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SAP



*REIMAGINING SUPPLY CHAIN AGILITY AND  
RESILIENCE FOR THE MODERN ENTERPRISE*

**HOW INTEGRATED DATA, AGILE PROCESSES AND  
SAP-ENABLED VISIBILITY HELP LEADERS RESPOND FASTER  
WITHOUT ADDING COMPLEXITY**

Many supply chain transformations have improved planning and execution inside the enterprise. Yet as supply chains become hyperconnected networks that span suppliers, contract manufacturers, logistics providers and customers, leaders still struggle when reality diverges from plan. The challenge is not getting more data. It is turning signals into synchronized, cross-functional decisions at the speed business demands.

That's the role of **supply chain orchestration**. Orchestration connects planning and execution so teams can sense changes early, evaluate options quickly and act in a coordinated way without adding complexity for already-stretched teams. Increasingly, organizations are looking to capabilities such as **SAP's Supply Chain Orchestration (SCO)** tool to help make that operating model real at scale.

A Chief Supply Chain Officer increasingly acts like a conductor, bringing the symphony of supply chain to life with planning, procurement,


manufacturing, logistics and customer fulfillment operating in sync, using shared data, common decision rules and coordinated execution. Organizations that embed resilience, digitalization, sustainability and risk awareness into end-to-end processes improve supply chain agility and performance even when conditions change.

# WHAT "ORCHESTRATION" REALLY MEANS, AND WHY IT'S DIFFERENT


**Orchestration** isn't another planning cycle or a new dashboard. It's a live decision-making framework that helps leaders evaluate trade-offs by combining real-time execution data with plan data. It **synchronizes end-to-end execution across the network**, from planning and procurement through logistics, manufacturing and real-time operations so teams can:



**EVALUATE MULTIPLE SCENARIOS BY COMBINING EXECUTION SIGNALS WITH PROBABILISTIC PLANS**



**COORDINATE DECISIONS ACROSS FUNCTIONS THAT TYPICALLY OPERATE IN SILOS**



**PLAN WHILE EXECUTING, AND RE-PLAN WHEN CONDITIONS CHANGE MIDSTREAM**



**CONVERT VISIBILITY INTO CONSISTENT ACTIONS, NOT HEROIC FIREFIGHTING**



**MAKE TRADEOFFS EXPLICITLY (COST, SERVICE, RISK) RATHER THAN REACTIVELY**

In practical terms, orchestration connects what your organization intends to do (plans) with what it's *actually doing* right now (execution). It also creates a consistent way to weigh cost impact, customer value and risk in the same conversation, instead of optimizing one at the expense of the others.

# WHY ORCHESTRATION IS RISING TO THE TOP OF THE AGENDA

## **ACROSS INDUSTRIES, SUPPLY CHAIN LEADERS CONSISTENTLY FACE THREE PERSISTENT CHALLENGES**

01

### **VISIBILITY EXISTS BUT IT ISN'T DECISION-GRADE**

Many organizations can see pieces of what's happening (a shipment status here, an inventory report there) but the view is often fragmented across systems and functions. Without a consistent, shared picture of "what's true now across the entire supply chain," teams default to manual follow-ups, stale reports and uncoordinated escalations.

02

### **DISRUPTIONS DEMAND SPEED ACROSS THE VALUE CHAIN**

Many organizations still run planning in structured cycles, but execute in a world where conditions shift daily—supplier constraints, transportation bottlenecks, quality holds, labor shortages or demand swings. When teams cannot quickly quantify the impact across supply, demand, capacity and logistics, response times can slow down and costs rise.

03

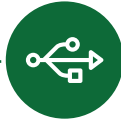
### **TALENT IS CONSUMED BY EXCEPTIONS AND FIREFIGHTING**

The more complex the network becomes, the more exceptions appear and the more time teams spend reconciling data, chasing updates and negotiating priorities. When teams spend most of their time fighting fires and reacting, they have less capacity to proactively plan for the future. Orchestration reduces that burden by standardizing decisions and automating routine work so people can focus on high-value decisions that require judgment.

# WHEN BREAKDOWNS CAN HAPPEN

(and what leaders can feel day to day)

## **EVEN WITH STRONG TEAMS, ORCHESTRATION CAN STRUGGLE TO TAKE HOLD OR FAIL FOR PREDICTABLE REASONS**



### **FUNCTIONAL SILOS CAN LEAD TO MISALIGNED DECISIONS**

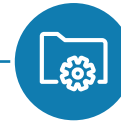
With functional silos, planning teams may optimize for forecast accuracy and inventory, sourcing teams may optimize for economic orders, manufacturing teams may optimize for run sizes, logistics teams may optimize for carrier performance, and customer teams may optimize for service.

However, the enterprise needs to deliver excellent customer service at optimum inventory levels with minimum purchasing, manufacturing and logistics cost. When decisions are not synchronized across functions, leaders tend to see whiplash across cost, service and working capital. The fallout can include increased spending due to expedited orders or freight, inventory building in the wrong places and customer service levels declining.



### **TECHNOLOGY ISN'T AVAILABLE FOR "PLANNING WHILE EXECUTING"**

Batch-driven handoffs and weekly cycles can't always keep up with real-world variability. Technological platforms often lack the capability of what-if scenario planning and rely too heavily on deterministic plans vs. probabilistic scenarios. With an orchestration platform, teams are able to quickly detect constraints, run scenarios, agree on tradeoffs and trigger coordinated actions, often within hours, not days.



### **DATA IS ABUNDANT BUT NOT CONNECTED ACROSS PLANNING AND EXECUTION**

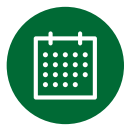
Orchestration requires planning signals (forecast, allocations, supply plans, production plans) to stay tightly connected to execution signals (orders, shipments, receipts, capacity availability, carrier availability). Without that link, organizations either see problems too late or they struggle to decide and enact solutions quickly and consistently.



# WHAT ORCHESTRATION LOOKS LIKE IN PRACTICE

Orchestration becomes real when it changes how decisions get made during pressure moments.

## FOR EXAMPLE



### **SUPPLIER SHORTFALL HITS MIDWEEK**

A critical component slips by two weeks. Instead of isolated escalations, orchestration enables a rapid cross-functional decision: find alternate supplier, expedite shipment, re-sequence production, or reallocate scarce supply to priority customers, adjust transportation plans and update customer commitments with a clear record of tradeoffs.



### **TRANSPORTATION DISRUPTION CASCADES**

A port delay threatens multiple inbound flows. With connected signals from the external sources, teams can quickly identify impacted orders, test rerouting options, evaluate cost-to-serve impacts and execute the new plan—before downstream sites run out of material.



### **INVENTORY IS HIGH, YET SERVICE SUFFERS**

The issue isn't total inventory; it's placement, substitutions and constraints. Orchestration connects demand signals, allocation logic and fulfillment realities to rebalance inventory and improve service without simply buying or producing more.

## **THE ENABLING LAYER**

# SAP SUPPLY CHAIN ORCHESTRATION AND SAP BUSINESS NETWORK AS A TECHNOLOGY, DATA AND PROCESS ACCELERATOR

Supplier collaboration and digitized transactions are foundational, but orchestration needs those signals to flow into end-to-end decisioning.

The SAP Business Network (SBN) can help by serving as a connected data and process layer across trading partners, supporting more consistent, timely visibility into orders, commitments, shipments, invoices and exceptions.

**SAP Supply Chain Orchestration (SCO)** can help apply an orchestration decision-making **framework** that enables supply chain executives to evaluate cost impact, customer value and risk across decisions and trade-offs.


## **WHEN THOSE PARTNER SIGNALS INTEGRATE INTO SUPPLY CHAIN PLANNING AND EXECUTION PROCESSES, ORGANIZATIONS CAN**



**DETECT DISRUPTIONS EARLIER AND WITH HIGHER CONFIDENCE**



**TRIGGER COORDINATED ACTIONS ACROSS PROCUREMENT, PLANNING, LOGISTICS AND OPERATIONS**



**REDUCE MANUAL RECONCILIATION BETWEEN PARTIES**



**STANDARDIZE HOW EXCEPTIONS ARE SURFACED AND DECISIONS ARE MADE, OWNED AND RESOLVED**

SBN can strengthen the **speed and reliability of network signals**, and SCO can help translate those signals into coordinated decisions and actions.



## **PROCESS + TECHNOLOGY + CHANGE**

# DELOITTE'S ROLE IN MAKING ORCHESTRATIONS STICK



Technology enablement is essential—but orchestration is ultimately an operating model shift. It includes decision rights, incentives, ways of working and adoption. Deloitte helps bring this together by aligning:

### **PROCESS DESIGN**

End-to-end workflows, exception paths, scenario-based decision making and acceptance criteria

### **ORGANIZATIONAL CHANGE MANAGEMENT (OCM)**

Roles, governance, training, communications and behavior change so new ways of working persist

### **TECHNOLOGY ENABLEMENT**

Integrating planning and execution capabilities and incorporating partner signals (including SBN) in the decision-making process for daily operations

### **VALUE MANAGEMENT**

Defining the measures that matter (service, cost-to-serve, working capital, resilience) and tracking progress over time

The potential outcome is an orchestration capability that's not confined to a control tower team. It becomes available to supply chain decision makers across the enterprise because the broader organization knows how to use it under real conditions.

## **GETTING STARTED**

# PRACTICAL MOVES THAT BUILD MOMENTUM

**ORCHESTRATION  
DOESN'T HAVE TO  
BE A MULTI-YEAR  
"BIG BANG."  
COMMON EARLY  
MOVES CAN INCLUDE:**



01

### **CHOOSE A PRESSURE POINT**

Such as a constrained product line, a critical supplier cluster or a volatile lane, where orchestration can prove value quickly.



02

### **DEFINE DECISION CADENCE AND RIGHTS**

Such as who decides what, how fast, using which data.



03

### **CONNECT A MINIMAL SET OF SIGNALS**

Across planning, execution and partners—enough to make decisions, not boil the ocean.



04

### **STANDARDIZE EXCEPTIONS**

What's an exception, who owns it, what actions are allowed.



05

### **OPERATIONALIZE SCENARIOS**

To make "what-if" analysis a routine part of disruption response, not an ad hoc exercise.

# THE FUTURE OF SUPPLY CHAINS FROM CONNECTED TO ORCHESTRATED

As networks become more complex and disruptions more frequent, “connected” will be table stakes. The advantage will come from being orchestrated when supply chain leaders are able to continuously align plans and execution, act on trusted network signals and make tradeoffs transparently and quickly.

Connect with our team to understand how SAP and Deloitte can enable supply chain orchestration so you can act on network signals faster, align functions end-to-end and hit the right notes on speed, resilience and execution.

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