GEP® INTELLIGENCE DRIVES INNOVATION

INSIGHTS FROM 2025 NCSU-GEP STUDY

BRIDGING THE PROCUREMENT & SUPPLY CHAIN GAP

AI-Powered Orchestration That Drives Alignment and Outcomes



Key Takeaways

- Procurement and supply chain leaders are increasingly aligned on strategic priorities but operational gaps persist.
- Resilience, quality compliance and sustainability have surpassed traditional cost and delivery metrics as top goals.
- Operational misalignment slows decision-making, increases risks and weakens supply chain performance.
- Orchestration creates a unified framework for aligning procurement and supply chain operations in real time.
- Generative AI accelerates orchestration by enabling faster, smarter collaboration and decision-making.
- Organizations that invest in human and operational readiness will be better equipped to integrate AI. They'll unlock synergy between procurement and supply chain, creating strategic advantage.

Executive Summary

Procurement and supply chain leaders are increasingly aligned on strategic goals like resilience, quality compliance and sustainability. But operational divides remain a significant barrier to turning strategy into action.

New research from North Carolina State University (NCSU) and GEP shows that while priorities are converging, differences in execution and technology adoption, particularly around AI integration, are slowing progress.

This paper explores the state of alignment between procurement and supply chain functions and the hidden costs of operational misalignment. It also reveals how orchestration, accelerated by generative AI, can close the gap. The paper offers a clear view of how leading organizations are building the resilience, agility and collaboration needed to succeed in a volatile and rapidly evolving environment.

Procurement and supply chain leaders are navigating a new reality where material shortages, regulatory scrutiny and shifting market demands have become permanent pressures[1]. Traditional strategies built on cost savings and delivery speed are no longer enough to ensure resilience or long-term success.

A shift is underway. Leaders are moving beyond transactional goals toward broader strategic priorities. Resilience, quality compliance and sustainability have become essential, and achieving them requires a new approach to collaboration and execution across procurement and supply chain operations.

Recent research conducted by NCSU and GEP shows growing strategic alignment between the two functions. However, the study also highlights challenges, especially in how they approach the integration of technologies like generative AI.

This paper focuses on how to close those operational gaps. It also shows how forward-looking organizations are building the resilience and agility needed to lead in a volatile, fast-moving environment.

[1] In this study, procurement refers to the function focusing on sourcing and acquiring goods and services, while supply chain focuses on managing the flow of materials and products from origin to delivery.

Shared Goals, Evolving Priorities

Procurement and supply chain leaders have long operated with different mandates. Today, traditional goals like cost savings, compliance and logistics efficiency are no longer enough to meet the demands of a more volatile and complex environment.

The study reveals a clear shift. Leaders across both functions are aligning around broader, more strategic outcomes. Resilience, quality compliance and sustainability have moved to the top of the agenda, reflecting a growing recognition that operational excellence is only part of the solution. Organizations must build adaptable, resilient systems that can deliver value under volatile conditions.

PRIORITY	CPO	CSCO
1	**Quality Compliance**	**Supply Chain Resiliency**
2	Achieving Lowest Cost	On-Time Delivery
3	On-Time Delivery	Supply Chain Visibility

The survey findings show that both CPOs and CSCOs rank resilience and quality compliance[2] as top strategic priorities for the coming years. Sustainability, particularly in addressing Scope 3 emissions, has also gained importance as companies respond to regulatory pressures and stakeholder expectations. Cost management remains part of the equation. However, it is no longer the primary driver of decision-making.

2025

PRIORITY	CPO
1	Quality Compliance
2	Achieving Lowest Cost
3	On-Time Delivery

PREVIOUS STUDY

PRIORITY	CPO
1	Reducing Cost
2	On-Time Delivery
3	Resilience

2025

PRIORITY	CSCO
1	Supply Chain Resiliency
2	On-Time Delivery
3	Supply Chain Visibility

PREVIOUS STUDY

PRIORITY	CSCO
1	On-Time Delivery
2	Achieving Lowest Cost
3	Resilience

[2] Quality compliance ensures procurement gets the right materials or services from the right supplier, at the right time, location, volume and price, using defined processes.

This evolution signals a move toward a more customer-centric and long-term view of supply chain performance. Leaders are no longer measured solely by savings or delivery speed, goals that often conflict. Increasingly, their success depends on building resilient, high-quality and sustainable supply chains that support enterprise goals.

This move toward a broader perspective and a strategic focus on the customer enable procurement and supply chain to step out of their respective silos. However, differences in operational focus remain. These gaps, particularly those around how organizations integrate emerging technologies into daily processes, present new challenges.

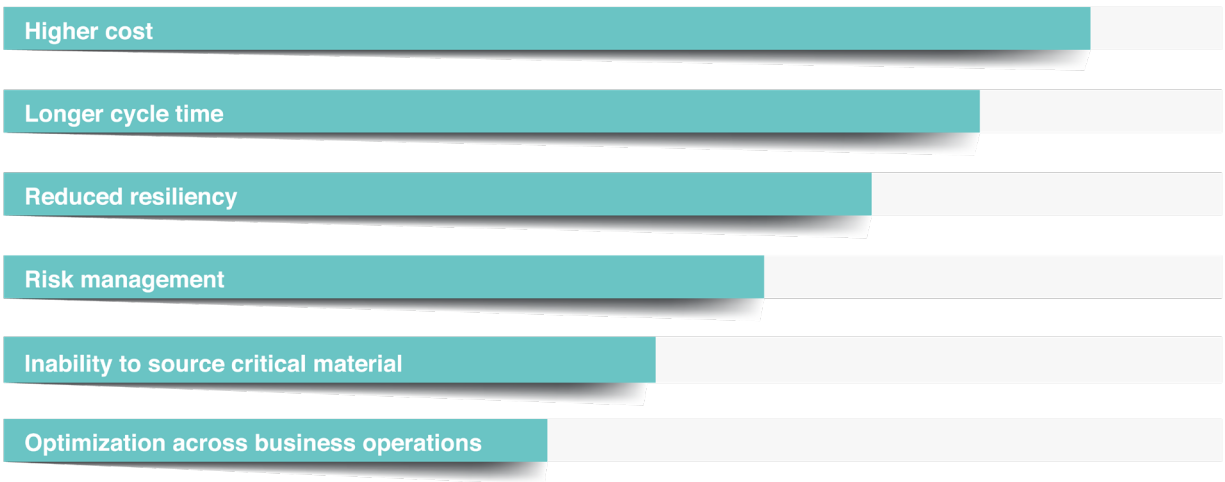
Understanding where alignment breaks down is the first step toward building a more resilient and unified operation. Beyond operational efficiencies, these gaps point to a deeper need for orchestration: a way to align fragmented functions and turn shared strategy into coordinated action.

The Cost of Misalignment

Procurement and supply chain leaders are aligned on strategy. However, gaps in execution still carry real costs for organizations working to build resilience and deliver sustainable value.

Without coordination, differences in focus slow decisions, weaken risk responses and create inefficiencies across the enterprise. Fragmented execution leaves organizations less able to respond to disruption and stalls progress toward strategic goals.

CPO–CSCO Misalignment Creates Enterprise-Wide Vulnerabilities: Higher Costs, Slower Cycles and Weakened Resiliency



Q: Given that the procurement-supply chain gap is consistently identified as a major issue, what are its most significant strategic implications?

Siloed operations compound risks. Contracting delays, supplier miscommunications and fragmented risk assessments undermine performance. Over time, these disconnects erode the very resilience and quality standards organizations aim to achieve. Costs increase, timelines slip and operational agility suffers.

Aligning strategy is only the first step. Without closing the operational gaps that lie beneath, companies fall short of their full potential. Addressing these divides requires improved coordination as well as new tools, processes and a framework for collaboration.

Orchestration, supported by AI and emerging technologies, offers a practical path forward. It enables real-time collaboration and creates shared visibility across procurement and supply chain operations to tackle the hidden costs of misalignment and build a competitive advantage.

Orchestration: A Powerful Enabler of Alignment

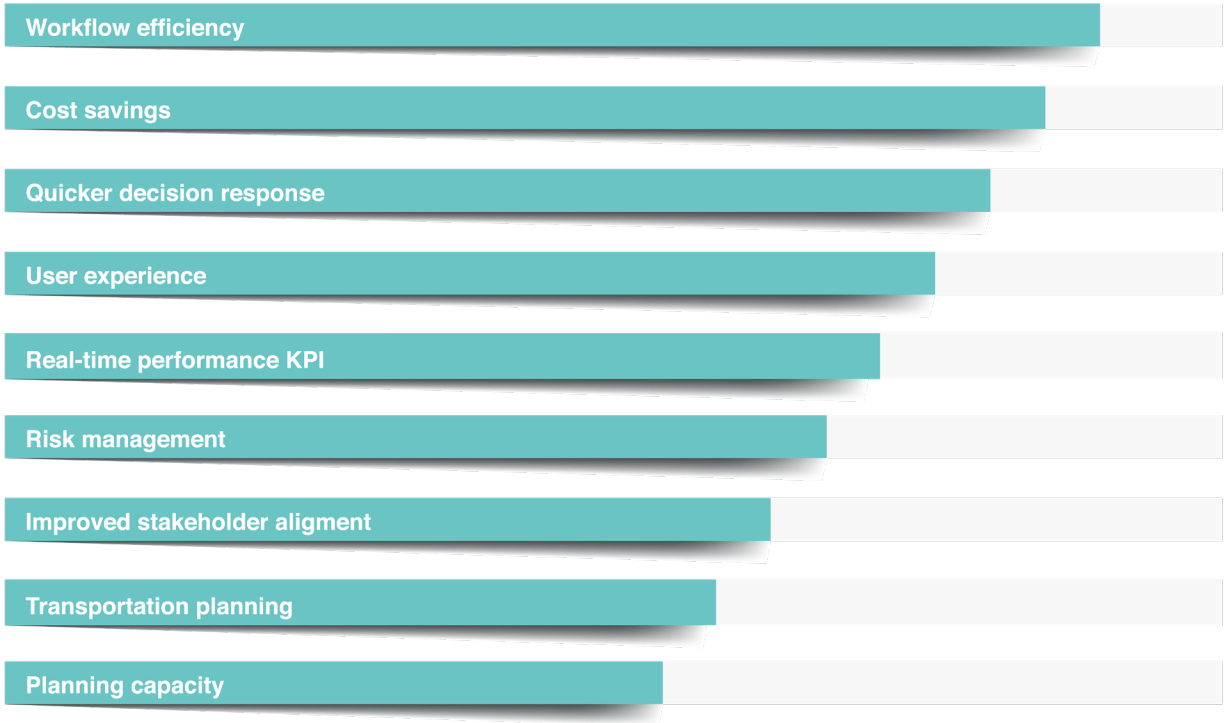
Orchestration aligns people, processes and technology to create a unified operating model. It ensures that procurement and supply chain functions are working toward the same goals in a coordinated and efficient way. Orchestration enables teams to act on the same information and respond faster to disruptions, improving workflow efficiency and reducing avoidable costs across the value chain.

This model moves beyond the traditional siloed view of procurement and supply chain management. It connects upstream planning with downstream execution and synchronizes sourcing decisions, supplier actions, logistics flows and risk mitigation efforts. The result is a more efficient, resilient supply chain that is better positioned to deliver on quality and sustainability goals.

Technology makes orchestration possible. Real-time data, AI-driven insights and integrated platforms help create the visibility and agility organizations need. Orchestration is more than systems. It requires a shift in mindset toward cross-functional collaboration, shared accountability and continuous learning.

Organizations that embrace orchestration are better equipped to align strategy and execution. They can turn high level objectives like resilience and sustainability into measurable outcomes, even amid uncertainty.

Workflow Efficiency and Cost Savings Are the Top Metrics in Measuring Orchestration Benefits



Q: How are you measuring the benefit/ROI from procurement orchestration, outside of implementation?





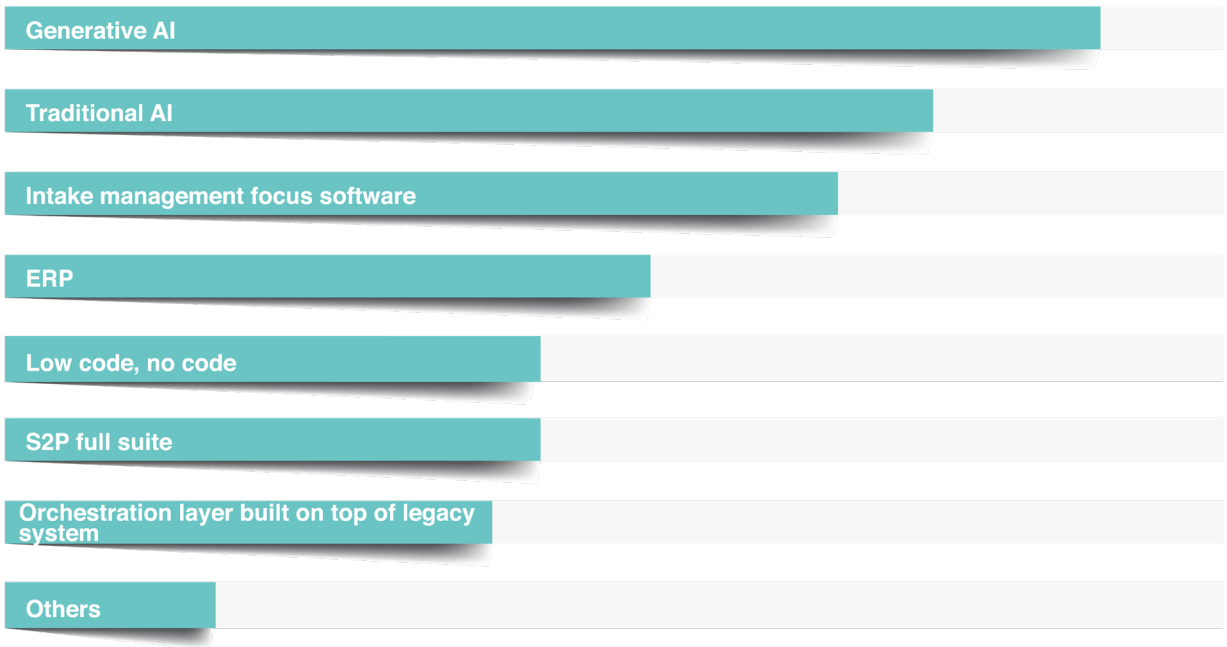
Leaders are already seeing tangible benefits. According to the study, the most commonly cited ways to measure ROI include improvements in workflow efficiency, cost savings and increased supply chain resilience. Workflow inefficiency is often the most visible symptom of poor alignment between procurement and supply chain, and orchestration's top delivered benefit is fixing it. That makes orchestration both a technical solution and a strategic lever for bridging functional gaps and driving operational cohesion. These metrics reflect a growing shift away from traditional savings targets and toward agility and long-term value creation.

Orchestration provides the framework, and technology determines the speed. Generative AI is already accelerating the shift from coordination to true integration in procurement and supply chain operations.

Generative AI: Enabling Seamless Orchestration

Generative AI has quickly become a practical enabler for business transformation, especially in procurement and supply chain. It enhances visibility, improves forecasting and helps teams coordinate complex activities across functions. Generative AI goes beyond just automating tasks and drives smarter decision-making by analyzing vast data sets, identifying patterns and suggesting actions in real time.

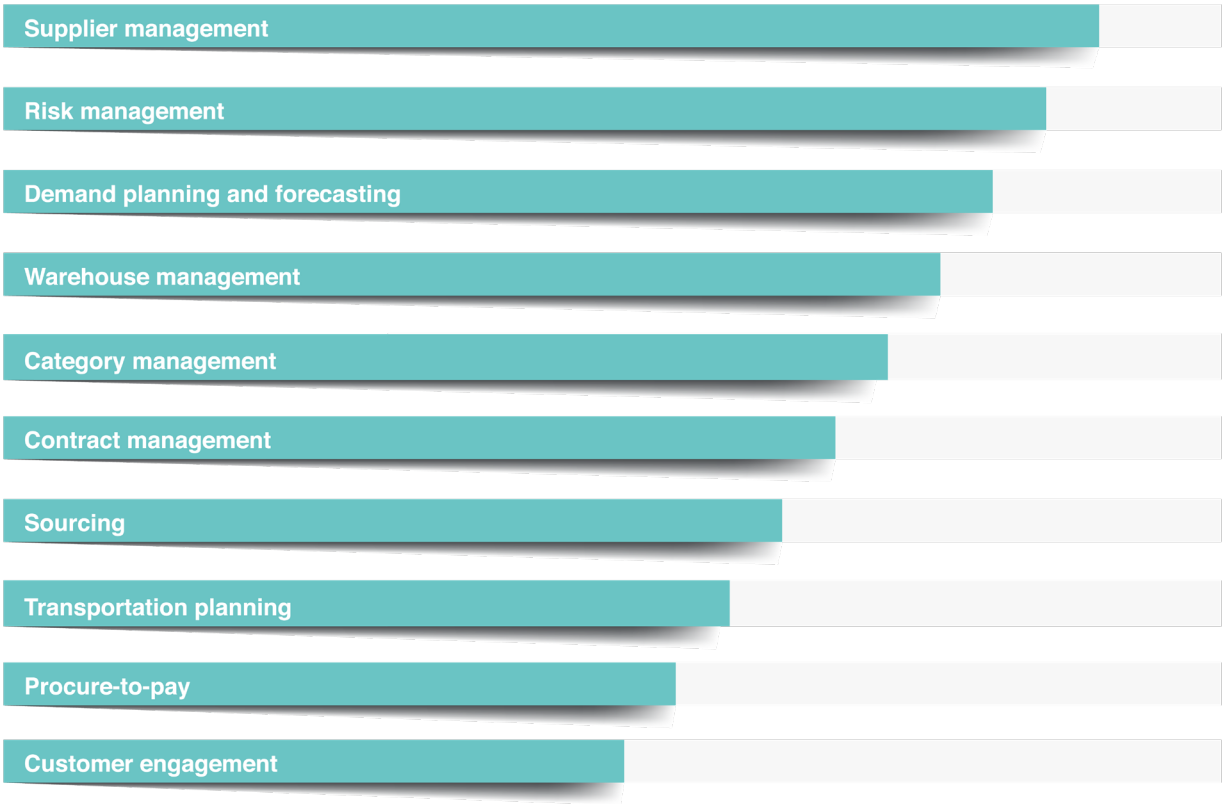
Generative AI Has Emerged as the Top Technology Powering Orchestration



Q: If your company has implemented procurement orchestration, what technologies are you using to enhance the integration between procurement and supply chain functions?

The research shows that leaders increasingly view generative AI as the top technology for improving integration between procurement and supply chain operations. Adoption is growing fastest in areas where complexity is high and decisions need to be made quickly. Supplier management, risk forecasting and demand planning are among the business processes where generative AI is delivering the greatest value.

The Areas Where Generative AI Will Have the Most Impact Are Supplier Management and Risk Management



Q: Which of the following business processes have the greatest likelihood of successful adoption of Generative AI in orchestration?

These capabilities are critical pieces of orchestration. Generative AI enables real-time collaboration by aligning planning with execution. It helps procurement and supply chain teams detect inconsistencies early, model different scenarios and adjust operations based on dynamic conditions.

Generative AI also supports broader digital transformation initiatives in concert with low-code platforms, IoT networks and advanced analytics. Together, these technologies create an ecosystem that builds resilience and fosters faster, more precise decisions.

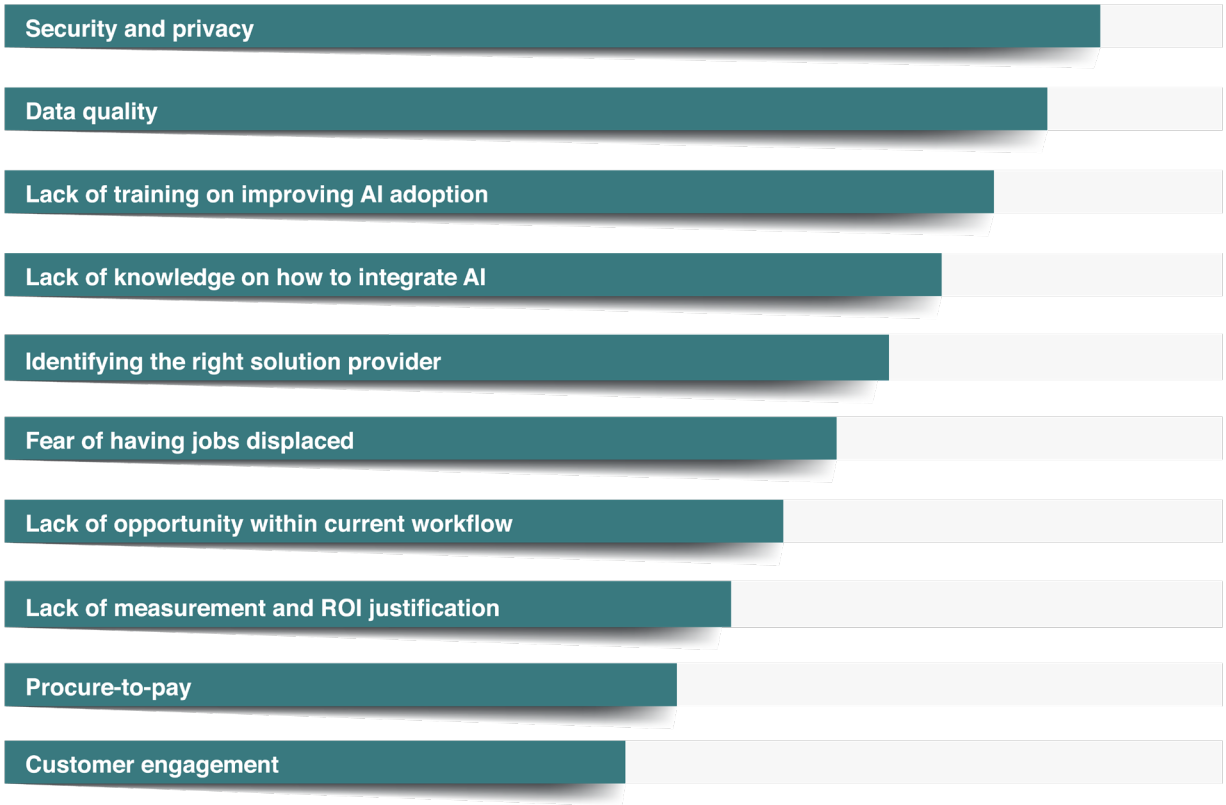
The organizations leading the AI race are embedding generative AI into the core of their operating models. They recognize that seamless orchestration, powered by intelligent technologies, is key to turning strategic goals into tangible results.

However, even the most powerful tools can't overcome the deep-rooted challenges that slow progress. The next section examines the barriers that stand in the way of full orchestration and AI adoption, and why addressing them must be a priority.

Barriers to AI and Orchestration Adoption

The data highlights common challenges that complicate AI adoption in procurement and supply chain operations and slow progress.

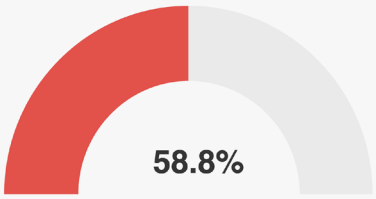
For AI Integration, Data Security and Data Quality Are the Two Foremost Challenges



Q: What challenges have you faced or are you expecting to face in implementing AI in your supply chain?

Procurement and supply chain leaders often approach AI integration from different angles. This makes it difficult to quickly develop a unified AI roadmap and deployment plan.

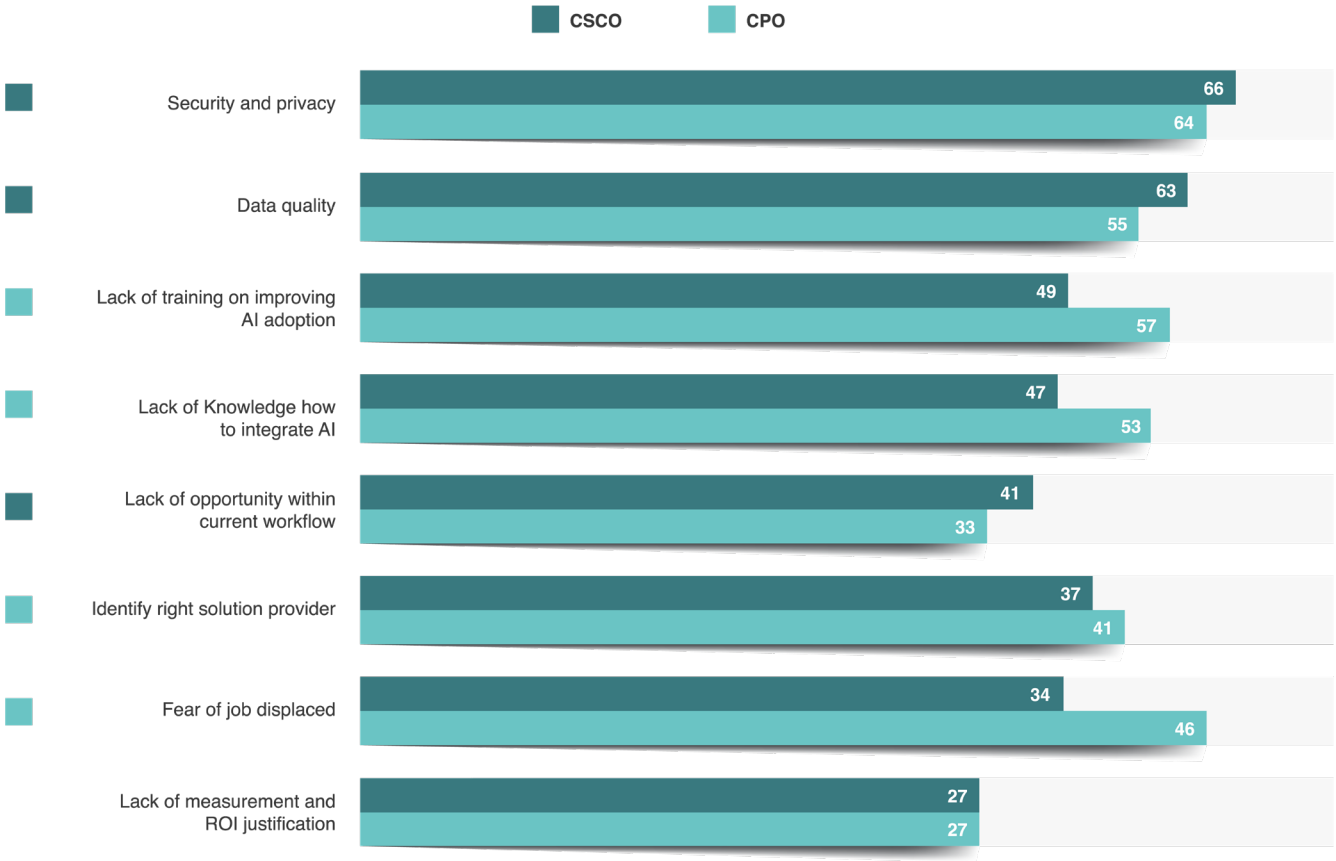
Integration of AI Into Current Business Processes



Q: How would you rate the relative alignment of Procurement & Supply Chain functions when it comes to planning decisions?

The study reveals a deeper reason AI adoption often stalls. Procurement and supply chain leaders struggle to align on how to integrate AI into existing operations, even though they recognize its value. Their distinct operational priorities and implementation approaches lead to friction that slows progress.

Misalignment on AI Integration Stems From Divergent Implementation Focus



Q: What challenges have you faced or are you expecting to face in implementing AI in your supply chain? AI implementation challenges in Supply Chain: CPO vs. CSCO perspectives.

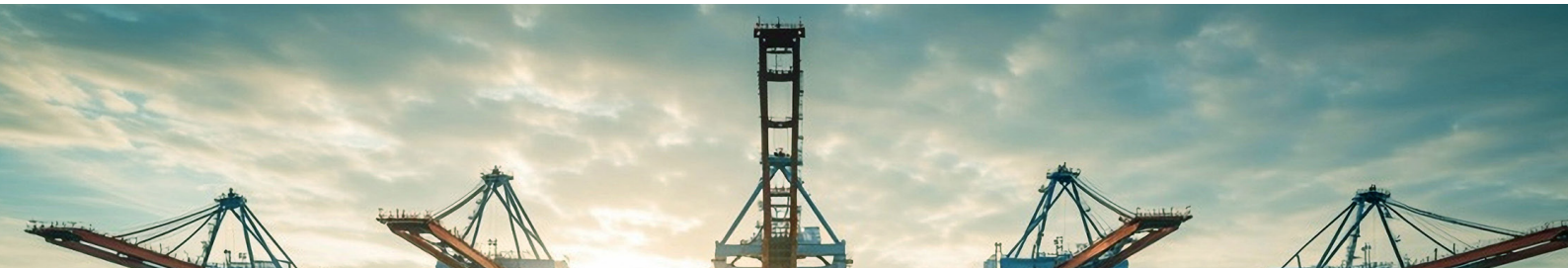
Security and privacy concerns were top of the list for both groups, as organizations must safeguard sensitive procurement and supply chain information while expanding digital capabilities. Data quality also remains a significant challenge. Without reliable, integrated data, even the most sophisticated AI models struggle to deliver actionable insights.

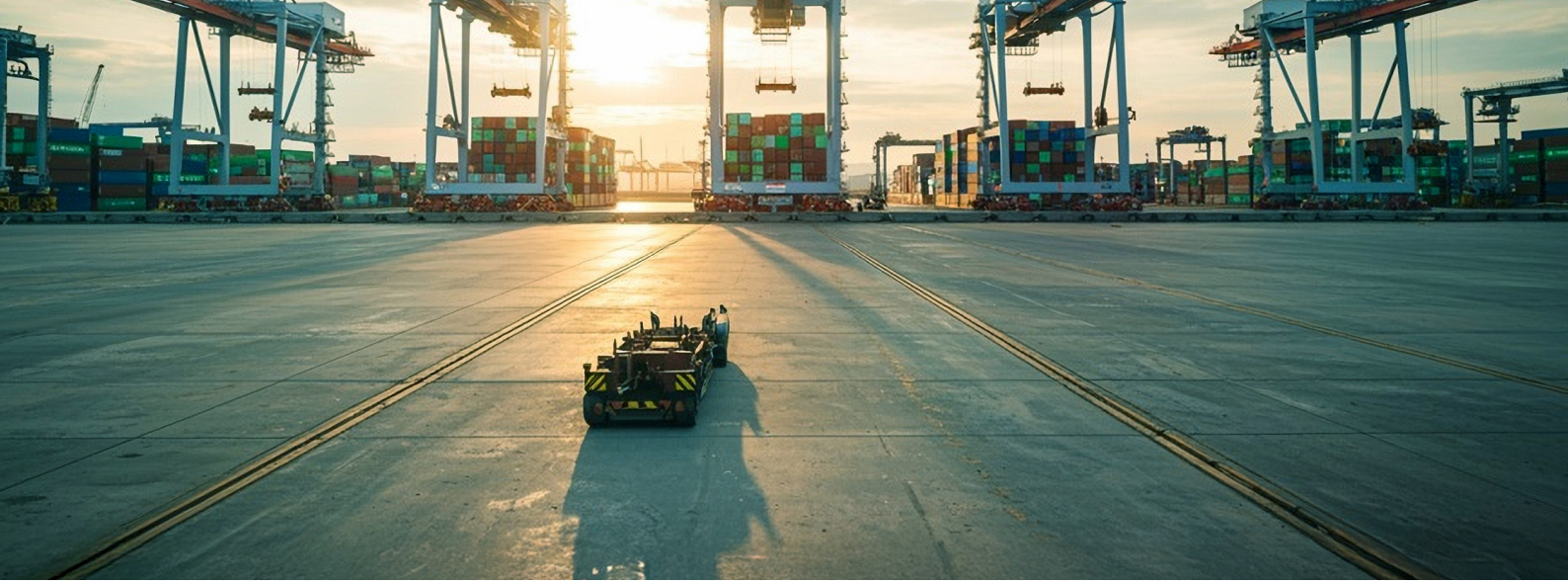
Skills gaps are another obstacle. Teams often lack experience with AI tools and orchestration processes. Training and upskilling are essential but require time and investment. Resistance to change is also a persistent issue. Shifting to an orchestrated model demands new ways of working, performance metrics and leadership mindsets.

Why is Alignment Elusive?

Procurement and supply chain leaders take different approaches to AI integration

- *CSCO: More concerned with technological barriers (data quality, cyber security)*
- *CPO: More concerned with people challenges (fear of job displacement, skill gaps)*





From a broader view, the study surfaces a key operational divide. Procurement and supply chain leaders differ in how they approach AI integration. CSCOs tend to be more concerned with the technological barriers in AI implementation such as data quality, cyber security and privacy. On the other hand, CPOs are likely to be more concerned about the people challenges, including fear of job displacement and lack of training.

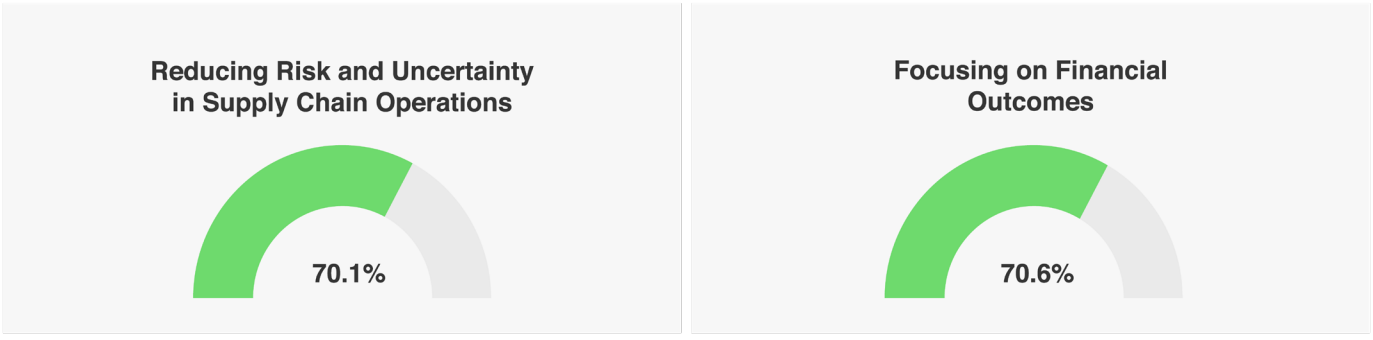
These challenges are significant but solvable. Companies that invest in high-quality data, digital literacy and cross-functional alignment are already seeing results. Beyond just a technological upgrade, orchestration is an operational shift that requires buy-in from across the enterprise.

So how can leaders close the gap and move from alignment to action?

Building Alignment Through Action: A Roadmap for CPO–CSCO Collaboration

Closing the gap between procurement and supply chain priorities demands a clear, deliberate path forward. To succeed, organizations must take targeted steps to turn strategy into action.

A strong foundation already exists. While alignment varies across planning areas, the research reveals two clear points of alignment: risk and financial outcomes. These reflect a shared focus on broader organizational strategic objectives of business continuity and performance, offering a natural starting point for deeper operational coordination.



Q: How would you rate the relative alignment of Procurement & Supply Chain functions when it comes to planning decisions?

These are the highest scores across all areas. Other areas include | Integration of AI into current business processes: 58.8% | Prioritizing lowest cost suppliers: 59.9% | Reducing reliance on overseas suppliers: 61.4% | Focusing on inventory reduction: 62.5% | Prioritizing local sources of supply: 63.7% | Identifying and collaborating with new suppliers: 63.8% | Carrying high levels of inventory safety stock to ensure reliable supply: 65.6% | Focusing on customer order fulfillment over all other priorities: 66.0% | Workflow improvement and flexibility: 67.8%

To fully align strategy and execution, CPOs and CSCOs must focus on four critical priorities that turn convergence into results:

1. Continue to drive collaboration in the strategic areas they are most aligned on, like risk reduction and financial outcomes.

2. Invest in orchestration technologies to enhance coordinated processes and workflow efficiency across supply chain and procurement.

3. Drive data and AI adoption and pilot agentic AI projects in converging areas like risk and supplier management. Success in these pilots should lead to broader orchestration initiatives.

4. Improve mutual understanding in AI implementation and balance the technical and human efforts to make the transformation successful.

Next Steps in AI-Powered Orchestration: GEP's Perspective

With the right foundation in place, the next step is a more hands-on approach to scaling AI and enabling orchestration where it matters most.

The promise of AI in orchestrating procurement and supply chain is compelling. Faster decisions, end-to-end visibility, early risk signals and dynamic planning are all within reach. Yet most companies are still struggling to deliver results at scale. The reason is organizational misalignment rather than the failure of technology. When procurement and supply chain operate in silos, orchestration cannot take root, no matter how advanced the AI.

What works instead is a structured, intentional approach. Below is a practical three-part framework that organizations can apply to close the gap and enable AI to support orchestration meaningfully.

1. Align on a Joint Decision Architecture

Start by mapping where procurement and supply chain decisions intersect and which of those can be enhanced by AI. This requires a shared "decision architecture" along with process flows.

Key actions:

- Identify cross-functional decisions such as supplier selection, risk response, demand planning and buffer stock adjustments. Map current ownership and decision rights.

- Agree on AI-supported decision types. For example, should AI recommend suppliers or auto-award based on constraints? Should it generate alerts on inbound shipment delays and trigger PO revisions automatically?

- Codify thresholds and escalation paths. For instance, allow AI to auto-negotiate up to a 2 percent price variance but require joint approval above that. This prevents delays and builds trust in automation.

This decision framework becomes the blueprint for orchestration. Without it, each team optimizes locally and AI recommendations fall into a void.

2. Build a Shared Data and KPI Layer

Data quality is often cited as a bottleneck, but the real issue is lack of agreement on what data matters and how it is interpreted across functions.

Key actions:

- Establish a unified data dictionary for supplier, part and risk attributes. Procurement and supply chain teams often use different naming conventions or risk scores, which confuses AI models and erodes credibility.
- Create a shared KPI stack. For example, align on supplier performance metrics that combine cost, delivery reliability, and risk exposure, rather than tracking them in isolation.
- Enable data access parity. AI systems often sit on top of supply chain platforms, leaving procurement teams to rely on stale or partial views. Both functions should be able to view and act on the same real-time insights.

Once data is shared and interpreted consistently, orchestration can shift from reactive handoffs to proactive collaboration.

3. Operationalize Orchestration through Governance and Incentives

AI-enabled orchestration has to be embedded into how people work and how they are evaluated.

Key actions:

- Set up a joint orchestration office or cross-functional task force, with a mandate to oversee use case selection, pilot execution, model calibration and change management. This prevents tool fatigue and ensures fast iteration.
- Redesign incentive structures. For example, reward both procurement and supply chain managers on total landed cost reduction or forecast accuracy instead of individual function-level KPIs.
- Schedule regular orchestration reviews. Treat AI outputs as inputs for real decisions. Review high-impact AI-driven exceptions, root causes and decisions made. Over time, this builds confidence and speeds up decision cycles.

This governance layer keeps orchestration efforts grounded, focused and cross-functional, especially as use cases expand.

Embedding these principles into daily operations can help organizations move beyond isolated AI pilots and unlock the full potential of orchestration at scale.





Survey Methodology

NCSU and GEP conducted this study to explore how procurement and supply chain leaders are adapting to shifting strategic priorities and the integration of emerging technologies like AI. The survey gathered responses from 250 senior executives across industries, including manufacturing, retail, construction and technology. Participants held leadership roles such as Chief Procurement Officer (CPO), Chief Supply Chain Officer (CSCO), Chief Financial Officer (CFO) and Chief Information Officer (CIO). Respondents were primarily based in North America, with additional representation from Europe and Asia-Pacific regions.

The gap between procurement and supply chain priorities is narrowing, but operational divides remain. Organizations that fail to close these gaps risk falling behind in an environment where resilience, quality and sustainability are the new benchmarks for success.

Orchestration, powered by generative AI and supported by broader digital transformation initiatives, offers a path forward. It enables real-time collaboration, enhances decision-making and helps organizations align strategy with execution.

Talk to GEP to learn how orchestration and AI can help your organization lead with resilience and agility. Connect with us today.

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