

AI at the core

From AI projects to profits

How agentic AI can sustain financial returns

How IBM can help

Clients can realize the potential of AI, analytics, and data using IBM's deep industry, functional, and technical expertise; enterprise-grade technology solutions; and science-based research innovations.

For more information about AI services from IBM Consulting, visit ibm.com/services/artificial-intelligence

For more information about AI solutions from IBM Software, visit ibm.com/Watson

For more information about AI innovations from IBM Research, visit research.ibm.com/artificial-intelligence

Contents



Introduction

4

The AI ROI reset

6

Orchestrating transformation with agentic AI

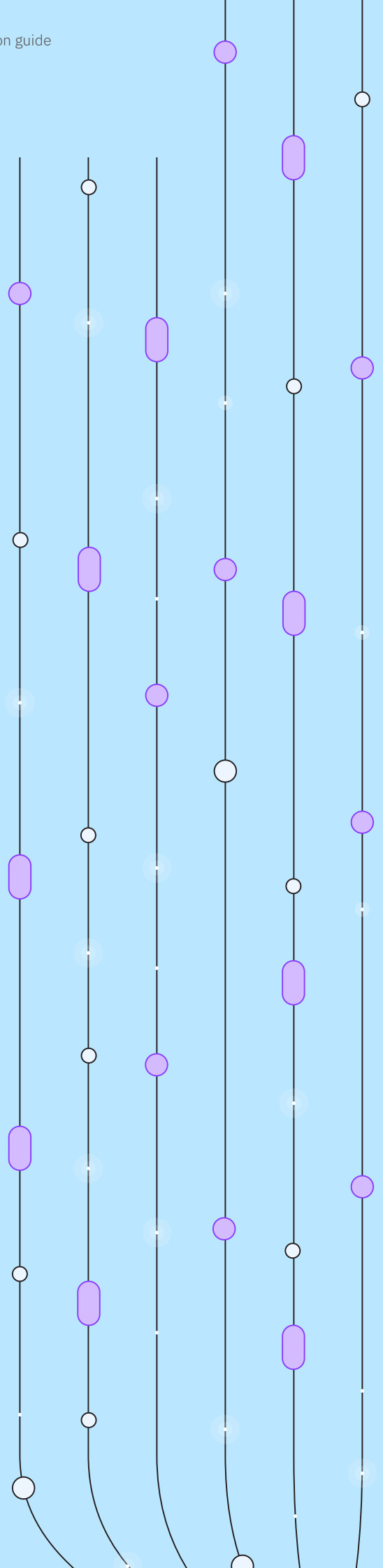
12

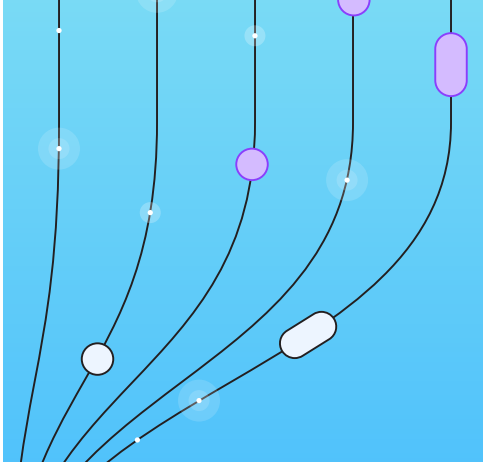
At the crossroads

18

Action guide

24





Key takeaways

“AI-first” organizations with established AI patterns are driving greater operating profit improvement, suggesting that AI maturity is spurring outsized top-line growth as well as operational efficiency improvements.

- The generative AI landscape has had a reality check—but AI more broadly is showing sustainable financial impact.

Projects that once boasted spectacular short-term gains likely attributable to pilots have settled into a more pedestrian 7% ROI for those projects that have scaled, consistent with prior AI cycles.¹ Yet operating profit improvements attributable to AI have shown consistent growth, indicating an increase in the actual value delivered by AI to shareholders.

- AI-enabled workflows—many driven by agentic AI—are poised to expand from 3% in 2024 to 25% by 2026, and investment in AI continues to rise.

The eightfold increase in AI-enabled workflows suggests not just incremental improvement but a fundamental rethinking of business processes across functions—as reflected in the sustained rise of AI investment, which has grown to about 12% of IT spend. This suggests that business and AI senior executives remain convinced of AI’s long-term transformative potential.

- Organizations with robust foundational AI capabilities and a transformational mindset continue to outpace their peers across key AI business metrics.

These “AI-first” organizations with established AI patterns are driving greater operating profit improvement, suggesting that AI maturity is spurring outsized top-line growth as well as operational efficiency improvements.

Introduction

The initial euphoria surrounding generative AI has given way to a more nuanced, realistic understanding of its potential and challenges, not dissimilar to what we observed following the exuberance over the initial use of deep learning.² This latest shift, however, seems to reflect a maturation in how organizations approach implementing various forms of AI and their business impact.

To learn more about these evolving dynamics in AI, including the latest focus on agentic AI, the IBM Institute for Business Value (IBM IBV) fielded two executive surveys in partnership with Oxford Economics. The first covered 2,500 executives spanning 18 industries and 19 regions, representing over 19 job roles. The second included 400 executives spanning 15 C-suite roles across 11 industries and six countries (see “Research methodology” on page 27). Our research found three distinct trends related to how enterprises are approaching this most recent stage in their AI journeys.

First, our research reveals a new way of thinking about AI as organizations reconcile ambitious expectations with practical realities—including a shift from short-term, project-based ROI measurements to what actually impacts the company’s bottom line.

Second, we explore the emergence of agentic AI—autonomous systems capable of orchestrating complex workflows with a pertinent, personalized human partnership—the latest variation of AI technology and its impact on business and society.

Finally, we document diverging paths between organizations that implement AI with robust capabilities—demonstrating superior outcomes across AI-related revenue growth, operating profit, and customer satisfaction—compared to those pursuing fragmented approaches.

As Dennis Empey, the CFO of Trinity Healthcare, says, “When I was growing up, I always watched Star Trek and all the fancy stuff they did. It’s getting closer and closer to reality, and that’s going to be through AI.”

The analysis is clear: AI has become a material contributor to financial performance, although organizations need to maintain their focus—especially through the economic J-curves³ of the latest AI technologies.



“When I was growing up, I always watched Star Trek and all the fancy stuff they did. It’s getting closer and closer to reality, and that’s going to be through AI.”

Dennis Empey, CFO, Trinity Healthcare

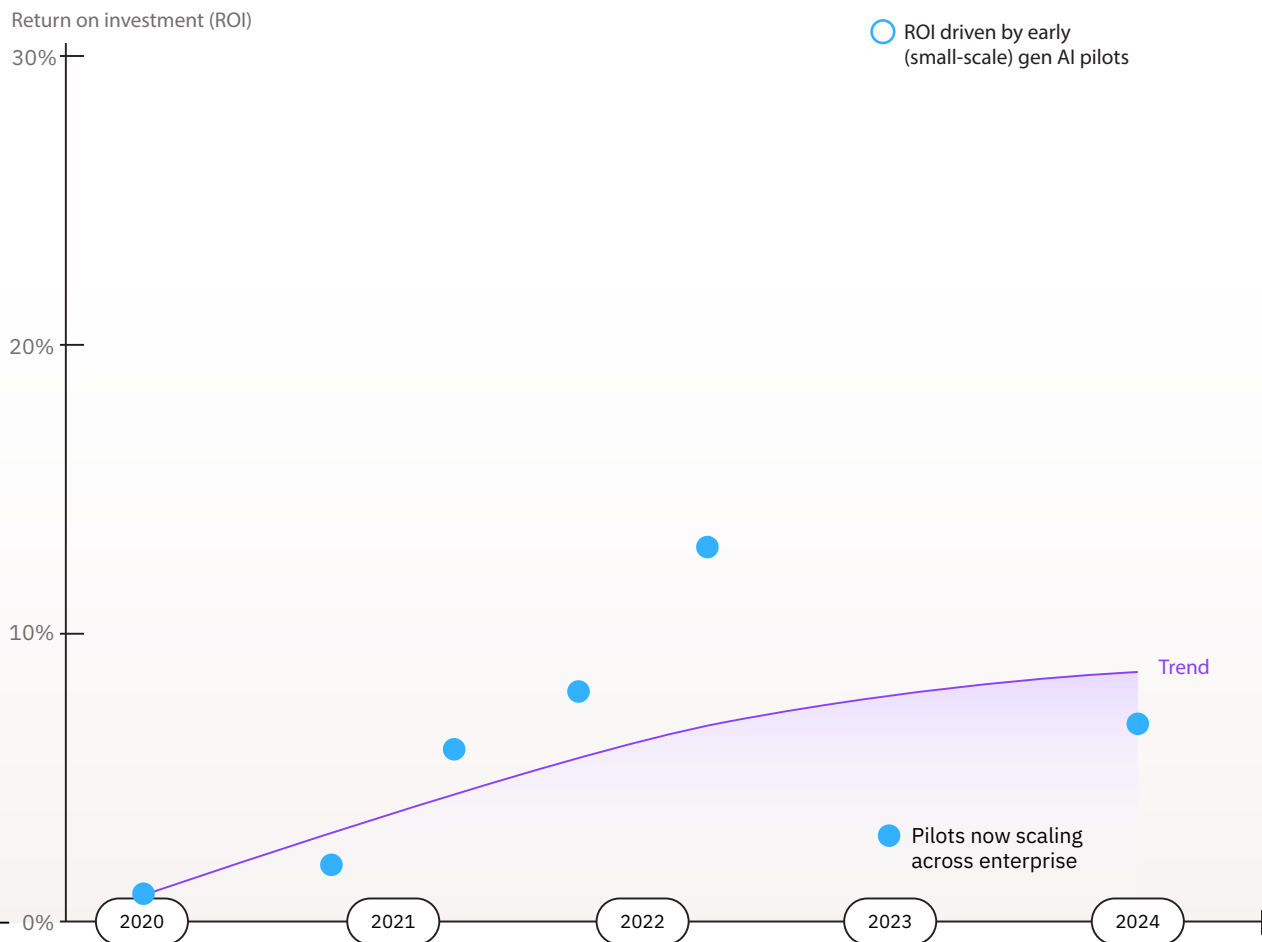
The AI ROI reset

A shifting focus from projects to profit

In the heady early days of generative AI, the technology seemed poised to deliver an economic windfall with minimal effort. In 2023, corporate executives rushed to implement pilots that promised—and initially delivered—eye-watering returns of 31%. But even as the champagne corks were popping, a more complex reality was evolving.

Figure 1

Return on AI investments had been surging—but as small gen AI pilots have scaled across enterprises, returns have reset to more modest levels.



Note: S-curve trendline excluding outlier (31%)

Source: IBM Institute for Business Value

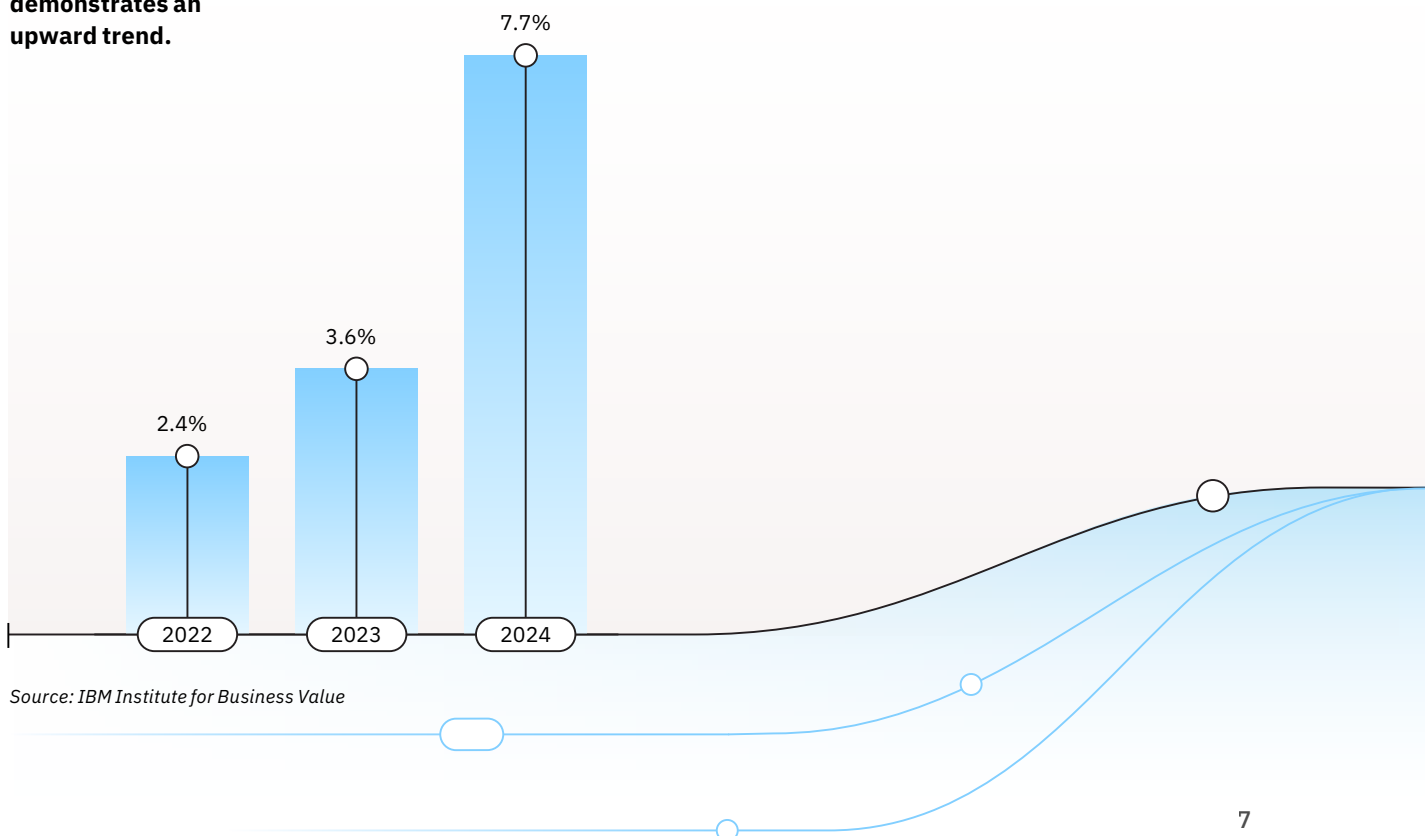
Enterprises are no longer reporting stratospheric ROI from generative AI pilots; as pilots scale, those returns have fallen back to earth. Projects that once boasted spectacular short-term gains have settled into a more pedestrian 7% ROI—notably shy of the approximately 10% cost of capital that serves as a typical capex hurdle rate (see Figure 1). Over the past three years, CEOs say only 25% of AI initiatives have delivered expected ROI, increasing the pressure on business and technology leaders to demonstrate financial impact.⁴

However, the top decile of organizations has achieved ROI of approximately 18%—well above the cost of capital—so higher returns are indeed achievable.

More tellingly, organizations report sustained growth in operating profit improvements attributed to AI since 2022 (see Figure 2). That’s not just a theoretical business case brought to a CFO to greenlight a project, but bottom-line impact delivered to shareholders.

Figure 2

AI’s impact on operating profit improvement demonstrates an upward trend.



Organizations also are redirecting their AI investments toward core functions, which now command 64% of AI budgets compared to 36% for non-core activities (see Figure 3). This reallocation suggests a growing sophistication: a recognition that AI delivers its most compelling value when applied to central business operations rather than peripheral processes.⁵

Working at the core is much more complicated than grabbing low-hanging fruit around the periphery, which may help explain why the pivot to core functions is concurrent with a decrease in ROI. Long term, the core should deliver far more scale and sustainable returns, but it requires more coordination to get moving.

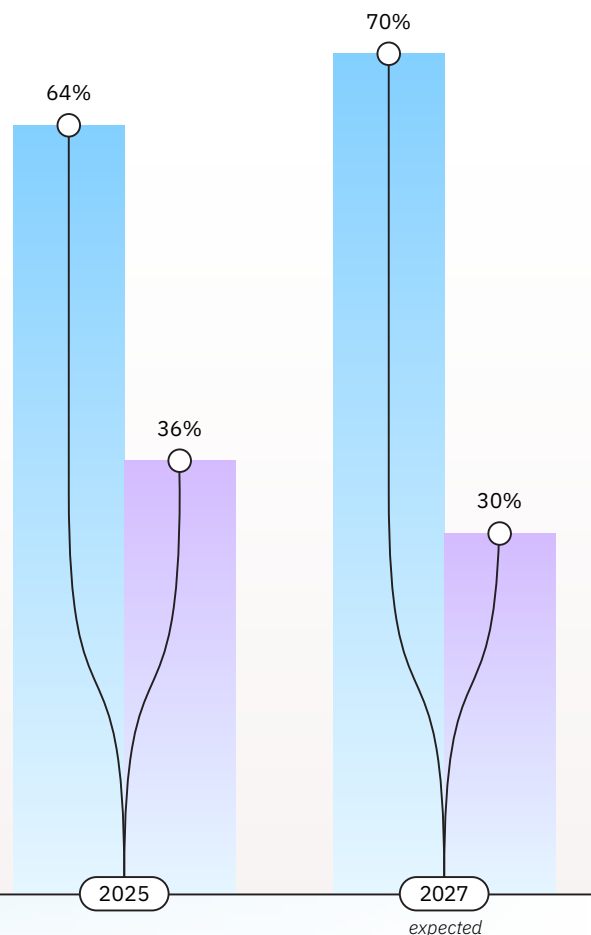
Across organizations, experience has brought wisdom. Only 6% now pursue AI in an ad hoc fashion, down from 19% a year earlier.⁶ This shift reflects a broader trend toward strategic implementation across horizontal functions, industry vertical workflows, products and services, and even business models. Companies have begun to recognize that scattered pilots, while sometimes instructive, cannot deliver the systematic benefits that come from coordinated, enterprise-wide approaches and trusted data.

Figure 3

Organizations expect to redirect more AI investments toward core functions.

AI investments in core vs. non-core functions

- **Core functions**
are integral to the organization's competitive advantage and are typically directly linked to its value proposition and market differentiation.
- **Non-core functions**
typically support core operations, but they can often be outsourced or handled by specialized internal teams.



Source: IBM Institute for Business Value

Yet for all this progress, more opportunity remains.

As Azaz Rasool, Director AI & Data Strategy, Al Rajhi Bank, Saudi Arabia, notes: “The biggest challenge we faced is how to integrate AI with the legacy systems, and the challenge is not just technology. It’s also process- and people-related. In one project, I have experienced that something that technologically could have been done in a couple of months took more than a year. Why? Because of a lack of alignment among different teams and broken processes.”

Fewer than a quarter of organizations are reimagining their workflows with AI at the center, as a core engine for growth in their products, or fundamentally reimagining their business models (see Figure 4).

This cautious incrementalism may represent a significant missed opportunity. AI’s greatest potential lies not in making existing processes marginally more efficient, but in enabling entirely new approaches to value creation and delivery.

For now, the AI revolution continues its march not with the drama of dizzying early predictions but with the steady determination of a technology finding its proper place in the corporate arsenal—less miraculous perhaps, but ultimately more meaningful. The advent of agentic AI, as discussed in the next section, is a significant step in that direction.

AI’s greatest potential lies not in making existing processes marginally more efficient, but in enabling entirely new approaches to value creation and delivery.

Figure 4

Most organizations are missing the opportunity for end-to-end transformation with AI.



Only

23%

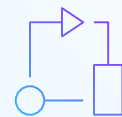
of respondents say their organization is leveraging AI for **reimagining** of their business model.



Only

22%

of respondents say their organization is leveraging AI as a **core engine** for products and services innovation.



Only

22%

of respondents say their organization is leveraging AI for **end-to-end transformation** of workflows.

Source: IBM Institute for Business Value

Case study

Revolutionizing colorectal cancer detection— The Informed Genomics and CanSense Partnership⁷

Informed Genomics, a UK-based genomics pioneer, has partnered with CanSense to develop an innovative, noninvasive blood test for colorectal cancer detection. This collaboration addresses critical challenges in cancer diagnosis, as colorectal cancer causes 700,000 deaths globally each year while 54% of cases are preventable with early detection.

The partnership leverages CanSense's AI-powered technology deployed on an IBM AI-powered platform to ensure model reliability and transparency. The solution, called CanSense–CRC, analyzes blood samples using spectroscopy and proprietary AI to detect cancer markers, significantly improving the diagnostic process.

This technology addresses healthcare bottlenecks by enabling clinicians to triage colonoscopy waiting lists, focusing resources on highest-risk patients. The noninvasive blood test offers a faster, less expensive alternative to traditional colonoscopies, which are struggling to meet increasing demand.

As Informed Genomics prepares to deploy the solution from its UK laboratory, CEO Simon Davis highlights: "Knowing that CanSense constantly monitors its AI performance with IBM solutions gives us confidence that we will be able to bring this to market successfully and prove its efficacy to industry regulators."

By combining cutting-edge spectroscopy, AI, and IBM's technology infrastructure, this partnership demonstrates how innovation can transform cancer diagnostics to enable earlier detection, personalized treatments, and improved patient outcomes.

Key success metrics include:

- Potential NHS savings of £300 million annually through enhanced colorectal cancer treatment pathways
- Reduced diagnosis timeline from weeks to days
- High sensitivity (90%) to help ensure accurate results.

Case study

AI-powered safety: Edsvärd Hållbarhet and IBM's construction industry solution⁸

A tragic local construction accident sparked Swedish company Edsvärd Hållbarhet to explore a potentially lifesaving question: could AI prevent similar incidents from happening again? This vision led to an innovative partnership with IBM Client Engineering to address the construction industry's alarming safety statistics.

The challenge was substantial. Construction consistently reports the highest number of work-related incidents and fatalities globally, with complex operations often occurring in environments fraught with multiple hazards—high-voltage installations, fire risks, and heavy traffic. Despite comprehensive regulations designed to create safe workplaces, these rules frequently prove difficult to interpret and implement during fast-paced operations.

Edsvärd worked with IBM to create an intelligent system that enhances communication and safety protocol implementation. This technology integration addresses the core issue: effective coordination across multiple working categories operating in shared, high-risk spaces where orchestral precision is required to prevent accidents.

This pioneering collaboration demonstrates AI's potential to address critical safety challenges in high-risk industries while simultaneously improving operational efficiency and sustainability.

Once the MVP is scaled into production, the following KPIs are expected:

- > 50% increased work efficiency
- > 80% increase in value creation for the business
- > 50% reduction in time spent looking for information
- > 75% reduction of repetitive administrative tasks like manual data input.

As well as these benefits:

- Improved utilization of technical information in daily operations
- More optimal communication of maintenance activities
- Enhanced sustainability in property management
- Anticipated significant safety improvements once the MVP scales to production.

As CEO Alexander Edsvärd indicates, "... This has enabled us to offer a totally new type of product. To the property management and construction industry we can enhance the health and safety for workers in these complex working environments. Potentially saving lives is the greatest outcome of this project."

Agentic AI

Orchestrating enterprise transformation

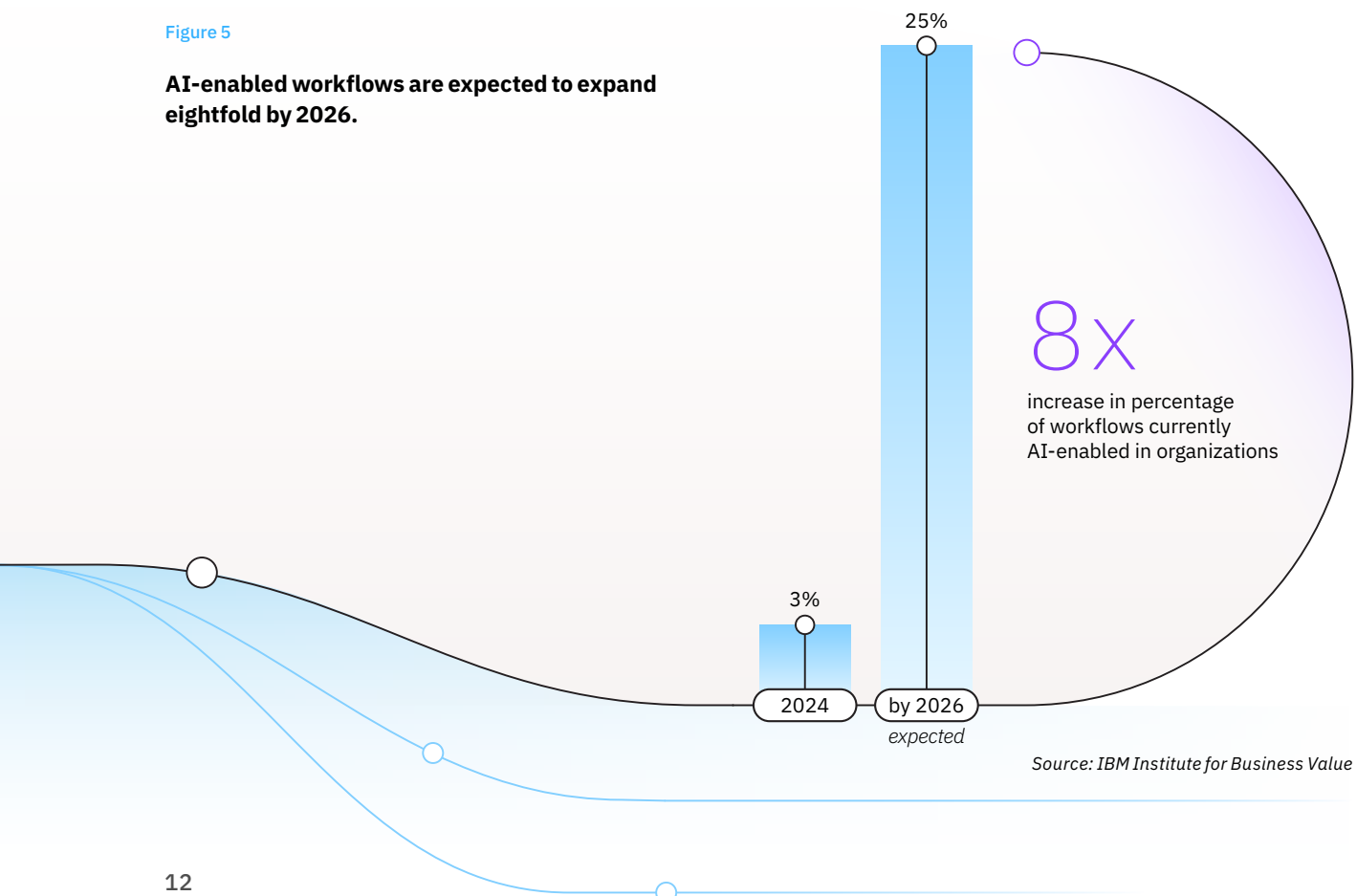
Agentic AI has rapidly transitioned from specialist jargon to boardroom buzzword. Unlike its more static and passive predecessors, such as robotic process automation (RPA), these systems with a higher degree of autonomy may mark a paradigm shift from productivity gains to full-scale business transformation, from fixed to dynamic workflows, from saying to doing.

This transformation—when powered by proprietary data, a fit-for-purpose AI model mix, robust governance, and modular tools, all orchestrated via a pertinent platform of choice—can drive real business outcomes.

Organizations anticipate a dramatic transformation in how work gets done, with AI-enabled workflows poised to expand from 3% in 2024 to 25% by 2026 (see Figure 5). The eightfold increase represents not merely incremental improvement but a fundamental rethinking of business processes across functions.

Figure 5

AI-enabled workflows are expected to expand eightfold by 2026.



Consistent with this aspiration, AI remains a priority for capital expenditures. Investment has continued to grow to about 12% of IT spend, suggesting that the C-suite remains convinced of AI's long-term transformative potential, even as they digest more modest immediate returns. This may also reflect the realities of absorbing investments in the foundational capabilities required for long-term AI success in small-scale projects, as prior research has demonstrated is necessary.⁹

70% of executives consider agentic AI important to their organizational future, and 70% believe that agentic AI is market-ready—consistent with other research indicating that 61% of CEOs say their organization is actively adopting AI agents and preparing to implement them at scale.¹⁰ Perhaps most tellingly, 76% are actively encouraging experimentation, suggesting a widespread recognition that theoretical understanding must be complemented by practical experience that aligns with organizational strategy (see Figure 6). Those with more robust AI capabilities and experience might make the decision to skip the proof-of-concept or even the pilot and move straight to scale.

Figure 6

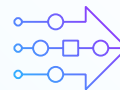
Executives perceive value in agentic AI systems.



70%

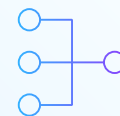
of executives consider agentic AI important to their organization's future.

while



70%

of executives believe that agentic AI is market-ready.



76%

Perhaps most tellingly,

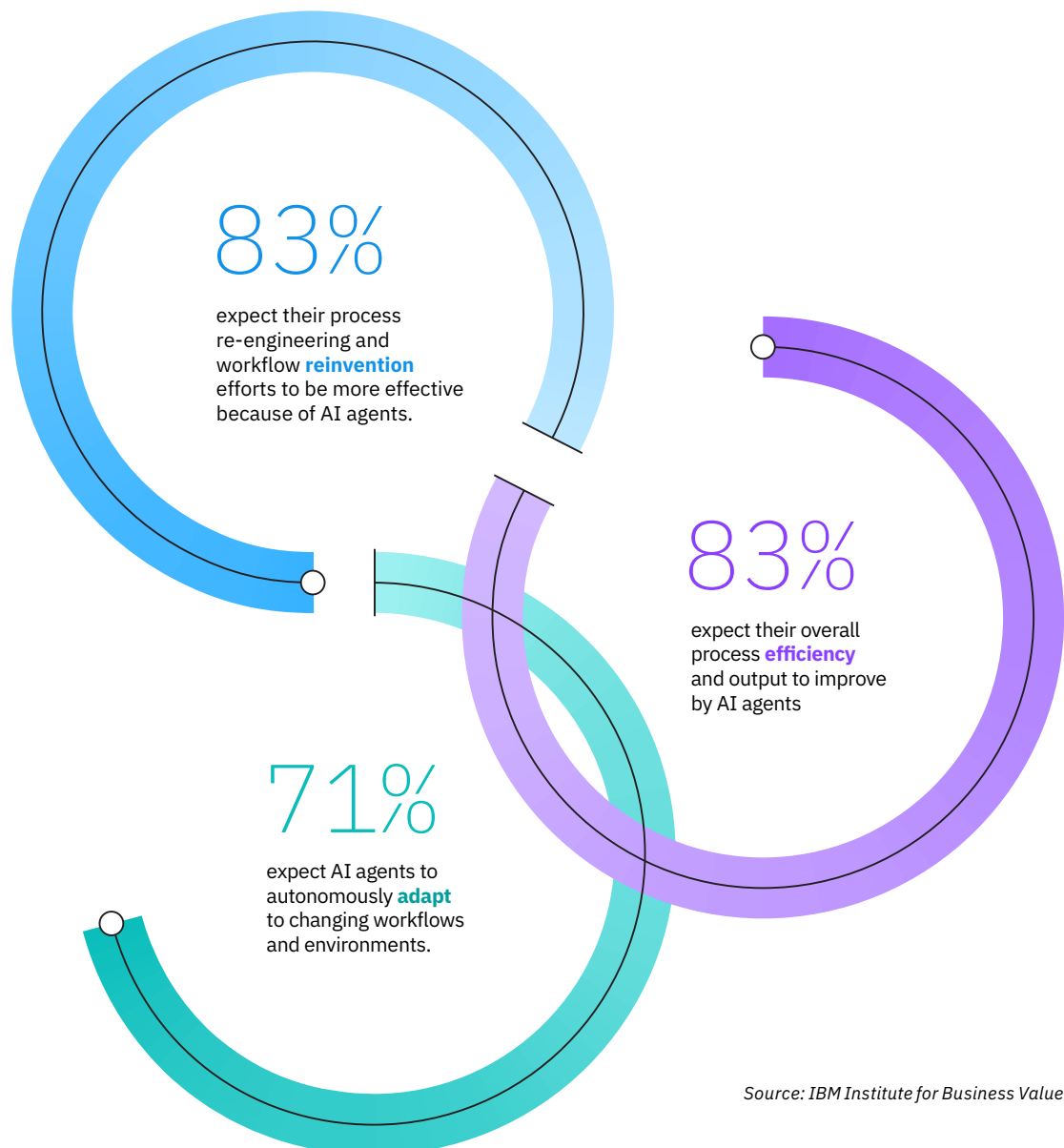
of executives are actively encouraging experimentation, suggesting practical experience is important.

Source: IBM Institute for Business Value

Broad enthusiasm has crystallized into specific expectations. By 2026, 83% of executives expect AI agents to dramatically improve process efficiency by handling repetitive, rule-based tasks at above-human speeds. A similar proportion believe their process re-engineering efforts will be fundamentally enhanced by these systems (see Figure 7). The logic is compelling—agentic AI offers not merely automation but intelligent orchestration, potentially redefining what constitutes optimal workflow design. (For additional insights on agentic AI in operations, check out the IBM IBV report *Orchestrating agentic AI for intelligent business operations* at <https://ibm.co/agentic-process-automation>.)

Figure 7

Broad enthusiasm among executives has crystallized into targeted expectations.



Source: IBM Institute for Business Value

When asked about concrete benefits around agentic AI, executives highlight two critical priorities (see Figure 8):

- Improved decision-making through enhanced data access and insights leads the pack (69%), reflecting the persistent challenge of extracting actionable intelligence from organizational information.
- Cost reduction through automation follows closely (67%), unsurprising in an economic climate that rewards operational efficiency.

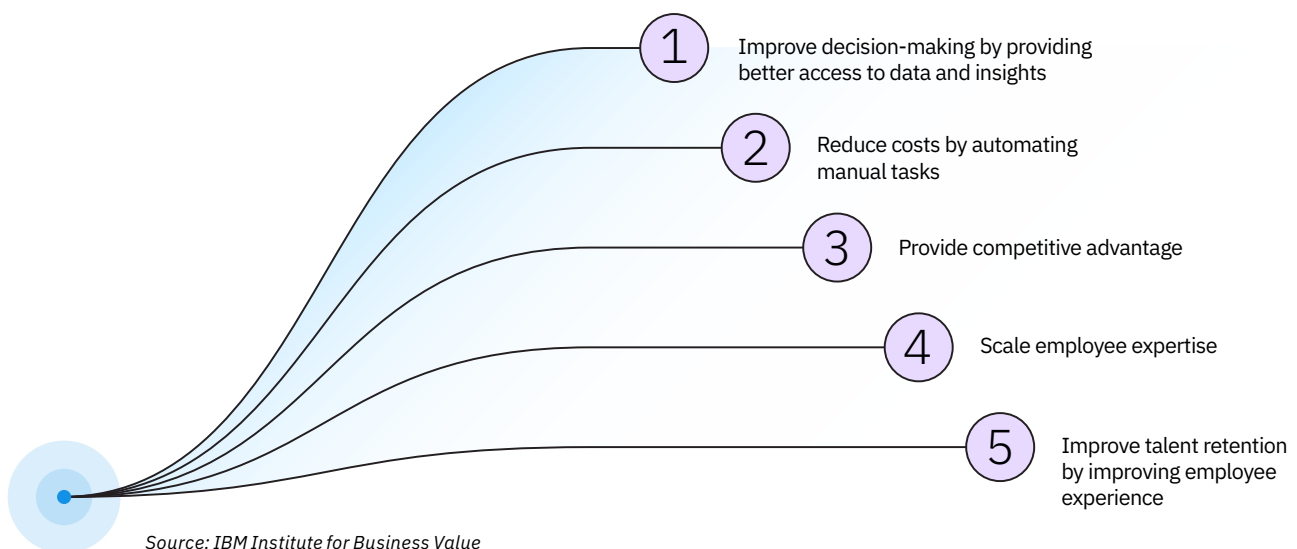
This is consistent with our observations in enterprise projects for value realized. These include low-volume, high-value business decisions such as mining exploration or high-volume, low-value decisions such as airline pricing. Also included is labor cost reduction or augmentation for those enterprises large enough and focused sufficiently on key horizontal or vertical task groupings.

The functional focus on implementation reinforces organizational priorities highlighted in part one of this paper. Research and innovation management, supply chain, and sales all reflect the shift to the core—while customer service has been a top focus across the IBM IBV's decade of AI research.

Yet what is the impact of the risk that this agentic explosion takes place in organizations that are not focused on the core? More disconnected pilots and/or even lower rates of return? More challenges aligning budgets, teams, and projects? More operational risk from inconsistent implementation?

Figure 8

Improved decision-making and cost reduction are some of the key expected benefits of agentic AI systems.



What remains largely unspoken in the statistics is the profound organizational redesign required for successful implementation. Agentic AI demands not merely technological deployment but a deep reconsideration of how work is structured, how decisions are made, and how humans and machines collaborate. Organizations must develop new governance frameworks that balance autonomy with accountability, speed with safety, innovation with reliability. ((For a deeper dive on this topic, see the IBM AI Ethics Board's *AI agents: Opportunities, risks, and mitigations* at <https://www.ibm.com/granite/docs/resources/ai-agents-opportunities-risks-and-mitigations.pdf>)

Despite expected benefits, significant barriers to adoption remain. Concerns around intellectual property (50%) and data accuracy or bias (49%) top the list, a reminder that even the most sophisticated agentic systems remain fundamentally dependent on the quality, accessibility, and governance of underlying information. Trust issues follow (46%), encompassing both reliability concerns and deeper questions about appropriate human oversight. Skills shortages (42%) complete the trifecta of challenges, highlighting that technological capability without corresponding human expertise creates more problems than solutions.

But as organizations overcome these challenges, the strategic implications will extend beyond process improvement to competitive positioning. As agentic systems become more capable, they will increasingly differentiate between organizations that merely deploy AI and those that orchestrate it effectively.

The winners will be those who recognize that the technology itself is necessary but insufficient. Success requires proprietary data, a fit-for-purpose AI model mix, modular tools, and a comprehensive platform strategy of business applications, AI agentic orchestration, and data platforms and experience layers that facilitates readiness, resilience, and trust across enterprises' hybrid estates. Companies could organize data into "products": curated, trusted, and reusable datasets that fuel AI agents across workflows.

And of course, processes and ways of working need to change too.

Agentic AI demands not merely technological deployment but a deep reconsideration of how work is structured, how decisions are made, and how humans and machines collaborate. Organizations must develop new governance frameworks that balance autonomy with accountability, speed with safety, innovation with reliability.

Case study

IBM drives proactive IT operations with an AI-powered solution¹¹

IBM uses a family of open, performant, and trusted AI models to power a solution using large language models and agentic AI to automate IT issue resolution. An initial release of this technology within an IBM observability platform helps analyze and troubleshoot microservices and containerized platforms.

Designed for ITOps and site reliability engineers (SREs), this solution automates aspects of diagnosis, recommendation, and action generation—aiming to significantly reduce the mean time required to resolve IT issues and prevent serious incidents. The solution has won multiple industry awards in 2024-25.

The diagnosis dimension of the solution is powered by an innovative Probable Root Cause Identification (PRCI) algorithm that accelerates the localization faults using causal AI algorithms.

Outcomes for root cause analysis when compared to competing solutions:

- 1.6x increase in true positive rates for incidents
- Decrease of ~200x false positive rate for incidents

At the crossroads

Diverging growth paths

The global rush toward AI adoption has begun to stratify corporate performance. It's not so much whether organizations are deploying AI or not. Rather, it's a divide between organizations that implement AI strategically with enterprise-wide collaboration and those pursuing tactical, fragmented approaches.

According to our research, approximately 25% of organizations qualify as “AI-first” adopters. The performance gap between these leaders and organizations pursuing gradual AI implementation is substantial and merits serious attention.

Consider the financial impact. At rates that outpace their peers, these AI-first organizations demonstrate revenue and operating profit improvements attributable to their AI initiatives. This suggests that AI maturity is delivering not just top-line growth but fundamental improvements in operational efficiency (see Figure 9). In a business environment where margin compression is a persistent threat, this advantage can compound dramatically over time, which can fund further AI investment. More indirectly, AI capabilities are also reshaping customer impact and employee productivity.

Yet the most profound differences lie not in current performance metrics but in how these organizations position themselves for future opportunities. AI-first organizations are more likely to create entirely new opportunities that did not previously exist—suggesting they are using AI not merely to optimize the present but to reimagine possibilities. (See also *The ingenuity of generative AI: Unlock productivity and innovation at scale* at <https://ibm.co/scale-generative-ai>) Similarly, they are more likely to leverage AI to reach new customers and markets, expanding their business models rather than merely competing more effectively within existing boundaries.

Their approach to innovation management reveals much about their sustained advantage. More AI-first organizations (68% versus 54%) report treating AI initiatives as an innovation portfolio. Balancing near-term, lower-risk projects with more ambitious, potentially transformative bets. This portfolio approach creates space for experimentation while generating a steady stream of wins that maintain organizational momentum and stakeholder confidence.

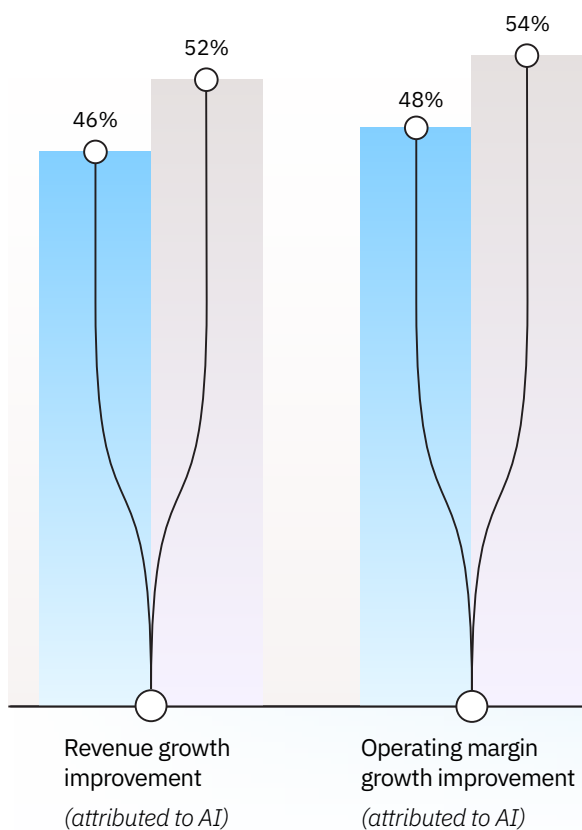
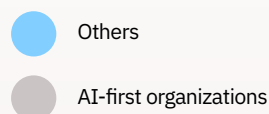


Figure 9

Over the past year, AI-first organizations attribute more than half of their revenue growth and operating margin improvements to AI initiatives.

AI-first vs. other organizations

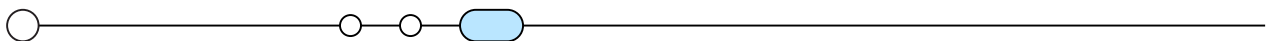
Assessment of AI-attributable improvements over past 12 months



Perhaps most revealing is the advantage in data management and governance capabilities. 68% of the AI-first organizations report having more mature and robust data and governance practices with well-established frameworks, compared to 32% of other organizations. While less flashy than cutting-edge algorithms or ambitious use cases, this foundation of structured, accessible, high-quality data represents the essential precondition for sustained AI success. The leaders have recognized that no algorithmic sophistication can compensate for poor data hygiene—and have invested accordingly. It’s also about establishing data access that is open and trusted across the organization both for humans as well as AI agents.

To that point, Praveen Sam, Senior Director—Strategy, Honeywell, US, notes, “While many organizations focus on AI strategies, neglecting a data and connectivity strategy is a recipe for failure. In fact, a clear data strategy is likely even more important, especially as AI techniques continue to evolve and mature.”

Adds Ana Delgado, Head of Technology, Telefonica, Spain: “For the development of new products and services, we’re actually using AI to analyze the customer feedback and identify the gaps that we might have. We wouldn’t be able to do that if we don’t analyze all of the data from the navigation, from the client, from the traffic that is



The leaders have recognized that no algorithmic sophistication can compensate for poor data hygiene—and have invested accordingly.

The organizations demonstrating superior capabilities and strategy are not simply experimenting more successfully—they are fundamentally reshaping the terms of competition in their industries.



underneath. That's one of the most powerful things that can help us to match what the customers are doing with what they want to do in the future."

The organizations demonstrating both technical sophistication and strategic clarity in their AI approach appear positioned to deliver sustained outperformance across multiple financial and operational metrics. Their advantage lies not in any single application but in the creation of an AI-enabled operating model that simultaneously improves efficiency, enhances customer relationships, and accelerates innovation. However, many IT departments are not set up to support such an operating model switch, as it's also about reorganizing the tech supply—a topic we are exploring in other research (see "Related reports" on page 28).

The evidence is clear: AI has moved beyond theoretical potential to practical differentiation. The organizations demonstrating superior capabilities and strategy are not simply experimenting more successfully—they are fundamentally reshaping the terms of competition in their industries. Their example stands as both inspiration and warning to executive teams still contemplating their AI approach. The window for establishing competitive parity, let alone advantage, is closing rapidly.

Case study

Revolutionizing asset valuation: Trust Anchor Group's AI transformation¹²

IBM Business Partner Trust Anchor Group, based in Sweden, faced a critical challenge with traditional asset valuation processes. Asset values can fluctuate daily due to market conditions, rate increases, and external factors, yet conventional methods only calculated valuations every 6-12 months. This left investors and businesses with potentially outdated or even misleading understandings of their assets' true worth.

Recognizing this gap, Trust Anchor Group collaborated with IBM through the Fintechx program and IBM Client Engineering to develop a dynamic solution powered by artificial intelligence. Over just six weeks, a team of 10 professionals built and tested an innovative Dynamic Asset Valuation App solution.

The solution performs multiple critical functions. It calculates digital asset values in real time by analyzing incoming events and market changes. The system summarizes relevant events and the sentiment surrounding them, then contextualizes their impact on asset values. This enables automated adjustments to valuations based on new information without requiring manual intervention.

Additionally, the team implemented an IBM virtual assistant across all Trust Anchor Group websites, allowing users to ask natural language questions about event summaries and receive immediate responses.

Overall, benefits include:

- Achieved up to 96.7% improvement in turnaround time to evaluate an event and its impact on an asset's value
- Eliminated error-prone manual research and valuation procedures
- Provided investors with accurate, current insights for asset valuations
- Enhanced decision-making through immediate access to valuation impacts
- Improved customer experience through natural language virtual assistance.

Case study

Thermo Fisher Scientific—Embracing AI as a conduit toward operational efficiency and quality management¹³

Thermo Fisher Scientific, a prominent player in the pharmaceutical and healthcare sectors, has shown innovation and agility in integrating AI across various domains. At the corporate level, Thermo Fisher has dedicated AI teams focusing on embedding the technology across the enterprise.

One significant application: boosting employee productivity via internal search engines called GeneAI that operate in a protected environment, allowing employees to query internal knowledge without the threat of exposure to external data.

Thermo Fisher is exploring the integration of AI into manufacturing line performance management to identify root causes and quality management as well, specifically for deviation and corrective/preventive action (CAPA) management. The organization will more efficiently conduct root cause analysis for deviations, identify prior occurrences, propose corrective or preventive actions, and develop implementation plans.

In the future, AI will also play a critical role in Thermo Fisher's predictive maintenance. This helps to detect trends indicating potential equipment failures, facilitating proactive maintenance and spare parts procurement. Riccardo Picca, Head of Digital and Operational Excellence for the Drug Product Division, notes: "AI will help us to predict in advance a possible failure or break of components or assets. This allows us not only to do an advanced maintenance plan, but also to order in advance spare parts if these are necessary."

Furthermore, Thermo Fisher is investigating AI's potential in energy management. By leveraging weather forecasts and production plans, the company can optimize energy consumption across sub-assets like boilers, chillers, compressed air, and cogeneration units, reducing costs and environmental impact.

Overall, AI will help Thermo Fisher to bolster operational efficiency, enhance quality management, and explore new avenues for growth. By harnessing AI across diverse domains, the organization not only improves internal processes but also positions itself as an innovator in the pharmaceutical and healthcare industries.

Action guide

While some organizations continue to tinker with pilot programs, their competitors are deploying AI agents that handle complex workflows, make autonomous decisions, and deliver measurable business outcomes.

These early movers aren't just gaining efficiency—they're rewriting the rules of engagement in their markets, creating new service standards and operational capabilities that will soon become table stakes. The following actions represent essential steps for leaders who recognize that their window for competitive response is measured in quarters, not years, and that half-measures will prove insufficient against fully committed AI-first competitors.

Set consistent and clear executive sponsorship for AI.

Adopt a “do as I do” not “do as I say” leadership mindset. Communicate that AI is disrupting all roles (including yours), not just others.’ Make “AI first” your mantra—and bring employees along by driving change in culture and mindset.

Align AI initiatives with your organization's most pressing strategic priorities—and prune the rest.

Balance “AI first” with the “hammer looking for a nail” phenomenon by rigorously identifying business problems and workflows where AI, and more specifically agentic AI, can deliver value. Establish a value framework that connects the corporate KPIs with the various AI initiatives with traceability across identification, tracking, and realization.

Shift ownership of AI—including risk—from technical fiefdoms to business leadership to ensure sufficient focus on the core of the business, not just the periphery.¹⁴

Require business leaders to take responsibility for business outcomes in their domains (enabled by AI), with specific, quantifiable, agreed targets embedded in performance reviews and compensation structures. Ensure IT follows suit with alignment alongside end-to-end process transformations and assumes ownership and management of AI products in production.

Embed AI governance and responsibility from day one—and throughout all stages of the AI lifecycle.

Lead with trust and design with built-in monitoring, guardrails, and observability to help ensure safe, compliant, and scalable deployment of agentic AI across critical workflows. (For more detail, see *The enterprise guide to AI governance: Three trust factors that can't be ignored* at <https://ibm.co/ai-governance>)

Industrialize your data into products.

Shift from siloed, ad hoc data pipelines to well-governed data products—curated, trusted, and reusable datasets that fuel AI agents across workflows. Treat data as a product with clear ownership, service-level agreements, and embedded quality controls to ensure agentic applications can reason, decide, and act with precision at scale.

About the authors

Kate Blair, PhD

Director of Incubation and Technology Experiences
IBM Research
[linkedin.com/in/kathrynleeblair/](https://www.linkedin.com/in/kathrynleeblair/)
kate.blair@ibm.com

Kate Blair leads the incubation of disruptive technologies from IBM Research using lean, user-centered design and development. Drawing from over a decade of experience in emerging technology, Kate played a key role in IBM's generative AI transformation, launching the first service that provided access to language models across the company and became the foundation for watsonx®.

Francesco Brenna

Senior Partner and Vice President
Global Leader, AI Integration Services
IBM Consulting
<https://www.linkedin.com/in/francesco-brenna/>
francesco.brenna@ch.ibm.com

With over two decades of global consulting experience working closely with top-tier organizations, Francesco Brenna has led transformative projects that leverage cutting-edge technologies to drive significant changes, boost operational efficiency, and accelerate digital maturity. He holds a Bachelor of Science in Computer Science from the University of Applied Sciences in Zurich and an MBA (with distinction) from Warwick Business School.

Nicholas Fuller, PhD

Vice President of AI and Automation
IBM Research
<https://www.linkedin.com/in/nicholascmfuller/>
nfuller@us.ibm.com

Dr. Nicholas Fuller is the Vice President of AI and Automation at IBM Research and global leader responsible for creating and delivering AI-based technologies to IBM's enterprise management software portfolio. Nick has 20+ years of R&D experience in AI, cloud, and semiconductors, catering to the evolving needs of IBM software and infrastructure clients. He is a recognized thought leader, routinely providing commentary on industry trends in various outlets.

Brian Goehring

Associate Partner and Global AI Research Lead
IBM Institute for Business Value
[linkedin.com/in/bcgoehring](https://www.linkedin.com/in/bcgoehring/)
goehring@us.ibm.com

Brian Goehring brings over 25 years' experience in strategy consulting with senior-level clients across most industries and functions, collaborating with academics, clients, and other experts to develop data-driven insights and thought leadership. He received an A.B. in Philosophy from Princeton University with certificates in Cognitive Studies and German.

Matt Sanchez

Vice President, Product, watsonx Orchestrate™
IBM Software
<https://www.linkedin.com/in/mbsanchez/>
mattsanchez@ibm.com

Matt Sanchez is Vice President of Product at IBM, where he leads the strategy and development for watsonx Orchestrate™, IBM's platform for AI agents and assistants. A trailblazer in enterprise AI, Matt is driving the next generation of intelligent workflows—helping global organizations reimagine how work gets done through AI assistants and agent technologies.

Contributors

Sara Aboulhosn, Namit Agrawal, Su Yin Anand, Nathan Boudreaux, Swati Gautam, Rachna Handa, Avdyl Haxhaj, Heba Nashaat, Arvind Raj, Sherihan Sherif, Lucy Sieger, Daby Sow, Devvrat Vaidya, and Sebastian Weir.

Research methodology

This study draws insights from two different executive surveys conducted in partnership with Oxford Economics in 2025. They are titled “AI at the core survey” and “Agentic AI pulse survey.” These surveys were designed with the objective of gauging organizations’ perspectives on the emerging era of agentic AI. The primary focus of both surveys is on AI’s current role in business operations, including its impact on revenue, profitability, productivity, and resource efficiency.

The “AI at the core survey” covers 2,500 executive respondents spanning 18 industries and 19 regions, representing over 19 job roles. The “Agentic AI pulse survey” included 400 executive respondents spanning 15 C-suite roles across 11 industries and 6 countries. Both surveys aim to assess AI adoption and integration, identify utilization challenges, uncover best practices, and propose strategies for enhanced AI utilization and optimizing its transformative potential.

To uncover key relationships, trends, and associations within the dataset, a suite of analytical techniques was employed, including correlation analysis, regression analysis, and structural equation modeling.

Subsequently, K-means clustering analysis was deployed to identify distinct organizational profiles based on five critical dimensions of AI maturity:

1. The scope of AI adoption, ranging from no formal strategy to enterprise-wide integration
2. The composition of AI tools and models, spanning off-the-shelf solutions to proprietary or industry-leading developments
3. The maturity of governance, risk, and ethical frameworks, from ad hoc practices to proactive enterprise-wide policies
4. The depth of internal AI skills, from reliance on external support to advanced strategic capabilities
5. The perceived strategic importance of AI, measured across a spectrum of organizational priorities, from incidental use to core business strategy.

The clustering analysis identified a clear organizational profile, defined by consistent patterns across these dimensions. This profile helped shape the study’s narrative by highlighting key trends in AI adoption and maturity. It also provided a useful framework for interpreting later findings, strengthening the analysis, and helping ensure a logical flow throughout the study.

Related reports

Orchestrating agentic AI for intelligent business operations. IBM Institute for Business Value. May 2025. <https://ibm.co/agentic-process-automation>

Global C-suite Series: CEO Study. ***5 mindshifts to supercharge business growth: Move from productivity to performance with agentic AI.*** IBM Institute for Business Value. May 2025. <https://www.ibm.com/thought-leadership/institute-business-value/en-us/c-suite-study/ceo>

The ingenuity of generative AI: Unlock productivity and innovation at scale. IBM Institute for Business Value. June 2024. <https://ibm.co/scale-generative-ai>



IBM Institute for Business Value

For two decades, the IBM Institute for Business Value has served as the thought leadership think tank for IBM. What inspires us is producing research-backed, technology-informed strategic insights that help leaders make smarter business decisions.

From our unique position at the intersection of business, technology, and society, we survey, interview, and engage with thousands of executives, consumers, and experts each year, synthesizing their perspectives into credible, inspiring, and actionable insights.

To stay connected and informed, sign up to receive IBV's email newsletter at ibm.com/ibv. You can also find us on LinkedIn at <https://ibm.co/ibv-linkedin>.

Subscribe to our IdeaWatch newsletter

Just the insights. At your fingertips. Delivered monthly.

Brought to you by the IBM Institute for Business Value, ranked #1 in thought leadership quality by Source Global Research for the second consecutive year.

Research-based thought leadership insights, data, and analysis to help you make smarter business decisions and more informed technology investments.

Subscribe now: ibm.co/ideawatch



Endnotes

1. Brenna, Francesco, Giorgio Danesi, Glenn Finch, Brian Goehring, and Manish Goyal. *Shifting toward Enterprise-grade AI: Resolving data and skills gaps to realize value*. IBM Institute for Business Value. Executive Report. September 2018. <https://www.oxfordeconomics.com/resource/shifting-toward-enterprise-grade-ai/>
2. Ibid.
3. Dickson, Ben. "AI's J-curve and upcoming productivity boom." TechTalks. January 31, 2022. <https://bdtechtalks.com/2022/01/31/ai-productivity-j-curve/>
4. Global C-suite Series: CEO Study. 32nd edition. *5 mindshifts to supercharge business growth: Move from productivity to performance with agentic AI*. IBM Institute for Business Value. May 2025. <https://www.ibm.com/thought-leadership/institute-business-value/en-us/c-suite-study/ceo>
5. Goehring, Brian, Manish Goyal, Ritika Gunnar, Anthony Marshall, and Aya Soffer. *The ingenuity of generative AI: Unlock productivity and innovation at scale*. IBM Institute for Business Value. June 2024. <https://ibm.co/scale-generative-ai>
6. Ibid.
7. "Helping to save lives with AI-driven cancer detection: CanSense brings a pioneering AI-powered colorectal cancer screening solution to market in partnership with Informed Genomics and IBM." IBM case study. Accessed May 23, 2025. <https://www.ibm.com/case-studies/informed-genomics-cansense>
8. "Edsvärd Hållbarhet + IBM." IBM case study. Accessed May 23, 2025. <https://www.ibm.com/case-studies/edsvardhallbarhet>
9. Ashoori, Maryam, Brian Goehring, Timothy Humphrey, Mahmoud Naghshineh, and Cathy Rodenbeck Reese. *Generating ROI with AI: Six capabilities that drive world-class results*. IBM Institute for Business Value. May 2023. <https://www.ibm.com/thought-leadership/institute-business-value/en-us/report/ai-capabilities>
10. Global C-suite Series: CEO Study. 32nd edition. *5 mindshifts to supercharge business growth: Move from productivity to performance with agentic AI*. IBM Institute for Business Value. May 2025. <https://www.ibm.com/thought-leadership/institute-business-value/en-us/c-suite-study/ceo>
11. Based on IBM internal experience.
12. "Building a dynamic asset valuation solution with generative AI: Trust Anchor Group + IBM." IBM case study. Accessed May 23, 2025. <https://www.ibm.com/case-studies/trust-anchor-group>
13. Based on Oxford Economics research/interview.
14. *AI agents: Opportunities, risks, and mitigations*. IBM AI Ethics Board. March 2025. <https://www.ibm.com/granite/docs/resources/ai-agents-opportunities-risks-and-mitigations.pdf>



© Copyright IBM Corporation 2025

IBM Corporation
New Orchard Road
Armonk, NY 10504

Produced in the United States of America | June 2025

IBM, the IBM logo, ibm.com and Watson are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at “Copyright and trademark information” at: ibm.com/legal/copytrade.shtml.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

This report is intended for general guidance only. It is not intended to be a substitute for detailed research or the exercise of professional judgment. IBM shall not be responsible for any loss whatsoever sustained by any organization or person who relies on this publication.

The data used in this report may be derived from third-party sources and IBM does not independently verify, validate or audit such data. The results from the use of such data are provided on an “as is” basis and IBM makes no representations or warranties, express or implied.

131cf87a30b31decUSEN-01