows of work

Lead Al-driven workforce transformation by operationalizing intelligent tools. Embed Al-driven workflows within the operating model so you can contribute meaningfully to the AI adoption of your products and services in other sectors. Understand clients' skills gaps and the ways their workflows will change as they integrate AI.

© 2025 Copyright owned by one or more of the KPMG International entities. KPMG International entities provide no services to clients. All rights reserved.

² Quantifying the GenAl opportunity, KPMG International, March 2025

At a glance

They have high expectations

Introduction

88%

believe that tech companies that embrace AI will develop a competitive edge over those who do not

68% ^{ex}

expect a moderate to very high ROI from AI investments of10 percent or more

But the pressure is on to prove ROI

62%

face significant pressure from shareholders to show immediate ROI on Al investments



I believe in some of these challenges, we are quite mature. We have a very clear idea on how to improve, how to get there. In other challenges, namely in everything that is Gen Al or agent related, I believe that we are still in infancy, and the rest of industry is still in its infancy as well. **99**

VP of Al and Data Science — Germany

Source: The intelligent tech enterprise: A blueprint for creating value through Al-driven transformation, KPMG International, 2025

Al spending will increase significantly

85%

will increase the percentage of global budget spent on Al



say this will be 10 percent or more

The benefits are flowing through:





Focus on growth

60%

are seeking to

74%

are focused on revenue growth

improve efficiency

have seen a moderate to very high ROI from their investments so far

are systematically incorporating AI into their products and services

with 81 percent planning to do so in the next 12 months, signaling a strong commitment to embedded AI as a core driver of business value. This is the opposite of most other sectors where the focus is largely on improving efficiency

Current state

Many tech companies are using AI capabilities to improve operational efficiency, decision making and data management (Figure 1). They are already embedding AI into their products and services. The degree of adoption varies widely. Some tech companies are leading the charge in AI-driven transformation while others struggle to move beyond experimental use cases. The difference often lies in their ability to integrate AI into their core business models while managing deployment complexity at scale.

The tech companies we surveyed have not yet realized Al's full potential within their own organizations. Many companies face hurdles related to security, Al literacy, trust and ethical considerations, and an evolving regulatory landscape (Figure 2).

The tech companies that are working to overcome these barriers are reaping significant efficiency and productivity gains. They are also enabling their leaders to make better decisions faster (Figure 3).

Figure 1: Using AI to drive overall productivity remains the key focus

Percentage who say their organization wants to achieve the following through using AI



Which of the following goals does your organization want to achieve through using AI? (Maximum 5) n=183

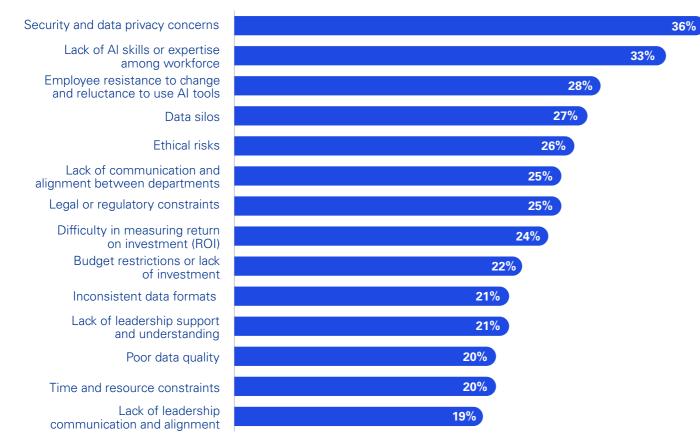
Source: The intelligent tech enterprise: A blueprint for creating value through Al-driven transformation, KPMG International, 2025

Introduction

Value at stake

Figure 2: Workforce literacy and security concerns are limiting Al's potential

Percentage who say their organization has faced the following challenges when integrating AI





Methodolog

A lack of Al-related knowledge is a significant challenge for our company.

We face a shortage of professionals with the skills to develop and apply Al. **99**

Chief Technology Officer — China

What challenges has your organization faced when integrating AI? (Maximum 5) n=183

Source: The intelligent tech enterprise: A blueprint for creating value through Al-driven transformation, KPMG International, 2025



My organization has been in hypergrowth mode for a while now. **Having an Al-led strategy** has enabled the organization to grow. *99*

VP of Al and Data Science — Germany

Figure 3: Al in technology drives operational success

Percentage who say their organization has achieved the following benefits through using Al



What benefits has your organization had from using AI in the business? (Maximum 5)

Source: The intelligent tech enterprise: A blueprint for creating value through Al-driven transformation, KPMG International, 2025

Introduction

Disruptive trends

Disruptive trends

Our research reveals a sector in rapid transition, marked by significant untapped opportunity, an accelerated pace of innovation and fluid competitive dynamics.

At the same time, even within the tech industry, many companies still lack a clear AI strategy, internal adoption programs, tech infrastructure and trust framework.

To compete and win in this rapidly changing landscape, tech companies must consider several market and technology battles that are currently playing out in the industry, while paying close attention to at least five interconnected trends. Their combined impact has the potential to trigger a seismic shift in workforce dynamics, disrupt business models and permanently alter the competitive landscape.



The next 10 years will be the biggest transformation in all

Methodolog

of history. When the applications of AI get more widespread, we will see the economy-wide productivity growth rate at least double. **99**

Erik Brynjolfsson

Professor and Senior Fellow at the Stanford Institute for Human-Centered AI (HAI), Director of the Stanford Digital Economy Lab

Key battles shaping the future of technology



Securing the trust and support of stakeholders — employees, suppliers, customers, investors, markets and regulators — is one of the greatest challenges for companies. This represents one of the largest change management efforts in recent history, requiring innovative strategies to build confidence on the Al journey.

Evolving AI regulations on ethics, data privacy and bias pose significant compliance challenges. With no universal governance framework, global corporations must navigate a complex regulatory landscape that shapes product design and usage across regions. Differences in competition law, data privacy, AI integrity and accuracy testing add complexity.

A shortage of resources — from talent to hardware to energy infrastructure — is pressuring innovation and growth. Nations and states are offering competing incentives to attract investment and create jobs as engineering advancements enable products that consume less resources than established peers.



Specialized hardware architectures must advance in sync with Al breakthroughs. Recent months have seen new strategic partnerships as Al builders optimize for speed, efficiency, flexibility and cost-effectiveness. Access to custom chips, robust data ecosystems and scalable platforms will likely determine which companies can scale Al most effectively.

Methodoloav

Enterprise architecture is changing as companies reconsider how hybrid cloud, modern data platforms, enterprise SaaS, AI models and agents integrate and map to business goals.

Base LLMs will likely coexist with Al agents as companies navigate the choice between leveraging foundational Al models to drive widespread market adoption or developing specialized, high-value Al-powered solutions tailored to specific needs.

Open-source AI democratizes access while proprietary solutions offer specialized, high-performance capabilities. Strategic planners must weigh cost, transparency, security and control when deciding whether to leverage community-driven innovation or retain exclusive IP advantages.

Current state

Disruptive trends

Introduction

Five interconnected trends are influencing operating model decisions



Foreword

Markets and ecosystems are expanding quickly

The rapid evolution of AI has forced technology companies to discover and serve new and underserved markets. In this expanded geography, everything from contextaware AI to hyper-personalization will likely drive new revenue streams.

New ecosystems are also being created. Whether one is a producer or a consumer of AI, AI systems enable partnerships to be built on more efficient and scaled platforms. In this intentional ecosystem, competitors may become collaborators, driving the creation of new developer communities.

Products are coming to market faster and at a lower cost

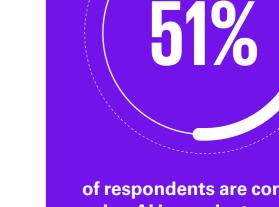
Value at stake

Al is already widely known to enable rapid prototyping, enabling swift new releases in near real time. At the same time, infrastructure and consumption costs are plummeting. Open-source frameworks and models have a cascading impact on companies building next-generation Al products, with increased code access, customization capabilities and developer collaboration.

S New SaaS is here to stay

Consumption and outcome-based models are the new norm, as traditional SaaS models are being redefined as new SaaS.

Companies that moved to traditional SaaS spent the last decade or more devoting significant effort to redefining their lead-to-cash processes and systems. These companies now must readjust lead-to-cash through the lens of consumption and outcome-based pricing models.



of respondents are consistently using AI in product and service development, enabling continuous innovation, tailored solutions and market differentiation

Source: The intelligent tech enterprise: A blueprint for creating value through Al-driven transformation, KPMG International, 2025

Humans and agents comprise a collaborative workforce

Agents and AI platforms are already deeply embedded in the workforce and workplace. Companies are observing a shift in culture, talent acquisition, evaluation and development processes, as they reimagine the employee experience beyond human-centric paradigms. For example, traditional interviewing techniques often cover scenario-based response testing as well as measurement of a candidate's alignment with company values. Similar tests are now being observed when evaluating AI agents to be implemented within organizations.

Just as human employees have detailed job descriptions, objectives and metrics, AI agents' roles in processes, functions or decisions are also being measured. Humans and agents may share the same goals — for example, humans may rely on AI to achieve better outcomes while AI agents are being evaluated on decision rationale and error correction.

5

Al is inspiring new operating models, but implementation is uneven

Al adoption is driving changes in how tech companies organize themselves. A majority, 53 percent, now report operating within a hybrid model that blends functional and agile approaches, reflecting the need for greater flexibility and responsiveness. Although it appears that AI has already made a significant impact on customer-facing functions like sales and marketing, its adoption in back-office operations remains limited. Less than half of respondents report notable AI-driven transformations in areas like HR, legal, finance or supply chain management.

The broad range of AI applications — spanning operations, customer service and marketing — makes it difficult to capture a holistic view of AI's impact. The companies we surveyed appear unprepared to map AI investments to clear outcomes: 44 percent of tech companies have yet to establish concrete ROI measures and another 44 percent are unable to measure AI scalability.

In response to these trends and uncertain tech battles, tech companies should reevaluate their operating models. This means aligning functional capabilities in ways that enable rapid experimentation and iterative learning, developing foundational enablers that support continuous evolution.

Only by structuring themselves for agility – organizationally and technologically – can tech companies remain positioned to capitalize on emerging opportunities as these systemic shifts unfold.



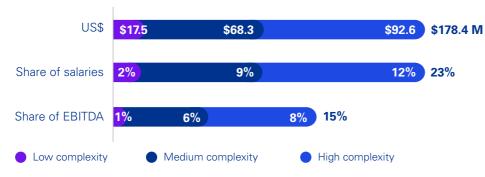
report operating within a hybrid model that blends functional and agile approaches, reflecting the need for greater flexibility and responsiveness

Source: The intelligent tech enterprise: A blueprint for creating value through Al-driven transformation, KPMG International, 2025

Value at stake

There is an immediate opportunity for tech companies to realize significant value by applying AI technology to operations.

Figure 4: Average annual Gen Al opportunity for the 832 technology companies



Source: Quantifying the GenAl opportunity, KPMG International, March 2025 Note: Percentages in the graph may be rounded to the nearest whole number.



Al should help us speed up our team to get things done, which means they can be more productive to either do more billable work or we operate with less headcount in the business. **99**

Methodolog

Chief Financial Officer — Australia

Despite being at the forefront of Al innovation, many technology companies have yet to unlock the full value of Al within their operations.

While they pioneer AI solutions for clients, their internal processes often remain reliant on legacy systems, manual workflows and fragmented data. This disconnect represents a significant missed opportunity. The ability to showcase AI-driven operational excellence within their own organizations strengthens credibility with clients, reinforcing the message that AI is not just a product to sell but a fundamental driver of business transformation and value.

By embedding AI into core operations, tech companies create a living proof of concept — demonstrating firsthand the measurable impact of AI on efficiency, innovation and profitability. In an increasingly competitive market, those that lead by example will not only differentiate themselves but can also help accelerate the broader adoption of AI across industries.

To guide clients' AI strategy and investments, KPMG in the US recently concluded an 18-month research project — Quantifying the Gen Al opportunity. The research evaluated the realistic value at stake from fully deploying and adopting Gen Al.

Over

17 million companies globally were assessed.

After looking in depth at

7,000 companies employing

72 million people and pressure-testing results with

500 clients,

the results conservatively equate to

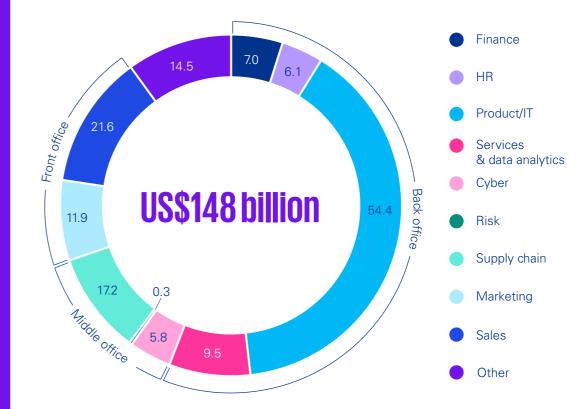
4–18% EBITDA* improvement in labor productivity alone.

The following chart reveals the potential value at stake within the technology sector.

*EBITDA = Earnings before interest, taxes, depreciation and amortization

Figure 5a: Gen Al opportunity by function: Tech enterprise (Values in US\$ billions)

Methodology



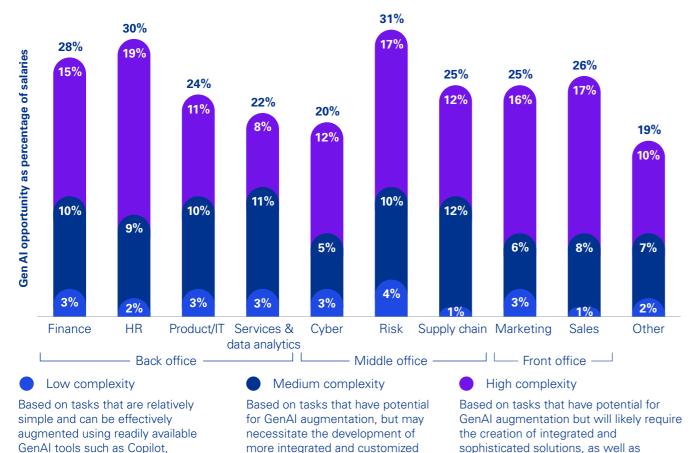
Source: Quantifying the GenAl opportunity, KPMG in the US, February 2025

comprehensive governance and change

management to enable adoption.

Methodology

Figure 5b: Gen Al opportunity, task complexity breakdown: Tech enterprise



op 10 areas of	opportunity:	Tech enterpris	e

01	Performance optimization	
02	Customer relationship management	
03	Operations execution	
04	Code generation and optimization	
05	Supply chain resource allocation	
06	Quality assurance testing	
07	Product performance analytics	
08	Data compression	
09	Data governance and compliance	
10	Product development	
Source: Quantifying the GenAl opportunity, KPMG in the US, February 2025		

Note: Figure 5b shows the Gen AI opportunity as a share of total salary cost by degree of complexity within each function for all 832 tech companies in the sample. The axis represents share of the Gen AI opportunity as a proportion of the total salary cost by degree of complexity within the function. Percentages in the graph were rounded to the nearest whole number.

Source: Quantifying the GenAl opportunity, KPMG in the US, February 2025

ChatGPT and other out-of-the-box

technologies.

solutions.

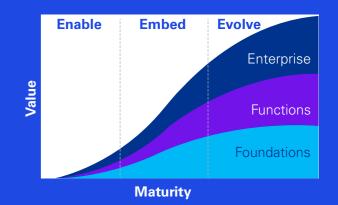
Foreword

Methodology

The journey to value

The pursuit of value in Al adoption is a journey, not a one-time initiative. KPMG has identified three distinct phases of value creation.

A structured model enables organizations to strategically invest in AI capabilities that drive growth, competitive advantage and long-term profitability. Rather than approaching AI as a fragmented set of experiments, this model helps businesses move from efficiency-focused automation (Enable) to process reengineering and scaled impact (Embed), and ultimately, to industry-defining innovation and ecosystem transformation (Evolve). This flexible framework balances adoption complexity with short-term efficiency gains and the need for longer-term innovation. It helps companies prioritize their efforts, allocate resources more intelligently, build capability and align AI initiatives with strategic objectives.



Enable

The Enable phase focuses on enabling people and building AI foundations. Organizations appoint a responsible executive, create an AI strategy, identify high-value use cases, boost AI literacy, align with regulations and establish ethical guardrails. AI pilots are launched across functions, while cloud platforms and pre-trained models are leveraged with minimal customization.

Embed

The Embed phase integrates AI into workflows, products, services, value streams, robotics and wearables, delivering greater value. A senior leader drives enterprise-wide workforce redesign, reskilling and change, embedding AI into operating models with a focus on ethics, trust and security. AI agents and diverse models are deployed, supported by cloud and legacy tech modernization, while enterprise-wide data enhances operations.

Evolve

The Evolve phase transforms business models and ecosystems, using AI and frontier technologies like quantum computing and blockchain to solve large sector-wide challenges. AI can orchestrate seamless value across enterprises and partners. Emphasizing ethics and trust with real-time security, this phase uplifts human potential with broad and deep workforce training, fostering a creative, innovative and value-driven future.

As tech companies transition through the three phases of value their architecture should evolve.

Our research illustrates that successfully implementing AI at scale in an organization involves a strategic, multilevel approach to help ensure seamless integration and enhanced benefits. This approach, which consists of a foundational layer, a functional layer and an enterprise layer, provides a structured blueprint for harnessing the full potential of AI technologies.

Phases of the Aljourney

Introduction

Focusing on maturity across the Enable, Embed and Evolve phases is critical for sustained value creation. It requires increasing the maturity of the capabilities that are vital to the foundations, functions and enterprise layers simultaneously.

Enterprise layer: This layer orchestrates transformational change of the whole enterprise, starting with how AI can adjust strategy, business models and key objectives. It defines enterprise-wide operating model shifts, workforce evolution, and risks and controls. The enterprise layer prioritizes AI transformation initiatives into a roadmap and runs a transformation office to help manage funding, track benefits and ROI, and adjust priorities dynamically to help maximize and sustain the value delivered.

Functional layer: This layer drives AI-enabled transformation across business functions, prioritizing customer-facing value streams and end-to-end enabling processes and workflows. AI applications, agents and robotics are embedded in the workflows. Functional operating model changes are delivered to realize potential benefits.

Foundational layer: This layer establishes the AI-first technology stack, including infrastructure, cloud and choices on chips. High-quality enterprise data needs to be curated, and diverse models are being deployed to handle domain-specific AI. An increased focus on cybersecurity for AI is needed as well as a plan for other emerging technology, such as quantum.

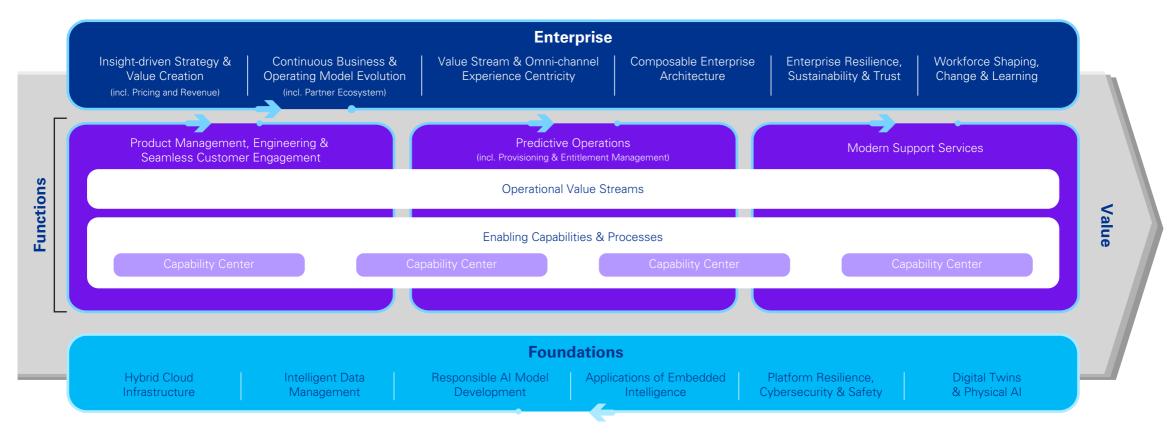
Enable Enable people	Embed Embed Al in work	Evolve the enterprise
	Enterprise	1
 Define highest-value use cases Model value opportunities Deploy in operating model Initiate early AI guardrails Invest in AI literacy Jumpstart an initial program 	 Align strategy and OKRs with AI Define value and investments Redesign operating model Strengthen trust in AI Reshape the workforce Orchestrate enterprise change 	 Define an ecosystem strategy Model value of the ecosystem Redesign business model Always-on AI trust platforms Extend with partner workforce Orchestrate ecosystem change
	Functions	
 Implement functional use cases Test and learn and refine Augment people with AI skills Treat AI as 'co-pilot'/'assistant' Focus on learning rapidly Build and deploy in sprints 	 Embed AI in value streams Embed AI in process workflows Embed AI agents as they mature Use AI to transform products and experiences Focus on end-to-end value flow Undertake agile change 	 Al powers ecosystems Al fuels interorganization workflow Deploy agents across ecosystems Evolve new experience possibilities Focus on end-to-end value outcom Continuous, agile change
	Foundations	
 Select AI strategic alliances Implement AI applications Configure and tailor Introduce simple models first Access AI through the cloud 	 Build an Al development 'factory' Select and train domain models Curate enterprise-wide data Invest in Al infrastructure Invest in increased cybersecurity 	 Deploy Al across ecosystem Compete using domain models Compete using ecosystem data Cloud with Al optimized chips Consider Al with quantum

© 2025 Copyright owned by one or more of the KPMG International entities. KPMG International entities provide no services to clients. All rights reserved.

The intelligent tech enterprise: A blueprint for creating value through Al-driven transformation | 18

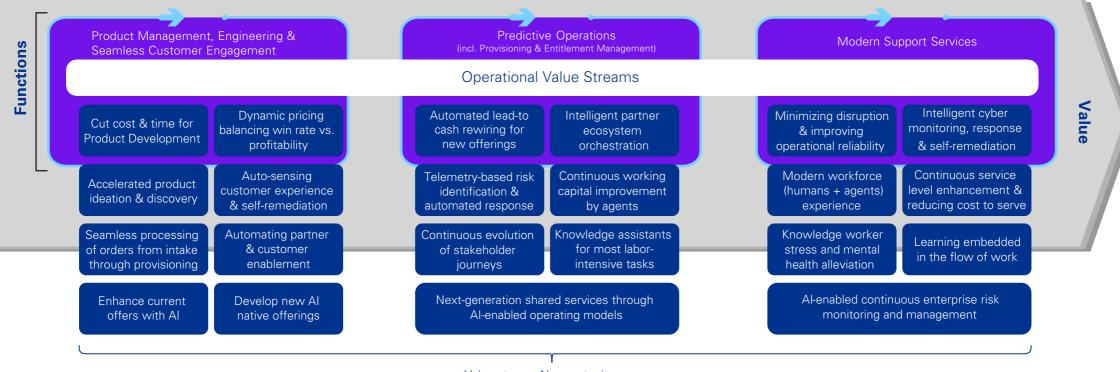
Blueprint of an intelligent technology company

This blueprint outlines key elements of a future-state Al-powered, customer-centric technology enterprise. The intelligent technology company leverages advanced technologies, personalized experiences, data-driven insights and automated operations to enhance efficiency, innovation and resilience. Focused on embedding intelligence across value streams, capability centers and processes, it helps ensure seamless customer interactions, robust risk management, intelligent product manufacturing and future-ready adaptability.



Let Al automate key operational value streams

To unlock its full potential, AI must be embedded into the end-to-end workflows that touch many different functions and parts of the company. These operational value streams define how work gets done, help breaking down silos and enabling access to all relevant data. Examples of how AI can impact key operational value-streams for technology companies are exemplified below. Over time, as agentic AI becomes more prevalent, we will likely see more complex tasks/processes that can be automated and the agents themselves can interact to find even more effective ways of collaborating.



Value stream AI opportunity areas

Case study Enable: Driving efficiency, building foundational capability

Elements of the multilevel blueprint are already emerging at a tech company in Australia, where employees are using AI to develop higher-quality code and boost back office productivity.

Current Al usage Early-stage Al adoption

The organization has started utilizing AI tools, such as tools from cloud providers and Copilot, to enhance coding efficiency and quality, optimize internal operations and improve customer outcomes. Developers are leveraging AI to produce higher-guality code with fewer bugs, and in backoffice functions to streamline tasks like email drafting and presentation creation. While adoption is progressing, Al integration remains in its early stages at the organization, with a controlled rollout rather than independent ad hoc experimentation.

Challenges

Addressing talent and training gaps in **Al implementation**

The organization faces challenges in Al adoption, including employee resistance, limited training and a shortage of skilled talent. The CFO notes that many senior leaders lack familiarity with AI, which can hinder its use in strategic decision-making. They also highlight that AI-skilled staff are hard to find due to the technology's relative recency. Furthermore, the rapid pace of Al advancements, combined with competitive and shareholder pressures to adopt AI, makes it challenging to plan long-term implementation and provide adequate staff training.

Organization Al outlook Expanding AI capabilities with strategic investments and knowledge sharing

The organization plans to significantly expand its AI capabilities over the next three years, reallocating research and development funds to invest in Al and attract top talent. The CFO expects that within the next 12 months, the organization will begin to realize benefits such as increased revenues and reduced headcount due to AI efficiencies. They acknowledge the need for leadership changes, more training and knowledge-sharing to build Al fluency across teams. Despite challenges, the company is optimistic about AI's potential to transform its business.

•

Case study Embed: Improving and aligning to unlock growth

To scale AI across the enterprise, a Japanese tech company is prioritizing data quality, governance and influencing AI policy.

.....

Current Al usage

The company has started to integrate AI tools into their work. They have made significant strides in adopting AI to streamline processes (i.e. HR using AI to identify talent and finance teams using AI to predict revenue). The CEO also recognizes the benefits of integrating AI tools into products, including large language models (LLMs) for reasoning and interactions, Al-driven customizations for customer personalization, and IoT integrations such as voice assistants. While it has not achieved 100 percent adoption, they see it benefiting them in the foreseeable future.

Overcoming data hurdles, ethical concerns and integration challenges

The organization faces challenges in scaling AI, including managing large data volumes, resource-heavy experimentation and distinguishing critical from non-critical deployments. Integrating Al with legacy systems, addressing ethical concerns like bias and managing high computational demands add further complexity.

To overcome this, the organization is focusing on improving data quality, training employees and fostering collaboration with startups, tech firms and governments. The organization works with the government to establish Al-related policies and regulations. Focus areas include ensuring compliance with privacy laws like GDPR, addressing biases in AI models, and defining the boundaries for Al usage in sensitive domains. They also provide input on how Al can be used for societal benefit. Their collaborative approach with governments highlights their role as a partner in shaping the ethical and practical frameworks for AI.

Organization Al outlook

The organization envisions a long-term and ambitious future for AI, focusing on innovation, sustainability, and responsible adoption. They plan to further integrate AI into operations and product development over a minimum five-year horizon, with increasing investments to modernize legacy systems and scale adoption.

For successful integration, engineers must handle technical aspects while leaders must deeply understand AI beyond optimization, focusing on its ethical implications and strategic potential.

Introduction

Methodology

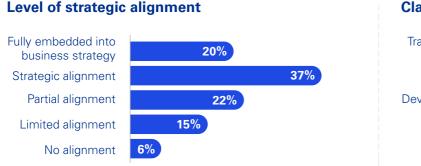
Key recommendations

Technology executives can take five actions to help accelerate their journey to value with AI.

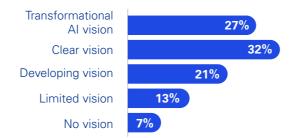
Disruptive trends

With AI capabilities and competitive dynamics evolving at a pace that can be hard to digest or predict, it may feel daunting to think about the future-state operating model. Nevertheless, there are several things that every tech company can do today that can help increase the chances of success, including refining your AI vision and strategy, building AI into key offers you sell today, putting governance in place to build trust in AI, securing access to the latest AI technology and most critical data, and starting to prepare your people for the workforce transformation journey ahead.

Figure 6: More than 40 percent of companies in our survey lack strategic alignment and clarity of vision on how to unlock Al's transformative potential



Clarity of vision



Architect a coherent, Alcentric vision and strategy



Build trust from the



Operationalize and evangelize

Al-enabled flows of work

To what extent (if at all) have leaders within your organization established strategic alignment on the adoption and implementation of Al? To what extent (if at all) does your organization's leadership have a clear vision of the way AI can be used to its benefit to help the organization transform within the next 5 years? n=183

Source: The intelligent tech enterprise: A blueprint for creating value through Al-driven transformation, KPMG International, 2025

5

Architect a coherent, Al-centric vision and strategy

The process of shaping vision and strategy isn't unique to AI but may be especially challenging to execute, given high degrees of market uncertainty, the disruptive nature of the technology and its cross-functional business impact. The AI strategy design must be focused on the biggest value pools today, yet flexible enough to rapidly adapt as markets and technologies evolve. We encourage taking an AI-first mindset to prepare your organization for the magnitude of change ahead.



A well-run corporation is like a Swiss watch with lots of little gears. If you wanted to make it digital, and you took out one of the gears and put a transistor in, it wouldn't be a great way to make it more digital. You have to have a holistic plan about how all the pieces fit together. **99**

Erik Brynjolfsson — Professor and Senior Fellow at the Stanford Institute for Human-Centered AI (HAI), Director of the Stanford Digital Economy Lab

Priority actions

Set vision and aspirations

Shape a compelling vision for the Al journey by tying strategic objectives to expected outcomes with a sense of urgency. Describe your starting position today, your desired future state and examples of how to close key gaps. Quantify key benefits and specific outcomes that you aspire to achieve over time. Tailor a compelling narrative for key stakeholder groups, with personally relevant rationale and urgency for change. Conclude by painting an emotionally compelling picture of what success will feel like at the journey's end.

Architect your transformation program and roadmap

While every program will be unique, most programs will include five types of transformation work streams:

- 1. Al strategy design, business case modeling, competitive intelligence and new business models;
- 2. Foundational efforts, including technology, data, trust and workforce transformation;
- 3. Functional initiatives, e.g. starting with scaling AI across two-to-four prioritized functions end-to-end;
- 4. Enterprise-wide efforts, e.g. embedding Al into prioritized cross-functional value-streams; and
- 5. Transformation leadership, including program governance, change support and value tracking.

Across all efforts, encourage an Al-first mindset to design for the future, not bolt Al onto the past.

Design Al-centric strategy

Methodology

Begin your AI strategy design by quantifying value pools, operational benefits, key competitive threats and opportunities. To avoid premature conclusions amid high market uncertainty, outline a range of strategic options and identify when and why to choose for future reference. Even if hard to specify in detail, define the critical aspects of the future business and operating models that will require most change. Consider partnerships and alignment with other players in your evolving ecosystem. Conclude with key barriers to success and how to overcome them to unlock AI's full value potential.

Energize leaders and partners

Design your change program, assuming this will be the largest change your organization has faced. Most knowledge workers will need to alter their daily routines, adapt to redesigned roles and processes, and collaborate with digital assistants/workers. Success requires executives, leaders and employees to be well trained and motivated. Appoint change leaders to model new behaviors and ensure psychological safety within their teams. Allocate sufficient resources and leadership time to support the transformation, remembering that key stakeholders include not only those within your organization but also your ecosystem of customers, partners and suppliers.

Build trust from the outset

No company can transform faster than the speed at which it builds trust. This requires compliance with evolving global regulations as well as a commitment to explainability, cybersecurity and risk mitigation. Al transformation will also be delayed if employees don't trust the AI tools, fear job losses or if customers doubt how your AI is interacting with their data.



We expect that [AI is] going to be a seismic change within the business [in] how our partners operate and how we operate and, most importantly, how our customers want to interact with the business [and] with the internet. **99**

Chief Data Officer — UK

Priority actions

Establish a trust committee

Establish an AI trust committee dedicated to embedding ethical principles into AI development and deployment.

This committee should consist of cross-functional teams, including ethicists, engineers and legal experts, to help ensure AI initiatives align with corporate values, regulations and societal expectations.

Implement decentralized AI governance models

Implement decentralized AI governance models that balance compliance with agility. A distributed governance structure allows different business units to maintain localized control over AI deployment while adhering to overarching corporate standards.

Develop autonomous data governance tools

Use AI to enforce real-time compliance, enhance data integrity and improve AI model accuracy. AI-driven data management can ensure that governance processes are proactive, adaptive and scalable.

Al can also be used to autonomously detect patterns and warning signs in employee usage of Al. It may also be used by the risk management team as a compliance testing tool, e.g. in internal audit.

Deploy real-time bias and explainability tools

Help users understand Al-driven outcomes as they occur. Bias and explainability tools should provide clear, user-friendly insights into Al decision-making processes, helping to mitigate bias, build trust and enable more informed interactions with Al-powered systems. These tools should uphold principles of fairness, integrity and security.

(1

Supercharge Al product intelligence

Design products for continuous AI learning and evolution. Embed AI deeply into product design, engineering and deployment, helping ensure real-time adaptability and intelligence. Also, consider taking a product approach in transforming internal functions.



Nobody knows for sure how agentic AI will impact LLMs and other types of AI. Most likely, agents will not replace all other types of AI; rather we will see an ecosystem of lots of AI technologies and tools growing, each adding distinct capabilities. **99**

Erik Brynjolfsson — Professor and Senior Fellow at the Stanford Institute for Human-Centered AI (HAI), Director of the Stanford Digital Economy Lab

Priority actions

Build Al-native products from the ground up

Embed AI as a core feature from the start with an AI-first mindset. Develop modular architectures that enable AI-driven functionality, such as real-time recommendations, adaptive automation and machine learning. In building new products, use AI to free up time in product engineering and shorten speed to market.

Enable continuous product learning

Integrate live AI feedback loops into products. Use real-time user data to fine-tune models, improve personalization and evolve features, enabling products to continuously adapt to changes in user behavior and market trends.

Leverage AI to enhance market data collection and testing demand for new products and services, e.g. using synthetic customer panels where AI mimics the preferences and observable behaviors of consumers.

Design for scalable AI evolution

Methodology

Build flexible, AI frameworks built for the future that support rapid experimentation, seamless model upgrades and integration of next-generation AI capabilities — helping ensure products stay cuttingedge without major overhauls. Use AI functionality, such as agents, to automatically test product feature combinations against evolving customer needs and requests.

Take a product approach to transformation

We are yet to see the entirety of the AI evolution play out. Instead of approaching internal transformations with a project mindset, consider applying a product approach to functional efficiency and reengineering.

Consider units in the future organization that consist of digital and human workers collaborating to solve a specific business need and who are jointly responsible for delivering a measurable outcome.

Scale Al operations with next-gen tech and data

Invest in providing the best AI to as many relevant users as possible, provisioning the necessary data and moving it closer to the AI models themselves. They need to stay updated on the latest AI developments to avoid falling behind — no easy task when the cost-performance ratio for LLMs is improving exponentially and AI agents are set to significantly enhance automation. Additionally, artificial general intelligence (AGI) may be only a few years away.

Navigating these choices — including what to build versus buy — requires tight alignment between engineering and business functions, strong internal cross-functional collaboration, and deliberate collaboration with a complex ecosystem of partners, including technology vendors, professional services providers and go-to-market channels.

66

It's too early for us to really understand the full power of AI. We're still in the exploration stage of finding out what it can do. **99**

Chief Technology Officer — China

Priority actions

Invest in intelligent cloud infrastructure

Adopting an intelligent cloud equips organizations with scalable infrastructure, cutting-edge AI and analytics tools, and secure, compliant environments, enabling innovation and the efficient integration of advanced technologies. The flexibility, cost management benefits and enhanced collaboration capabilities provided by intelligent cloud platforms allow businesses to rapidly experiment, deploy and adapt to new technological advancements.

Move data closer to LLMs — or vice versa

Make data more readily accessible to the computational resources of the LLM. By moving data closer to the LLM — whether geographically or through emerging strategies such as edge computing — you can achieve faster data retrieval, processing and response times, enabling your organization to increase efficiency, accessibility and overall performance. An alternative method is to move lightweight LLMs closer to the data, especially in potential edge use cases or when interacting with geographically dispersed OT technologies.

Take Al out of the lab and into the org

Autonomous systems are an important advancement, yet the potential of AI extends far beyond agentic. Tech companies must remain ready to test and implement new technologies as they emerge, so avoid confining them to isolated innovation labs. Instead, operationalize AI tools across departments and empower employees to discover if exciting innovations can create measurable business value.

Align engineering with business goals

Traditionally, engineering pursued autonomous innovation supported by large budgets. Today, a focus on profitability, consumer privacy and regulatory compliance necessitates a strategic shift. Engineers must balance innovation with corporate and social responsibility goals, so foster human-centered culture change with training and customized education that will help engineers adapt. Cross-functional collaboration, and focusing on strategic value over limitless innovation, helps ensure impactful outcomes.

5 Operationalize and evangelize Al-enabled flows of work

Tech companies face a significant challenge in balancing investments and talent between integrating AI into their products and services and leveraging AI to enhance their own operations. Surprisingly, many prioritize external applications over internal adoption, except for boosting software engineer productivity. This untapped opportunity is crucial to capture.

Winners will go beyond basic AI adoption to integrating AI into every key workstream, leveraging agentic AI to eventually reengineer them. By operationalizing their internal workflows, they can free up time and resources to enhance their AI-enabled offerings even faster and potentially find new opportunities to productize. Evangelizing benefits and discoveries with key customers helps them go faster and enhances your own growth.



The key challenge [is] about upskilling people... Not everybody is on the same level of technology, adaptation and maturity. **99**

Director of Al Strategy — Canada

Priority actions

Accelerate internal Al adoption

Tech companies must lead Al-driven workforce transformation by embedding Al into both customer and employee experiences. Focus less on identifying individual use-cases; instead, focus on groups of 10-100 users, learn how they spend their time, and support them as they discover the ways that Al tools can make them more productive. Leverage a portfolio of interventions to motivate and accelerate behavioral change, including Al champions, gamification and peerto-peer sharing. Focus on daily usage, not monthly.

Embed intelligent workflows in the operating model

Start by reimagining the flow of work through the lens of an intelligent company with a sizable Al-agentic workforce. Next, prioritize workflows by quantifying the value potential, competitive threat and operational risks. Assess your current processes and explore opportunities for several types of agents. Start introducing agents in prioritized areas and roll them out in phases, incorporating change management along the way. Test, letting agents restructure how they work together over time.

Structure the AI workforce transformation

Once your internal AI adoption is increasing, redefine employee roles to hardwire where to redirect time, prioritizing the highest return activities. Integrate AI into your current day-to-day business processes to enhance efficiency, decision-making and overall productivity. Learn how AI interacts best with human workers: This will be critical in designing an effective human-AI collaborative environment. Consider structural changes to create new ways of interacting with the power structure of your business.

Help customers close the AI skills gap

Share and evangelize your own AI transformation discoveries with your customers to stimulate demand, preempt competition and shorten time to purchasing decisions. Providing AI-enablement toolkits will help enterprises integrate AI into their operations with minimal friction, fostering seamless adoption and reducing technical barriers. Helping their employees adapt to new ways of working will enhance your business relationships and drive growth. Disruptive trends

Methodology

To gain a broad understanding of how leaders are navigating the opportunities and challenges of implementing AI, KPMG International conducted a robust research program involving multiple methodologies.

This included in-depth interviews with eight AI specialists spanning technology, government regulation and industry, as well as discussions with sector-specific KPMG specialists. We also tapped into our own experiences from helping KPMG clients on more than 500 AI engagements.

Qualitative research was conducted to uncover nuanced, industry-specific challenges and opportunities, such as insights from several industry experts, including Erik Brynjolfsson of Stanford University, a renowned authority on AI and digital transformation.

The research was further strengthened by a quantitative survey of 1,390 decision-makers across key global markets, including 183 respondents from the technology sector. These leaders shared their experiences and perspectives on overcoming barriers to Al adoption, from dismantling legacy systems to addressing organizational inertia.

In parallel, an 18-month research effort evaluated the realistic value at stake for fully deploying and adopting Gen Al.³ More than 17 million companies were analyzed, down to individual tasks for 2,000 roles. In total, we assessed more than three billion data points. Among these, 7,074 public companies were studied in more detail through collection of publicly available financial data, including close to 832 public companies in the technology sector. The data from our model is current as of 27 March 2025. The source data of our model will continue to improve and some of the data will refine over time.

Together, these inputs surface a clear roadmap for organizations to unlock Al's potential and drive meaningful, enterprise-wide change.

1,390

decision-makers across key global markets, including 183 from the technology sector

17 million

companies assessed to quantify the addressable opportunity for Gen Al, including 832 technology companies

³ Quantifying the GenAl opportunity, KPMG International, March 2025.

Introduction

Current state

Disruptive trends

Value at stake

KPMG professionals can guide your Al transformation with experience

With over 150 years of experience in helping our clients improve and transform their business, KPMG is positioned to help you uncover AI opportunities, work through critical business challenges and unlock new revenue streams.

KPMG has invested in an AI-enabled platform for organizational change. It brings together the best of our thinking, frameworks, strategies and tools. So, you can change smarter and move faster — eliminating inefficiencies and building trust and confidence, at every step.

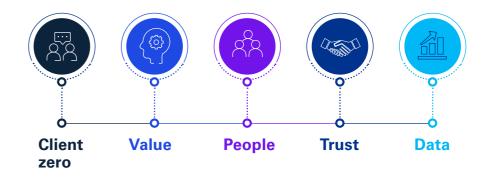
From AI strategy to implementation, we understand all the key barriers that stand between you and the tremendous value that AI can bring to your business. This includes the ability to quantify AI benefits and where they sit, to drive adoption and frequent use of new AI tools among your people. That builds trust in your transformation among all key stakeholders and helps ensure you have the technology and data infrastructure you need to scale.

Methodology

For each key barrier, we bring digital solutions with tested impact and happily share our "client zero" learnings from having gone through this journey ourselves. We guide you through your journey at a pace tailored for your unique starting position, taking impactful steps to address even the most complex challenges — all built on trust and uniting your people along the path.

Bold, fast, responsible

Accelerate the value of AI with confidence



Current state

Introduction



Foreword

Define your Al goals, identify opportunities and risks, and create a tailored strategy and execution plan. Build a business case with clear metrics to secure investments and help ensure measurable success by scaling AI for enterprise-wide impact and building lasting capabilities.



Empower your workforce with Al

KPMG AI-enabled Workforce solutions deliver personalized adoption and upskilling experiences, helping your team transform the functions of your business, embrace generative AI and infuse it into everyday work.



Ensure Al trust and compliance

Scaling AI introduces complexities and risks. KPMG Trusted AI Framework teams can help ensure your Al solutions are ethical. secure and compliant. Our Trusted AI Framework, built on 10 ethical pillars, can empower organizations to boldly deploy AI responsibly, transparently and with confidence.

Kev recommendations



Methodology

Build a sustainable Al technology and data infrastructure

Leverage KPMG professionals' experience to integrate AI frameworks, platforms and accelerators. helping you ensure your technology infrastructure is ready to scale AI initiatives.

We help clients harness the power and potential of Al. From strategy to implementation. Small steps to solving seemingly impenetrable problems. Underpinned by trust.

You can discover endless opportunities with Al. You can with KPMG.

About the authors



Chad Seiler Partner, Advisorv TMT Sector lead for Consulting KPMG in the US

Chad is KPMG's Technology, Media and Telecom (TMT) Consulting Industry Leader, helping major TMT clients solve business challenges and achieving sustained value. With 28 years at KPMG, including 25 in Silicon Valley, he brings extensive experience to his role.



Prasad Jayaraman Principal, Advisory Al Disruption leader KPMG in the US

Prasad is a principal in KPMG Advisory Services with over 25 years of experience in business and technology. As the leader of the Al Business Model Disruption team in the US, he specializes in driving innovation by fostering ecosystems of cutting-edge startups and translating emerging market trends into actionable strategies. Prasad is particularly focused on creating new revenue pathways through the productization of service offerings, blending evolving opportunities with practical execution to deliver measurable results.



Global AI Sales Acceleration Leader **KPMG** International

Pär leads efforts in navigating the generative AI disruption for the Advisory practice globally and for the TMT sector in the US. He recently concluded five years on the board of KPMG in the US, where he chaired the Board Committee in the US overseeing AI initiatives bringing 30 years of strategy consulting and executive experience.



Jeanne Johnson Global Consulting lead for **Customer and Operations KPMG** International

Jeanne has extensive experience in strategic planning, performance management, program portfolio management, business and technology architecture, and deploying new operating models. Jeanne also serves on the KPMG in the US Board and chairs the Operations and Technology Committee overseeing our Al Strategy and transformation.



Methodology

Vijay Subramanyam Principal, Advisory TMT Transformation Leader KPMG in the US

Vijay leads the transformation offering for the tech sector for KPMG in the US, supporting transformation programs at major companies. He specializes in strategic initiatives and innovative projects involving AI, emerging technologies, enterprise systems, business model changes, data centers, cybersecurity and enterprise architecture.



Adrian Clamp Global Head of **Connected Enterprise KPMG** International

Adrian is the Global Head of Connected Enterprise at KPMG International, which focuses on customer-centric and agile digital transformation. With over 30 years of experience in leading complex technology change, he specializes in large-scale digital transformation projects, utilizing advanced technologies like AI to unlock value in large organizations.

Contributors

We could not have created this report without the support, knowledge and insights of AI experts and KPMG professionals around the world who contributed their time to this report. Thank you to:

External contributors

Erik Brynjolfsson

Professor and Senior Fellow at the Stanford Institute for Human-Centered AI (HAI), Director of the Stanford Digital Economy Lab

Editorial board

Leanne Allen

Partner, FS Consulting Technology and Data, Data Science & Al Capability Lead KPMG in the UK

Lisa Bigelow

Managing Editor, Advisory Insights KPMG in the US

Gerrit Bojen

Partner, Head of Technology & Finance Consulting, Financial Services KPMG Deutschland

Rebecca Brokmeier

Principal, Advisory, Corporate Finance KPMG in the US

Sam Burns

Global Chief Marketing Officer KPMG International

Swaminathan Chandrasekaran Head of US AI Center of Excellence

KPMG in the US

David Conway

Senior Associate Director Customer Excellence Centre KPMG in the UK

Melany Eli

Managing Director, Head of Functional Marketing and Al-led Campaigns KPMG International

Benedikt Höck Head of Artificial Intelligence KPMG in Germany

Scott Marshall Al-enabled digital transformation KPMG International

Joseph Parente Principal, Al Consulting Leader KPMG in the US

Jeff Potter Head of Advisory Insights KPMG in the US

David Rowlands

Global Head of Artificial Intelligence KPMG International

René Vader Global Markets Al Lead KPMG International

Sector editorial group

Chad Seiler Partner, Advisory TMT Sector lead for Consulting KPMG in the US

Pär Edin Global AI Sales Acceleration Leader KPMG International

Vijay Subramanyam

Principal, Advisory TMT Transformation Leader KPMG in the US

Prasad Jayaraman

Principal, Advisory Al Disruption leader KPMG in the US

Jeanne Johnson

Principal, Advisory and Global Consulting lead for Customer and Operations KPMG International

Adrian Clamp

Global Head of Connected Enterprise KPMG International

Contacts

Mark Gibson

Global Head of Technology, Media & Telecommunications KPMG International mgibson@kpmg.com Chad Seiler Partner, Advisory and TMT sector lead for Consulting KPMG in the US cseiler@kpmg.com

Pär Edin

Global AI Sales Acceleration Leader KPMG International pedin@kpmg.com René Vader Global Markets Al Lead KPMG International rvader@kpmg.fr

Anna Scally EMEATMT sector lead KPMG in Ireland anna.scally@kpmg.ie Simon Dubois ASPAC Tech sector lead KPMG Australia sdubois@kpmg.com.au

kpmg.com/intelligenttechnology



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2025 Copyright owned by one or more of the KPMG International entities. KPMG International entities provide no services to clients. All rights reserved.

KPMG refers to the global organization or to one or more of the member firms of KPMG International Limited ("KPMG International"), each of which is a separate legal entity. KPMG International Limited is a private English company limited by guarantee and does not provide services to clients. For more details about our structure please visit <u>kpmg.com/governance</u>.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.

Throughout this document, "we", "KPMG", "us" and "our" refers to the KPMG global organization, to KPMG International Limited ("KPMG International"), and/or to one or more of the member firms of KPMG International, each of which is a separate legal entity.

The views and opinions [of external contributors] expressed herein are those of the interviewees and do not necessarily represent the views and opinions of KPMG International Limited or any KPMG member firm.

KPMG's participation and contribution in this regard is not an endorsement, sponsorship or implied backing of any company's products or services.

Designed by Evalueserve.

Publication name: The intelligent tech enterprise: A blueprint for creating value through AI-driven transformation

Publication number: 139919-G | Publication date: April 2025