KPMG

Voice of the CSCO

A recurring conversation with CSCOs on the state of their supply chains

November 2025

CSCOs leverage AI for agile, resilient supply chains

In our conversations with chief supply chain officers (CSCOs), AI is a frequent topic. The end of the year is a dynamic period that presents a unique paradox: While AI's rapid evolution complicates traditional long-term strategic planning, AI also offers unprecedented opportunities to revolutionize supply chain operations. Our discussion captured the unique perspectives of leading CSCOs as they navigate this paradoxical landscape. A common theme covered the organizational culture embracing AI, emphasizing the need for strategic planning, robust training and upskilling initiatives, along with a focus on AI implementation and value. Many CSCOs are mandating that employees become digital savvy or look elsewhere for employment. CSCOs also struggle with harmonizing data and processes across functions, recognizing that successful AI integration and scaling hinge on a cohesive operational framework. Ultimately, CSCOs must become armed with actionable strategies to harness AI's full potential, ensuring agile, resilient, and future-ready supply chains.

On the CSCO agenda

Strategic planning

Long-term planning stymied by fast-moving AI

People, culture, training

Different approaches for different companies

AI implementation and value

Data and processes must come together

Strategic planning

Long-term planning stymied by fast-moving AI

CSCOs are finding it difficult to perform long-term strategic planning when technology, particularly AI, is advancing at such an exponential rate.

In a recent conversation, this technological change was referred to as a multiyear transformation for supply chains. The last 20 years were about globalizing supply chains while the next 20 years will be centered around AI.

Today's CSCOs are living through the transformation in real time. The CSCO for a manufacturing company shared their dilemma that struck a chord with fellow CSCOs.

"The goal is to plan for three years from now, but it's going to change in a few months anyway."

Despite AI planning being the focus, the evolving aspect of AI makes planning next to impossible.

"AI planning is in my planning function, and I can see areas of supply chain that will be impacted by AI news on the way," remarked the CSCO for a consumer products company.

Other CSCOs are starting to see that while it is true that technology and AI are the problem, they may also be the solution. For example, AI can expand and modernize the planning function with enhanced demand forecasting and inventory optimization. AI helps move supply chains from reactive to proactive.

"AI changes up the way we think about supply chain planning," noted Philip Ogaard, KPMG director, Advisory, Procurement & Supply Chain.

"We're doing simple mathematical modeling across our plants based on historical consumption. We can put in a forecast based on supplier volatility and know what items should be stocked and which orders should be filled today," said the CSCO of an industrial company.

Another CSCO has made inroads on leveraging AI and agents in supply chain operations, from an agentic factory for faster problem-solving to analyzing databases for best options on materials and costs. The company also has an AI hub with the latest AI tool for employee use. The CSCO even has a little advice for fellow CSCOs.

"Manufacturing is straightforward and predictive. If results are X, chances are Y is causing it. If you have enough data, you're able to understand faster and empower managers in how they lead."

> "If you're not using AI in your job, you're not working to your full potential."
>
> —CSCO for a utility company

People, culture, training

Different approaches for different companies

Technology is only as good as the people who use the AI tools and the organizational culture that supports them. Most supply chains implement AI training programs like prompt engineering and digital skills. Upskilling reflects leadership commitment, reduces fear and resistance, and shapes the culture.

Examples abound with CSCOs on their respective AI training programs with differing approaches and areas of emphasis. Some hired outside experts. Others favored internal academies and peer-to-peer training.

"What works for us in training is somebody with a similar persona training another individual in the same role," remarked the CSCO of a technology company.

Other CSCOs make the point that tone from the top matters with a special blend of excitement and fear.

"Tone from the top like holding town halls can make the difference. I want employees to become digitally savvy. If they're not, they probably should get another job," remarked the CSCO of a retail company.

A utility company CSCO put it this way. "We're revamping our playbooks, from sourcing and negotiation to contracting in an effort to assist and upskill our employees."

Ultimately, the goal of training and upskilling is to have a supply chain staff that is ready to embrace AI and all its possibilities. Supply chains need not only people who are digitally savvy but who can also interpret results in the context of real-world operations.

As Chris McCarney, US Consulting Leader for Supply Chain and Procurement, KPMG LLP, noted when hiring data scientists, "The ideal talent not only understands the art of the possible but also the nuances of your supply chain."

Other aspects are critical with AI like the demand for cross-functional collaboration. A supply chain touches other departments from procurement (evaluate different suppliers) to finance (understand cost and margin impact) and sales (discuss price changes and product availability).

"We're big fans of cross-functional, cross-sector councils that feature a small group of decision-makers elevated to represent their areas," said the CSCO of an aerospace and defense company. "The goal is to move faster on key initiatives with the full enrollment given the council has already approved."

"I'm encouraging people to think about a world of constant change."

—CSCO for a consumer products company

AI implementation and value

Data and processes must come together

Implementing AI is about creating a continuous, collaborative, and data-fueled activity. Processes must be able to adapt quickly and incorporate the insights from data analysis.

Supply chains are mostly at different levels of AI implementation but united in goals as this CSCO articulates.

"Our vision is to move our supply chain across different functions to a more autonomous supply chain with the concept of empowering our teams to focus on value creation rather than transaction activity."

This same CSCO hit on the biggest challenge with supply chains focused on proof-of-concept initiatives.

"If you have proof of concept and you're not able to scale, you get nothing out of it."

Scaling is the Achilles' heel of any proof of concept. A small improvement in an isolated corner can have zero impact if the system isn't scaled. And there's nothing worse than pilot purgatory where successful pilot projects never get off the ground. It's toxic to innovation and morale.

Proofs of concept are often derailed by data. Silos and disconnected processes prevent data sharing. Rich, granular, and connected data bring strength and accuracy to scenario planning.

"We're strengthening and bringing data into place," shared the CSCO of a food company. "It's something of a prerequisite, and we're confident that it will help enable potential solutions."

The main difficulty with data lies in handling its need to span multiple functions and organizing business processes. Orchestrating data across departments and functions is key to using AI to generate value.

For one CSCO, customer service, logistics, and planning are connected and sharing data. The door to using AI to generate ROI is open but challenges remain.

"We need to step back and understand how. How are we going to address areas of opportunity? How can we connect AI to machine learning? We are taking a journey for the next three years."

For CSCOs, having successful proof of concept, a pilot that scales, and a department that comes online with data sharing all equates to repeated success that builds momentum. The technology company CSCO discovered the lesserknown outcome from duplicating success.

"It creates a springboard, enabling us to hyperscale across other groups to get more value."

"Ensure data scientists understand industrial operations, not just the art of what's possible."

—Chris McCarney , US Consulting Leader for Supply Chain and Procurement, KPMG LLP

Considerations

- Create a single source of truth for consensus building
- Evaluate proofs of concept on ability to scale and generate value
- Focus on cross-functional data orchestration

Additional insights

2025 KPMG US CEO Outlook
Create AI Value Across your Workforce
Guide to Building Workforce Value through AI Investment

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