# BK CONSULTING

Supply Chain & Operations Strategy | Executive Advisory

*Clarity in Supply Chain & Operations*

# INDUSTRIAL AI & OPERATIONS TECHNOLOGY INSIGHTS

**Supply Chain | Manufacturing | Logistics | Operations**

Week Ending August 23, 2026

## Executive Readout

- Agentic AI is moving from copilots toward governed transaction execution. The differentiator is increasingly process context, permissions, observability and exception handling—not model novelty.
- Supply-chain software vendors are converging on orchestrated domain agents across planning, inventory, logistics, procurement and manufacturing.
- Physical AI is becoming an operations architecture question: robotics, simulation, machine vision, telemetry and workflow orchestration must work across vendors.
- The largest near-term value pools remain narrow, measurable workflows: planner exception reduction, inventory disposition, maintenance triage, quality inspection, logistics exception management and repetitive administrative work.
- Governance is now an operating requirement. Any agent touching ERP, WMS, TMS or OT should have authority limits, approvals, audit logs and rollback.

## What Is Materially Changing

| Vendor / category | Current direction | BK view |
|---|---|---|
| SAP | Role-based assistants and supply-chain agents tied to business-process context. | Strong fit where SAP process/data foundation is clean; test transaction authority. |
| Oracle | Embedded AI across SCM/manufacturing with movement toward coordinated agents. | Watch execution depth and measurable labor/cycle-time reduction. |
| Blue Yonder | Persistent domain agents plus orchestrator across end-to-end supply chain. | Architecture is compelling; validate interoperability and data-cloud dependency. |
| Kinaxis | Composable agents grounded in concurrent planning workflows. | Useful for planner productivity if exception quality is high. |
| AWS / physical AI | Simulation, robotics and AI infrastructure increasingly integrated. | Treat demos as architecture evidence; demand plant-level ROI proof. |
| Samsara / connected ops | Agentic workflows built on physical-asset telemetry. | Interesting for fleet, equipment and field operations because state data is native. |
| Computer vision | Quality inspection and safety use cases continue to mature. | Prioritize defects with high cost of escape or inspection labor. |
| Digital twins / simulation | Faster scenario testing before physical deployment. | High value when tied to real telemetry and decision rights. |

## AI Reality Check

| Question | What good looks like |
|---|---|
| Pilot vs production | Named sites, users, transactions and autonomous actions live in production. |
| ROI | Pre/post metric: labor hours, downtime, service, inventory, scrap or cycle time. |
| Data readiness | Master data and operational signals reconcile before agent deployment. |
| Governance | Explicit authority limits, approvals, exception path, audit and rollback. |
| Human expertise | Operator/process-engineer knowledge is captured, not assumed. |
| Cyber / OT | Identity, permissions, segmentation and safe failure modes are designed in. |
| Resilience | Automation improves adaptability rather than creating a brittle optimized process. |

## Highest-Value Use Cases — Next 12 Months

- Supply planning: autonomous exception triage and scenario generation.
- Procurement: quote comparison, supplier-risk monitoring and contract obligation extraction.
- Manufacturing: vision inspection, maintenance triage, work-instruction assistance and schedule recovery.
- Warehousing: labor planning, slotting recommendations, exception handling and robotics orchestration.
- Logistics: shipment exception agents, ETA risk, claims/document automation and dynamic mode/routing recommendations.
- Executive operations: automated fact-base assembly with human approval before decisions or external communication.

## BK Actions This Week

- Require every AI proposal to name the transaction or decision it changes.
- Measure baseline process performance before pilot launch.
- Prefer agent architectures that expose permissions, logs and rollback.
- Do not automate around bad master data; fix the operating process first.
- Keep human approval for high-consequence supplier, inventory, plant and transportation decisions until error rates are proven.

## Sources & Notes

Public-source intelligence is used for directional executive decision support. Spot/channel prices are not OEM contract prices. Where historical or exchange data are gated, the limitation is stated rather than estimated.

[1] Blue Yonder, AI Agents for Supply Chain, current product materials.
[2] Oracle, AI for SCM and Manufacturing, current product materials.
[3] SAP supply-chain AI / agent announcements, 2026.
[4] Kinaxis Maestro / agent materials, 2026.
[5] AWS industrial/physical AI demonstrations and manufacturing materials, 2026.
[6] Samsara Agent Studio / connected operations materials, 2026.
[7] Current 2026 industry reporting on agentic AI in supply chain and operations.