GAINS
MOVE FORWARD FASTER

Whitepaper

Beyond Good Enough:

Engineering Supply Chain Decisions That Hold Up Today And Tomorrow

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Executive Overview

A planning system that could produce a plan and keep operations moving was, for years, considered "good enough." Until volatility and uncertainty became an unavoidable part of life. Now, supply chain leaders know that these static systems can't keep up with the pace of change, which has become the standard operating environment. Far from being decision-ready system recommendations, time-out before they can become actionable.

As a result, over time, supply chain teams are forced to compensate for systematic shortcomings, relying on **planner heroics** consisting of overrides, manual workflows, dodgy spreadsheet logic, and a reliance on tribal knowledge. The supply chain still functions... "good enough," but its day-to-day performance depends on the manual efforts of your team, not your software solution.

A "perfect" supply chain plan that can't be acted on is pointless. For any solution to be effective, it must present leaders with valid, actionable recommendations in a timely manner governed by

the policies of the business and the constraints of the real-world.

GAINS believes your supply chain deserves better. The goal for supply chain professionals should be to build a decision system to produce fast, explainable supply chain trade-offs, so leaders can protect service, free working capital, and absorb shocks to the network without resorting to fire drills.

The "Good Enough" Trap

Good enough doesn't fail loudly. It fails through latency, overrides, and manual work until volatility exposes it.

The Good Enough Trap

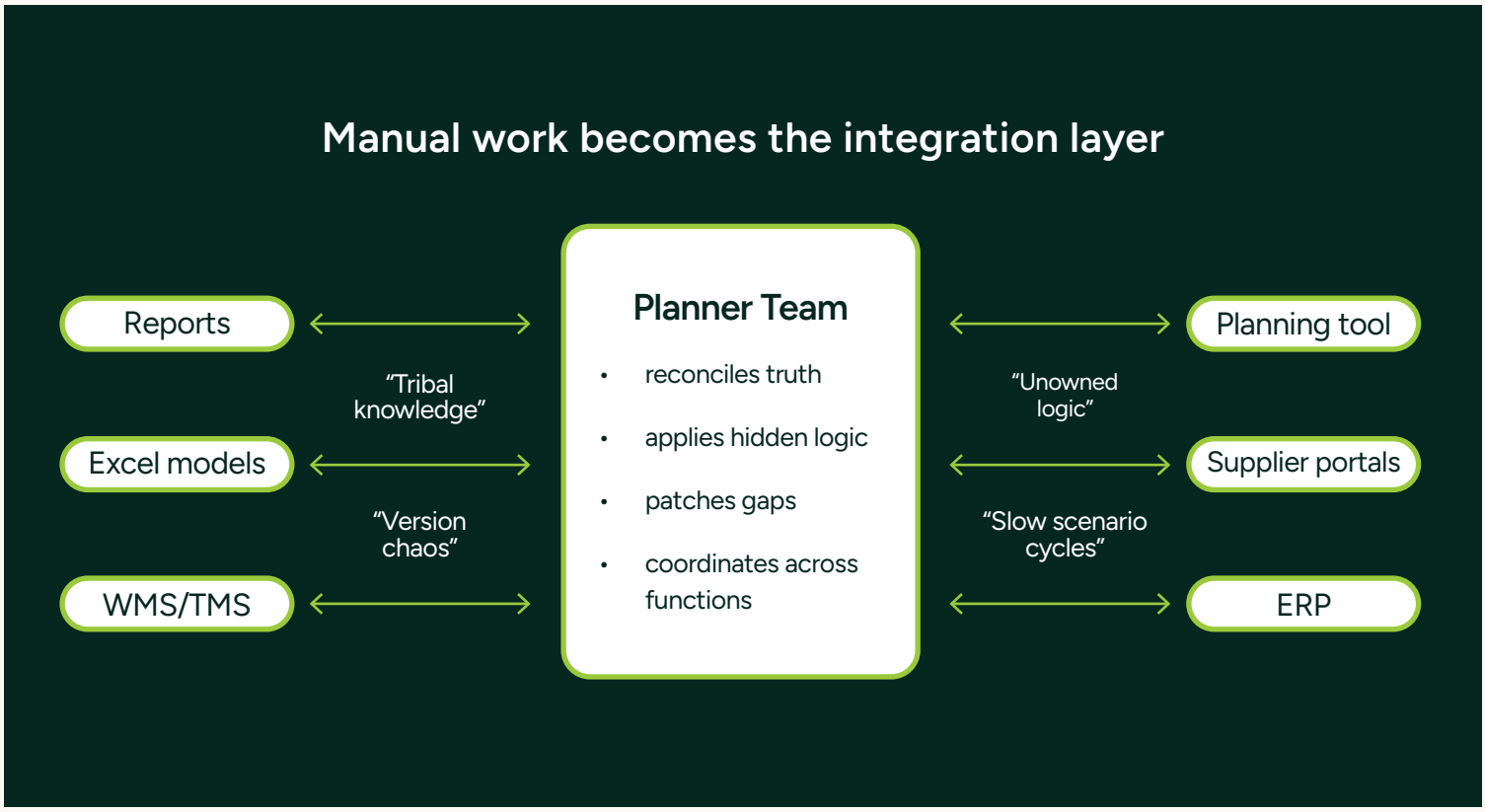
Most supply chain leaders didn't choose their current solution; they inherited it. Sometimes built from patches and workarounds from having outgrown the capabilities of previous solutions. However it happened, over time, they fall into the same operating pattern:

An incomplete picture

ERP, WMS, suppliers, and planning tools don't reconcile cleanly, so teams optimize in silos. Data exists, but recommendations might be " best " for one team, but costly for the company as a whole. Eg. A transfer is issued because the ERP shows stock as "available"; however, the inventory is actually allocated/ on hold. The planning tool flags a potential service risk, so the planner overrides the system, not knowing that the restriction was due to costly capacity/ freight/tariff constraints.

Unclear focus

Instead of time-bound, actionable decisions, these systems produce reports and dashboards. Information is unclear or scattered, leaving



you in the middle of a crisis, struggling to answer: "What should we be doing right now?" and "What trade-offs do we need to make between service, cost, and risk?"

Inconsistent recommendations

When recommendations don't align, are unexplained or unrealistic, manual overrides become standard, recommendations becomes optional, consistency evaporates, and signals conflict.

Slow decisions

In volatile operating environments, speed matters as much as quality and reliability. If alignment takes days, the decision arrives after conditions have changed.

Reliance on manual workflows

When tools can't connect decisions across time horizons and functions, your planners become the "integration layer" for your various tools.

Sometimes, legacy "good enough" solutions come crashing down in a moment, as they did for so many during the 2020 pandemic crisis. Typically, however, they collapse quietly and over time and turn your supply chain into a system of manual workflows and overrides, until volatility spikes and your leadership demands clarity.

Why legacy solutions stick

Ultimately, these solutions end up being costly (safety stock, overtime pay, and expediting fees), so why do they persist?

- **Implementation Trauma**: past experience with long delays in previous software rollouts
- **IT bandwidth and governance**: change is expensive, slow, and hard to prioritize
- **Fear of service impacts**: leaders can't afford to lose visibility during a transition
- **ERP dependency**: the planning layer is tangled into a larger system other departments rely on

What leaders need now:

Decision speed + explainable trade-offs, (subheading)

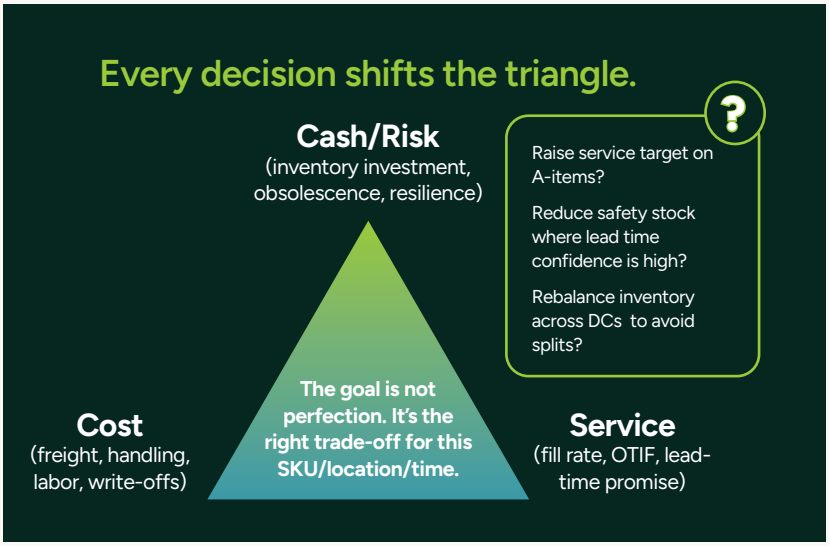
Your team doesn't need "more planning." It needs a stronger decision system designed to turn volatility into clear, timely action, not more noise to work through.

A Decision Engineering & Optimization platform like GAINS DEO connects demand, supply, inventory, and constraints into one decision-ready view, then translates that into what to do next. Generating a usable response fast enough to matter, grounded in real constraints, and clear trade-offs.

GAINS DEO builds confidence across stakeholders by answering the questions leaders ask in the moment: **What changed? What are our options? What's the impact on service, cost, cash, and risk? And what should we do now?**

Outcomes that matter

- Faster supply chain decisions
- Explainable trade-offs in plain language
- Resilience and flexibility across plans and supply networks
- Reduced manual workload, planners focus on exceptions and strategy
- Improved supplier performance and better lead time prediction



Inventory and replenishment, the gateway to continual improvement

Inventory is where the **"good enough" tax** becomes visible, compounding across thousands—or millions- of SKUs. Stockouts damage service and impact revenue. Excess inventory traps working capital and increases obsolescence. When inventory and replenishment decisions are engineered well, they stabilize the entire network: demand, supply, logistics, and customer experience all benefit.

- **Fast, provable ROI**: Inventory decisions repeat constantly across huge SKU counts, so small improvements compound quickly into service gains and working-capital release.
- **Measurable, executive outcomes**: Stockouts, fill rate, turns, days on hand, obsolescence, expedited spend, easy to track and hard to argue with.

Snapshot: Border States (distribution)

BORDER STATES

The sixth-largest electrical distributor in the United States, with more than 120 locations in 29 states.

- Reduced inventory by $21M within 6–8 months.
- Improved lead time accuracy by 65% and reduced lead time error by 31%.
- Reduced expediting costs by 30%.
- Achieved 976% ROI with 1.3 months' payback.
- Reached 90% purchase order automation within three months.

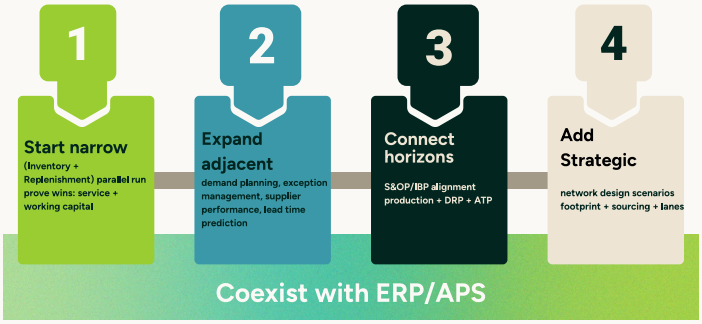
[Read the full case study here]

Building a better solution without blowing up the business

Decision Engineering and Optimization doesn't require a massive overhaul. It's a better decision system built incrementally using tools the business already trusts.

Safe Modernization Path

(parallel run → phased cutover → expand)



A winning approach

Rip and replace is unnecessary and risky, especially when your supply chain is the business promise. The winning approach is incremental: parallel run, coexistence with existing ERP/APS, phased by business unit and planning horizon (tactical first, then strategic), and built on small wins to build confidence.

Moving from getting by to a continuous learning network

Most organizations can recognize where they are on this path:

Level 1: "Good Enough"

Planning output exists, but trust is limited. Overrides and expedites are common. People bridge gaps with spreadsheets and tribal knowledge. Performance depends on heroics.

Level 2: Stabilize & Trust

Decision-ready data replaces fragmented "truth." Constraints are respected and visible. Recommendations become repeatable and explainable. Adoption improves because the tool aligns with reality.

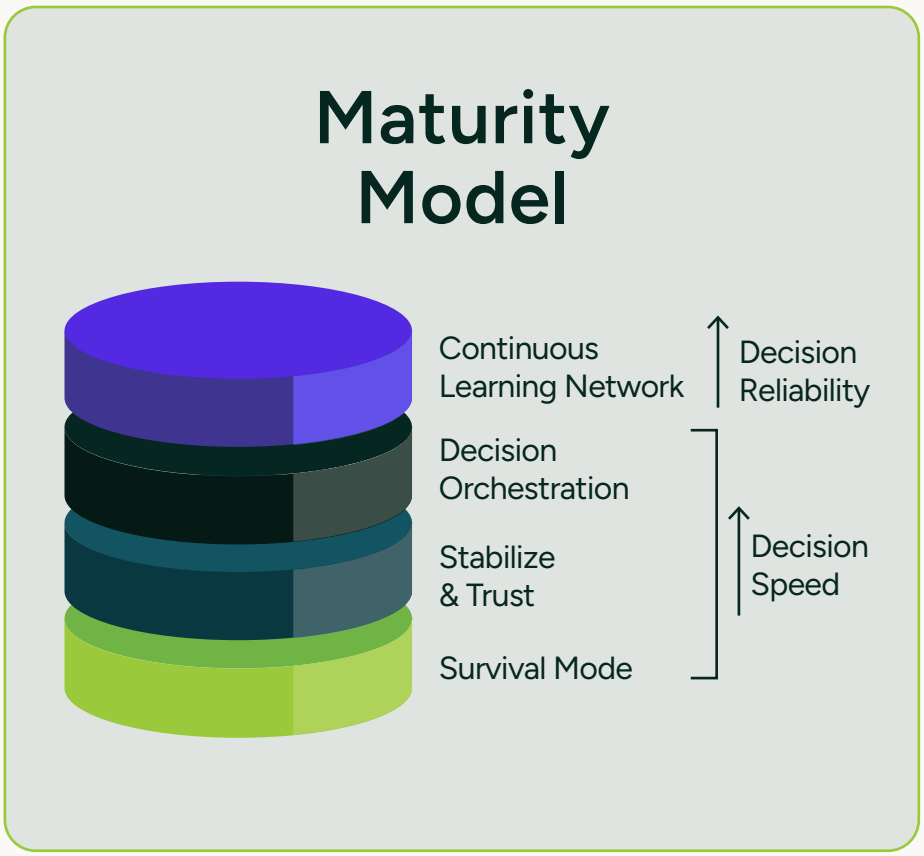
Level 3: Decision Orchestration

Decisions connect across horizons: S&OP/IBP → inventory policy → replenishment → execution. Scenario tradeoffs become fast enough to use in a week. Exceptions are automated; teams focus on what matters.

Level 4: Continuous Learning Network

Policies adapt as conditions change. The system senses, simulates, and responds continuously. Leaders orchestrate decisions across planning and execution with clarity, speed, and control.

What supply chain professionals need today and tomorrow



Pragmatic AI built for decisions

AI often stops at insight or takes the form of an FAQ Chatbot. An effective decision system must go further: using AI to explain what's happening, recommend what to do, aligning decisions with business priorities and your operational constraints.

Decision Engineering & Orchestration (DEO): a decision framework across horizons

1. Diagnose decisions and outcomes
2. Model constraints and policies
3. Run scenarios
4. Decision Orchestration
5. Continuous improvement and learning

Composable, incremental modernization (parallel run + phased cutover)

A practical modernization path starts with a high-value decision area (often inventory and replenishment), run in parallel with existing systems to reduce risk, proves wins fast, then expands to adjacent domains: demand planning, supply planning, S&OP/IBP, production planning, distribution/DRP, and order promising/ATP.

Design informs planning. Planning validates design. Execution proves both.

Network design shouldn't be a separate program divorced from planning. It's a strategic extension of the same decision system, scalable, scenario-based, and connected to tactical plans and execution.

Design and planning are symbiotic. Network design sets the structure and intent. (facility roles, flow paths, sourcing strategies, inventory positioning) Planning structures it into day-to-day decisions. (service targets, replenishment policies, production and distribution plans) When they're connected, strategic choices become operationally actionable, and operational reality continuously improves the strategy.

Instead of a one-time network study, you get a continuous feedback loop: execution reveals what's truly happening (actual lead times, service behavior, costs, constraints), planning responds quickly, and network design absorbs those learnings to refine the network over time.

Combining planning and network design creates an environment of continual improvement, where decisions get better because the system learns, and the network evolves because planning keeps it honest.

Proof snapshots: measurable outcomes without a disruptive overhaul

ACR

A North American manufacturer providing essential packaging and preparation products used in foodservice, janitorial, sanitation, education, industrial, hospitality, and healthcare. Read the full case study here

- Fill rates increased to 98% (from the mid,70% range).
- Default location fulfillment exceeded 95%.
- Outbound freight and warehouse expenses reduced by 27%.
- Inventory reduced by 25% while supporting sales growth.

Continental Battery Systems

A North American distributor and manufacturer with more than 200 branches and more than 30,000 dealer locations. Read the full case study here

- Inventory reduced by 40% while improving service performance.
- In stock performance for A and B items improved into the high 80s/low 90s (from 65–70%).
- Network design analysis identified additional projected benefits: 10% operational cost reduction, 10–13% working capital reduction, and a 5–6% increase in vendor direct shipments.

How to stay out of the Good Enough Trap

Any solution can produce a plan. The issue is whether it is flexible and adaptive enough to hold up under real-world volatility, respect constraints, and calculate constant trade-offs. In environments with high SKU complexity, multi-node networks, and service pressure, we often hear the same themes from teams using more modern but still rigid planning tools:

- **Too much manual intervention**: planners still do the work to make outputs usable.
- **Slow scenario cycles**: useful answers arrive too late to matter.
- **Limited flexibility without heavy lift**: tailoring workflows or reporting can require specialized resources.
- **Low trust due to "black box" or inconsistent behavior**: teams override, and the tool becomes optional.
- **Hard to modernize safely**: tight coupling increases the perceived risk of change.

GAINS DEO is built for the reality leaders are managing now:

Constant change, competing priorities, and decisions that can't wait for the next planning cycle.

Most organizations don't suffer from a lack of tools—they suffer from decision latency and misalignment. Data lives in too many places, plans don't survive contact with real constraints, and by the time teams align on what to do, conditions have already shifted. **DEO** fixes that by connecting demand, supply, inventory, lead times, capacity, and policy into a decision-ready view, then translating complexity into a small set of clear options leaders can act on fast enough to make a difference.

What makes DEO different

A combination of advanced models + pragmatic AI, applied to supply chain decisions.

GAINS brings purpose-built forecasting and lead-time prediction models, constraint-aware optimization, and decision automation that learns and improves over time. But the output isn't a black-box answer. **DEO "shows its work"**: what changed, what signals are driving the recommendation, which constraints were considered, and what trade-offs were prioritized (service vs. inventory vs. cost vs. cash). Routine decisions can be executed within guardrails, while exceptions are elevated with context—so humans stay in control and the organization can trust what the system recommends and does.

DEO is designed for tomorrow: composable and incremental

You don't need a risky rip-and-replace. Start where leverage is highest—often inventory and replenishment—run in parallel with the existing ERP or planning tools you trust, prove measurable wins, then expand across horizons. DEO grows with you as your network changes, models adapt, policies evolve, and decisions stay aligned from strategy through execution. That's how leaders build a supply chain decision system that holds up today—and gets better as the world changes.

Find out if your current solution is decision ready or just good enough

If volatility is exposing cracks in your planning stack, the answer isn't more dashboards; it's faster, explainable decisions that connect to execution. GAINS can help you pinpoint where decision latency is costing you (service, cash, productivity), then modernize your supply chain incrementally through measurable wins without disrupting the business. Continue the conversation. **Book a demo today.**

Let's Move Forward Faster.

Drive Results. Engineer Your Advantage and orchestrate smarter decisions—together.

Contact GAINS today