KPMG

KPMG 2025 Industrial Manufacturing and Automotive CEO Outlook

KPMG. Make the Difference.

Foreword

Did you know that in the first half of 2025 exports from China to the US declined by approximately 16 percent while at the same time imports into Germany from China increased by 11 percent?[1]

The figures show that in today's rapidly evolving industrial landscape, automotive and manufacturing leaders face unprecedented complexity. Global supply chains are under constant pressure from geopolitical shifts, resource constraints, and sustainability imperatives. At the same time, technological disruption — driven by automation, artificial intelligence, and data-driven decision-making — is redefining how production systems operate and compete. And further adding to this, stakeholder expectations — from customers and suppliers to investors and regulators — are as well continuously evolving, demanding greater transparency, a focus on innovation, and strong resilience.

Focus automotive

One of the greatest transformations in automotive history

The automotive industry is undergoing one of its most profound transformations since its inception. Electrification, autonomous driving, and AI-driven mobility solutions are reshaping the entire value chain — from design and production to customer engagement. Global competition is intensifying, with China emerging as a dominant force in electric vehicles and battery technologies. At the same time, sustainability regulations and shifting consumer expectations are accelerating the transition towards zero-emission fleets and cars as computers on wheels. For CEOs, this means leading organizations through a period of radical innovation while managing geopolitical risks, securing critical resources, and building resilient supply networks.

Focus industrial manufacturing

New conditions, new frontiers

Industrial manufacturing is no longer defined solely by efficiency and scale. Today, production environments, products, machinery and even services are being reconfigured to integrate advanced robotics, digital twins, and AI-driven predictive systems. These changes enable greater flexibility and resilience but also demand new capabilities and partnerships. Beyond traditional sectors, manufacturing is expanding into strategic domains such as defense, aerospace, and space technologies — areas that require cutting-edge innovation and robust compliance frameworks. CEOs must navigate this shift by fostering ecosystems that combine technological excellence with agility, ensuring their organizations remain competitive in a world where boundaries between industries are increasingly blurred.

[1] On the diversion of Chinese exports to Germany, Institute of the German Economy, 2025

In both industries these dynamics demand more than operational excellence from management and boards; they require strategic foresight and agility at the very top. In this environment the role of the CEO is no longer confined to steering growth and profitability — it now encompasses orchestrating resilience, fostering innovation, and navigating ecosystems of partners and technologies. Leadership should balance short-term performance with long-term transformation, ensuring that organizations remain competitive while embracing sustainability and digitalization.

The industrial manufacturing and automotive data from the KPMG 2025 Global CEO Outlook show the challenges and opportunities shaping the future of the sectors. The data provides insights into how companies can leverage technology, talent, and collaboration to thrive in an era of disruption.

As Global Sector Heads for Automotive and Industrial Manufacturing, our mission is to help you navigate this transformation with confidence. We are committed to sharing insights, fostering collaboration, and listening to the challenges you face. By bringing together global expertise and innovative thinking, we aim to illuminate pathways for growth, resilience, and sustainable success. Together, we can shape the future of production and create lasting value for businesses, societies, and the planet.

Thus, we invite you to explore the insights from the CEO Outlook and reflect on how your leadership can drive meaningful change in this complex environment for your company and the industry. KPMG teams are ready to facilitate the dialogue and help shape the path forward.

Yours,

Jonathon Gill
Global Sector Head
Industrial Markets and Aerospace
KPMG International

Dr. Andreas Ries
Global Sector Head Automotive
KPMG International

Executive summary

In an era defined by volatility and accelerated change, industrial manufacturing (IM) and automotive CEOs are navigating a landscape that is both promising and profoundly challenging. Bold leadership is imperative in this dynamic environment.

The results of the study reveal a striking paradox: while global leaders remain optimistic about the broader industry outlook, confidence in their own organizations is more tempered.

This cautious stance reflects the evolving nature of the CEO role — marked by heightened complexity, new stakeholder expectations, and an urgent need for adaptability. CEOs acknowledge that their responsibilities have expanded beyond traditional boundaries. Strategic foresight, resilience, and agility are no longer optional — they are prerequisites for survival and growth.

Hence, profitability drivers seem to be clear: best-in-class production, streamlined processes, innovative business models, and optimized supply chains. In this context appetite for M&A remains strong, signaling a willingness to pursue inorganic growth even as most anticipate only moderate growth of up to 5 percent.

From a technology perspective, generative AI (Gen AI) dominates investment priorities, with agentic AI emerging as a potential game-changer. Yet, while many expect significant operational impact from agentic AI, few foresee a truly transformational shift — raising questions about whether ambition is keeping pace with technological potential.

In addition, regulatory fragmentation and geopolitical uncertainty continue to challenge global operations. CEOs are responding by forging partnerships to accelerate innovation while balancing environmental commitments and compliance demands — a delicate act that will likely define competitive advantage in the years ahead.

This study does not merely capture optimism or caution; it underscores the tension between aspiration and execution. The question is not whether CEOs and companies can adapt — but how quickly and decisively they may act in a world where the rules are being rewritten.

Economic outlook and CEO perspective

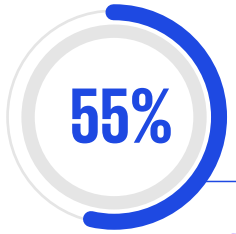
87% of automotive and 81 percent of IM CEOs are confident in their respective industry's growth prospects, but only

75% of automotive and 77 percent of IM CEOs are optimistic about their company's growth

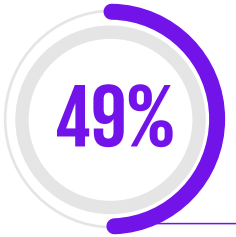
71% of automotive CEOs state that their role has evolved significantly, with new expectations and greater complexity — this is also the assessment of nearly half of IM CEOs (48 percent)

Key findings

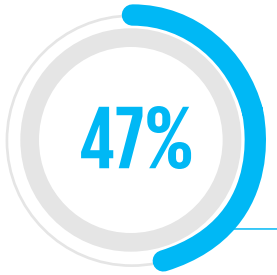
Operations and performance



see best-in-class production and processes and 49 percent new business models as most significant drivers of profitability in next 3 years (automotive)



of IM CEOs anticipate 'high impact' deal activity with automotive executives at almost the same level (44 percent)



in automotive and 63 percent in IM say supply chain resilience is the top operational priority

Technology and AI

81%

of automotive and 68 percent of IM CEOs say AI is a top investment priority

22%

(figure for both industries) see increased efficiency and productivity as top benefits from implementing AI

70%

plan to allocate 10–20 percent of their budget to AI over the next year

The biggest challenge in attracting and retaining AI talent is bridging the gap between existing skills and desired capabilities (33 percent for IM and 29 percent for automotive)

29% Automotive

33% Industrial Manufacturing

Geopolitics and sustainability

Automotive

IM

of respondents admit that they are still learning and adapting their organization's ability to navigate regulatory and political differences across markets

Automotive

IM

focus on collaboration and partnerships to drive innovation while adhering to environmental and regulatory requirements

Economic outlook and CEO perspective

Challenge accepted and focused on opportunities

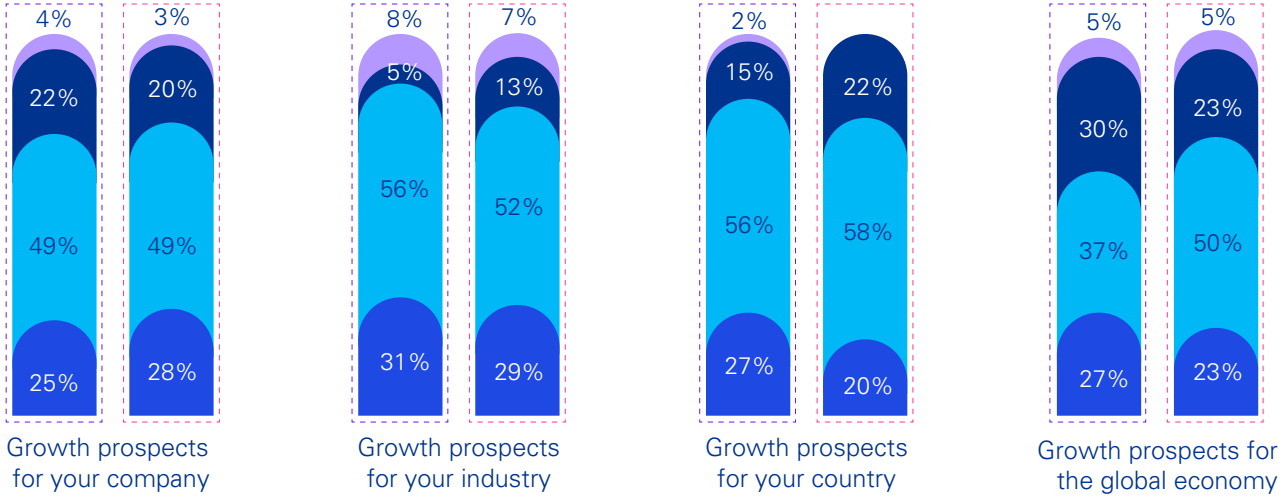
Despite an uncertain economic and geopolitical backdrop, confidence in IM remains relatively high, with 77 percent of CEOs positive about their company's growth, up from 73 percent in 2024.

For automotive CEOs, however, optimism fell from 81 percent to 75 percent in 2025 (lower than any other sector in the survey), reflecting transformational challenges of electrification and digitalization, at a time of industry overcapacity.

Interestingly, 87 percent of automotive CEOs (81 percent IM CEOs) feel upbeat about their global sector's growth prospects — which is more than in any other industry. This disparity indicates that while CEOs across automotive and IM sectors are confident about their industry's overall trajectory from a global perspective, they remain more cautious regarding their own organizations' ability to execute transformation at the required speed and scale — amid challenges such as electrification, digitalization, AI integration, supply chain volatility, global overcapacity, and mounting geopolitical risks.

Despite these challenges CEOs from both sectors anticipate stronger earnings growth over the next 3 years (growth > 2.5 percent), with 61 percent of IM leaders (compared to 52 percent in 2024) and 66 percent of automotive CEOs — up from 61 percent.

Growth prospects over the next 3 years

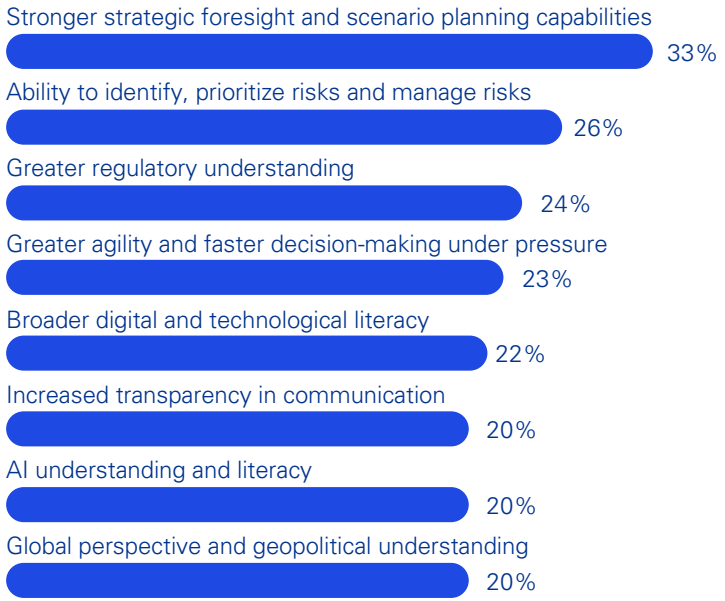


Changing environment forces adjustment in leadership

Given the complexity and volatility of today's landscape, it is unsurprising that the role of management functions and especially the role of the CEO is undergoing a profound shift. It is no longer limited to traditional operational and financial oversight; instead, it now demands strategic agility, resilience, and the ability to lead transformation on a scale.

Thus, 71 percent of CEOs in automotive and almost half of CEOs in IM (48 percent) report that their role has evolved significantly over the past 5 years, with new expectations and greater complexity. This evolution reflects the growing need for leadership capabilities that go beyond execution. When asked which skills are becoming most essential in today's unpredictable environment, CEOs highlighted stronger strategic foresight and scenario planning (33 percent automotive and 23 percent IM), greater agility and faster decision-making under pressure (23 percent automotive and 24 percent IM), the ability to identify, prioritize, and manage risks (26 percent automotive and 29 percent IM), and greater regulatory understanding (24 percent automotive and 14 percent IM).

Essential leadership capabilities in today's fast-changing and unpredictable environment



Automotive (n = 110)

Industrial Manufacturing (n = 120)

This shift is not just a challenge — it is an opportunity. CEOs are being called to redefine leadership for a new era: to anticipate disruption before it strikes, to turn uncertainty into competitive advantage, and to inspire organizations to embrace innovation and sustainability. This can only be reached if they strongly invest in their own technological understanding and risk-identification potential, in collaborative approaches within the ecosystem and trusted communication skills helping their companies to adjust to the future of their industries.

What this implies:

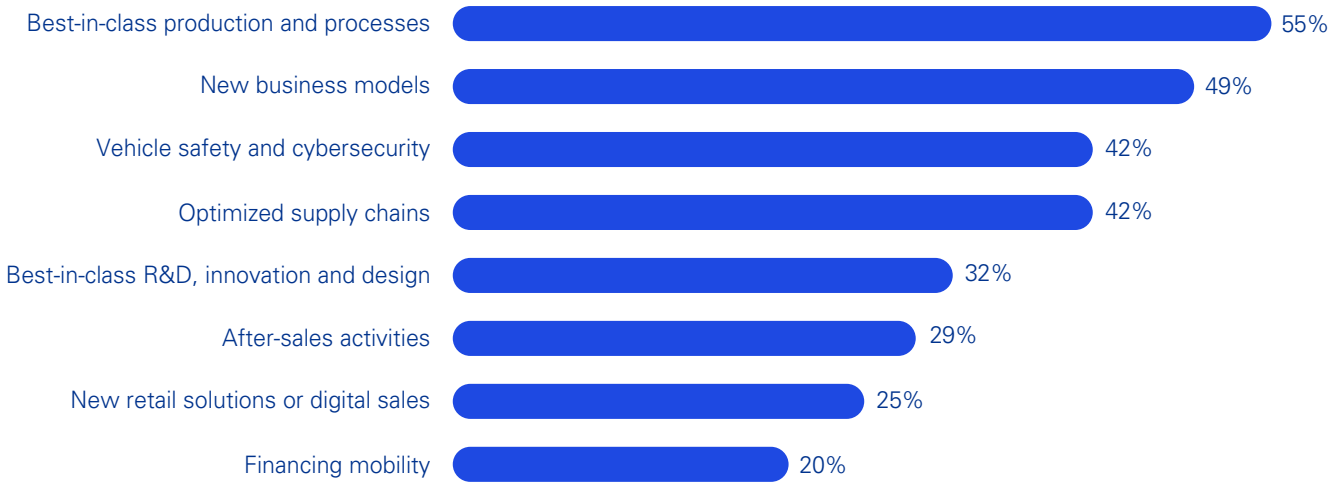
The future calls for CEOs to become architects of transformation, not just managers of operations. In an era of electrification, digitalization, and AI, leadership must transcend traditional boundaries — turning volatility into a catalyst for innovation. Success will likely belong to those who invest boldly in technology, sustainability, and collaborative ecosystems, inspiring organizations to lead with purpose and resilience.

Performance and operations

Balancing long-and-short term strategies

In the next 3 years, CEOs in the automotive sector see profitability driven primarily by best-in-class production and processes (55 percent), followed by new business models (49 percent) and optimized supply chains (42 percent). These priorities reflect a clear focus on operational excellence while simultaneously reinventing business models to capture emerging opportunities, a strategic approach which clearly speaks for both IM and automotive.

Key profitability drivers in automotive: Impact of tech disruptions



Automotive (n = 110)

However, short-term decisions are being shaped by mounting pressures. Supply chain resilience tops the list for both IM (63 percent) and for automotive (47 percent), underscoring persistent vulnerabilities in global networks. Economic uncertainty (25 percent) and the integration of AI into organizational processes (24 percent) in automotive and pressure to increase or maintain production in response to demand (24 percent) and economic uncertainty (22 percent) for IM add further complexity, requiring leaders to balance immediate risk mitigation with long-term transformation.

To address these challenges, organizations are increasing investments in critical areas: supply chain resilience and operational continuity (40 percent for automotive and 51 percent for IM), and AI integration into operations and workflows (32 percent for automotive and 36 percent for IM) — alongside cybersecurity and digital risk resilience (30 percent for automotive and 20 percent for IM). These investments signal a dual imperative: strengthening the core while building future-ready capabilities.

Operational priorities mirror this shift. CEOs in the automotive sector identify understanding and implementing generative and agentic AI (15 percent) and advancing digitization and connectivity (13 percent) as essential to achieving growth objectives. The IM CEOs believe that they need to reconfigure the supply chain to provide greater resilience, transparency and access to the supplies they need (18 percent), and advance the digitization and connectivity (16 percent) to achieve their growth objectives.

Yet, the path forward is not without obstacles. Over the next 3 years, leaders in the automotive sector anticipate significant impact from competition for AI talent (83 percent) and the successful integration of AI into business processes (80 percent) to have maximum impact on their organization's prosperity. Meanwhile IM CEOs anticipate cost of technology infrastructure (79 percent) and AI workforce readiness or upskilling (74 percent) as having great impact and both sector CEOs also raise costs and inflationary pressures (82 percent automotive/83 IM) as a key issue.

Appetite for deals is high

Almost half of IM CEOs (49 percent) anticipate 'high-impact' deal activity in the next 3 years, up from 45 percent in 2024. Companies are seeking to diversify into fast-growth areas like defense and energy and acquire new digital capabilities.

In the automotive sector, the picture is similar with 44 percent of industry leaders as well anticipating high-impact activity. Given the existing overcapacity, large-scale brand purchases remain unlikely — except in China, where OEMs continue to acquire complementary brands to diversify their vehicle portfolios. However, vertical integration into the supply chain and investments in advanced and green technologies can significantly strengthen core capabilities. At the same time, it is important to recognize the other side of the coin: in the current market environment, as companies seek to resize and optimize their operations, numerous opportunities from disinvestments are emerging for those prepared to act decisively.

What this implies:

CEOs must not only optimize operations but also embrace innovation, build resilience, and lead with foresight. The ability to integrate AI effectively, secure talent, and navigate regulatory and cyber risks will define competitive advantage for the own company. Those who act decisively — investing in technology, data-driven insights, and collaborative ecosystems — may be best positioned to turn disruption into opportunity.

"Japanese manufacturers are increasingly looking beyond domestic markets, pursuing overseas acquisitions that offer access to new technologies, supply networks, or customer bases. For example, deals in sectors such as EV components, semiconductors, and renewable energy are seen as strategic enablers for future growth. There is a shift towards partnership-oriented M&A, rather than purely financial acquisitions, with quality and strategic fit taking priority over deal size."

Jun Okamoto
Head of Industrial Manufacturing
KPMG in Japan

Spotlight

Searching for supply chain resilience

Supply chains have come under intense pressure in recent years from territorial conflict, trade and tariff changes, rising energy costs, and scarcity of rare earth and other materials. The number one challenge driving short-term decisions for CEOs is supply chain resilience (63 percent for IM and 47 percent for automotive (highest value for both industries). Not surprisingly, supply chain and operational continuity are the highest investment priority.

These findings are echoed in the 25th KPMG Annual Global Automotive Executive Survey, where respondents rank sustainability and supply chain transformation as the single most disruptive factor facing the industry over the next 3 years. And 68 percent of companies are actively restructuring their supply chains using strategies such as near-shoring, friend-shoring and local-for-local production. The experience of the pandemic and geopolitical tensions has led to 'China + 1' or even 'China + 2' strategies. In addition to improve digital visibility and data-driven management, companies are using AI, internet of things (IoT), and blockchain to monitor suppliers, logistics, and inventories in real time. This allows earlier detection of risks such as shortages, delays, or geopolitical shocks.

Tariff changes complicate sourcing decisions

The 25th KPMG Annual Global Auto Executive Survey highlights how increased tariffs have complicated sourcing decisions, forcing purchasing teams to factor in fluctuating customs duties when calculating total landed costs. Tariffs on steel, aluminum and copper goods have significantly increased raw material costs. Importers may pay duties based solely on the value of components for certain imports — but they need help from suppliers to obtain the necessary data. Tariffs on automotive and truck parts can be lowered with the import adjustment offset program, but vehicle producers and suppliers must manage offsets carefully. Reliable technology is key for traceability, reducing duties, and ensuring compliance.

> **"Companies are taking a range of steps to address supply chain threats. After a period of sourcing from low-cost regions, there is a trend towards nearshoring or 're-localizing' suppliers, to hedge against tariff threats and disruption, and avoid having to hold costly high inventories. Some European OEMs and manufacturers are considering central Europe and Northern Africa as an alternative to Asia. Others may step back from certain countries or products with high duties to sidestep tariffs and import bureaucracy."**
>
> **Dr. Andreas Ries**
> Global Head of Automotive
> KPMG International

Technology and AI

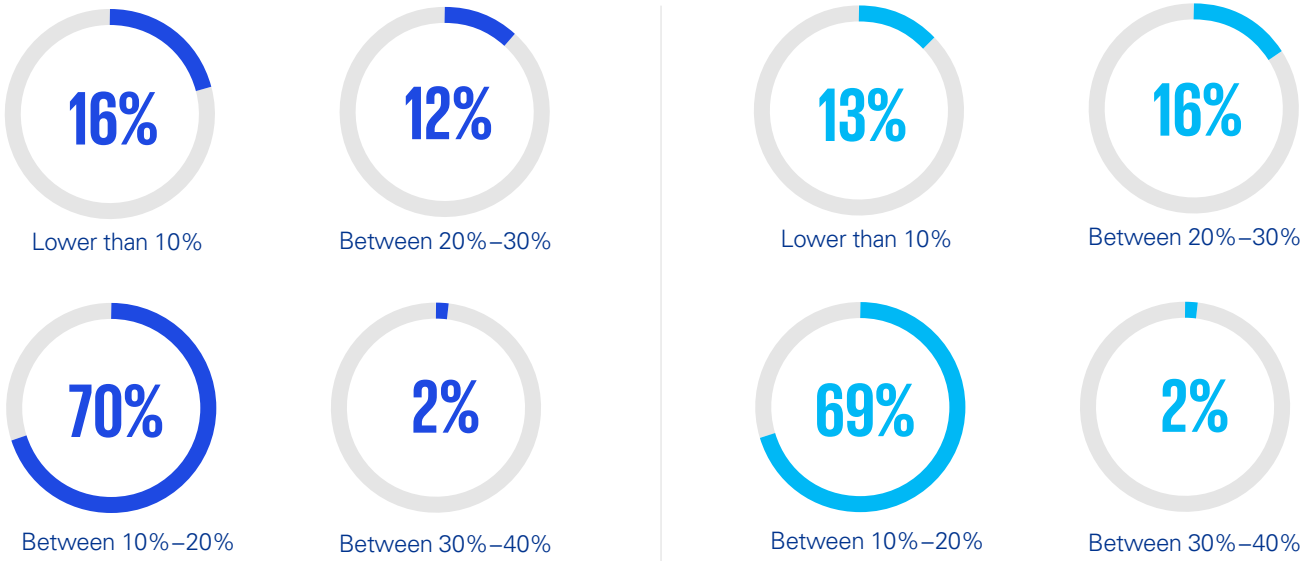
Seamless possibilities on the horizon

From the factory floor to the back office, from the on-road vehicle to the maintenance department, AI is having a profound impact on the IM and automotive sectors. A large majority of the CEOs surveyed say AI is a top investment priority, with the automotive sector showing a dramatic increase (81 percent compared to just 63 percent in 2024) while IM CEOs are showing a steady increase (68 percent in 2025 and 57 percent the previous year).

Manufacturing and automotive companies are deploying AI across a wide range of operations — from production planning, research and development predictive maintenance, and quality inspection to supply chain optimization and energy management. Back-office functions like finance, procurement, and supply chain management are also making use of off-the-shelf, AI-powered tools to reduce manual work, speed up performance and cut costs.

Consequently, 7 in 10 CEOs (70 percent) anticipate allocating 10–20 percent of their budget to AI in the next 12 months, as they integrate this technology into their operations and processes.

Investment in AI in the next 12 months



And there's a belief that these significant financial outlays can bring financial and competitive rewards in the short-to-medium term. Sixty-four percent of leaders expect return on investment (ROI) in AI within 1–3 years (in 2024 the corresponding figures for automotive were 43 percent, and 48 percent for IM). Indeed, almost a quarter of automotive CEOs (24 percent) feel that their companies will see a ROI within 6 months to 1 year. To unlock the full potential of AI, manufacturing companies should move beyond isolated use cases and reimagine how intelligence is embedded across the enterprise. This means aligning AI with strategic value streams, reshaping culture to embrace experimentation and agility, and designing for trust, transparency and scale. The real opportunity lies not just in smarter operations, but in creating a more connected, adaptive and value-driven ecosystem.

The top benefits of AI are seen as increased efficiency and productivity (22 percent) and enhanced decision-making and data analysis (21 percent). As manufacturers become more service-oriented, AI agents can play a major role in connecting with customers and suppliers and diagnosing and resolving issues faster.

63%

of manufacturing leaders and 64% of automotive leaders expect return on investment (ROI) in AI within 1–3 years (in 2024 the corresponding figures for automotive were 43 percent, and 48 percent for IM).

"A significant amount of investment, such as joint ventures, are about putting capital into ecosystems, to partner with local technology players to access essential intellectual property and skills."

Brian Higgins, Head of Industrial Manufacturing, KPMG in the US

"Across the manufacturing value chain, companies are increasingly investing in AI to enhance R&D, optimize production processes, and improve equipment connectivity. For example, digital twins enable continuous virtual testing of machinery and systems, significantly accelerating the transition from prototype to full-scale production. At the same time, AI-driven analytics can monitor equipment performance in real time, predict maintenance needs, and support operators with actionable insights to maximize efficiency and uptime."

Jonathon Gill, Global Head of Industrial Markets and Aerospace, KPMG International

Data and governance: The foundation for AI success

CEOs in both industries are confident about AI readiness: 85 percent IM/82 percent automotive say they understand AI's benefits, while 75 percent of automotive CEOs and 82 percent of IM CEOs see clarity on its disruptive potential. Yet only 70 percent automotive and 76 percent IM CEOs feel confident their data is prepared for AI integration — a critical weakness given that AI success depends on vast, high-quality datasets and robust governance.

AI readiness in boards and leadership

Confidence among CEOs and boards is also high when it comes to navigating AI adoption and its implications for operations and talent. Eighty-two percent of automotive CEOs and 72 percent of IM CEOs feel confident or very confident in their organization's ability to keep pace with the speed of AI development, and 93 percent of automotive CEOs and 89 percent of IM CEOs agree their boards are equipped to steer the adoption of advanced technologies and the strategic use of data — including AI — to drive business growth.

Thus, while many CEOs and boards believe they possess all the necessary skills for AI implementation, this assumption should be treated with caution.

Confidence alone does not guarantee execution. True readiness requires robust data foundations, clear governance frameworks, and workforce strategies that anticipate disruption. Boards and leadership teams must ensure that AI integration is safe, ethical, and transparent — supported by clear explanations for algorithms, measures to eliminate bias, and effective monitoring systems.

In particular, understanding the transformative potential of emerging technologies such as agentic AI remains limited in many organizations as seen in the following chapter, highlighting a critical gap between perceived readiness and actual capability.

Agentic AI: Potential vs. reality

Unlike earlier AI models that required constant human intervention, agentic AI can operate independently, with minimal oversight, to improve yield or reduce downtime. CEOs in our global survey recognize this potential: 45 percent of automotive leaders and 51 percent of IM CEOs expect agentic AI to have a significant impact on efficiency and cost, yet only 18 percent of automotive CEOs and 13 percent of IM CEOs expect that there will be a transformational impact (fundamentally change our operating model and how we manage our workforce).

What this implies:

True readiness goes far beyond intent; it requires secure data management, transparent algorithms, and compliance measures to prevent bias and discrimination. Without these foundations, organizations risk stalled initiatives, regulatory exposure, and erosion of trust.

Trust is essential for enterprise-wide AI adoption. Explainable AI (XAI) models, ethical governance frameworks and clear regulatory compliance measures will help manufacturers create transparency and accountability. Engaging engineers, factory operators, supply chain managers and business leaders early in the AI journey — addressing concerns about workforce impact, data security and decision-making autonomy — can foster long-term confidence.

The '70 – 80 percent' confidence range around data readiness and workforce skills feels high for autonomous vehicles or space products, which are developing fields. True readiness in these areas mean managing petabytes of labeled sensor data and securing highly specialized engineers who can train and validate at safety-critical levels."

Hugh Nguyen
Partner, AV Lead Automotive
KPMG in the US

How much of an impact do CEOs believe that agentic AI will have on their organizations?

	Automotive (n=110)	Industrial Manufacturing (n = 120)
Transformational — it will fundamentally change our operating model and how we manage our workforce (5)	18%	13%
Significant — it will drive major improvements in efficiency or growth (4)	45%	51%
Moderate — some targeted use cases, but limited overall impact (3)	29%	31%
Minimal — it will play a small, supporting role (2)	8%	6%

This gap between expectation and reality suggests that many CEOs may not yet fully appreciate the scale of change agentic AI can deliver. While optimism is high, adoption remains in its infancy — and organizations risk underestimating how quickly autonomous AI systems can reshape operations, reduce downtime, and unlock new productivity gains.

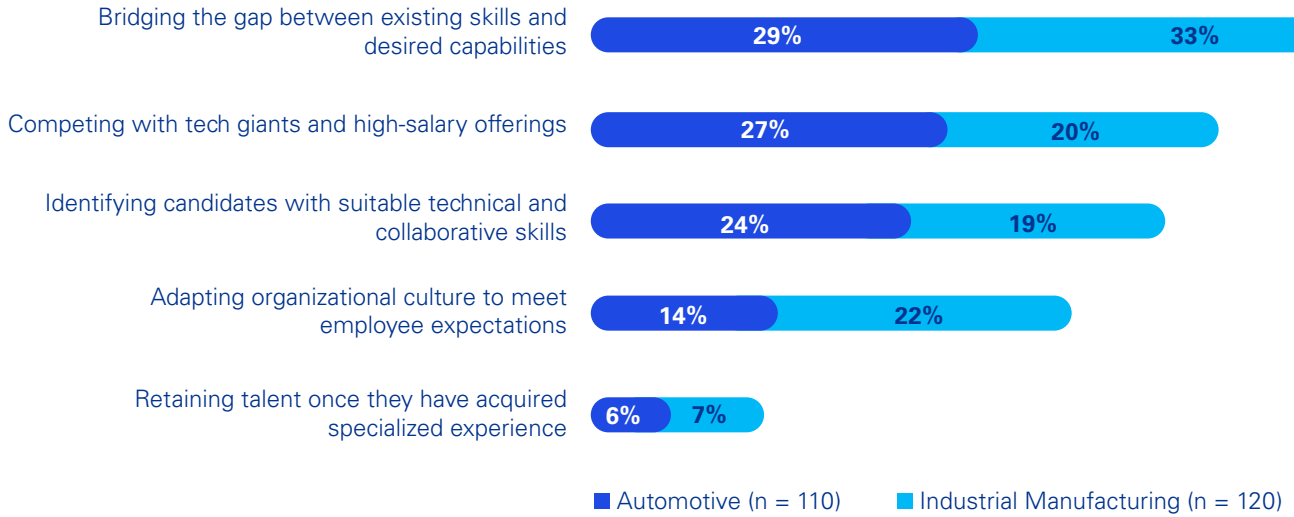
People and knowledge: Building AI-ready talent

AI is not only transforming processes — it is fundamentally reshaping the skills and capabilities organizations require. While 79 percent of automotive CEOs and 74 percent of IM CEOs believe their employees already have the right skills to leverage AI, and 80 percent of automotive CEOs and 83 percent of IM CEOs say AI integration has influenced training and development, these figures may reflect optimism rather than reality. The fact that 77 percent of automotive CEOs and 79 percent of IM CEOs in the survey claim readiness to upskill employees and as well acknowledge that AI is redefining entry-level roles (84 percent for IM CEOs) signals awareness, but not necessarily execution.

In practice, bridging the gap between existing skills and future needs remains one of the biggest challenges, compounded by fierce competition for talent and the speed of technological change. Without sustained investment in reskilling, tailored training, and workforce adaptability, even the most advanced AI strategies risk falling short.

Thus, attracting and retaining AI and digital talent remains one of the most pressing challenges for CEOs. Nearly a third (29 percent) of automotive CEOs and IM CEOs (33 percent) cite bridging the gap between existing skills and desired capabilities as their biggest hurdle, while 27 percent of automotive CEOs point to fierce competition with tech giants offering high salaries. IM CEOs identify adapting organizational culture to employee expectations (22 percent) as a major hurdle to attracting and retaining AI talent. This talent gap is not just a recruitment issue — it is a strategic risk that could slow down transformation if left unaddressed.

Organizational challenges in attracting and retaining AI and digital talent



When you buy a technology business, you need to think about the people aspects of the deal. AI can empower employees in different ways and has exciting potential to make their work more interesting. But it also brings in new types of individuals unaccustomed to a traditional manufacturing environment. Rather than seeing this as a negative, company leaders should view it as an opportunity to make the sector appeal to a wider range of prospective recruits, helping attract data scientists, and more women, for example."

Glynn Bellamy
Partner, Aerospace
KPMG in the UK

Organizations are responding to these challenges with proactive measures, but the scale of change required is significant. Almost half (48 percent) of automotive CEOs are investing in reskilling and upskilling programs for affected roles while 48 percent of IM CEOs are providing AI education and training across the whole workforce. Additionally, 44 percent of CEOs in IM and 43 percent in automotive have or are planning to engage external AI experts to accelerate adoption and workforce integration.

These actions signal a shift towards continuous learning and adaptability — critical steps to ensure employees are equipped to leverage AI rather than be displaced by it. However, the question remains whether these initiatives are happening fast enough to close the skills gap and secure the talent needed for long-term competitiveness.

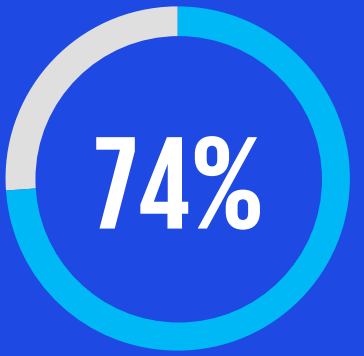
Overcoming roadblocks to AI adoption

Automotive and IM leaders are tuned into the ethical use of AI, to ensure they maintain a reputation for fairness, accountability, sustainability and transparency. Models may unintentionally inherit human biases, or draw on unreliable data, to form inaccurate conclusions. Ethical challenges are seen as the single biggest barrier to successful AI implementation (according to 56 percent and 53 percent of automotive and IM CEOs respectively).

Another concern is the slow pace of regulatory progress, cited by 74 percent of IM leaders and 66 percent of automotive heads. Initiatives like using AI to track production line activity, or using data to enhance workforce management, may be challenged by labor laws as over-intrusive and breaching data privacy. In the defense sector, there is even greater scrutiny over data used by AI models, as this could affect national security.

What this implies:

CEOs and boards recognize AI's transformative potential, but success depends on closing the gap between ambition and execution. This means investing in scalable data infrastructure, embedding governance, and building a workforce ready for an AI-driven future. Organizations that act decisively — combining technology, talent, and trust — will lead the next wave of industrial transformation. While CEOs express strong confidence in both talent and governance, the gap between aspiration and execution is evident. Building an AI-ready organization demands more than optimism — it requires concrete action: investing in scalable data infrastructure, embedding governance, and creating a culture of continuous learning. Those who move decisively now can turn ambition into measurable impact and secure a competitive edge in an AI-driven future.



of IM leaders and 66 percent of automotive heads cite the slow pace of regulatory progress as one of the barriers to successful AI implementation.

Cybersecurity: A persistent leadership priority

Not surprisingly, cybersecurity remains a major challenge for companies in these sectors. CEOs report high levels of concern across multiple technological risks, with 58 percent of IM CEOs and 61 percent of automotive CEOs extremely concerned about fraud detection and prevention, and 55 percent of IM CEOs and 58 percent of automotive CEOs extremely concerned about identity theft and data privacy. Vulnerability to cyber-attacks is also a pressing issue, with 46 percent of automotive CEOs and 43 percent of IM CEOs extremely concerned and acknowledging that they have a plan in place to mitigate this risk.

These figures underscore that cyber threats are not only pervasive but increasingly complex. As organizations accelerate AI adoption and digital transformation, the attack surface expands dramatically — making robust governance and security frameworks indispensable. CEOs must ensure their companies have comprehensive oversight of data collection, storage, and management, supported by transparent explanations of algorithmic logic and measures to eliminate bias and discrimination. Equally critical is the implementation of effective monitoring systems to detect anomalies early and safeguard trust. Without these foundations, the promise of AI-driven efficiency could be overshadowed by escalating cyber risks. In an era were AI and automation drive efficiency, resilience against cybercrime must remain a top leadership priority.

Strict, well-enforced access controls and provenance tracking can help prevent cyberattacks, with segmentation strategies to isolate safety-critical systems. Companies should conduct risk assessments across data, models and deployment environments, and align with industry-specific standards."

Koichi Iguchi
Head of Strategy
KPMG in Japan

CEOs report high levels of concern across multiple technological risks, with

58%

of IM CEOs and 61 percent of automotive CEOs extremely concerned about fraud detection and prevention, and 55 percent of IM CEOs and 58 percent of automotive CEOs extremely concerned about identity theft and data privacy.

Geopolitics and sustainability

Sustainability is increasingly shifting from a compliance-driven obligation to a strategic lever for value creation. For example, a circular economy approach to manufacturing — focused on reducing waste and pollution and keeping products and materials in use — offers further opportunities to cut material costs and reduce dependency on suppliers who might raise prices or restrict availability.

Consideration of cost and value of sustainability initiatives in making capital decisions

We comprehensively calculate and integrate both the costs and potential return on investment of sustainability initiatives into every major capital decision.

We consider the costs and potential return on investment of sustainability initiatives in some capital decisions, but not all.

We assess sustainability initiatives qualitatively but have not yet developed a quantitative approach to valuing them in capital decisions.

We have begun developing methods to quantify the costs and return on investment of sustainability initiatives, but do not yet apply them in decision-making.

We currently do not incorporate sustainability costs and return on investment into our capital decision-making process.

■ Automotive (n = 110) ■ Industrial Manufacturing (n = 120)

36%

of IM CEOs and **40 percent** of automotive CEOs report that their companies fully integrate sustainability costs and ROI into all major capital decisions. This indicates that while technology adoption is accelerating, strategic alignment is still evolving.

In general, organizations seem to be moving beyond simply meeting regulatory requirements to using sustainability to secure access to lower-cost, reliable energy, optimize scarce resources, and strengthen competitive advantage. CEOs are embedding sustainability goals into core business strategies and prioritizing compliance and reporting standards. This evolution is reflected in the numbers: nearly three-quarters (74 percent IM CEOs) of executives now say sustainability is embedded in their business and critical to long-term success — a notable increase from 65 percent the previous year.

Despite these advances, ESG maturity remains a work in progress. Only 36 percent of IM CEOs and 40 percent of automotive CEOs report that their companies fully integrate sustainability costs and ROI into all major capital decisions. This indicates that while technology adoption is accelerating, strategic alignment is still evolving.

And yet another figure shows that organizations are still not fully prepared to navigate regulatory and political differences across markets. Only 24 percent of automotive CEOs and 19 percent of IM CEOs feel very confident in their ability to adapt effectively, supported by strong systems and leadership. The majority (66 percent of automotive CEOs and 69 percent of IM CEOs) are somewhat confident, still learning and adapting to these differences, while 10 percent of automotive CEOs and 12 percent of IM CEOs admit they are not very confident and struggle to maintain consistency and alignment.

At the same time, innovation efforts are accelerating in response to the energy transition and growing demand for sustainable products, while managing regulatory complexity. Half of organizations report actively developing and launching new products or services that address the energy transition and meet sustainability demands (the figure for IM leaders is slightly lower at 44 percent).

More than half, 52 percent, of automotive CEOs and 57 percent of IM CEOs are monitoring regulatory developments to anticipate market changes that could impact innovation strategies. Furthermore, 58 percent of automotive CEOs and 43 percent of IM CEOs emphasize collaboration and partnerships as a key approach to driving innovation while adhering to environmental and regulatory requirements.

“Industrial manufacturing and even more the automotive sector are massively impacted by regulatory issues, and companies have invested significantly in compliance. But targets for reducing carbon emissions, water and energy usage, and waste, and adopting circular economy principles, are also driving down costs and improving efficiency. Sustainability as a business concept is moving from must-do to value creation, which calls for a strategic approach, involving R&D, to ensure sustainability by design, including using more recycled materials, and creating new business models, e.g. for old batteries.”

Yannik Michels
Partner, Performance & Strategy
KPMG in Germany

Sustainability and AI

AI is increasingly becoming an enabler of sustainability rather than just a useful tool. AI-powered systems can analyse massive real-time data from machinery, sensors, and environmental conditions to optimize energy consumption. Advanced applications such as AI-based carbon accounting and life-cycle analysis help identify emission hotspots and design effective mitigation strategies. This data-driven transparency supports sustainability reporting aligned with global standards.

In the automotive sector, AI enables real-time powertrain, thermal, and regenerative braking control to improve range and reduce fuel consumption. Intelligent mobility and traffic management systems minimize congestion and idle time through optimized routing and signal control. In manufacturing and supply chains, AI-driven process optimization reduces inactive periods lowers HVAC loads, and minimizes scrap, contributing to both cost efficiency and environmental goals.

Organizations broadly recognize AI's potential to support climate and sustainability objectives. Eighty-four percent of automotive CEOs and 81 percent of IM CEOs agree that AI can help reduce emissions and improve energy efficiency, while 86 percent of automotive CEOs and 83 percent of IM CEOs see its value in enhancing climate risk modeling and scenario planning. These figures underscore AI's growing role as a catalyst for sustainable transformation.

What this implies:

Sustainability is evolving from a compliance obligation to a strategic driver of value creation. CEOs must embed sustainability into core business strategies, align capital decisions with sustainability ROI, and prepare for regulatory complexity across markets. Success will depend on innovation, collaboration, and leveraging AI to accelerate the energy transition and optimize resources. Those who recognize the developments now can turn sustainability into a competitive advantage.

84%

of automotive CEOs and **81 percent** of IM CEOs agree that AI can help reduce emissions and improve energy efficiency, while **86 percent** of automotive CEOs and **83 percent** of IM CEOs see its value in enhancing climate risk modeling and scenario planning.

The journey ahead

What kinds of CEOs and organizations are likely to lead the way in an AI-driven, energy-efficient world, where geopolitical and technological disruption are the norm, and workforces must collaborate seamlessly with artificial intelligence and machines?

1 Economic outlook & CEO perspective

CEOs must serve as visionaries of transformation rather than custodians of routine. Those who navigate hyper-speed, volatility, and disruption will define the frontier of innovation.

- **Success through bold bets on:**
  - Tech breakthroughs
  - Smart/New business models
  - Collaborative ecosystems
- **Leadership maxim:**
  - Preparedness
  - Agility
  - Resilience

From practice to impact

Identifying new revenue streams is important in an insecure enviroment. Many companies have recently started to expand into the space industry, initially leveraging core competencies, e.g. in vehicle design or technical know-how in material handling, to address opportunities in lunar exploration, launch vehicles, and satellite deployment and evolving towards integrating space technology directly into industry innovation.

Assessing and benchmarking business resilience is essential — but knowing how your organization responds under pressure is the real test. Leading companies evaluate maturity and run continuity simulations to ensure executives and key stakeholders can act decisively during disruption.

2 Operations & performance

Efficiency might be the baseline but it is adaptability that will drive success.

- **Priorities:**
  - Innovation at speed
  - Resilient and sustainable supply chains
  - Cost efficiency
- **Competitive edge through:**
  - Seamless AI integration and data-powered insights
  - Risk mastery (regulatory and cyber)

From practice to impact

Improving data analytics capabilities with AI and ML can unlock powerful insights as a manufacturing client recently regonized — but it's not without challenges. Organizations often struggle with siloed functions, making a cohesive, future-ready analytics framework essential for success.

Building a robust cyber and data security framework is critical especially for many OEMs — but navigating evolving regulations in different jurisdictions, can be complex. Leading companies need to align with local laws, mitigate compliance risks, and integrate best practices into their internal processes.

The journey ahead

3 Technology & AI

The AI revolution remains in an ambition-versus-execution gap, where success and failure are closely intertwined. Winning will depend for every company on building a distinctive competitive edge.

- **Imperatives:**
  - Scalable data backbone
  - Embedded governance & trust
  - Future-ready, digital workforce
- **Winning formula:**
  - Blend tech, talent, and trust
  - Investments in real use cases
  - Culture of continuous learning

From practice to impact

Expanding remote work globally can strengthen your position as an employer of choice — but it comes with regulatory and compliance challenges. Organizations need to establish clear frameworks and processes that enable international mobility while addressing compliance risks.

Building a unified AI strategy and governance is critical — but many organizations lack clarity on their current maturity and capabilities. An objective readiness assessment helps identify gaps, benchmark progress, and provide a clear roadmap for future AI strategy and implementation.

4 Geopolitics & sustainability

Evolving from compliance to competitive advantage, sustainability is emerging as a catalyst for transformation and a driver of long-term value creation.

- **Key moves:**
  - Embed sustainability in strategy and capital decisions
  - Navigate fragmented regulations with agility
  - Reorganize global footprint
- **Accelerators:**
  - AI-driven energy optimization and carbon tracking
  - Circular economy and new business models

From practice to impact

In today's complex global trade environment, tariffs can pose significant risks to financial stability and supply chain performance. Leveraging advanced data analysis and visualization enables organizations to gain immediate insights, make informed decisions, and implement strategies that reduce exposure to rising tariffs.

Reframing sustainability metrics is not a technical adjustment — it's a strategic imperative. Begin by redefining core circular economy KPIs. The real challenge: orchestrating system-wide alignment, enabling a frictionless transition, and preserving transparency in reporting.

Methodology

The 11th edition of the KPMG CEO Outlook, conducted with 1,350 CEOs between 5 August and 10 September 2025, provides unique insight into the mindset, strategies and planning tactics of CEOs.

All respondents oversee companies with annual revenues over US$500M and a third of the companies surveyed have more than US$10B in annual revenue. The survey included CEOs from 11 key markets (Australia, Canada, China, France, Germany, India, Italy, Japan, Spain, UK and US) and 12 key industry sectors (asset management, automotive, banking, consumer and retail, energy, infrastructure, healthcare, insurance, life sciences, manufacturing, technology and telecommunications).

NOTE: Some figures may not add up to 100 percent due to rounding.

How KPMG can help

KPMG professionals recognize that effective transformation requires advanced technology, optimized processes, and experienced talent. With decades of leadership in the field, KPMG helps clients realize sustainable outcomes by aligning people and technology for maximum impact.

We support industrial manufacturing and automotive companies in transforming business models, strengthening operational resilience, navigating regulatory risks, driving technological innovation — including AI adoption — and unlocking greater value creation.

KPMG Trusted AI framework

As KPMG harnesses the power of AI and accelerates adoption, we recognize that advanced technologies can introduce complexity and AI risks that should be addressed clearly and responsibly. Learn more.

Our professionals work closely with companies to develop strategies for ESG, digital transformation, electrification, autonomous vehicles, Industry 4.0, and supply chain resilience, talent acquisition, leadership development, and workforce planning, helping ensure they have the skills and capabilities needed to thrive in a rapidly changing industry. This holistic approach affirms that companies are not only meeting their current operational needs but are also positioned for long-term success.

Environmental, social and governance (ESG)

Unlock the power of ESG to transform your business. In today's increasingly disruptive world of climate disasters, political conflict and societal inequalities, rapid ESG progress is crucial to achieving a more sustainable future. Learn more.

Our global automotive and industrial manufacturing networks unite Audit, Tax and Advisory professionals from KPMG firms around the world to deliver coordinated and multidisciplinary approaches.

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Jonathon Gill is the Global Head of Industrial Markets and Aerospace at KPMG International and works across the globe advising teams on alliances, venture capital strategy, and complex transformation and delivery programs. He keeps track of global trends and is often a trusted advisor to CEOs and other C-suite professionals in reference to their strategic and operational challenges. His experience working with public and private sector clients gives him a deeper and multidimensional perspective to challenges, implementable transformations, and bold and agile decision-making.

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Andreas Ries is the Global Head of Automotive at KPMG International and leads a network of over 8,250 professionals based in KPMG member firms in more than 30 countries and territories, who provide Audit, Assurance, Tax and Advisory services to the automotive industry.

As a trusted advisor, Andreas helps automotive leaders, from the largest OEMs to Tier 1 suppliers and mobility startups, to address their transformation challenges, utilizing KPMG professionals' multidisciplinary experience, and enabling automotive companies to focus on their performance and regulatory considerations. With his deep experience of over 25 years in the automotive industry, Andreas understands the complex challenges the industry is facing.

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