



Intelligent industries

A blueprint for creating value through AI-driven transformation

Executive summary

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Many organizations are enthusiastic about the potential of artificial intelligence (AI), with early evidence pointing to strong returns on investment. However, they often struggle with effective implementation due to outdated legacy systems, entrenched working practices, concerns around AI-specific risks and regulatory compliance and a shortage of skilled talent — barriers that can significantly slow progress.

The intelligent industries research includes:

A quantitative survey of

1,390

decision-makers.

10

additional interviews with AI sector-specific professionals.

Expert interviews with

8

AI experts across AI technology, government regulation and industries, as well as discussions with sector-specific KPMG specialists.

8

key markets

Australia, China, Germany, the UK, Canada, France, Japan and the US.

8

industry sectors

Banking, Energy, Healthcare, Industrial Manufacturing, Insurance, Life Sciences, Retail and Technology.

Executives increasingly recognize that unlocking AI's full potential requires a fundamental redefinition of strategy, culture and operations. To support this transformation, KPMG International has conducted a comprehensive research series spanning eight industry sectors, uncovering the strategies executives are using to overcome legacy constraints and position their organizations for an AI-driven future.

AI is not a fleeting trend — it is an accelerating force reshaping industries at an unprecedented pace. The next evolution, autonomous agentic AI, will redefine customer interactions, operational efficiency and decision-making. Leading organizations are not waiting; they are actively preparing now to harness the power of AI-driven autonomy and secure a competitive edge.

The research reveals that effective AI implementation can create substantial value, optimizing operations, enhancing customer experiences, enabling data-driven decision-making, accelerating innovation and unlocking new revenue streams. However, we find that realizing this value requires visionary leadership, a clear AI roadmap disciplined investment, data readiness and a culture centered on empowerment.

With these capabilities, organizations can evolve beyond efficiency gains to achieve strategic transformation, positioning themselves to capitalize on AI as a powerful driver of long-term growth and market leadership.

In this report, enterprises gain insights into the three phases of AI transformation: Enable, Embed and Evolve. Each phase outlines critical steps for integrating AI into business processes and fostering a culture of innovation.

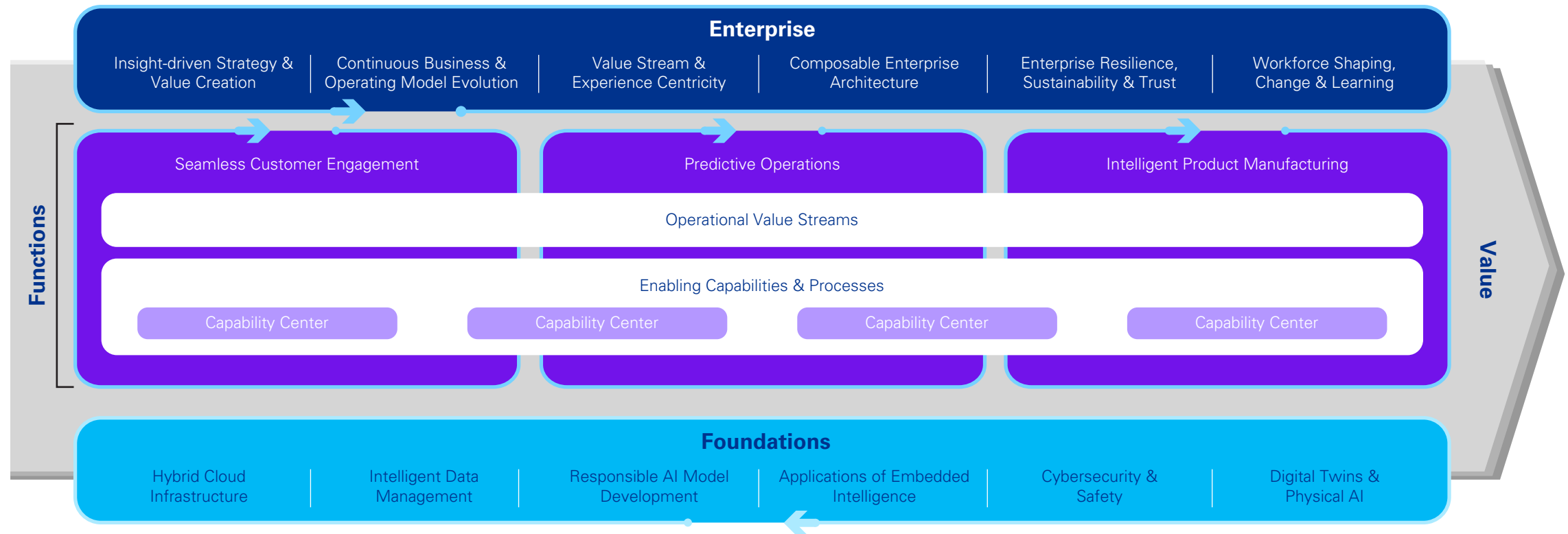


The next 10 years will be the biggest business transformation in all of history when the applications of AI get more wide-spread we will see the economy-wide productivity growth rate at least double. ”

Erik Brynjolfsson — Professor and Senior Fellow at the Stanford Institute for Human-Centered AI (HAI)

Blueprint for an intelligent industry

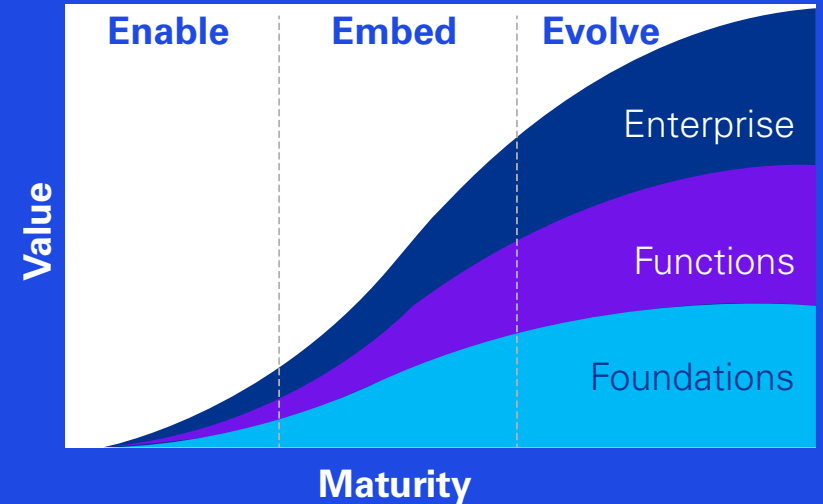
This blueprint outlines some of the key, high-level capabilities for an AI-powered, customer-centric enterprise. An intelligent industry leverages advanced technologies, personalized experiences, data-driven insights and automated operations to enhance efficiency, innovation and resilience. Focused on embedding intelligence across value streams, capability centers and processes, it ensures seamless customer interactions, robust risk management, intelligent product manufacturing and future-ready adaptability to thrive in the intelligent economy.



The journey to become an intelligent industry

Effective AI-enabled transformation goes beyond technology implementation. By examining leading practice, we have identified that enterprises can increase capability and value across three phases of AI transformation.

This provides a structured yet flexible framework for navigating the complexities of AI adoption. It balances the need for short-term efficiency gains with the imperative to prepare for future growth and innovation. It helps enterprises prioritize their efforts, allocate resources effectively, build capability and align their AI initiatives with both short-term goals and long-term 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, re-skilling 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 evolves 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.

A company may have a portfolio of initiatives aimed at any level (of the operating model) within each phase. The ratio of effort and investment across the phases will vary as the organization matures. Initially, most resources will focus on phase one, with a small effort to explore enterprise-wide transformation. Over time, as foundational efficiencies are realized more effort is invested in phase two, while, with an eye on the future, long-term investments in phase three start to lay the groundwork for transformative innovation. This dynamic balancing act can help ensure enterprises achieve immediate results while setting themselves up for future success.

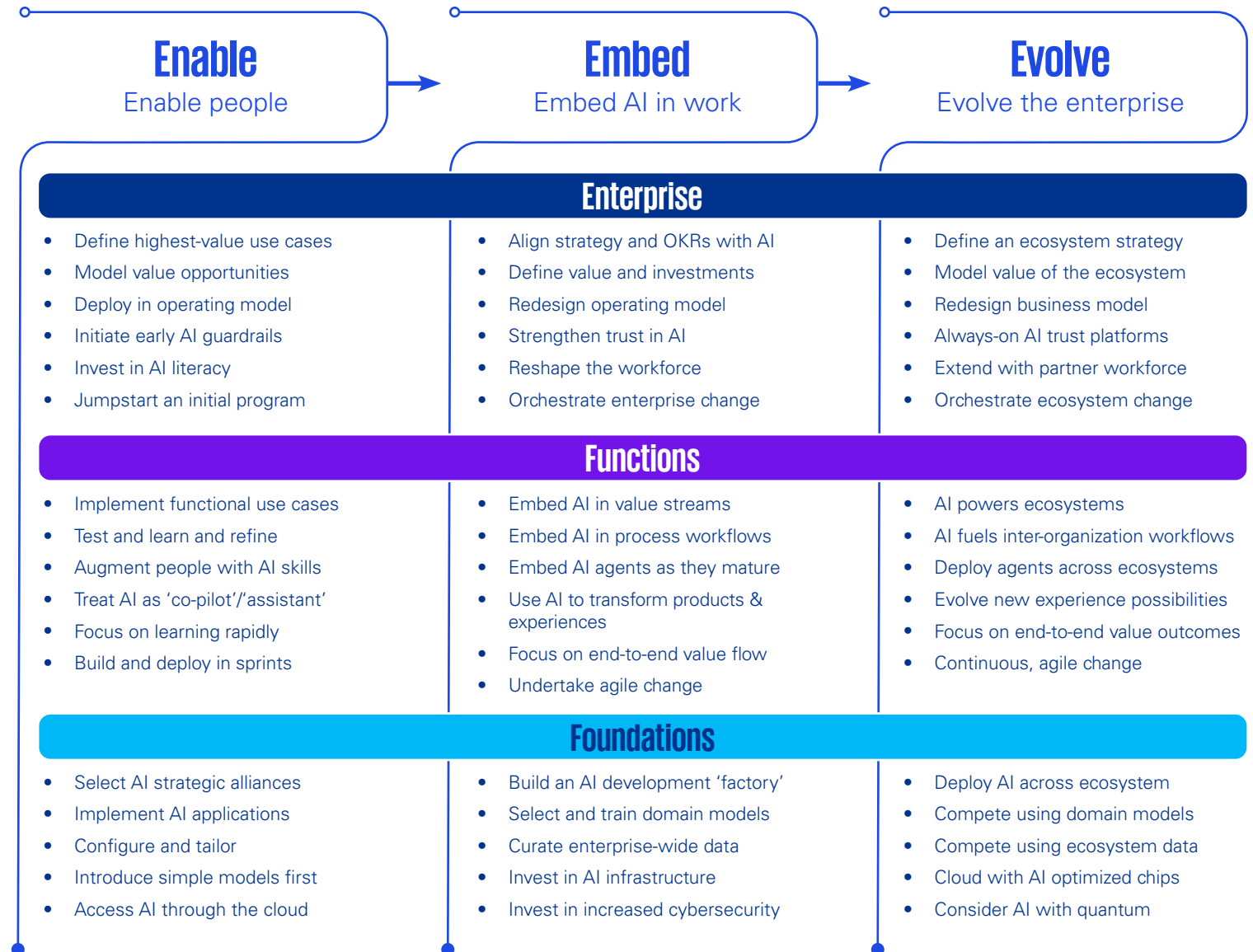
Phases on the AI journey

Focusing on maturity across the three phases — Enable, Embed and Evolve — 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.

At the enterprise layer, increased AI maturity involves orchestrating AI across functions to enable enterprise-wide innovation and strategic alignment. Without a balanced focus on all three layers, organizations risk missing opportunities for transformation.

At the functions layer, AI should be embedded into key value streams, optimizing specific processes and creating improved outcomes, such as more compelling products and services and more engaging, end-to-end employee and customer experiences.

At the foundations layer organizations should build up the new AI-first technology stack, through a process of technology modernization. Infrastructure, data, models and applications can all become optimized for delivery of AI.



Key considerations

By strategically aligning with each phase and preparing for unknowns, firms can navigate this transformative journey with confidence. In preparing for this future there are four things executives need to do as they create a value-centered, AI-driven enterprise:

1

Design an AI strategy that aligns with core competencies and unlocks value

Enterprises should establish a bold vision for AI that aligns with their core strengths and long-term strategic objectives. This vision should serve as the foundation for a transformation roadmap that redefines how AI drives growth, innovation and operational excellence while ensuring accountability for measurable results. By aligning AI initiatives with key business priorities — such as enhancing decision-making, optimizing processes and delivering hyper-personalized experiences — organizations can maximize ROI and build a sustainable competitive advantage.

2

Build trust into the transformation roadmap

AI introduces unique risks to enterprises that can undermine trust, meaning proactive risk management critical from the outset. Enterprises should address data privacy and security challenges, helping ensure compliance with financial regulations while protecting sensitive customer information. Combating algorithmic bias and adopting explainable AI systems that regulators, customers and internal stakeholders can trust is critical.

3

Create sustainable technology and data infrastructure for AI adoption

Data is a critical strategic asset and the foundation for all AI initiatives. Enterprises should build a robust data governance framework, focusing on quality, integration and security, while also creating a foundation for long-term scalability. This includes investing in enterprise-grade AI infrastructure that can support high volumes of transactions, complex risk models and real-time decision-making.

4

Build a culture that uses AI to uplift human potential

A multifaceted talent strategy that balances retention with upskilling is a key priority. Academic institutions, fintech startups and innovation hubs can inject fresh perspectives and enhance workforce capabilities. Immersive AI training programs help to drive innovation in customer experiences and operational models, diversify hiring pipelines and enable transformative outcomes.

Preparing for an AI future

Organizations should look beyond mere incremental improvements and instead envision a future where technology enhances customer experiences, optimizes operations and fosters innovative business models. This requires leaders to engage in thorough strategic analysis, including scenario planning to understand how technology might alter the competitive landscape.

AI is not a passing trend; it is an accelerating force that will continue to evolve and disrupt. To navigate this reality, enterprises should take no-regrets actions — foundational investments in scalable infrastructure, data governance and AI-friendly operating models — that position them to capitalize on future breakthroughs. These actions can help ensure that when the technology advances, they are ready to integrate, adapt and thrive. Inaction is not an option; enterprises must balance the perceived risks with the transformative potential of AI to remain competitive and relevant in a rapidly changing financial landscape.

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