



The oil, gas, and chemicals supply chain mandate: Modernize, strengthen, and scale

New survey finds leaders are focused on building more resilient, digitally enabled supply chains as operational risks continue to rise.

KPMG 2026 US Supply Chain Survey: Oil, Gas, and Chemicals



Transformation moves higher on the supply chain agenda

Oil, gas, and chemicals leaders are managing a broad and interconnected set of supply chain risks.

Disruptions due to cyber threats, supply shortages, regulatory change, geopolitical uncertainty, and multi-tier supplier vulnerabilities are creating an increasingly complex risk matrix that can affect operations, costs, and access to critical materials and equipment. These pressures are especially difficult to manage across expanding networks of suppliers, business units, operating regions, and essential infrastructure.

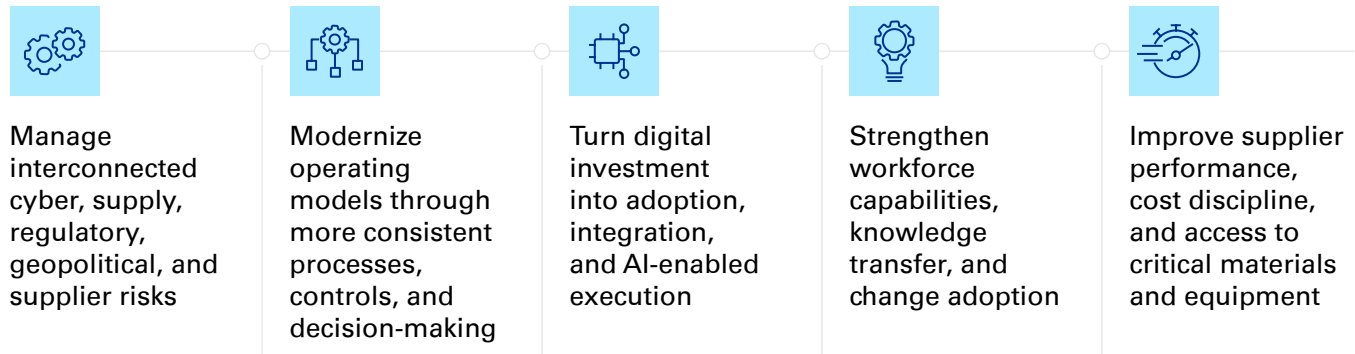
That spotlight on risk—and how to better mitigate it—comes through in our KPMG 2026 US Supply Chain Survey, which found 8 in 10 respondents in the oil, gas, and chemicals sectors planning a comprehensive transformation of their supply chain model within the next three years. Risk and resilience are central to that transformation agenda: 98 percent are currently innovating or planning to innovate in this area as they look to strengthen controls, improve supply continuity, and respond faster when conditions change.

The sector also reports strong digital confidence. Most respondents describe their supply chain operations as fully digitalized, and 88 percent expect to reach at least a moderate level of autonomy by 2027. But technology deployment is only part of the transformation. Many companies are still working to connect systems, improve data management, increase adoption, and turn digital investments into better decisions and more consistent execution.

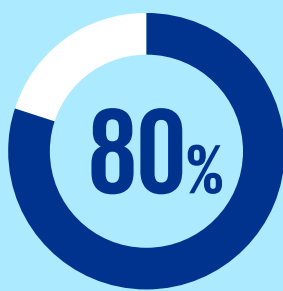
For oil, gas, and chemicals leaders, the next phase of supply chain modernization is about converting ambition into operational performance. That means embedding risk into everyday decisions, creating more consistent ways of working, and helping their teams use technology effectively across complex operating environments.



The findings point to five connected priorities for oil, gas, and chemicals leaders:



Here's a closer look at the insights from our oil, gas, and chemicals supply chain survey—and what the findings suggest for the sector's next phase of transformation.



are planning a comprehensive transformation of their supply chain model within the next three years

About the survey

KPMG LLP (KPMG) surveyed

462

US supply chain leaders
at companies with

\$1B

or more in annual
revenue as part of the

2026

US Supply Chain
Survey.

This oil, gas, and chemicals industry review includes data from 50 respondents across segments including: oil and gas, chemicals and performance technologies, mining and metals, renewable energy, forestry, agribusiness, and related energy and natural resources categories.

Risk and resilience

Risk management moves closer to daily operations

For supply chains in the energy sector, resilience increasingly depends on understanding exposure across the supplier network. Cyber security, supplier health, access to critical materials, regulatory requirements, and geopolitical volatility can each affect whether companies have what they need to keep essential assets and operations running.

It's no surprise, then, that nearly every survey respondent in this sector is currently innovating or planning innovation in risk management and resilience. But the opportunity extends beyond seeing risks earlier. Companies need better ways to evaluate supplier exposure, manage supplier relationships and performance, and connect changing risk signals to sourcing, inventory, contracting, and operational decisions.

That's pushing risk management further into everyday processes. More structured supplier workflows, stronger controls, and more timely visibility across the supplier network can reduce reliance on fragmented communications and help teams identify when intervention is needed. The goal is to make risk part of how supply chain decisions are made—not a review that happens after plans are already in motion.

Leadership's takeaway

Bring risk closer to daily execution by connecting supplier insights, controls, and changing conditions in a unified view—helping teams make faster, better-informed decisions that keep critical materials, equipment, and operations moving.



are currently innovating or planning innovation in their risk management and resilience functions within the next three years

Top perceived supply chain risks

40% 
Cybersecurity threats

38% 
Regulatory risks

40% 
Supply shortages

38% 
Geopolitical risks

38% 
Multitier supplier risks



Operating model

Transformation expands beyond cost and efficiency

Oil, gas, and chemicals companies have pursued supply chain transformation for years, often with a strong focus on reducing costs and improving efficiency.

That work is accelerating:

80%



of respondents are planning a comprehensive transformation of their supply chain model, the strongest transformation signal across the sectors in our survey.

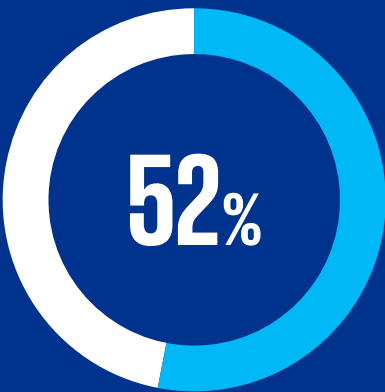
But the goals are also becoming broader as leaders look to strengthen how their organizations operate under more volatile conditions.

Cost remains central, but digitalization, technology enablement, and managing geopolitical uncertainty and market volatility are also among the leading transformation drivers. Meeting those priorities requires more than deploying new tools. In an industry this complex—operating across multiple refineries, plants, field operations, business units, regions, asset classes, and supplier networks—companies need more consistent processes and controls so that technology and data can support execution at scale.

The top transformation objectives reinforce that need. Respondents are prioritizing new organizational structures, greater operational efficiency through technology and automation, and stronger cross-functional collaboration. Together, these priorities point toward operating models that better connect people, processes, and technology—and clarify how work gets done, who owns key decisions, and how teams coordinate across the enterprise.

Leadership’s takeaway

Design operating model, talent, and technology improvements to create more consistent planning and execution processes, clearer decision rights, stronger collaboration, and better connectivity across the supply chain.

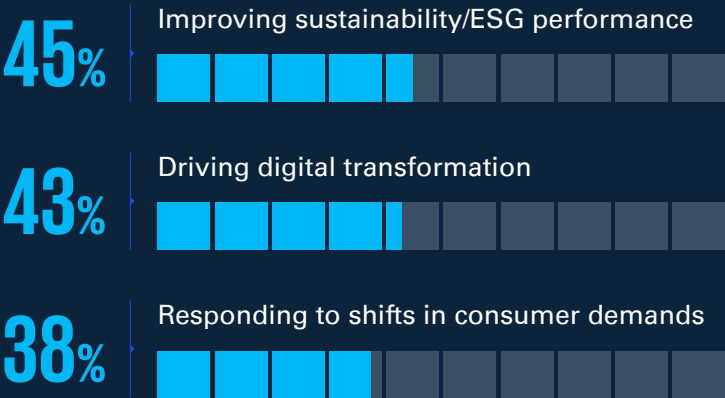


say a new organizational structure or improved talent management strategy is their top transformation objective

Top drivers of supply chain transformation

- 1 Operational efficiency and cost reduction 
- 2 Digitalization and technology enablement 
- 3 Managing geopolitical uncertainties and market volatility 

Top reasons for operating model change



Digital, AI, and autonomy

Digital confidence faces an execution test

Industry respondents report strong digital maturity, with almost 9 in 10 describing their supply chain operations as fully digitalized. Many companies have invested heavily in enterprise resource planning (ERP) upgrades, connected platforms, and other elements of a modern digital core. The next test is whether those foundations can support increasingly autonomous operations and faster, more responsive decisions across the supply chain.

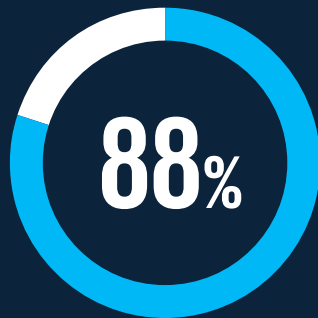
AI adoption remains a work in progress. Companies are identifying use cases and experimenting with new tools while managing familiar barriers around data, integration, governance, and workforce adoption. The survey reflects that work: Improving data management, developing a comprehensive AI strategy, and upgrading ERP systems are among the leading approaches to overcoming deployment challenges.

As companies move toward greater autonomy, the focus should remain on practical execution. Digital and AI investments need to help teams identify exceptions, evaluate options, and act faster across planning, sourcing, inventory, supplier management, and operations.



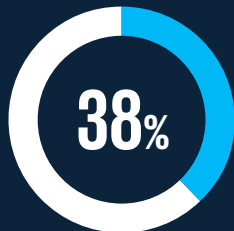
Leadership's takeaway

Build on the digital core by prioritizing trusted data, workforce adoption, and AI use cases tied to specific supply chain decisions and outcomes.

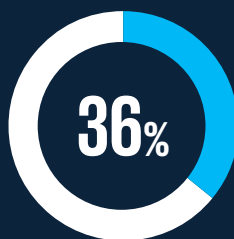


expect their operations to be at least moderately autonomous by 2027

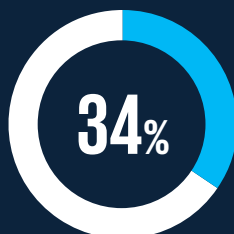
How companies plan to overcome AI/GenAI deployment challenges



Enhancing data management capabilities



Developing a comprehensive AI/GenAI strategy



Upgrading or replacing ERP systems for better data integration

Digital assessment



88%

Fully digitalized



12%

Partially digitalized



0%

Not digitalized

Talent and capabilities

The talent gap puts critical knowledge at risk

More than three-quarters of oil, gas, and chemicals respondents report a talent gap within their supply chain. That gap affects internal teams as well as the critical suppliers and service providers many companies rely on for maintenance, turnaround work, field support, and specialized operations. The effects are showing up across inventory management, supply chain visibility, and customer service and experience—areas where operational knowledge and digital capabilities increasingly need to work together.

The challenge is especially acute as experienced employees approach retirement, with more than a third of respondents citing an aging workforce. These workers often hold deep knowledge of assets, suppliers, operating conditions, and informal workflows that may not be fully documented. Newer employees may bring greater familiarity with digital tools, but they still need the context required to apply them effectively in complex field and operating environments.

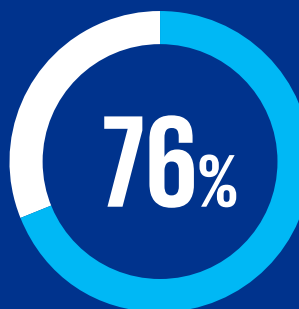
AI and automation will also reshape this equation:

78% expect these technology advances to have a significant workforce impact, including reducing some roles.

But companies still need experienced people to implement new tools, redesign processes, govern automated decisions, and transfer critical knowledge. Closing the gap therefore goes beyond recruitment or technical training. It requires a deliberate transition that combines institutional knowledge with new digital and analytical capabilities.

Leadership's takeaway

Connect workforce development, knowledge transfer, automation, and technology adoption so critical experience is preserved—and new capabilities translate into better execution.



believe that there is a talent gap within their organization's procurement and supply chain function

Where the talent gap is showing up

47%

Inventory
management

44%

Supply chain
visibility

40%

Customer service
and experience

Top challenges in addressing the talent gap

40%

Competition in the labor market



35%

Aging workforce



Managing costs

Cost pressure puts more mitigation levers in play

During periods of high production and strong margins, immediate operational demands can sometimes take precedence over longer-term cost discipline. But today, tariffs, supply shortages, and volatility on multiple fronts are keeping cost discipline firmly atop the agenda—raising the stakes for decisions across pricing, sourcing, inventory, contracting, and supplier management.

Respondents are using a mix of commercial and operational levers to manage those pressures. Where market structures allow, some companies are adjusting pricing or offerings. Others are increasing inventory buffers, improving processes through automation, and diversifying supplier networks where feasible. Together, these actions position cost management as a foundation for continuity and operational performance—not simply a cost-cutting exercise.

The opportunity now is to connect these levers more deliberately. Better supplier performance data can help leaders enforce pricing agreements and identify emerging constraints. Stronger scenario analysis can clarify when to absorb costs, adjust inventory, pursue alternatives, or pass cost increases through to customers where commercial structures allow. These capabilities give teams more options for mitigating price spikes without compromising access to critical materials, equipment, and services.



Leadership's takeaway

Coordinate supplier, inventory, pricing, and automation strategies to mitigate cost volatility, manage cost pass-throughs where available, and protect performance.

No. 1



Operational efficiency and cost reduction together rank as the sector's top driver of supply chain transformation

Near-term measures to mitigate tariff-related costs

38%



Adjust pricing structures, or pass increased costs to customers

36%



Optimize costs through automation or process efficiencies

36%



Increase inventory or buffer stock

36%



Diversify the supplier base or shift to alternative markets

Turning transformation ambition into operational performance

Oil, gas, and chemicals leaders have set an ambitious transformation agenda. They are modernizing operating models, strengthening risk and resilience, and building on substantial investments in digital infrastructure. At the same time, workforce shifts, supplier constraints, and cost volatility are raising the expectations for what those transformations must deliver.

The survey points to the importance of connecting these efforts through the way the supply chain operates every day. Risk insights should inform sourcing and inventory decisions. Technology should help teams identify exceptions and act faster. Operating model changes should create more consistent processes and clearer accountability. Automation should preserve critical knowledge while enabling new ways of working.

For supply chain leaders and their teams, the opportunity is to turn strong foundations into more responsive execution across suppliers, assets, business units, and operating regions. Companies that make those connections can manage volatility with greater confidence, protect operational continuity, and create lasting value from their transformation investments.

Leadership's takeaway

Connect risk, technology, talent, and operating model improvements around the decisions that strengthen resilience, control costs, and keep complex operations moving.



How KPMG helps oil, gas, and chemicals leaders modernize supply chain operations

Oil, gas, and chemicals supply chains are being pushed to operate with greater consistency across volatile markets, complex assets, critical suppliers, and rising technology and workforce demands. KPMG works with leaders to strengthen the supply chain capabilities behind that mandate—connecting operating model design, risk management, digital tools, AI, talent, suppliers, and cost discipline around the decisions that affect operational performance.

That work can include helping organizations to:



Strengthen risk and resilience

Improve supplier risk visibility, controls, scenario planning, and response processes so teams can identify changing exposures and act before they disrupt critical materials, equipment, services, or operations.



Align talent with workforce transformation

Connect workforce strategy, knowledge transfer, process redesign, upskilling, and change management with the capabilities needed to adopt new technologies and sustain more consistent ways of working.



Modernize the operating model

Redesign processes, governance, decision rights, organizational structures, and ways of working to support more consistent execution across business units, operating regions, plants, refineries, assets, and supplier networks.



Improve cost and supplier performance

Strengthen supplier performance visibility, category management, contract management, commercial controls, and value-leakage analysis, so teams can better coordinate sourcing, inventory, pricing, and cost strategies as market conditions change.



Select, implement, and scale digital and AI capabilities

Prioritize technologies and use cases with the clearest operational value, strengthen data management and integration, and connect digital or AI outputs to the workflows, controls, and people responsible for action.



Sustain performance over time

Establish the operating rhythms and KPIs needed to monitor risk, supplier performance, adoption, cost, inventory, exception management, and decision effectiveness—and use those insights to adjust workflows, controls, and decision rules over time.



For oil, gas, and chemicals leaders, modernization is an opportunity to build supply chains that are more resilient, responsive, and consistent across complex operating environments. KPMG can help your organization move from transformation ambition to operational performance—connecting risk, technology, talent, suppliers, and operating models to support measurable value.

[Explore KPMG Supply Chain services](#) 

Start a conversation



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