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An Aptean Company

Orchestration to Execution:

The 2030 Operating Model of the Decision Centric Supply Chain

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Introduction

Traditional supply chain systems were designed to record, plan, and report, often with periodic decision-making and a backward-looking view of forecasts built on past occurrences. However, this can no longer keep pace, and even as AI has entered the picture, many organizations are hindered by legacy tools, processes, and thinking.

Supply chain organizations now need a new operating model that shifts the focus from data availability to decision outcomes. The real challenge isn't a lack of data but a lack of decision coherence and speed. Many teams still operate on rigid planning cycles, conflicting signals, and siloed priorities, which slow responses. McKinsey estimates the typical Fortune 500 company wastes more than $250 million annually due to slow or poor decision-making.[1]

Decision orchestration offers a new operating model that can redefine supply chain leadership. Instead of asking what data the organization has, it asks what decisions it is trying to make and what business outcome it seeks. In this approach, decisions are continuously context-aware and driven by outcomes rather than accuracy at a point in time. Leveraging AI enables the organization to evaluate options and trade-offs while understanding what the recommendations are and why they matter.

1. Decision making in the age of urgency, McKinsey, April 2019

The Decision Centric Enterprise is supported by a single, unified platform with real-time, end-to-end visibility and automation that puts planning and execution in a single continuous system. This offers a flexible, adaptive operating model that enables organizations to automate and quickly address the dozens to hundreds of daily decisions that bog down supply chain planners. It also augments human limitations and turns the supply chain from a cost and service function into a strategic business advantage.

The Structural Weaknesses of Legacy Systems

Traditional supply chain systems were designed to record, plan, and report on, and only adjust course when things went wrong. Over the years, planners have moved from clipboards and spreadsheets to ERP and SCM systems. However, the underlying decision model has largely remained the same, with planning and execution often happening in siloes. With this model, critical decisions were often made late and with incomplete context. Meanwhile, any forward-looking assumptions made were at best estimates based on past performance and events. It ultimately left planners in a reactive mode, chasing yesterday's assumptions rather than dealing with today and tomorrow.

However, supply chains are moving faster than ever, with many still relying on spreadsheet-driven demand planning, manual workflows, and reactive scheduling. The volume and speed of signals make it increasingly difficult to align, know when to act, and how decisions affect downstream outcomes.

"What has changed is that supply chains have gone global and they run at a pace about ten times faster than they did a couple of decades ago. Once you go global and just-in-time, any disruption can be catastrophic," said Allan Dow, Executive Vice President and General Manager of Aptean.

Legacy systems have three structural weaknesses:

They operate in siloes with fragmented systems

Traditional systems and planning methods operate in silos, where departments such as sales, production, and distribution live in separate planning realities with their own objectives. Fragmented systems force users to rely on spreadsheets and manual handoffs, which impedes data transfer. This makes alignment difficult, leaves them with little visibility, and prevents decision-makers from gaining cross-functional insight.

They have significant data and decision latency

Static planning cycles and traditional planning methods were designed for stable environments and cannot perform well in today's volatile landscape. They only capture a moment in time, leaving data outdated by the time it reaches the decision maker. This latency is exacerbated by the fact that it can take two to four weeks to act on changes and up to 180 days to fully understand consumer buying patterns.

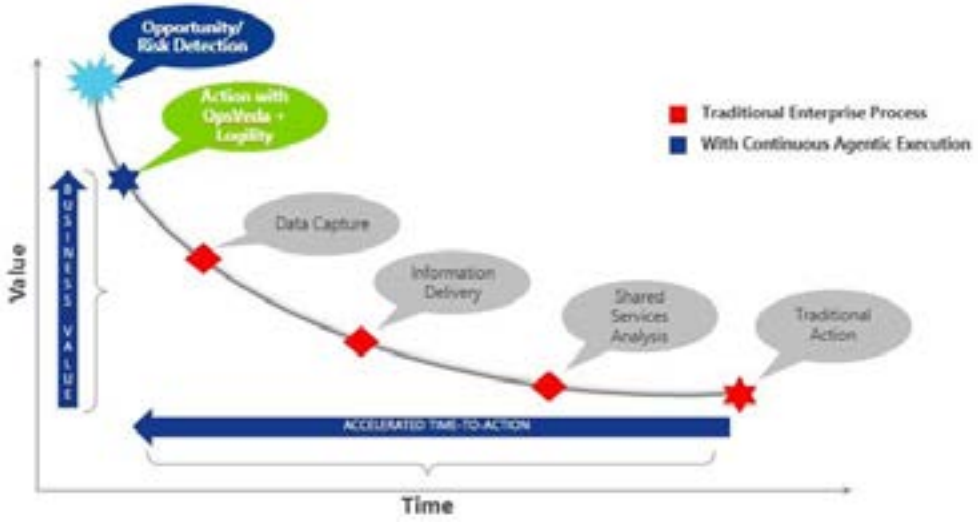
They carry inherent risk

Legacy planning systems carry inherent risk. Decisions made too slowly or without the right information can lead to excessive inventory, stockouts, missed service levels, excessive freight costs, and customer attrition. Additionally, traditional ERP systems provide no unified audit trail of decisions, assumptions, or scenario outcomes.

The decisions that trouble organizations the most aren't the long-term strategic decisions, but the near-term operational ones. This can include customer commitments, inventory allocation, expedites, margin trade-offs, and penalty avoidance.

"It's not the long-term decisions, it's that they're constantly failing at the hundreds of small, fast micro-decisions made every day," said Sanjiv Gupta, CEO of OpsVeda.

VUCA – Volatility, Uncertainty, Complexity, and Ambiguity
In volatile environments, value leaks between what happens and what gets executed **[Decision Latency]**



The New Operating Model: From Data-Driven to Decision Automated

While organizations scraped by with these systems for years, they will quickly lose market share to competitors with the scalability, flexibility, and innovation of cloud services.

Fortunately, new technologies help alleviate many of the challenges and barriers in traditional supply chain planning. AI is already having a transformative impact on supply chain planning by enabling faster and better decisions.[2] However, organizations that lead in 2030 won't be those with the most data, they will be the ones that can make decisions and execute faster.

2. The Transformative Impact of AI in Supply Chain Management, Logility, February 26, 2026,

The Decision Centric Enterprise

Leading supply chain organizations are now moving toward a "decision centric" planning approach, enabled by agentic AI, intelligent workflows, and modern supply chain ecosystems. The Decision Centric Enterprise puts decisions, quality, speed, transparency, and governance at the forefront. It operates on a model that uses shared data assets and end-to-end visibility to navigate a world of persistent, structural global disruptions. Rather than asking what data it has, the Decision Centric Enterprise starts with what decisions it needs to make and what business outcome it wants to drive.

In this model, decisions are continuous, context-aware, and driven by outcomes rather than arbitrary time intervals. AI is already enabling autonomous decision-making across many areas, including supply chain planning.

Intelligent Workflows: From Automation to Orchestration

Gartner predicts that by 2030, approximately half of all cross-functional SCM solutions will incorporate agentic AI to enable autonomous decision execution across supply chain ecosystems.[3] Agentic AI not only helps make and orchestrate decisions but also provides detailed analysis and reasoning, and can then execute on the decision.[4] It can evaluate and identify trade-offs across margin, service level, risk, and inventory, providing not only a recommendation but also the alternatives considered and why it was selected.

3. Gartner Predicts Half of Supply Chain Management Solutions Will Include Agentic AI Capabilities by 2030, Gartner, May 2025
4. Agentic AI Is Here – and It's Transforming the Supply Chain, Logility, April 2025

The Modern Orchestrated Supply Chain

A modern, orchestrated supply chain is a streamlined, highly effective decision-making framework that enables executives to spend more time on a few critical decisions rather than micromanaging 200 alerts. It is defined by several characteristics:

- It has structural agility with resilience, optionality, and distributed scale to help face today's volatility and disruption.
- It also has end-to-end digital integration to unlock next-level performance and reduce siloes across supply chain functions. Planning, execution, and analytics are connected in one continuous system, not as a series of handoffs.
- It leverages AI-driven forecasting and planning. The most successful organizations will use Human+AI operating models that blend human judgment with AI autonomy, preserving the human intervention for strategic and creative decision-making.

The Path to Orchestration and the Decision Centric Operating Model

The path to becoming a Decision Centric Enterprise isn't a single technology deployment or software integration, but an evolution of capability, organizational readiness, and governance. It involves a structured progression through several key stages:

Map Out Data Sources and Decision Flows

The first step is to identify and understand the fragmentation and visibility gaps. This includes points in the supply chain where decisions are slow, opaque, or disconnected from the downstream consequences. The organization should also evaluate its data readiness, system operability, and scenario planning maturity.

Questions to ask in this step can include:

- Where do teams spend the most time looking for information rather than acting on it?
- Which decisions require the most manual coordination across systems or functions?
- Where do disruptions consistently go undetected until they have caused damage?
- What areas of planning could benefit from continuous improvement?

Centralize Decision Domains

The next step is to define cross-functional decision domains. This calls for building layers of orchestration that unify workflows, assumptions, and outcomes across supply, inventory, order allocation, and risk.

Centralizing decision domains will help organizations prepare for the use of intelligent agents to automate decisions in the ecosystem. Organizations that already aligned their decision domains will be able to capture the full value of the capacity early on.

Leverage an AI-first supply chain platform

Next is to identify and select an AI-first supply chain platform. AI can help in three areas. It can help in the first mile by interpreting and classifying incoming information and in the last mile by synthesizing recommendations and communicating them clearly. The most value will be in the middle mile, with logic such as optimization, constraint enforcement, policy compliance, and customer prioritization. However, this decision-making requires specialized technology.

"It cannot be left to general-purpose LLMs. They are useful for the edges but not for core decisions. Supply chain decisions require deterministic optimization, strategic policy alignment, margin analysis, and a purpose-built platform with supply chain expertise," Gupta said.

A purpose-built AI supply chain platform can also help harmonize data to map out decision flows and are designed to help supply chain planners work through the most complex problems and scenarios.

Consider Use Case Scenarios

The next step is to start thinking about and identifying potential use case scenarios within your organization and supply chain. While these can vary, common use cases include supplier delays and continuous improvement. Here are three scenarios that illustrate how a Decision Centric Enterprise responds differently than a traditional one:

- **A Major Disruption**
  It can be difficult to prepare for major disruptions, such as a sudden factory closure or a geopolitical shock. In a traditional plan and model, it can take a cascade of calls, emails, contacts, and managerial analysis before leadership even knows what has occurred. However, an orchestrated model can immediately detect events and offer AI-powered scenario responses. For example, it may propose reorganizing production, adjusting inventory buffers, and reallocating orders with a ranked set of recommendations and their full financial impact. This drops decision latency from days to hours.

- **Supplier delays**
  Traditional planning systems typically don't identify minor events, such as supplier delays or regional logistics issues, until after the fact. However, continuous monitoring can help detect these events earlier and either address the issue or reduce the impact. For example, if a delay may result in a customer service issue, intelligent order allocation can automatically adjust fulfillment sequences within business rules, without requiring a planner to intervene. This preserves the customer experience and enables the planner to focus on higher-value work.

- **Continuous Optimization**
  Rather than waiting for a quarterly network design review, an orchestrated supply chain continuously evaluates distribution patterns, inventory positioning, and transportation costs against current demand signals and constraints. It can offer recommendations on an ongoing basis, with actionable decisions and clear business-case quantification.

Building the New Operating Model

While technology and AI are critical to the Decision Centric Enterprise, they are not the only pieces. AI isn't appropriate for all supply chain decisions, and without the right process and model, the platform is irrelevant. It's essential that the organization creates an operating model that governs how decisions are made, reviewed, and escalated.

Scenario Governance

Without guardrails and scenario governance, automation will just create chaos. Any high-stakes scenario, such as a demand shock, supply disruption, or capacity constraint, requires a defined decision framework, a set of inputs, and a clear escalation path. Organizations need to determine who owns the decisions, what data is required, when AI should act autonomously, and when it should escalate. Thinking through and codifying the answers to these questions helps turn ad hoc decision-making into a repeatable, auditable process.

Codified Best Practices & Exception Management

The goal isn't to remove humans from supply chain decision-making but to ensure that it is applied where it adds the most value. To accomplish this, organizations will have to navigate workforce transformation and define exception thresholds and conditions under which AI defers to a human.[5] It must also embed basic institutions knowledge into agent workflows so that routine decisions are handled consistently and automatically.

Role-Based Impacts

Operating with a decision centric model enables many roles in the organization and can reshape how each function operates:

- **CSCO:** Offers real-time, cross-functional intelligence that strengthens resilience, accelerates response to disruption, and helps turn the supply chain into a value creator.
- **CTO:** Enables the ability to unify data, AI, and automation into an intelligent operating backbone that modernizes the tech ecosystem and scales enterprise-wide orchestration.
- **Director/VP (Operations, Supply Chain, Planning, etc.):** Simplifies complex decision flows, reduces manual firefighting, and delivers higher-quality outcomes through transparent, connected, and AI-supported processes.

5. Navigating AI workforce transformation in supply chains, Logility, October 31, 2025

- **IT (CIO/VP):** Offers a unified, governable architecture that reduces system fragmentation, improves data quality, and accelerates digital transformation with scalable AI and automation.
- **Finance:** Drives better forecast accuracy, stronger risk controls, and clearer financial impact visibility by linking operational decisions directly to business outcomes.
- **User Level Planner:** Enhances effectiveness by automating routine tasks, surfacing intelligent recommendations, and providing real-time visibility so users can focus on higher-value exceptions and make faster, more accurate decisions.

Decision Centric Enterprise Operating Model Checklist

Use this checklist to benchmark your organization's progress towards orchestration maturity. Each item represents a capability your supply chain will need as a Decision Centric Enterprise.

Unified data foundation. Real-time, end-to-end visibility across planning, execution, and operations, with no critical data locked in disconnected systems or requiring manual exports.

AI-enabled decision frameworks. Touchless forecasting, intelligent order response, and scenario simulation are operational.

Scenario governance. Standard scenario types are defined, with clear decision rights, required inputs, and escalation paths codified and embedded in workflows.

Cross-functional orchestration. Planning and execution operate as one continuous system. Handoffs between demand, supply, inventory, and logistics are automated, not manual.

Exception management protocols. Institutional knowledge is codified in agent workflows, and threat holes are defined for when AI acts autonomously and when human judgment re-enters.

Organizational readiness for human+AI operating models. Teams are skilled, incentivized, and culturally aligned to work alongside AI.

Audit trail and decision transparency. Every significant decision — and the assumptions behind it — is traceable, reviewable, and defensible. Governance frameworks match the speed and autonomy of AI-driven operations.

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REIMAGINE SUPPLY CHAIN

About Logility, an Aptean company

Logility's AI-first supply chain management software helps organizations build sustainable digital supply chains that improve people's lives and the world we live in. Our fully integrated, AI-driven end-to-end platform helps clients know faster, turn uncertainty into opportunity, and transform supply chain from a cost center to an engine for growth.

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