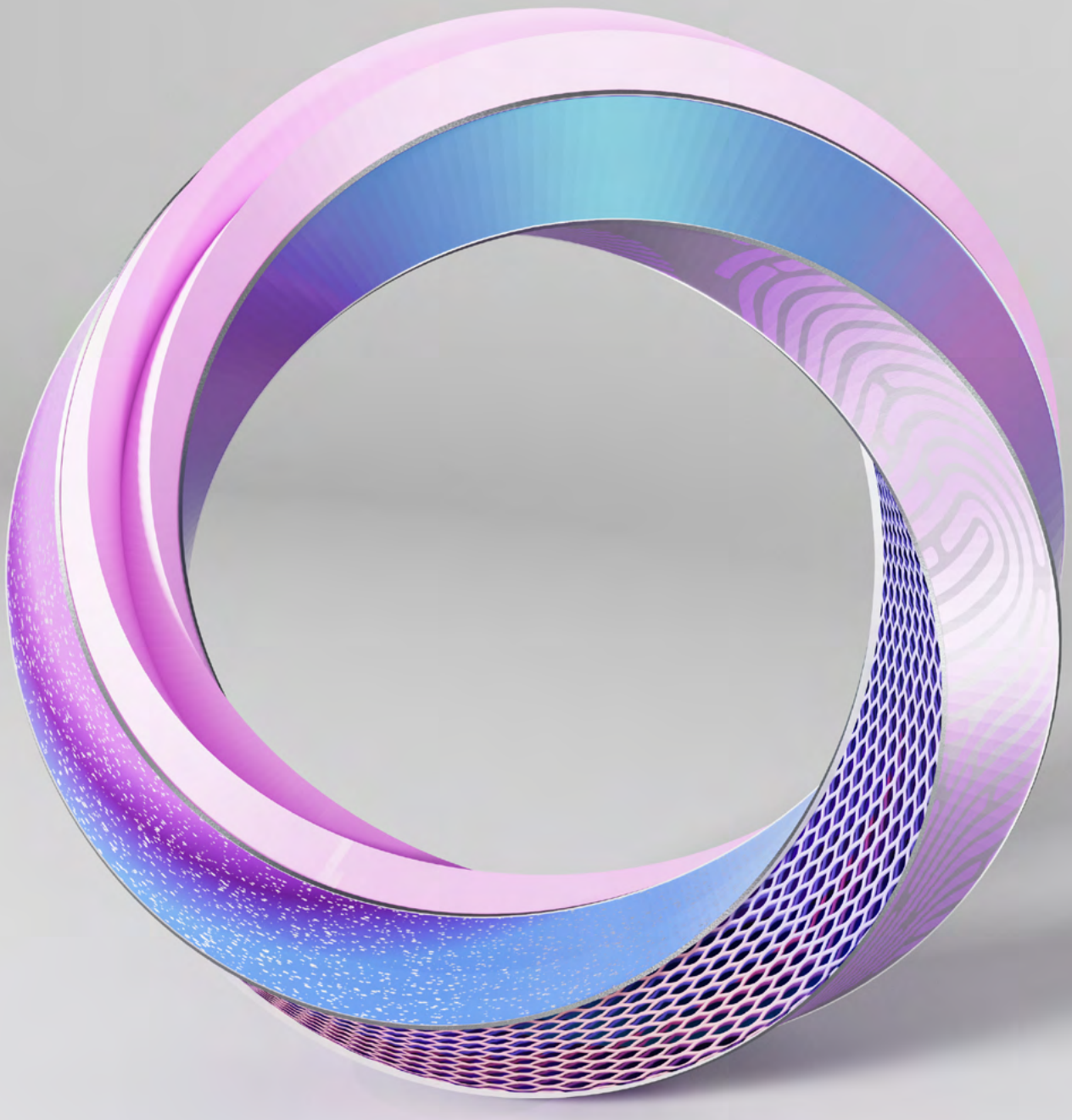

The enterprise in 2030

Engineered for perpetual innovation

IBM

How IBM can help

IBM has been providing expertise to help organizations win in the marketplace for more than a century. Clients can realize the potential of AI and better navigate a changing world using IBM's deep industry, functional, and technical expertise; enterprise-grade technology solutions; and science-based research innovations.

IBM is also a global leader in quantum computing, ready to aid clients as they embark on their own quantum journeys.

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.

For more information about quantum computing from IBM, visit ibm.com/quantum.

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Foreword

AI-first advantage demands tailored technology

Mohamad Ali

Senior Vice President
IBM Consulting

AI isn't just enhancing the business model. By 2030, it will *be* the business model.

Across industries, the pattern is the same: AI is changing what companies do and how they do it. Yet a striking blind spot remains. 79% of executives say AI will significantly contribute to their revenue by 2030, but only 24% can clearly see where that revenue will come from. That gap between expectations and outcomes presents the leadership challenge of this decade.

With no clear destination in sight, winning CEOs won't chase competitive advantage. They'll code it into existence.

That requires tailored technology—digital agents, AI models, and data that capture the essence of each organization's business logic. Generic algorithms and off-the-shelf agents alone won't differentiate. The real advantage (and ROI) comes from AI capabilities that no competitor can replicate. When you encode your organization's intellectual property and proprietary data into every product, service, and process, you can create entirely new markets and revenue streams. That's how you disrupt your business quarter after quarter.

It's not about bolting AI onto existing ways of working. It's pivoting to an AI-first enterprise. Most executives—57%—now say their competitive advantage will come primarily from the sophistication of their AI models by 2030. While people will remain essential, organizations will need to build differentiating technology for even the best teams to deliver an edge in an AI-first world.

Across industries, leaders are recognizing that the future of business is a hybrid of people and software—a lot of software. Every process that can be automated will be. Every role will be enhanced by intelligent systems that learn and adapt. But the real advantage will come from how organizations design and orchestrate thousands of AI agents that work alongside employees, each one tuned to the company's purpose, culture, and competitive edge. Leaders will need to ask: Where should AI augment people—and where should people augment AI? The most successful organizations will reimagine how humans and machines collaborate to achieve more than either could on their own.

It's this dynamic that will define the winners of the next decade: not deploying the most powerful technology and making the biggest cuts to headcount, but building AI that knows the business, reflects its values, and amplifies the expertise of its people.

What does that look like in practice? The following pages detail five predictions about what will define the most successful enterprises in 2030—and the steps leaders can take to turn an AI-first advantage into a transformation success story.

Executive summary

The dawn of the smarter enterprise

Today, most organizations are playing a familiar game: bolting AI onto existing processes to automate tasks and optimize workflows. It yields incremental gains. It's not too disruptive. And it's missing the point entirely.

The enterprise of the future won't win by fine-tuning today's operations. In tomorrow's AI-powered global economy, success will flow from lightning-fast decision-making and real-time course-correction. Getting there requires rewiring the enterprise to make it less monolithic, more modular—less like hardware, more like software.

Think about what makes software powerful: You can rewrite any part of it without rebuilding from scratch. Improvements can be rolled out at scale in minutes or hours rather than months or years. As AI embeds these capabilities into organizations, static design becomes dynamic intelligence; rigid structures give way to fluid adaptation.

What emerges is the smarter enterprise. Where traditional enterprises are built around fixed processes, linear decision-making, and periodic executive reviews, the enterprise of the future embeds transformation into its operational DNA. It uses every interaction, transaction, and outcome to continuously become smarter, faster, and more responsive.

"The concept of 'resource optimization' is already outdated. I believe the advent of generative AI is as impactful as the emergence of the internet."

Akiyuki Ui
Operating Officer, Mizuho Bank

"By 2030, insight will be everywhere. Interfaces will be radically different, and AI will act as the business intelligence system, decision engine, and a participant in operations."

Chad Gates
Managing Director, Pronto Software

This is the difference between AI-enabled and AI-first. Instead of using quarterly strategy sessions to analyze market changes, the smarter enterprise processes market signals continuously and adjusts course in real time. Instead of relying on annual performance reviews, it assesses and deploys talent dynamically based on project needs and individual performance metrics. Instead of sticking with established business models, it experiments with new revenue streams automatically, scaling what works and discontinuing what doesn't. Instead of operating on a fixed schedule, it's 'always on' and ready to adapt.

This isn't just an idealistic vision of the future. IBM Institute for Business Value (IBM IBV) research shows this transition is already underway. In partnership with Oxford Economics, we surveyed 2,000 executives in the third and fourth quarters of 2025 about how they expect their organization to evolve over the next five years. Responses from leaders across 33 geographies and 23 industries reveal a seismic reconfiguring of operational practices and strategic assumptions (see "Research methodology" on page 56).

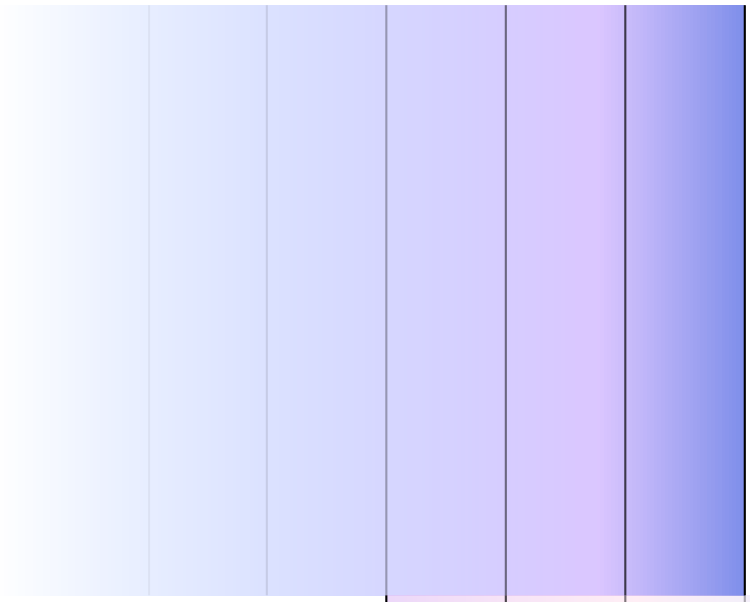
Among the dramatic findings: by 2030, technology will have removed many of the most persistent challenges enterprises face today. For example, 67% of executives expect AI to eliminate the resource and skills constraints that currently hold their organization back. And 64% say competitive advantage will come from innovation rather than resource optimization (see Figure 1).

"My marketing teams sit with engineering to build growth into the product rather than just advertising it. In 2030, every effective growth leader will operate this way, managing cross-functional squads where the distinction between 'building' and 'selling' is blurred."

Alex Schultz
VP Analytics and CMO, Meta

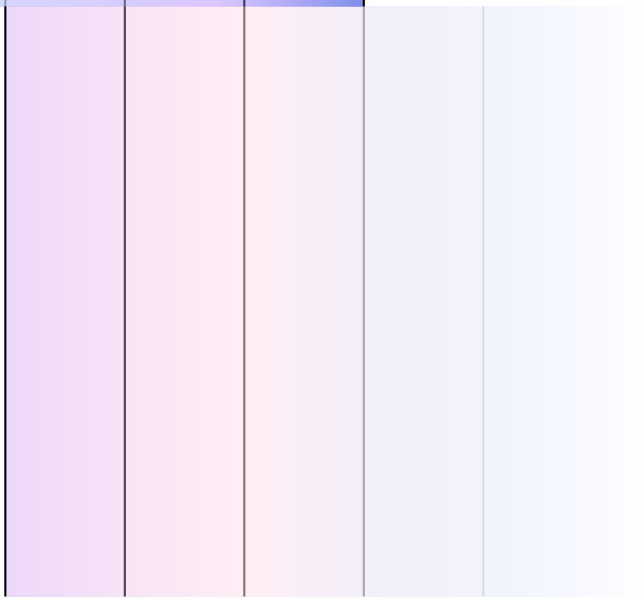
FIGURE 1

By 2030, technology will remove some of the most persistent challenges enterprises face today



67%

of executives expect AI to eliminate the resource and skills constraints that currently hold their organization back.



And

64%

say competitive advantage will come from innovation rather than resource optimization.

"In a world that is increasingly digital, the luxury consumer is going to expect more human connection—because that is going to be a luxury."

Tina Edmundson
President, Luxury, Marriott International

Executives expect to shift funding accordingly. Between 2025 and 2030, they predict AI investment will surge approximately 150%.[1] While a large portion of AI spend (47%) is focused on efficiency today, executives expect almost two-thirds (62%) to be dedicated to product and service and business model innovation by 2030. This may reflect the fact that, in a smarter enterprise, efficiency and innovation should be one and the same.

In this vein, product and service innovation is the top priority for organizations between 2026 and 2030, rising from third place in our 2025 CEO Study.[2] Business model innovation and market share growth are lower on the list of future priorities, but have inched up as compared with 2025 (see Figure 2).

This shows that, in the near term, leaders are focused on change within the product and service portfolio. But they're delaying the more significant disruption that becoming an AI-first enterprise will require. Is that because organizations lack the bandwidth needed to transform at scale today? Or are executives simply unclear about what the future business model should look like—so they're kicking the can down the road? Either way, delays are not a luxury that enterprises can afford.

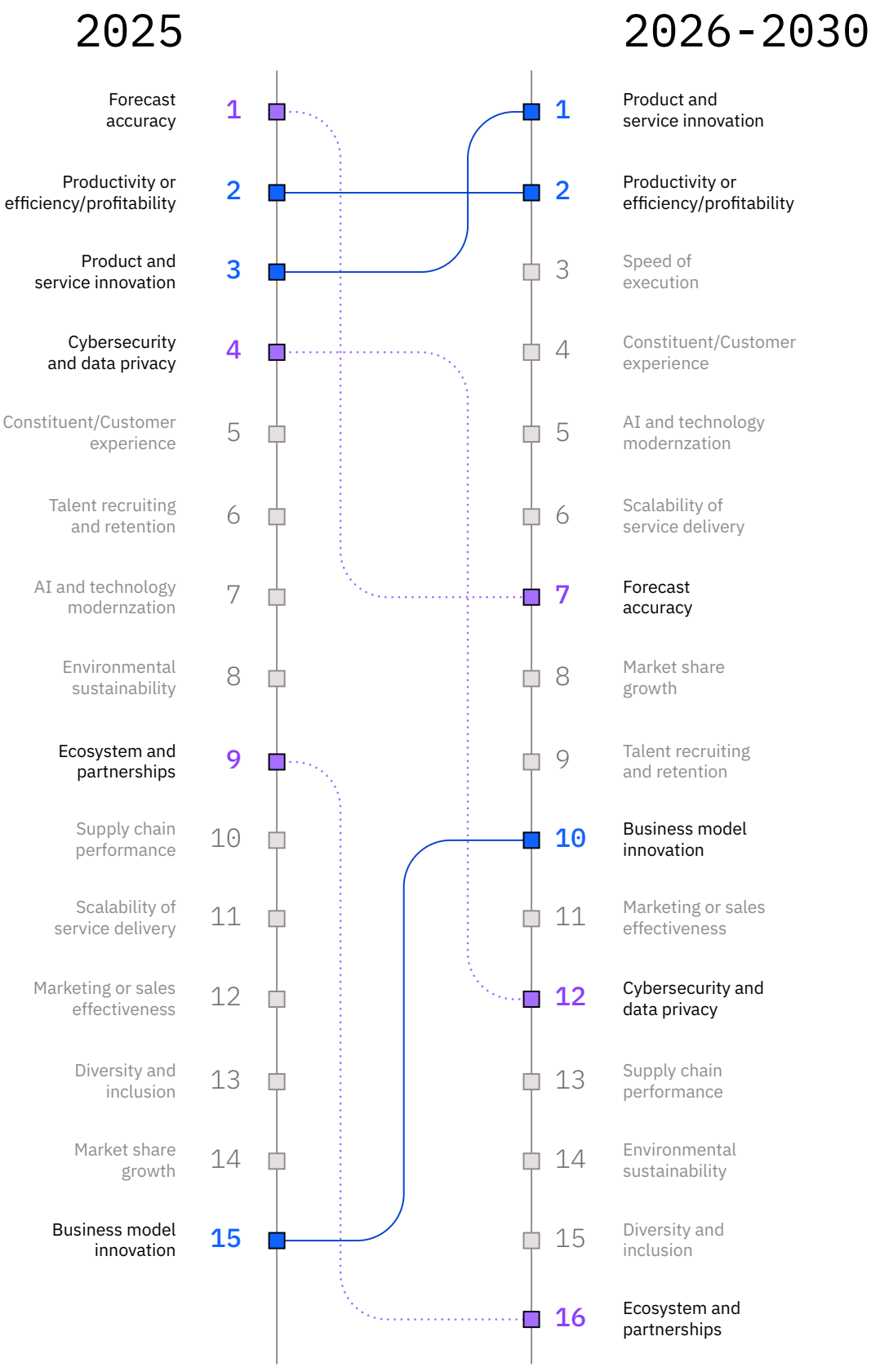
Leaders also expect a few of today's top priorities to be less important in 2030. Ecosystems and cybersecurity, for example, both dropped in ranking. That doesn't mean these focal areas are unimportant—in fact, they will be essential to make the most of emerging technologies. Rather, executives expect them to become table stakes. If they've already been well-handled, they won't need to be top priorities in 2030.

"By 2030, competition will be diluted in the face of collaborative ecosystems that define global standards and accelerate innovation. Ecosystems will win—not isolated companies."

Susana Meseguer
Executive Managing Director of Digitalization and Services, Repsol

FIGURE 2

Top C-suite priorities



Source for 2025 priorities: IBM Institute for Business Value 2025 CEO Study.

"We'll need more problem solvers who understand both the business and the models—people who can marry technical capability with business insight. That's the future of every company, including ours."

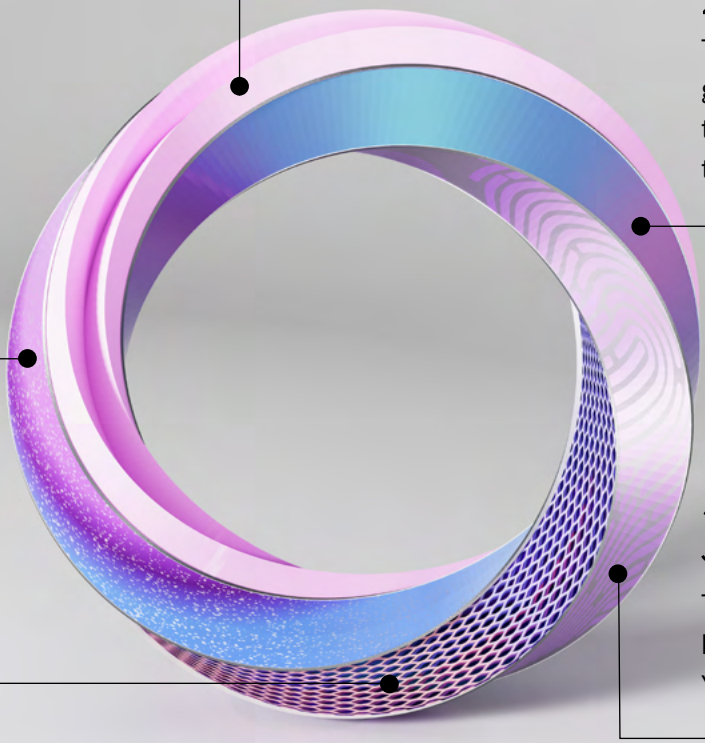
Umang Dharmik
SVP and Head of IT
Mercedes-Benz Research Development India (MBRDI)

It's difficult to imagine the revolutionary capabilities AI will develop over the next five years. Building an organization that can succeed in the future means preparing for continual tech-driven disruption—abandoning the comfort of incremental change and embracing constant evolution that matches the pace of algorithmic insight. Everything else is just playing catch-up.

In this paper, drawn from our proprietary quantitative research as well as in-depth qualitative interviews with select C-suite executives, we highlight five predictions for 2030 that leaders can act on today to bring the smarter enterprise to life.

1. Competitive pressure will make big bets non-negotiable.

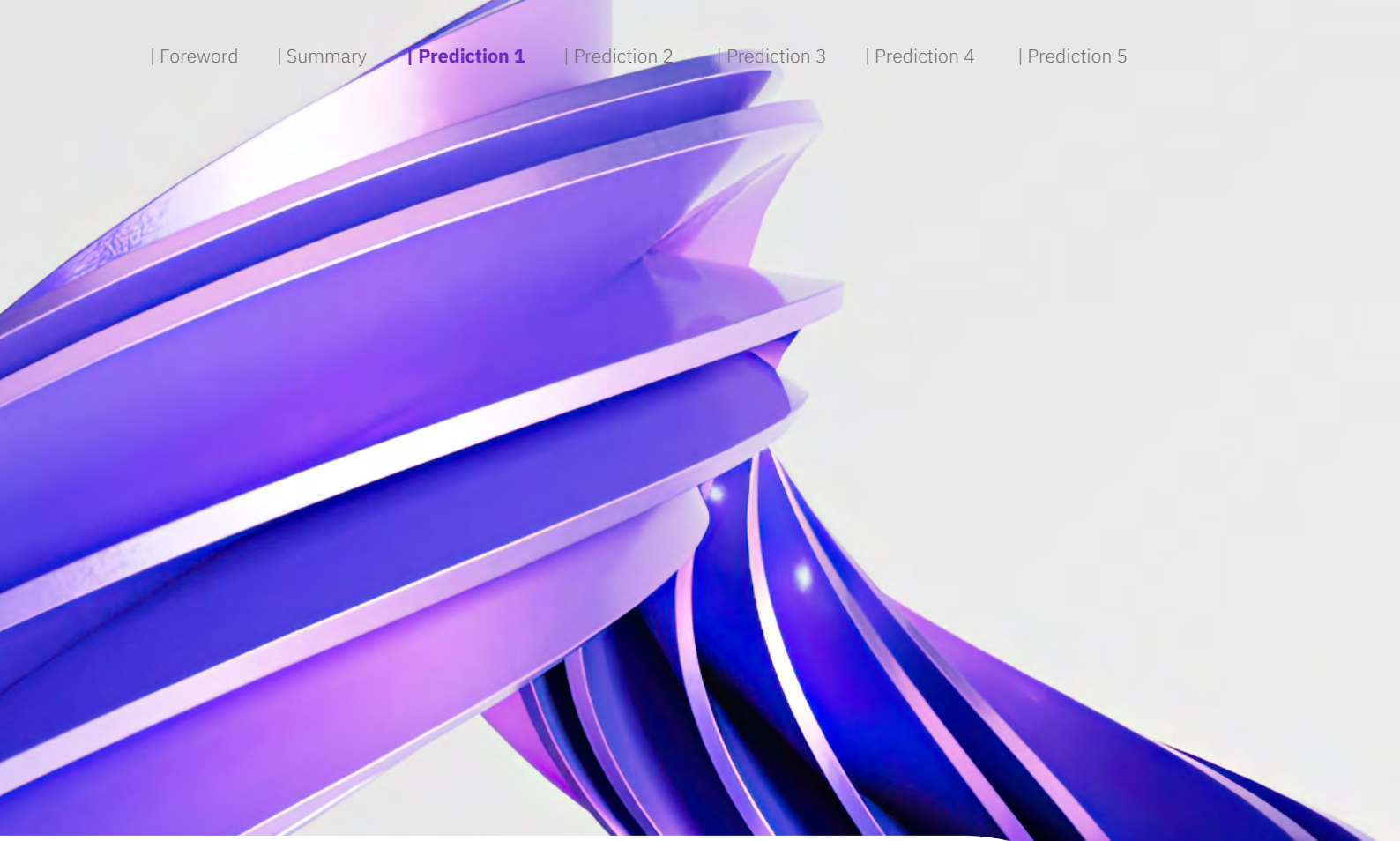
2. Today's productivity gains will fund tomorrow's industry transformation.



3. The best AI will be one-of-a-kind. Your kind.

4. AI won't do all your thinking for you.

5. Quantum will cause the next seismic shift.



Prediction 1

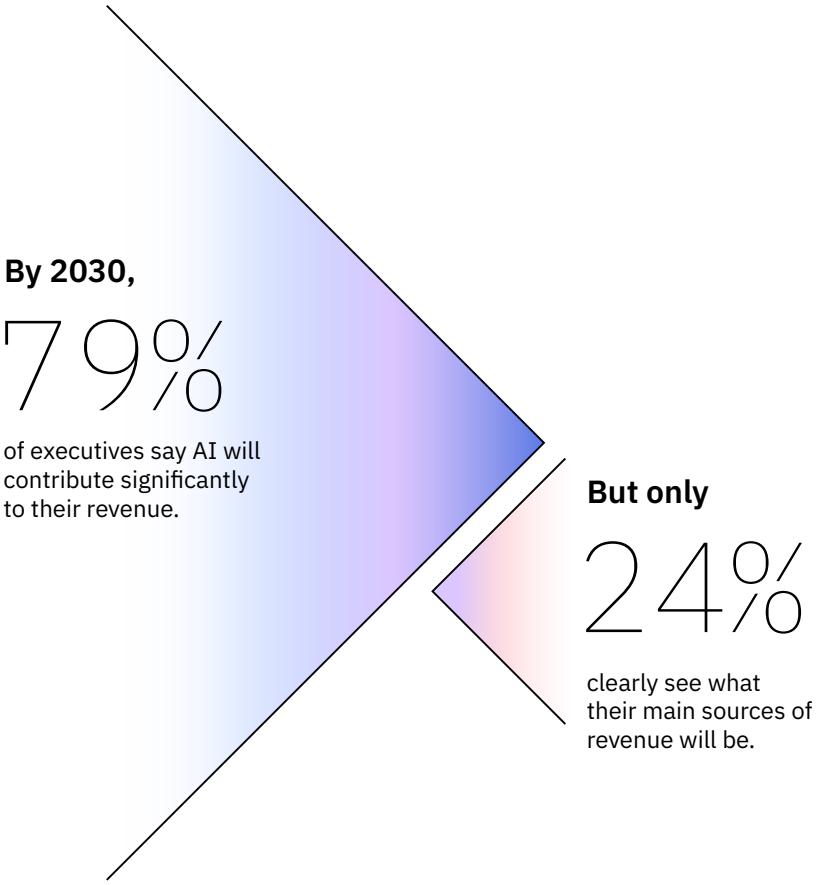
Competitive pressure will make big bets non-negotiable.

In 2030, success won't be measured by steady progress toward long-term targets. It will be defined by how much an enterprise disrupts its industry quarter by quarter. The biggest risk won't be making the wrong bets—but making bets that are too small.

What does it take to turn incremental progress into exponential gains? It starts by embracing the unknown. By 2030, 79% of executives say AI will contribute significantly to their revenue, up from just 40% who say AI drives revenue today. But only 24% can clearly identify what their main sources of revenue will be in 2030 (see Figure 3).

FIGURE 3

Executives are banking on the unknown



"In 2030, I think we will be bringing offerings and solutions to market that we can't even envision today because the technology isn't there yet. I would say 50% of our revenues will come from new offerings."

Maureen Power Sweeny
Chief Revenue Officer, RapidScale

This lack of visibility isn't due to a lack of imagination. It's a symptom of the AI paradox. When used to its full potential, AI promises to provide differentiated value. When used as a crutch, it fuels homogenization. Already, two-thirds of executives are concerned that AI is creating conformity, leading many organizations to make the same decisions, based on the same data.

Our research indicates that winning in 2030 will depend on a combination of creativity, confidence, and speed: 55% of executives say competitive advantage in 2030 will depend more on speed of execution than making perfect decisions. These leaders know they'll have to make bigger bets faster—with less complete information at their disposal.

Unlike today's calculated risks, tomorrow's bets will prioritize entering uncharted markets, creating entirely new revenue streams, and challenging traditional business logic. The airline industry offers a nascent case in point: as the world's first AI-native airline takes flight, traditional organizations must begin to adapt their business models to compete.[3] If consumers see one company offering products and services that are more aligned to their preferences, that pressure could quickly compound—pushing companies to rethink everything.

"AI neutralizes the classic advantage of the incumbent. A startup can now operate at the same scale as a large enterprise, but move at a much faster speed. That means smaller companies can really disrupt the markets they're going after."

Aaron Levie
CEO and Co-founder, Box

Organizations that have embraced the unknown expect to accelerate much faster than their peers. Our analysis shows that organizations leaning into AI-first operations anticipate 70% greater improvement in productivity, 74% greater reductions in process cycle times and, 67% greater improvement in project delivery times than their peers by 2030. They are more confident that AI can eliminate traditional resource and skill constraints, they prioritize innovative growth over resource optimization, and they place a greater emphasis on developing new revenue from products and services that they are not delivering today.

This is as much of an operational challenge as a strategic one. To move at speed, organizations need to foster a culture of outcomes-focused experimentation: rapidly deploying minimum viable products (MVPs), iterating and tracking performance, and deciding which MVPs to scale to deliver the most business value. They also need a stable ecosystem, with partners that can support the agility AI-first organizations require. And they need AI capabilities and models fine-tuned with their organization's proprietary data, coupled with agents that can access the most up-to-date information as data is processed and flows across the organization in real time.

Organizations that get it right aren't just beating competitors to market. They're operating on different principles. In the time it takes slower organizations to complete one full cycle of development, testing, and delivery, these leaders have completed multiple iterations—learning, adapting, and improving with each round. This creates a compounding effect that traditional enterprises can't match; an advantage that compounds exponentially with each accelerated cycle.

"The more we use technology to get closer to people, the more competitive we are."

Estrella Botas
COO, Unicaja

Every faster delivery generates fresh customer feedback. Each shortened process reveals operational insights. And change will become even more dramatic as AI advances over the next five years. The smarter enterprise transforms this velocity into wisdom, using every interaction as a data point to refine its understanding of what works, what doesn't, and what's next. It's always on and continuously adapting.

In 2030, it won't be enough to simply be agile or lean—concepts that assume you know what you're optimizing for. Instead, success will come from building organizational intelligence with clear accountability structures that can recognize patterns, anticipate shifts, and cultivate the confidence leaders need to place bigger, smarter bets ahead of competition. This also involves asking how AI will redefine leadership. For instance, executives expect that 25% of enterprise boards will have an AI advisor or co-decision maker by 2030. How will leaders define the role these AI board members should play? How will the decision-making process need to evolve? These are some of the big questions business leaders face.

Making big bets doesn't mean doing away with safety measures. Risk mitigation and diversification strategies continue to be essential. But asking the right questions—and being able to rely on AI for real-time response—is what will give leaders the clarity they need to accelerate in the right direction.

When entire industries can be redefined in quarters rather than decades, moving at machine speed isn't reckless gambling—it's intelligent risk-taking powered by real-time market learning. The winning enterprise of 2030 won't just adapt to change; it will create the changes others must adapt to.

The smarter enterprise transforms velocity into wisdom, using every interaction as a data point to refine its understanding of what works, what doesn't, and what's next. It's always on and continuously adapting.

"By 2030, we will do things that were previously too expensive to be ROI-positive. We will also build products that simply couldn't exist without AI semantic understanding."

Alex Schultz
VP Analytics and CMO, Meta

What to do

Bet big on promising but unconventional ideas that may be tangential to your core business today. Start with AI-powered market scanning systems—setting alerts for specific signals that could reveal future growth drivers. Surface insights that let you anticipate—and counter—competitor strategies before they launch publicly. Then actively deconstruct your existing business model and legacy revenue streams to uncover both vulnerabilities and opportunities for reinvention.

Stress-test new ideas through rapid experimentation, identifying opportunities for improvement, re-designing processes, developing MVPs, and deploying them in a controlled way to identify the opportunities that should be scaled. Foster a culture of experimentation—where failures are not problems but learning opportunities.

Industry showcase

Telecom

Embracing speed over certainty

The telecom industry stands at a crossroads that will define the next decade.

On one side lies incremental progress—optimizing networks, automating customer service, and squeezing efficiency gains from existing operations. On the other side lies transformation—new business models, cross-industry partnerships, and revenue streams that don't exist today.

Telecom executives aren't confused about which path to take: 67% expect AI to disrupt existing business models or create new ones. They're also 20% more likely than leaders in other industries to say they already see what their main source of revenue will be in 2030.

Speed trumps perfection for telecom leaders, with almost two-thirds (64%) saying success depends more on execution velocity than getting every decision right. Today, 46% of AI-related telecom spending focuses on efficiency plays—network optimization, predictive maintenance, automated support. By 2030, product innovation and business model innovation will claim roughly two-thirds of projected AI spend. The message in that math: telecoms are moving from cost-cutting to revenue-creation.

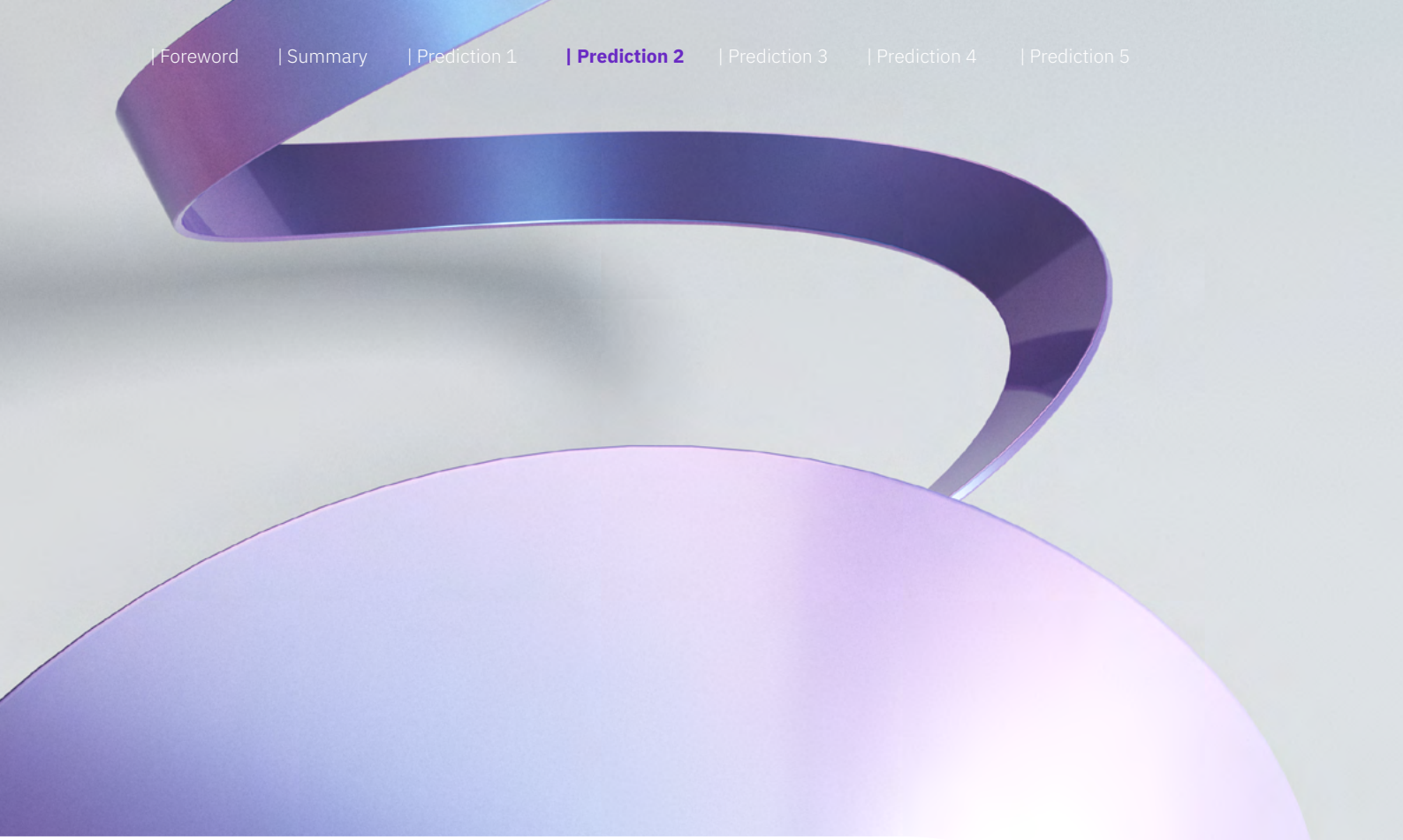
What does this look like in practice? Consider the effect of digital twins paired with AI agents. Telecoms can run "what-if" scenarios not just on network capacity, but on entirely new service launches. They can simulate customer experiences before products hit the market, dramatically compressing development cycles while improving user satisfaction. When AI sales agents detect shifting usage patterns, they can trigger upsells in real time—turning data insights into revenue opportunities.

The biggest opportunities lie beyond traditional telecom boundaries. Cross-industry collaboration is unlocking revenue streams that didn't exist five years ago: smart city infrastructures, AI-powered telehealth networks, and immersive media platforms that blur the lines between physical and digital experiences. As the trusted connectors of people, data, and devices, telecom companies aren't just participating in these emerging markets. They're orchestrating them.

This positioning advantage won't last forever. Cloud providers, tech giants, and agile startups are eyeing the same opportunities. But in a world where data residency, regulatory compliance, and national security concerns dominate boardroom conversations, telecoms possess something hyperscalers can't easily replicate: massive infrastructure, existing customer relationships, and regulatory expertise.

That makes AI sovereignty a critical issue for telecoms. Recent IBM IBV research found that 93% of telecom executives say they must factor AI sovereignty into their 2026 business strategy.[4] Many telcos have already announced their plans to provide sovereign AI—positioning themselves as a secure, compliant alternative to global cloud giants.

The window for telecoms to leverage their unique assets is open now. But it's closing fast.



Prediction 2

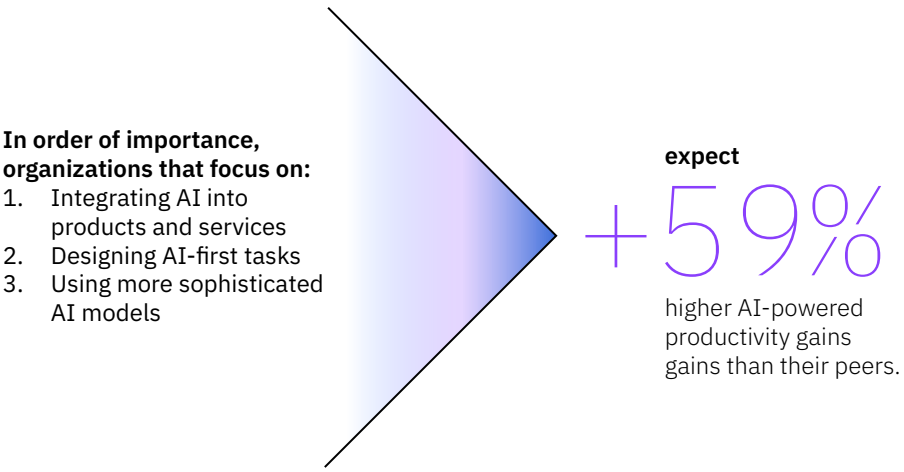
Today’s productivity gains will fund tomorrow’s industry transformation.

Today's AI investments are driving unprecedented productivity gains. And these efficiency improvements are just the opening act.

A two-phase revolution has already begun. More than half (53%) of executives say AI will have transformed business models in their industry by 2030. Phase one, focused on using AI to eliminate waste, accelerate processes, and amplify human capability within existing business models, is already well underway (see Figure 4). Executives expect AI to increase productivity by 42% by 2030—and 67% of executives expect to have captured most of their AI-enabled productivity gains by then.

FIGURE 4

How to boost AI-powered productivity



"The entire C-suite should always be asking, 'How can we disrupt the market? How can we leverage disruption to our competitive advantage by reinventing the what's next and where are we going?'"

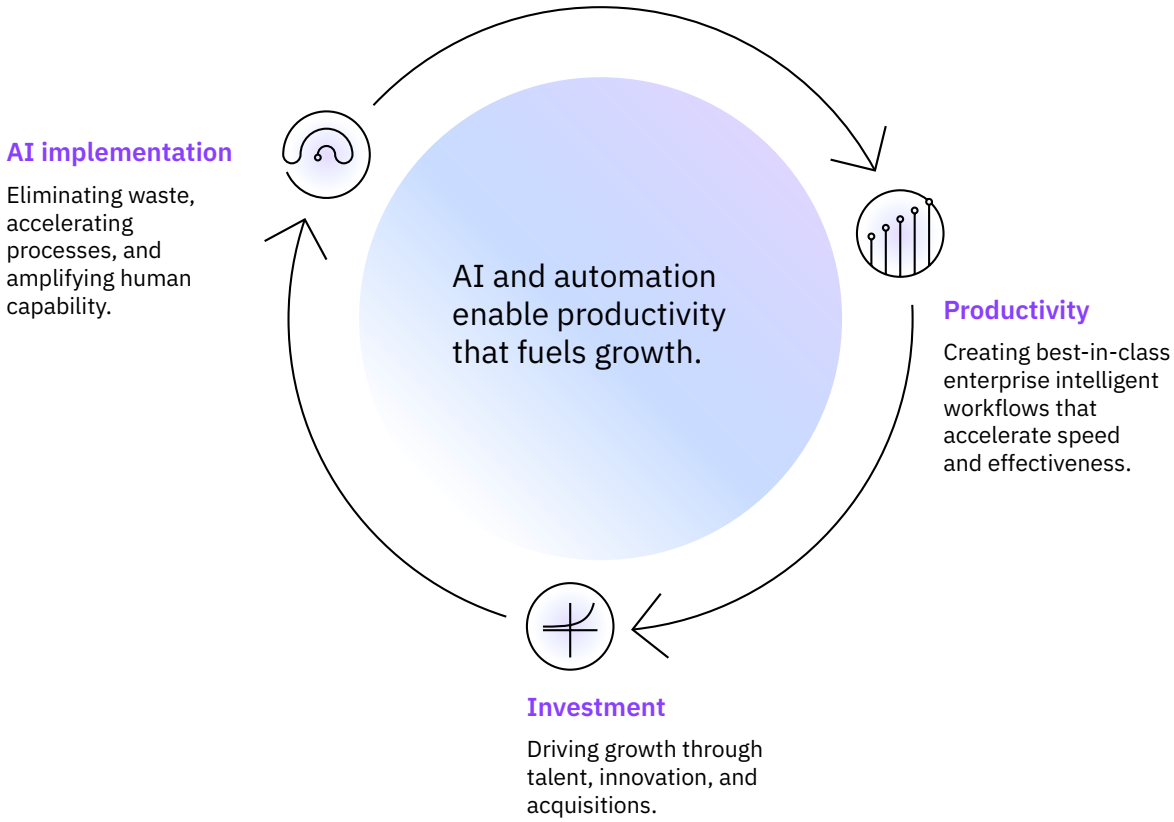
Maureen Power Sweeny
Chief Revenue Officer, RapidScale

Phase two leverages the resources freed up from those productivity gains to reimagine entire industry verticals—and the first to get it right could earn an unassailable advantage. Already, 70% of executives say they're looking to use the value gained from AI to fund investment and growth across the organization.

Instead of banking productivity savings as profit, organizations can reinvest them in exponential growth opportunities. These investments in innovation then transform the business model, which in turn fuel further growth. It's a flywheel effect where productivity gains don't just reduce costs, they actively drive revenue growth by helping companies capture greater market share (see Figure 5).

FIGURE 5

The AI-first flywheel effect



The smarter enterprise will operate with resource abundance that previous generations of leaders couldn't have hoped for.

When organizations integrate AI directly into their products and services or use it to create new revenue streams, they transform productivity plays into customer value multipliers. For instance, today's auto manufacturers already use AI to optimize supply chain operations and reinvest those efficiency gains to develop AI-integrated vehicles that learn driver preferences, predict maintenance needs, and improve customer experience with every mile driven.

These innovations are rapidly turning cars into platforms to deliver software-driven mobility. Currently, digital and software-related revenue accounts for about 15% of total automotive revenue, but this is expected to increase to 51% by 2035.[5] Cost savings become revenue engines when companies use them to continually redefine and push the boundaries of what cars can do.

Customers are eager for this transition. In fact, separate IBM IBV research reported that 56% of global consumers say they're so excited about cutting-edge, AI-enabled services that they'd accept flaws.[6] But they don't want surprises. Two-thirds of consumers say they would switch brands if a company intentionally concealed AI's involvement in their experience—and half would pay more to do so.[7] This means AI-first products and services must come with clear governance frameworks. Consumers say easy-to-understand explanations of how AI is using their data is what would make them most comfortable engaging with AI-powered products and services.[8]

"If you fast forward to 2030, the majority of governance work may not actually be done by humans due to its scale and complexity. So the question becomes, how do you build automated governance tools that humans can oversee—and how long do you have to figure that out?"

Kristie Chon Flynn
Data Protection Officer, Google

"There will come a time when what has been capitalized will no longer be an asset. I think the differentiating factor in this world comes down to data generated from hardware and software. The quality of data, not the quantity, will be the biggest source of competitive advantage."

Junta Tsujinaga
President and CEO, OMRON

Then there are the operational opportunities that grow from AI-native capabilities that improve themselves over time. Tasks aren't just completed more efficiently; they evolve based on performance data, optimizing for outcomes that weren't visible when the work was originally designed. For a retailer, this could mean reinvesting inventory optimization savings into AI recommendation engines that dramatically increase basket sizes. For energy companies, it could mean channeling predictive maintenance savings into smart grid technologies that redefine how power gets distributed.

The smarter enterprise will operate with resource abundance that previous generations of leaders couldn't have hoped for. Traditional trade-offs between growth and profitability, innovation and efficiency, or scale and agility become obsolete when AI eliminates the scarcity that forced those choices in the first place. When capital, talent, and operational barriers no longer limit what's possible, the question shifts from "what can we afford to do?" to "what should we choose to create?" Vision, adaptability, and courage become the primary differentiators.

The results go beyond acceleration. They let an enterprise radically alter its industry vertical and become a market leader for years to come.

"I'm interested in hyper-personalization. How amazing would it be if you went to a hotel and they already knew what you wanted? We need to think about how we adapt our operations to accommodate that at scale at the hotel level. Where are we investing time and money to drive innovation so that we can actually get there?"

Tina Edmundson
President, Luxury, Marriott International

"Many marketers are holding themselves back by defining creativity too narrowly. By only viewing creativity as pixels, meaning images and video, they fail to see that creativity now exists in bits and bytes, meaning data structures, code pipelines, and AI prompting. This prevents them from fully leveraging AI for structural productivity."

Alex Schultz
VP Analytics and CMO, Meta

What to do

Begin by setting a productivity moonshot goal for 2030. Then break this into annual milestones and assign ownership to specific executives. As part of this effort, launch quarterly "efficiency sprints" where cross-functional teams identify one workflow that can become 50% faster using AI.

Use a rapid experimentation approach to drive improvements and regularly track and report on progress toward a predefined set of metrics. Create a "productivity-to-opportunity map" that connects every efficiency gain to a revenue-generating capability, then focus newly added bandwidth on that area of the business.

Designate three to five business processes as "AI sandboxes" where teams can experiment with emerging tools without breaking core operations. Rotate these quarterly to spread learning across the organization.

What fuels AI-powered productivity gains?

"I need people on my team who think across the entire employee lifecycle and identify ways to deploy AI-enabled technology at scale to have a positive impact on everyone's experience."

Danny Guillory
Chief People Officer, GameTime

"When we look to the future of how people will work, we don't necessarily think it'll be fewer people doing the work. But we expect to accomplish more with the teammates we have in our organization."

Corbin Wallace
CEO, Trevi

"Every quarter, we select about 30 people to participate in an AI skills development program, where they take one day a week to go through AI capabilities training and enablement. One team member, who is not an engineer, used that time to build a web application that cut the time it takes to do her job by 80%. We gave up one day a week for a quarter and now we get four days back. It's amazing."

Ryan Petersen
Founder and CEO, Flexport

"We are entering an era where the entire workflow must be fundamentally re-examined, shifting from sequential to parallel processes."

Akiyuki Ui
Operating Officer, Mizuho Bank

Perspective

Cybersecurity in the smarter enterprise

In an AI world, cybersecurity can no longer be a defensive afterthought—it's becoming the intelligent backbone of enterprise operations. In part, that's because of the risk environment: AI tools are in the hands of bad actors, which requires faster, most sophisticated protection. But AI also offers dramatic opportunities to make security more efficient and effective.

AI augmentation in security operations is expected to increase 50% over the next three years, while the use of generative AI security capabilities will grow 63%, according to recent IBM IBV research.[9] Nearly two-thirds of executives expect every employee in their IT organizations to be using AI agents within two years.[10] This isn't gradual adoption—it's systematic reinvention of how organizations protect themselves.

The leaders getting ahead of this shift are discovering something remarkable: cybersecurity that thinks for itself. Already, 30% of organizations have built an AI-first security foundation that operates as a self-regulating, self-correcting, and self-healing system.[11]

Self-regulating systems automatically adjust security policies and access controls based on real-time risk assessment, tightening permissions when suspicious activity emerges or relaxing them when legitimate business needs arise. Self-correcting capabilities enable the system to identify and fix vulnerabilities, misconfigurations, or policy violations as they occur—patching security gaps, updating firewall rules, or recalibrating threat detection algorithms based on new attack patterns.

Self-healing systems take this a step further by orchestrating comprehensive recovery from security incidents. They automatically isolate compromised systems, reroute network traffic, restore services from clean backups, and rebuild affected infrastructure while simultaneously strengthening defenses against similar future attacks.

Together, these capabilities create cybersecurity that turns security infrastructure into a continuously improving shield that gets stronger with every challenge it faces. For executives, the implications are clear: cybersecurity is evolving from a cost center that prevents or manages threats to a strategic capability that enables rapid, safe innovation. Smarter enterprises aren't just more secure—they move faster, take smarter risks, and build competitive advantages.

Industry showcase

IT services

Saying goodbye to billable hours

IT services companies are at the leading edge of AI productivity gains: 80% expect to realize most of their efficiency benefits by 2030. They are also leading on agentic AI adoption, with 56% deploying intelligent agents across multiple workflows—compared with 31% of organizations globally.

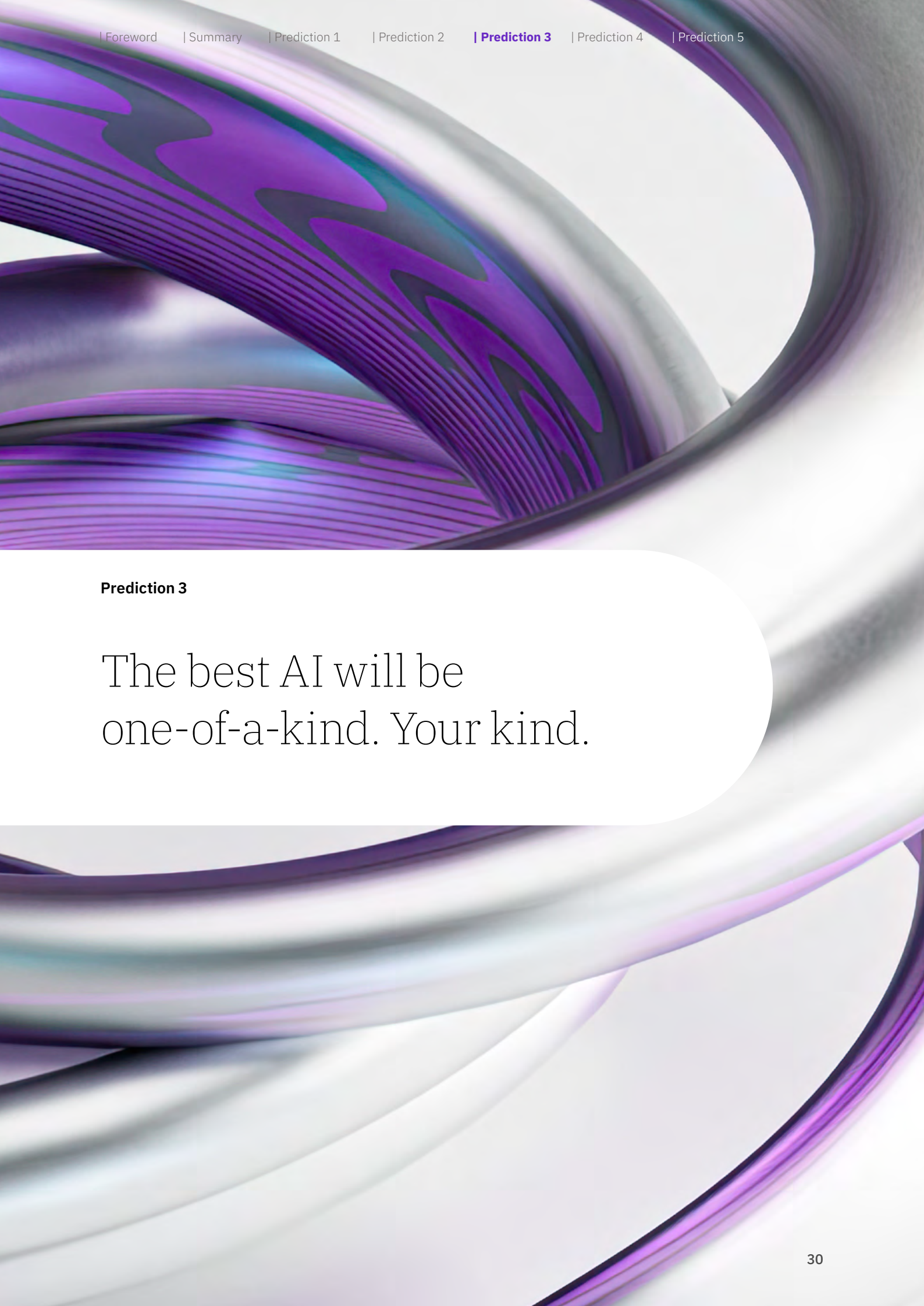
Yet productivity gains alone won't save an industry built on billable hours when AI can deliver outcomes in a fraction of the time. The fact is, the IT services sector faces an existential threat that other industries simply don't. Manufacturing companies can use AI to optimize production lines, but they're still making physical products. Retailers can enhance customer experiences, but they're still filling shopping carts. IT services companies are selling something AI can increasingly do without them.

That's why 81% of IT services executives are using AI-driven savings to fund growth investments across their organizations. They're not banking the savings—they're betting them on reinvention. In fact, 65% of IT services execs in our research cite revenue growth as their top AI investment driver in 2030—the highest of any industry studied. What's more, 78% of IT services executives say AI will enable new or disrupt existing industry business models—compared to just 53% of global execs on average.

By necessity, IT services are shifting from time-based billing to outcome-based delivery. Instead of selling consulting hours, IT services are already starting to sell results—combining AI assets with human expertise to deliver measurable business impact. This model requires both a mindset change and a massive upfront investment. AI platforms, data infrastructure, and new talent don't come cheap. While some of the savings generated from streamlining existing operations will need to be passed along to customers, IT services companies are particularly well-positioned to fund their next evolution.

Almost half (44%) of IT services executives strongly believe AI will deliver clear competitive advantage by 2030—again, the highest confidence of any sector. They understand that early movers won't just win market share. They'll define entirely new markets.

While it's ironic that the industry best positioned to understand AI's transformative power is also the one most threatened by it, threat creates urgency—and urgency creates opportunity. The IT services companies that emerge stronger from this transition will be those that reinvest their productivity gains fast enough to lead it.



Prediction 3

The best AI will be one-of-a-kind. Your kind.

Tomorrow's competitive advantage won't come from using the largest AI models. It will come from using AI in a way that no one ever has before.

As AI becomes ubiquitous, uniqueness becomes essential. When every organization has access to the same large foundation models, the differentiating factor becomes how well these different models are combined and customized—and how unique enterprise data is incorporated to achieve targeted business objectives.

Foundation models are the Swiss Army knives of AI. They're versatile and provide flexibility across multiple use cases and modalities. As a subset of foundation models, large language models (LLMs) are general-purpose models trained on vast data, typically text and code. They have general reasoning capabilities and are adaptable but require significant compute power and training. Small language models (SLMs) are the tactical specialists. They're compact, fast, and designed for specific tasks or edge deployment. They're commonly used in real-time applications such as chatbots, mobile apps, or IoT devices, where speed and efficiency trump raw capability.

The strategic choice isn't either-or—it's about matching the right tool to the right job. LLMs for general tasks and problem-solving. SLMs for specific functions and applications that demand customization and fine-tuning. Then have them work on your organization's proprietary data to tailor your AI capabilities even further.

"We're the first women's soccer league in the world to implement a video assistant referee. We know that AI is going to unlock tremendous efficiency and effectiveness to reduce or potentially even eliminate some of the human error that happens around the calls that happen on the field."

Jessica Berman
Commissioner, National Women's Soccer League

"We design AI systems to be modular, disposable, and potentially replaceable. This allows us to adapt quickly to new innovations without being locked in and integrate new technologies as they emerge."

Chad Gates
Managing Director, Pronto Software

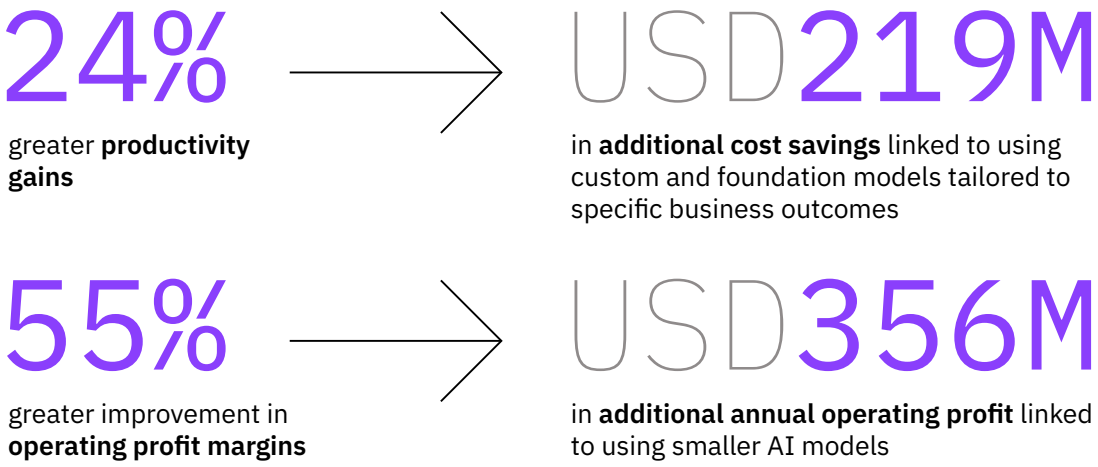
Our research shows that the ability to use multiple models—including smaller, fit-for-purpose models—in an integrated and optimal way will be essential for future success. By 2030, 82% of executives expect their AI capabilities to be multi-model—and 72% expect SLMs to become more prominent than LLMs in their organizations in the same timeframe.

What's more, organizations that plan to use more tailored model portfolios expect much greater productivity gains. To come to this conclusion, we compared organizations that plan to primarily use large, pre-trained models to those planning to use a combination of models tailored to achieve specific business outcomes. We looked specifically at how organizations in each of these groups expect AI to improve several key performance metrics.

When we controlled for size, we found that organizations that scale AI across multiple workflows with a focus on smaller AI models or a combination of custom and foundation models anticipate 24% greater productivity gains, 55% higher operating profit margin improvements, and twice the reduction in process cycle and project delivery times by 2030, compared to those relying predominantly on large pre-trained models (see Figure 6). These gains—which are not our predictions, but the expectations of the executives we surveyed—come on top of those achieved by using foundation models alone.

FIGURE 6

The right mix of models amplify baseline AI-powered business outcomes



Note: Calculations are based on an average company with USD20 billion in annual revenue. Dollar figures reflect gains achieved on top of those achieved using foundation models alone. See "Research methodology" on page 56 for more details.

"As AI tools become ubiquitous, simply using them will no longer be an advantage; it will be the baseline. The competitive edge will shift entirely to what you feed the AI (your unique data) and how you direct it (your unique creativity)."

Alex Schultz
VP Analytics and CMO, Meta

This validates the importance of customizing and tailoring AI models, starting today. But unique AI is not just about training and adopting the right AI models one at a time. It's about building portfolios that can survive market swings, regulatory shifts, and procurement cycles. 2030's market leaders will be able to adapt their AI portfolio dynamically and responsively, just as an investor adapts their financial portfolio. Knowing what capabilities to add, what to maintain, and what to cut at the right time is key.

Enterprises will also work with ecosystem partners to access the right AI models, assets, and applications when needed, because they may not always have the best tool for the job on hand. Today, 71% of executives say they view emerging AI capabilities as complementary tools in a dynamic portfolio.[12] But only 28% of executives are confident they know what AI models they'll need by 2030.

By 2030, enterprises will optimize their AI portfolios not just for internal use but as competitive assets in external markets. Organizations will sell, license, or collaborate using their proprietary AI capabilities, turning their portfolios into revenue-generating tools. In other words, organizations must treat their AI portfolios as products themselves—creating ecosystems where their AI competes, evolves, and generates value beyond traditional business applications.

This approach makes the AI portfolio far more valuable than the sum of its parts, as synergies between different models reinforce each other. Combining specialized capabilities and modalities to address different tasks can accelerate workflows. Sharing data across different models can inform better insights and predictions. But to make the most of this opportunity, organizations will need open and interoperable AI models that can interact with each other seamlessly.

The portfolio must also be underpinned by a flexible, secure, and scalable hybrid-cloud architecture that allows relevant teams across the enterprise to access AI models instantly—as well as the underlying data and applications built on top. Data must flow and be processed in real time wherever it is needed across the enterprise.

"AI models are only as good as the context and the goals that you give them. So, the need for a high degree of clarity is very important in this new world of work."

Aaron Levie
CEO and Co-founder, Box

Two significant obstacles stand in the way of optimizing a multi-model AI portfolio. The first revolves around leadership skills. Directing a dynamic AI model portfolio isn't the same as overseeing traditional software deployments or even cloud migrations. Because these models learn, adapt, and evolve in real time—making decisions based on data patterns that shift by the hour and interacting with customers as well as operations—this type of portfolio needs constant tuning, ethical oversight, and strategic direction. Leaders need a skillset that is part technologist, part strategist, part behavioral scientist. No wonder 74% of the executives we surveyed say AI will redefine leadership roles across the enterprise by 2030. Two-thirds say AI will create entirely new leadership roles, with 68% expecting to have a Chief AI Officer.

The second obstacle: 68% of executives worry their AI efforts will fail due to lack of integration with core business activities. There is a difference between AI adoption—adding tools to existing processes—and creating integrated intelligence that becomes inseparable from business strategy.

This is where orchestration comes in. A neutral orchestration layer makes it possible to integrate a full range of tools—from business platforms to apps to AI agents—to gain flexibility and interoperability between different systems. An orchestration layer acts as the "concierge" between systems, connecting workflows across systems in a way that feels seamless to the user. It coordinates data flows and enables the combination of capabilities from different environments to create end-to-end solutions. Plus, it makes it easy to add and remove solutions as business needs demand.

"AI's future isn't about bigger models. It's about smarter integration with people and processes."

Jinesh Dalal
Head and Vice President, Technology Development, C-Metric

"If we have 100 million customers, ideally we would create 100 million unique profiles and offer financial products perfectly tailored to each customer, delivering returns that outperform the market."

Masahiro Kuniyuki
Managing Corporate Executive and Group CHRO, MUFG

The rules the orchestration layer uses to manage employee access essentially serve as a governance layer that embeds key controls and enables appropriate human oversight. Accountability will be crucial as AI advances, which means organizations need mechanisms in place to implement audit trails, maintain decision logs, and help ensure that AI systems can provide explanations for their outputs. From a legal standpoint, organizations must establish clear delegation authorities, define liability boundaries, and create governance structures that can adapt to evolving regulatory requirements.

Smarter enterprises master this transformation by design. They don't just collect data; they create secure and ethical feedback loops where AI performance improves business outcomes, which generate better data, which then enhances AI performance. The enterprise that wins in 2030 will operate with intelligence baked into every business process, turning AI into an asset inseparable from strategy.

"I see governance as a differentiator in 2030, because companies can't choose between doing things quickly or doing them responsibly. It has to be both."

Kristie Chon Flynn
Data Protection Officer, Google

What to do

Shape AI to fit, not dazzle. Start by identifying the three to five capabilities that truly set you apart—your customer relationships, specialized knowledge, operational advantages, or market position—and make sure that proprietary data can be accessed and used by AI. Then determine which AI models and assets need to be part of your portfolio to amplify these differentiators.

Establish a neutral, interoperable orchestration layer that integrates platforms, apps, and agents to create a seamless employee experience. Encode key controls in a governance layer to manage data access and help ensure the responsible use of AI.

Create rapid experimentation cycles to test, refine, and validate tailored models and assets—and break out of tech lock-in so embedded AI can fluidly adapt as business needs change. Make AI fluency as essential as financial literacy for senior roles.

Industry showcase

Aerospace and defense

Launching mission-specific AI

National security demands next-level data protections.

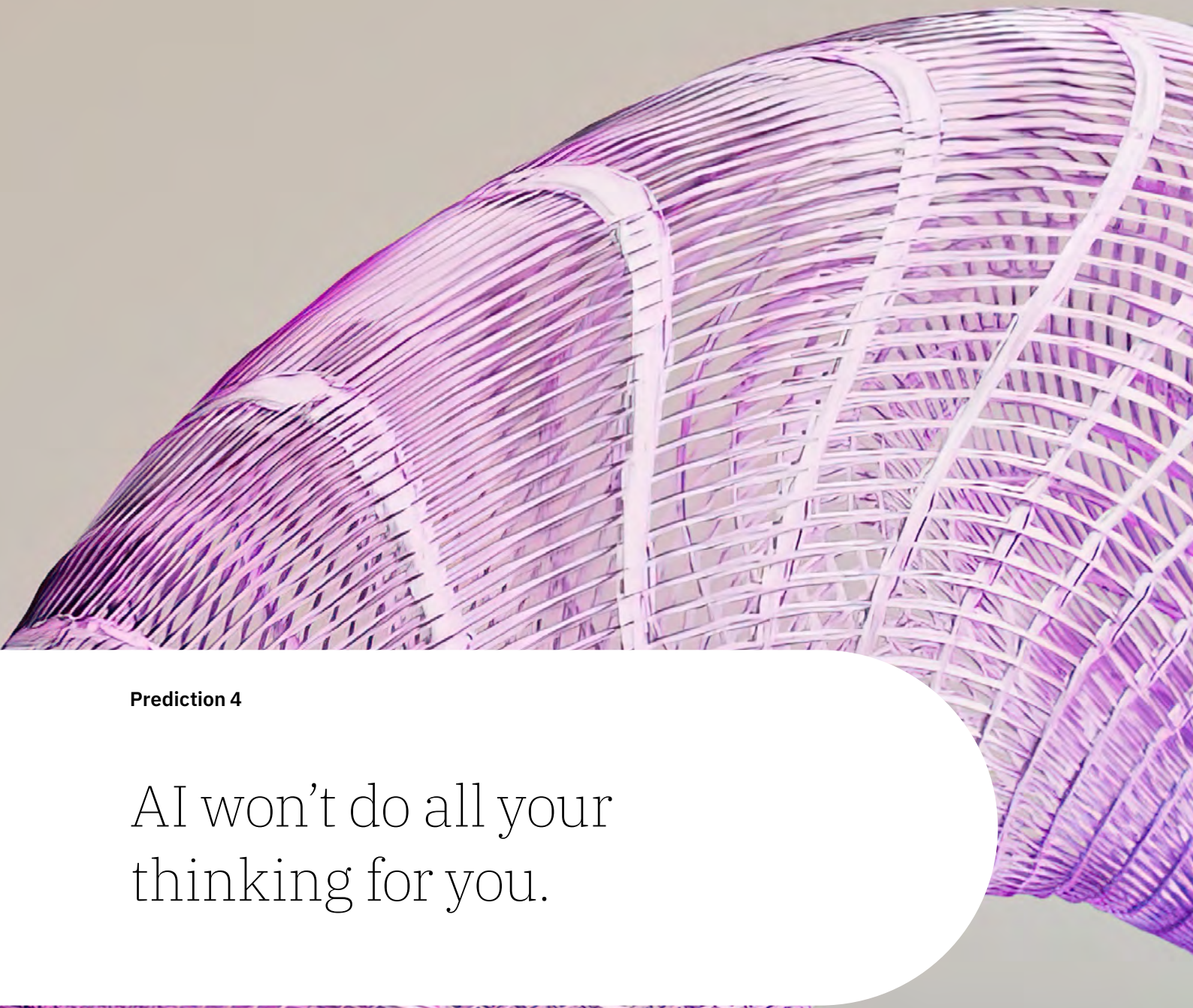
When lives depend on your systems—when the stakes involve protecting nations and preserving peace—off-the-shelf solutions simply aren't an option. You need models that understand the nuances of specific threat environments, systems that are resilient under extreme operational constraints, and data storage and governance that protects the most sensitive intelligence.

This reality has aerospace and defense organizations laser-focused on developing unique AI model portfolios: 79% of aerospace and defense leaders say they have a clear view of the AI models they'll need by 2030—the highest certainty of any sector. And 46% say their organization will prioritize building custom AI models tailored to their specific needs, compared to just 23% across other industries.

What's more, 78% of aerospace and defense firms are leveraging fit-for-purpose SLMs rather than relying on broad, general-purpose systems. These targeted models can more securely and reliably process classified information, understand technical specifications unique to defense applications, and maintain performance even in degraded and edge environments. What's driving this precision? Security imperatives and ethical obligations that don't exist in other commercial markets. Unique solutions are needed when mission superiority depends on information advantage—and when that information is classified.

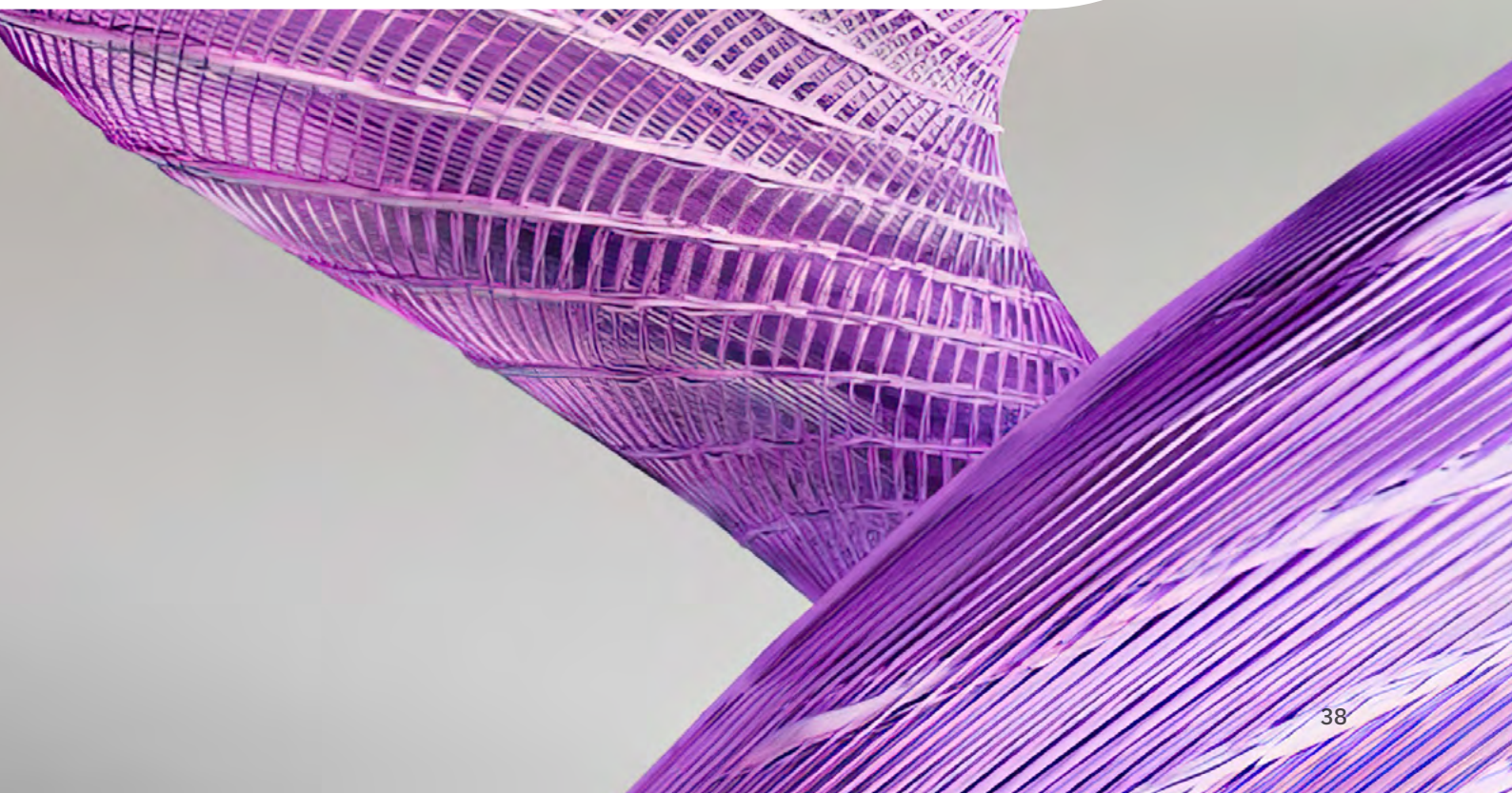
The ethical stakes run deeper still. When AI systems are integrated into weapons platforms, flight controls, and threat detection networks, understanding exactly how they'll interact with human operators becomes a matter of national security and ethical responsibility. In fact, 75% of defense and aerospace firms routinely evaluate AI's impact on job roles and work processes—higher than any sector except IT services. Similarly, 78% expect to have a Chief AI Officer by 2030.

This layer of governance helps ensure AI enhances human judgment rather than replacing it—and that systems remain accountable to the humans they serve.



Prediction 4

AI won’t do all your thinking for you.



Today's job roles will be unrecognizable in the enterprise of the future. Already the half-life of human skills is shrinking: 67% of executives in our research say job roles are becoming shorter-lived and 57% expect most current employee skills to become obsolete by 2030.

Many leaders are wondering which tasks should be delegated to AI and which should remain with humans. More precisely: Where should AI augment people—and where should people augment AI?

As noted earlier, an AI-first approach is correlated with higher projected productivity gains. While a smarter enterprise will amplify the unique strengths of humans and machines, our analysis shows that tomorrow's AI should lead in some areas that today require a human touch.

Looking to 2030, our research indicates that AI-first organizations are 79% more likely to say knowledge work—such as the creation of reports, proposals, and code—will be predominantly done by AI. These organizations are also working more intently to make this vision a reality: they are 48% more likely to be creating net-new job roles and 46% more likely to be redesigning their organizational structure to get more value from AI.

Today, organizations hire specialists for job roles that require targeted expertise. But tomorrow, AI will be the specialist in many situations. When trained and governed properly, AI models, agents, and assets have the potential to take on tasks that a human would need years to master. In that environment, human expertise becomes a cost the organization must justify. While critical thinking will still be essential, competence won't be a differentiator. Human creativity and ingenuity—the brilliant ideas that break new ground—is what will deliver a competitive advantage.

As pre-AI workflows become obsolete, employees will need to envision entirely new functions that can manage AI-first operations. Instead of teams of people who use AI to augment individual job roles, they need orchestrators who can manage AI across multiple domains and integrate insights that span traditional departmental boundaries.

"We have to push our creativity to see how many things we can do without human intervention. That is a mandate."

Jacobo Díaz García
CFO and Head of Digital Banking, Bankinter

People become more valuable, not less, when their energy is focused on the problems that only humans can solve.

Where organizations employ coders today, they may employ experience managers with no coding skills by 2030. The premium is shifting from technical experts to business strategists who can review and improve AI outputs with an eye on how they will deliver value. As human-led, agent-operated teams become the new competitive unit, many of the executives we interviewed say they expect HR and IT functions to converge.

AI agents promise to shatter traditional org charts as they're embedded in workflows across functions (see Figure 7). At least two-thirds of executives say agentic AI will play a significant role in finance, sales, marketing, IT, and research and development by 2030. These agents generally come in one of two forms: personal agents that empower employees to work smarter and enterprise agents that optimize end-to-end workflows. Personal agents are designed to assist individuals with everyday tasks—such as summarizing meeting notes or preparing daily agendas—while enterprise agents automate and optimize complex workflows.

When deployed at the enterprise level, these different types of agents can be combined to drive rapid experimentation and scaled solutions that integrate more advanced AI solutions. This process will in turn create the need for entirely new job roles to design and manage the work of agents, such as functional AI agent supervisors and AI safety engineers.

But few organizations are set up for this shift. Today, 68% of executives view current organizational structures as impediments to realizing AI's full value. And by end of 2026, executives expect 56% of the workforce will require reskilling due to AI-driven automation.[13]

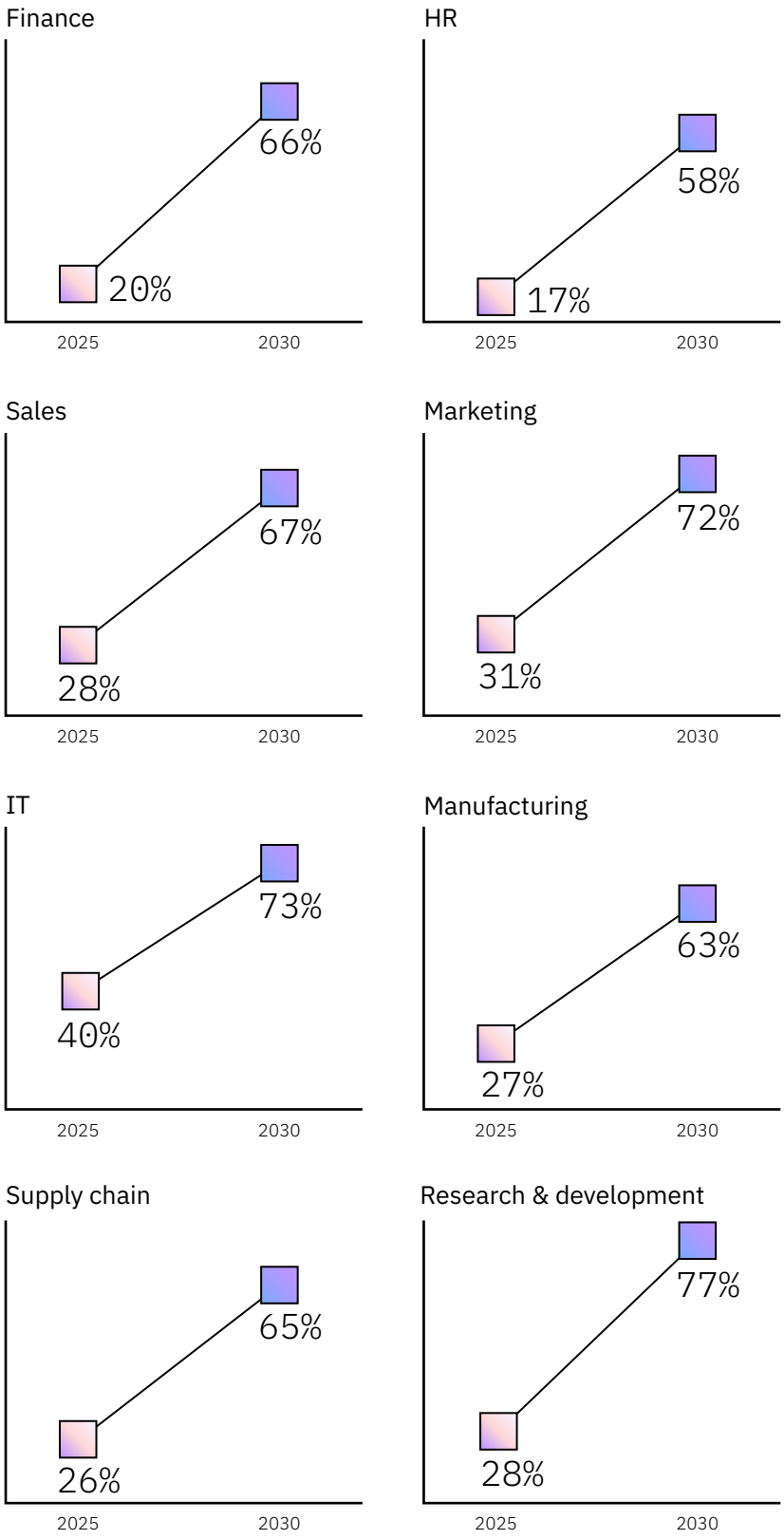
"The goal is for our employees not only to consume technology, but also to be able to co-create solutions alongside AI, developing new forms of collaboration between people and machines."

Susana Meseguer
Executive Managing Director of Digitalization and Services, Repsol

FIGURE 7

Agentic AI will transform business functions—and reshape the org chart.

Percentages reflect the portion of executives who say agentic AI will be embedded to a moderate or great extent in each function, by year.



"The capabilities that transcend any particular job will remain very important: decision-making, judgment, strategy, collaboration skills, intuition, clarity of thought. Those things will become even more necessary in a world where you can delegate a lot of the underlying work to an agent."

Aaron Levie
CEO and Co-founder, Box

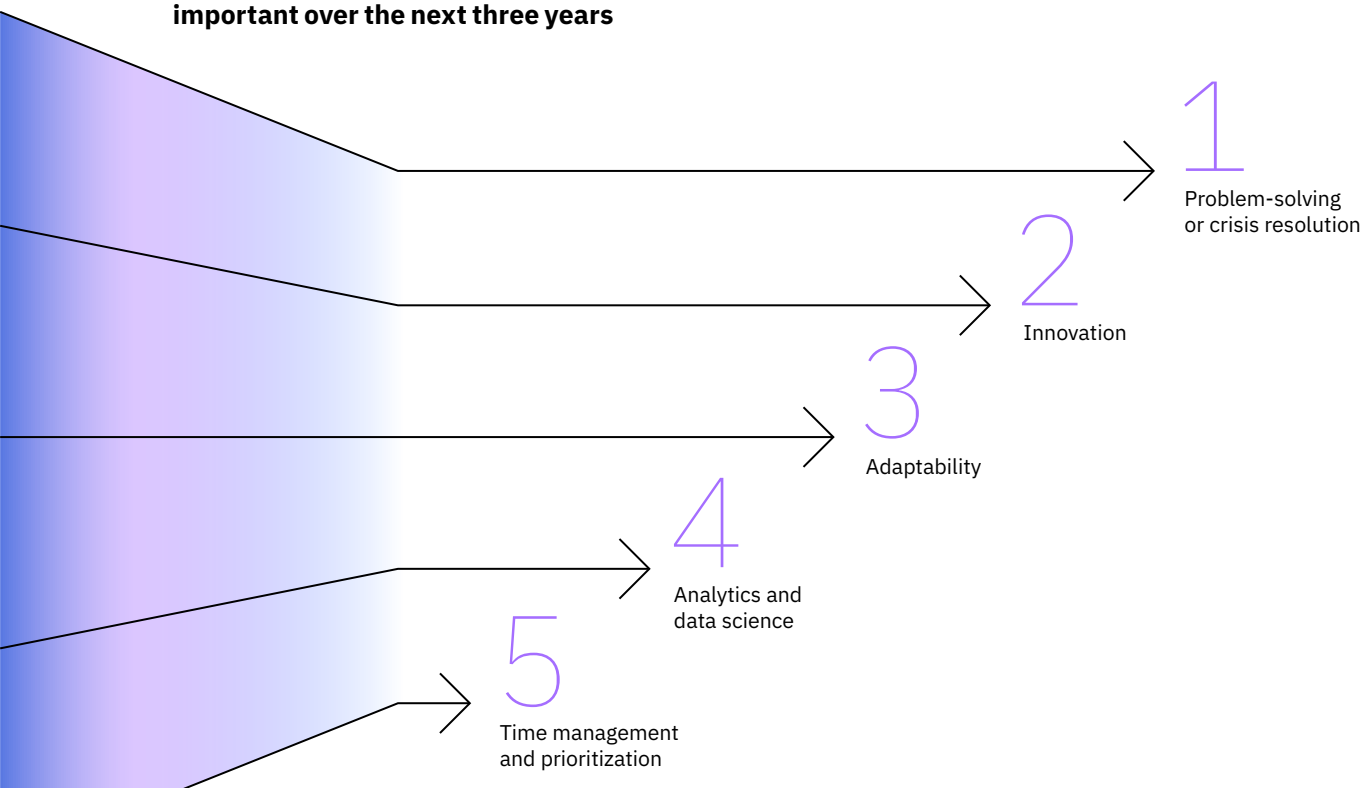
The skills they're most focused on aren't technical. Execs say problem-solving and innovation are the most important skills for their employees to have today—and they expect generative AI to make these skills even more important over the next three years (see Figure 8).[14]

As a result, organizations face a major talent management challenge. Many may need to retrain entire divisions of employees as they transition to AI-first workflows. Fortunately, AI can help in this area, as well. Instead of pulling people out of work for formal training, organizations can embed learning directly into the workflow.

For example, when an employee interacts with an AI assistant, that same technology can simultaneously deliver personalized learning—analyzing their current capabilities and providing skill development and coaching based on their personal career trajectory. This approach transforms the very AI systems that are reshaping jobs into the platforms that prepare people for what comes next. The result? Workers gain new certifications and credentials while continuing to contribute, turning technological disruption into human advancement.

FIGURE 8

Top skills generative AI will make more important over the next three years



Where will your organization require human intelligence in 2030?

"When AI can do everything, where do I need to rely on my experience and wisdom? No one really knows yet—and that sweet spot also depends on what industry you're in."

Guido Teuber
CEO, CATAN GmbH

"It's hard to anticipate cool. It was hard 20 years ago and it's going to be hard in five years. But there's always going to be players who do. It's a feeling—it's such a mix of left brain and right brain."

Melissa Mash
Founder and CEO, Dagne Dover

"AI doesn't know if it has generated an image that is beautiful or if it's slop. But a person can tell the difference. That's where we still need human experience and judgement about what works and what doesn't."

Danny Guillory
Chief People Officer, GameTime

"As technical skills become a little less important over time, critical thinking becomes more important—understanding where you can find areas of optimization or areas of growth."

Robin Chiang
Chief Growth Officer, OpenTable

"The generalist who's smart, hard-working and has the communication skills to inspire people will be more important as domain experience becomes much more commodified."

Ryan Petersen
Founder and CEO, Flexport

For their part, employees are eager to adapt. Across all age groups, at least twice as many employees say they would embrace, rather than resist, greater use of AI by their employers in 2026.[15] While not everyone is on board, 63% of employees would work in collaboration with an AI agent—and nearly half (48%) say they'd be comfortable being managed by one.[16] When employees understand their role is enhanced rather than eliminated, resistance becomes engagement.

Succeeding in the future will require hiring for an AI-first mindset: seeking out those who can think critically and systemically about problems AI hasn't encountered before, who can provide ethical guardrails for AI-led decisions, and deploy AI capabilities where they will deliver the most value. In fact, 67% of executives agree that mindset will be more important than skills in 2030.

A smarter enterprise needs people who are willing—even eager—to continuously learn and adapt. In this environment, employee contributions aren't diminished. People become more valuable, not less, when their energy is focused on the problems that only humans can solve.

"The biggest challenge is not just data readiness—it's awareness, education, and skills. The technology is evolving so fast that even training programs risk becoming obsolete within months."

Umang Dharmik
SVP and Head of IT
Mercedes-Benz Research Development India (MBRDI)

What to do

Recast your org chart to fuel the AI-first transition. Start by replacing fixed job descriptions with outcome-based mandates that evolve as AI capabilities expand and business needs shift. Then empower employees to define use cases where AI can add the most value, to develop their own low- or no-code personal agents, and to pilot AI tools in real workflows. Set clear guardrails and create accountability mechanisms to increase employee comfort and reduce risk.

As you advance, continually redesign processes so that AI handles all tasks it can reliably complete. Augment AI with the critical thinking, oversight, and judgment that only humans can provide. Re-skill employees by embedding learning into the workflow with agentic AI coaches that offer advice, courses, and certifications. Re-set expectations so that employees know they must drive change—not just accept it. Recruit people with a growth mindset instead of a static skillset.

Client zero story

Transforming HR for an AI-first future[17]

With a workforce of over 300,000, IBM needed an HR solution that could scale as fast as AI. To meet this challenge, the IBM HR and CIO organizations jointly led a strategic transformation initiative. The vision was to create a seamlessly integrated, AI-driven HR ecosystem that could help teams make faster, smarter decisions while delivering a more consistent employee experience.

With over 1,000 interfaces, the existing HR system created silos, inefficiencies, and significant maintenance overhead. Critical HR workflows, such as onboarding, employee benefits, and time management, were increasingly fragmented, with employees navigating multiple systems to complete routine tasks.

A global talent management revolution

By embedding AI-driven automation and designing for intentional behavior change, IBM created an optimized and user-friendly HR environment. The resulting solution positioned IBM HR to deliver long-term business value through a globally consistent yet locally adaptable platform. Early wins included accurate payroll execution and smooth onboarding of more than 4,000 pre-hires.

The scale of this transformation was immense. Data migration covered 300,000 employees and more than 11 years of payroll history. IBM introduced 141 automations to reduce manual effort, minimize errors, and accelerate processes such as onboarding, employee transfers, and leave requests.

These improvements drove unprecedented operational efficiency and quicker resolution of requests and allowed HR to focus on higher value work. Employees benefit from hyper-personalized, human-like interactions, improving not only the productivity of HR but of the entire workforce. With AI supporting each individual employee with more tailored career guidance and skills development, HR transformation acts as a catalyst for transformation of workflows across the enterprise.

Pooja Kumar, Vice President, HR AI Innovation at IBM, shared her insights on the transformation: “What makes this powerful isn’t just the scale, but how it frees HR to focus on people and strategy. With AI and automation at the core, we’ve built a foundation that will keep evolving with IBM’s workforce well into the future.”

Industry showcase

Healthcare

Removing obstacles to high-quality care

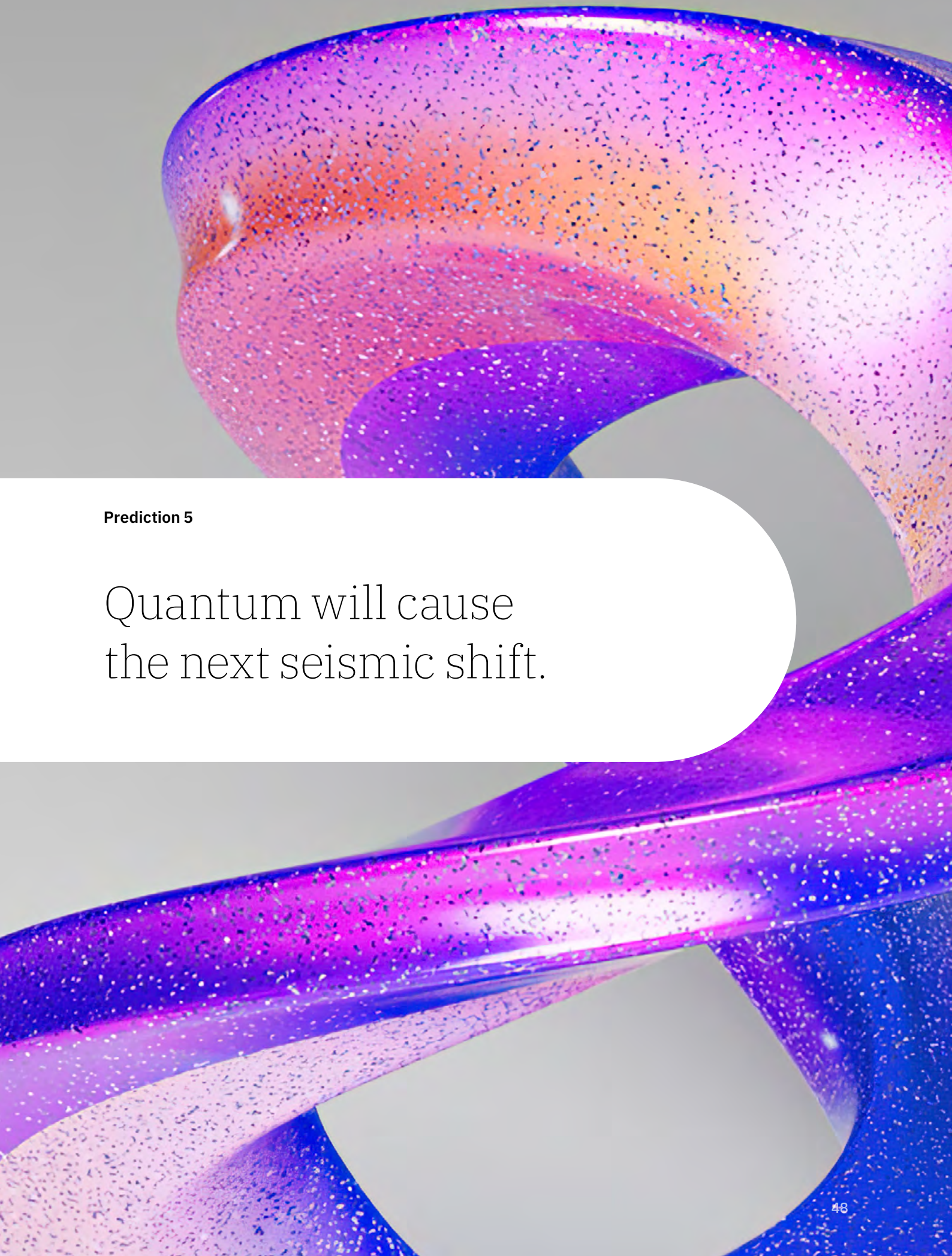
AI-first healthcare isn't about replacing the human touch. It's about creating organizational structures that free healthcare professionals to focus on what matters most: patient care.

The numbers reveal an industry in active transformation. 66% of healthcare executives say they're creating net-new jobs because of AI—and 63% are redesigning their organizational structures entirely.

Unlike sectors where AI adoption can be gradual, healthcare organizations face life-and-death pressure. When administrative inefficiencies delay patient care, when diagnostic backlogs stretch for months, when qualified professionals spend more time on paperwork than patients, the cost isn't just financial—it's human.

Already, 65% of healthcare executives are empowering employees to use AI for task automation in their specific roles. Agentic AI is automating clinical coding, managing patient waitlists, and streamlining discharge procedures. Manual validation processes that once took months can now be completed in hours. The efficiency gains free up human expertise for patient-facing work— where empathy, intuition, and complex decision-making remain irreplaceable.

Healthcare organizations that resist this structural shift face the risk that their best people will burn out managing administrative overhead while patients wait longer for care. The AI-first operating model isn't about technology preference—it's about sustainable care delivery in an increasingly complex medical landscape. The choice is between healthcare systems that use AI to amplify human expertise and those that let administrative burden diminish it.



Prediction 5

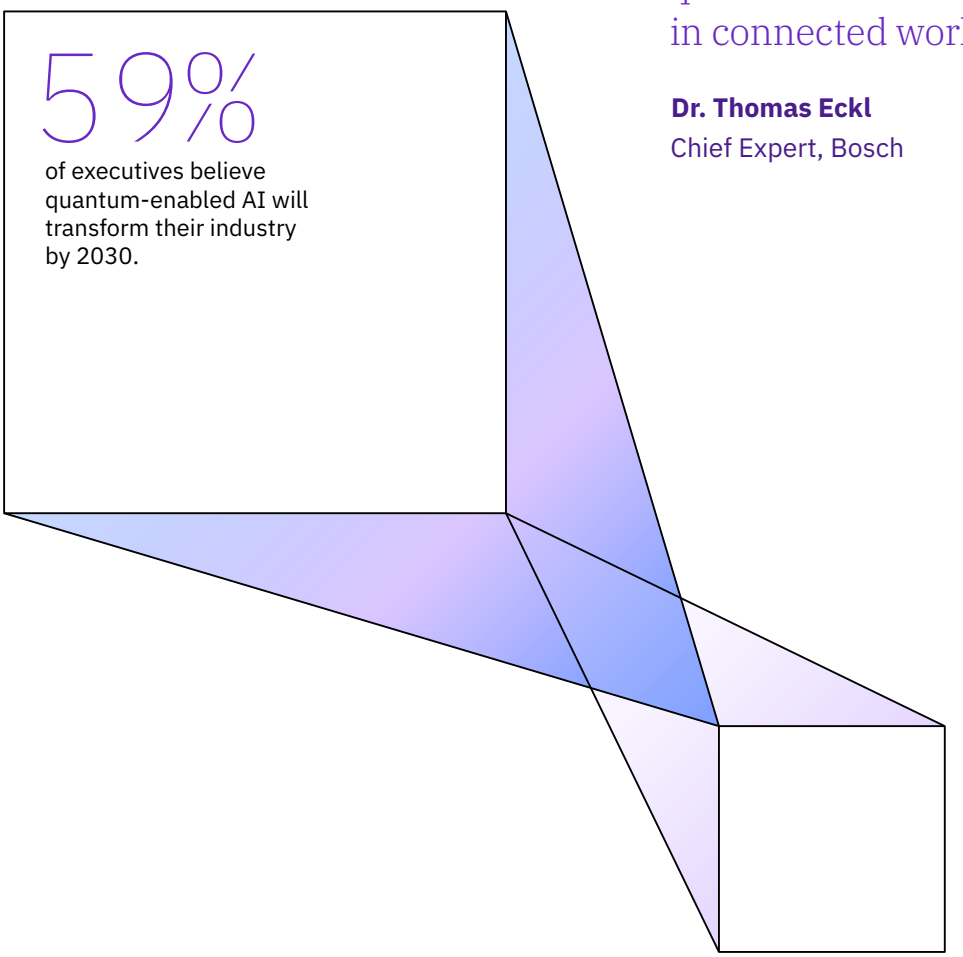
Quantum will cause the next seismic shift.

As business leaders focus on staying ahead of the AI curve, they're at risk of missing a seismic shift in computing—quantum computing——a miscalculation that could leave even the most adaptive enterprises exposed.

While 59% of executives say quantum-enabled AI will transform their industry by 2030, only 27% expect to be using quantum computing in any capacity by then (see Figure 9). This gap between quantum's potential and industry preparation creates massive opportunity for the organizations that act decisively today.

FIGURE 9

Quantum readiness is a work in progress



"Quantum will never stand alone. Classical computing, AI, and quantum must work together in connected workflows."

Dr. Thomas Eckl
Chief Expert, Bosch

"Even if the quantum computers of tomorrow appeared today, we're still not sure what to do with them. Mapping financial services problems to quantum frameworks is the real challenge."

Peter Tsahalis
CIO and Executive Vice President, Strategic Services and Advanced Technology, Wells Fargo

Quantum has the potential to accelerate computing—and to unlock use cases beyond the abilities of even today's most powerful high-performance computers. Signals of quantum computing providing potential value are already emerging in applications as diverse as drug discovery, financial modeling, and materials simulation.

Quantum computing, with its ability to process and analyze certain data structures in ways that can't be replicated classically, pushes past today's computational limits—including the limits of AI. While AI can unlock problems at large scale, quantum algorithms can address complex problems by exploiting underlying structure. Quantum and AI working together will offer truly transformative computational capabilities.

That's why organizations should consider quantum and AI in tandem. It's a symbiotic relationship.

A few factors have emerged as the most powerful predictors of future success in quantum. For example, quantum-ready organizations—those that rank in the top 10% of our 2025 Quantum Readiness Index—are three times more likely to belong to multiple ecosystems than other organizations.[18]

"By 2030, technologies like quantum computing could transform business and cybersecurity, making foresight, governance, and strategic readiness critical."

Ajay Singh
Managing Director, Stretch 365

The organizations that expect quantum-enabled capabilities to drive the highest portion of 2030 revenues are also more focused on building strong ecosystem alliances and identifying early use cases that might help them gain quantum advantage. Yet only 32% of all organizations are actively building quantum ecosystem alliances that align with their competitive advantage.

The strategic imperative is to build the flexible operations, infrastructure, and partnerships needed to capitalize on quantum as it matures. This requires transitioning to a quantum-centric supercomputing architecture where quantum computers work in tandem with powerful high-performance computing and AI infrastructure.

Such a system could, for example, simulate the behavior of atoms and molecules beyond the ability of any existing computer, while using AI to aid in the data analysis. This can assist in the development of new drugs or materials that are out of reach today.

This transition requires forming alliances with quantum research institutions and technology providers. It also takes developing talent pipelines that emphasize both classical and quantum approaches to problem-solving. This groundwork is what will help organizations exponentially accelerate progress toward specific business goals when the time is ripe.

The strategic imperative is to build the flexible operations, infrastructure, and partnerships needed to capitalize on quantum as it matures.

"Building a robust, proactive plan for quantum resilience is going to take some investment—and I deliberately use the word investment, because it's not a cost."

Kristie Chon Flynn
Data Protection Officer, Google

Quantum computing will also require new approaches to security. The timeline could be shockingly short for executives who think they have many years to prepare. While 72% of executives say security will be a board-level mandate equal to financial performance by 2030, only 34% are actively preparing their organization to be quantum safe today.

At the heart of this challenge is cryptography—the science of protecting information through encryption. Current encryption methods could be broken by future quantum computers. Threat actors are already using "harvest now, decrypt later" tactics—stealing encrypted data today to potentially unlock once quantum capabilities mature.[19]

By 2030, the organizations that have gained breakthrough quantum capabilities will be able to explore fundamentally different problem-solving capabilities that make new solutions practical.

But organizations must start preparing today. This means developing quantum skills and expertise, experimenting on real-world quantum hardware, and developing quantum-centric supercomputing infrastructure. The smarter enterprise won't wait for quantum to arrive—it's already building structures that will be able to quantum advantage into value as soon as it appears.

"Addressing quantum technology is not a problem that a single bank can solve alone; just as companies collaborated to address the development of RSA encryption in the United States, we need to work together as a society to ensure cybersecurity."

Akiyuki Ui
Operating Officer, Mizuho Bank

What to do

Don’t just prepare for the quantum revolution—lead it. Take the first step by partnering with quantum providers to run small-scale experiments today. Allocate part of this year’s budget to hands-on quantum computing trials, even if the use cases seem academic at first. Consider quantum and AI in tandem in your technology roadmap.

Identify key business problems that classical computers struggle with: complex optimization challenges, molecular simulations, financial risk modeling, or supply chain scenarios with complex data structures. These become your quantum-advantage opportunities when computational power and change accelerate exponentially. Invest in post-quantum cryptography now to secure your enterprise for 2030 and beyond.

Industry showcase

Banking

Sparking a finance revolution

The banking industry is experiencing something unprecedented: a technology revolution that early adopters are positioned to lead.

While other sectors are still exploring quantum computing's distant possibilities, banking executives are staring down rapid disruption: 63% say quantum will fundamentally alter their industry. Yet today only 43% are actively exploring use cases.

That gap—between strategic awareness and tactical execution—represents the industry's defining challenge. Banking executives know quantum is coming. They're just not sure exactly how it will materialize.

In an industry built on computational advantage, where one percent of improvement could translate to hundreds of millions in returns, the quantum business case isn't difficult to imagine. Already, HSBC has run a proof-of-concept experiment that showcased promising results. The company used a combination of quantum and classical computing resources to achieve as much as a 34% improvement in predicting how likely a trade would be filled at a quoted price, compared to common classical techniques used in the industry.[20]

Traditional computers struggle with the mathematical complexity that defines modern finance—from portfolio optimization across thousands of variables to options pricing models that account for infinite market scenarios. These are core competitive battlegrounds where quantum advantage translates directly to market advantage.

Banking executives are 113% more likely than executives in other industries to expect quantum to deliver business value for their enterprise by 2030. For financial service firms, quantum disruption isn't coming eventually—it's coming fast.

Case study

Moderna pioneers quantum computing in mRNA medicine development[21]

Moderna, a leading biotechnology company pioneering messenger RNA medicines and vaccines, faced a fundamental computational challenge that classical computers struggle to solve efficiently. For any given protein that could treat disease, there's an astronomically large number of possible mRNA sequences that could encode it—making optimization extraordinarily complex.

The challenge centered on developing mRNA technology instructions that accurately direct the body to produce therapeutic proteins. Researchers must identify nucleotide sequences that not only encode the right protein but remain stable in the body, can be manufactured at scale, and won't trigger unwanted immune responses. This requires sifting through millions of possible sequences to find optimal solutions.

"Our goal is to improve human health," said Alexey Galda, Associate Scientific Director, Quantum Algorithms and Applications at Moderna. "We believe it's critical to explore every available tool—including quantum computing—to scale our progress today, rather than wait for the technology to fully mature."

Moderna's research centered on predicting mRNA secondary structure—the complex folding patterns that determine how efficiently mRNA translates into proteins and interacts with cellular machinery. The company applied Conditional Value at Risk (CVaR), a financial risk-assessment technique, to improve variational quantum algorithms. CVaR focuses optimization on the most promising, lowest-energy solutions while reducing sensitivity to computational noise.

The results have been groundbreaking. Moderna recently achieved what appears to be the largest quantum secondary structure simulation to date—involving up to 80 qubits and mRNA sequences up to 60 nucleotides long. Previous quantum simulations had never tackled sequences beyond 42 nucleotides.

But the team pushed further, applying their methodology to problems involving up to 156 qubits and 950 non-local gates. Their quantum approach successfully matched results from commercial classical solvers for combinatorial optimization problems—demonstrating real quantum utility in pharmaceutical research.

Moderna's vision is about building toward a quantum-enabled biotechnology pipeline where quantum computing handles specific computational bottlenecks while classical methods manage the broader workflow, positioning itself to leverage quantum advantages as the technology scales.

Research methodology

To assess enterprise strategies for the future and their anticipated impact on productivity through 2030, the IBM Institute for Business Value (IBV), in collaboration with Oxford Economics, conducted a global survey during the third and fourth quarters of 2025. The study gathered insights from more than 2,000 senior executives on how they expect their organizations to evolve between 2025 and 2030.

The survey explored strategic priorities, including AI-first operations, the integration of advanced AI models into products and services, workforce transformation, and readiness for emerging technologies, such as quantum computing. Respondents included decision-makers with direct responsibility for AI strategy, digital transformation, and operational performance.

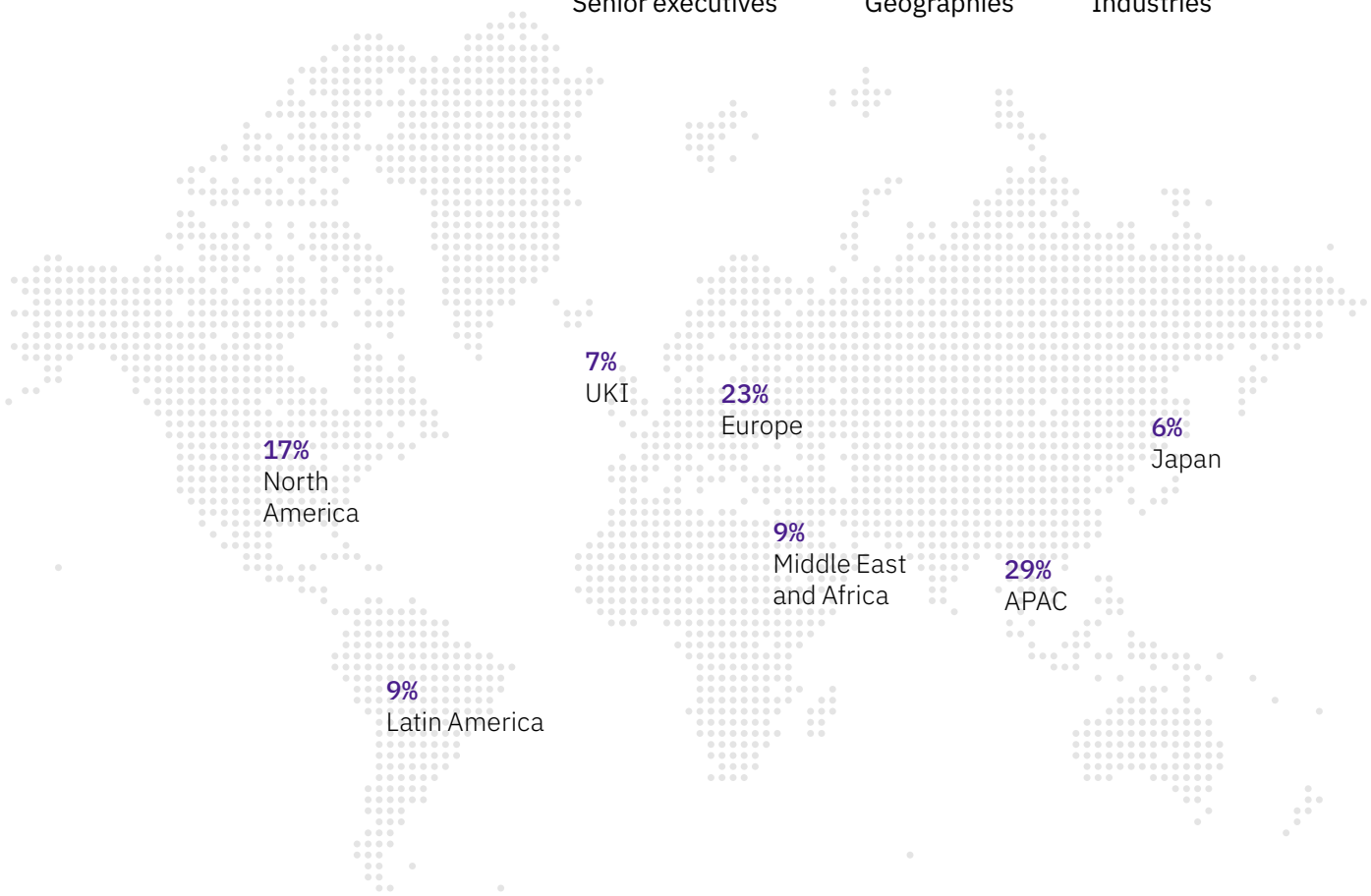
Participants represented 33 geographies and 23 industries, spanning organizations of varying sizes and sectors. This diverse composition ensures the findings capture a wide range of AI maturity levels, strategic priorities, and regional contexts across the global business landscape.

In addition to descriptive analysis of expectations, priorities, and trends with the basic frequency data, we designed and implemented an analytical framework to better understand the relationships between approaches to AI and expected outcomes and performance. The survey data and analysis were complemented with insights from more than 30 in-depth qualitative interviews with executives, as well as case studies.

2,000+ Senior executives

33 Geographies

23 Industries



Analytical framework
To identify the drivers of AI-powered productivity gains and segment organizations by strategic approach, we employed three complementary analytical techniques: quantifying productivity drivers, identifying strategic archetypes, and estimating financial impact.

Quantifying productivity drivers[22]
We examined the relationship between strategic AI capabilities and anticipated productivity gains by 2030, focusing on respondents' projected productivity impact measured on a percentage improvement scale.

Three key factors were analyzed based on their theoretical relevance to AI-driven performance.

1. **AI innovation:** Whether organizations identified new products and services as a key value driver from AI
2. **AI sophistication:** Belief that competitive advantage in 2030 will stem from the sophistication of AI models rather than human workforce creativity
3. **AI-first task design**: Percentage of organizational tasks expected to be designed for AI-first completion by 2030, with humans in oversight roles

This analysis allowed us to estimate the independent contribution of each factor while controlling for the others, providing comparable measures of relative importance across different variables.

Identifying strategic archetypes[23]
We segmented organizations by their AI design and execution maturity using two key dimensions.

1. **AI-first task design:** Percentage of tasks designed for AI-first completion by 2030
2. **AI execution capability:** Percentage of tasks expected to be executed with AI or agentic AI-enabled automation in 2030

Organizations were partitioned into four distinct groups based on how they approach AI design and execution. These clusters were further profiled across innovation priorities, resource optimization strategies, competitive advantage beliefs, and agentic AI adoption timelines to develop comprehensive strategic archetypes.

Financial impact modelling
To translate productivity projections into tangible business outcomes, we developed a financial impact model that combines self-reported baseline performance metrics with AI improvement factors and global benchmarks. This approach provides a transparent, replicable framework for quantifying AI's business value.

To assess the value of expected productivity improvements we first normalized anticipated gains as a percentage of organizational revenue to ensure comparability across firms of different sizes. Next, we calculated the difference in productivity gain rates between AI strategies and applied this percentage-point gap to a reference revenue base. This method converts relative productivity improvements into monetary terms, enabling scenario modelling for organizations at various scales. The observed 24% productivity lift is attributed to adopting a mix of custom models and foundation models, selected according to specific use cases and business needs. Applying this gap to a representative USD20 billion organization resulted in an estimated incremental impact of USD219 million.

For operating margin impact, the calculation follows a similar logic. We began with the average organizational operating margin from 2025 estimates and calculated baseline operating profit as revenue multiplied by operating margin. The AI improvement factor is based on organizations leveraging smaller AI models for greater flexibility and cost efficiency, which showed 55% greater expected improvement from AI in operating profit margins compared to those relying only on pre-trained larger models.

This modelling approach anchors financial estimates in actual organizational baselines while applying empirically derived improvement factors, enabling executives to contextualize AI investments within their specific performance parameters.

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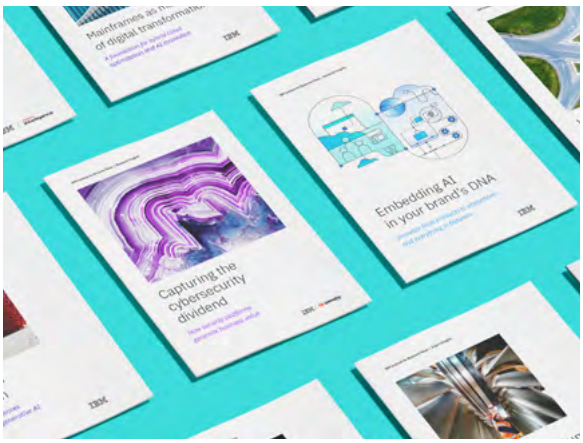

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Notes and sources

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22 Analysis conducted using Ordinary Least Squares (OLS) regression with productivity impact as the dependent variable and AI innovation (binary), AI sophistication (categorical), and AI-first task design (continuous percentage) as independent variables. Model achieved statistical significance (F-statistic = 69.32, $p < 0.001$) with adjusted $R^2 = 0.093$. Regression diagnostics confirmed model assumptions, including linearity, homoscedasticity, and absence of multicollinearity.

23 Segmentation conducted using K-means cluster analysis with standardized Z-scores. Cluster validity assessed through one-way ANOVA confirming statistically significant differences between groups ($p < 0.001$), with post-hoc comparison tests applied to determine which groups differed significantly on each measure. All analyses employed validated statistical techniques with significance thresholds set at $p < 0.05$.

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