

# Engineering Recession-Proof Supply Chains

A Decision-Centric Approach to Volatility, Cost Pressures, and Demand Uncertainty

## Why Now?

Today's global economy is in a constant state of flux. Inflation remains stubborn. Interest rates have reshaped capital investment decisions. Shifting tariffs, supply shortages, and geopolitical uncertainty have left companies with more questions than clear answers. Whether we are entering a recession or simply enduring another round of economic instability, one thing is certain:

**The companies that think and act decisively rather than reactively, across all planning horizons, will emerge stronger.**

Resilient supply chains aren't built on guesswork. They're engineered through high-fidelity decisions grounded in scenario modeling, strategic prioritization, and adaptable, composable systems. At GAINS, we call this Decision Engineering & Orchestration (DEO)—a modern reference model that helps leading companies systematically make better decisions and drive meaningful outcomes.

## Executive Summary

GAINS helps supply chain leaders turn complexity into clarity. While traditional planning systems are rigid, slow to adapt, and reliant on assumptions and struggle to keep up with today's volatility, GAINS DEO changes that—enabling companies to simulate uncertainty, optimize trade-offs, and prioritize

actions based on impact, time horizon, and business value. Optimizing your network—without relying on gut instinct or outdated rules.

## Our customers have achieved:

- **15–30% inventory reduction**
- **Up to 20% improvement in service levels**
- **Faster execution of planning strategies**
- **Reduced working capital exposure in volatile markets**

This white paper outlines a four-stage roadmap to resilience built on real-world GAINS deployments and powered by our **DEO methodology**—designed for incremental transformation without rip-and-replace disruption.



# Understanding the Disruptors: Tariffs & Recession Risk

## Tariffs: A Moving Target with Real Impact

Shifting trade policies create ripple effects across sourcing, pricing, and landed costs. GAINS enables scenario testing to simulate tariff impacts in advance—empowering them to respond without delay.

- ✓ Model multiple tariff scenarios
- ✓ Recalculate SKU profitability and sourcing strategies
- ✓ Execute pricing or supply shifts with speed and precision

*"We use AI to parse through mountains of data and deliver exactly what we need to make faster, smarter decisions." – Kory Jacobson, Regional Procurement Director, Border States*

## Recession Pressures: Shrinking Demand, Rising Risk

Recessions shrink demand, stretch supplier relationships, and challenge cash flow. They test every part of the supply chain. With GAINS DEO, businesses can reprioritize decisions across time horizons and automate where it matters most.:

- ✓ Re-prioritize SKUs and rationalize assortments
- ✓ Automate replenishment for low-risk items
- ✓ Adjust policies to balance inventory with financial goals

## The GAINS Roadmap: Decision Engineering for Resilience

Each stage of the DEO roadmap addresses a different maturity level, helping companies shift from tactical firefighting to enterprise-wide resilience through prioritized, outcome-driven decision-making to build a recession-resistant supply chain:

### Stage 1: Tactical Resilience

#### Structured Reaction to Volatile Demand & Costs

Challenge	GAINS DEO Response
Demand volatility	Segment SKUs by risk and customer importance
Inflation pressure	Simulate cost-driven ordering strategies
Limited planning bandwidth	Automate decisions for low-variance SKUs

#### Key Tactics:

- ✓ Reclassify SKUs using geographic & customer diversification
- ✓ Automate bulk buys where cost predictability is high
- ✓ Adjust lot sizes with AI-powered policy tuning



## Stage 2: Strategic Resilience

### Internal Orchestration Across Functions

Challenge	GAINS DEO Response
Siloed planning teams	Enable cross-functional forecast enrichment
Conflicting priorities	Use scenario modeling to align trade-offs
Lagging internal signals	Leverage shared visibility into drivers & constraints

#### Key Tactics:

- ✓ Align demand planning with sales and finance
- ✓ Model variable demand drops (e.g. 20%, 40%, 60%)
- ✓ Integrate supplier risk into upstream decision-making

## Stage 3: Structural Resilience

### Automating What Shouldn't Be Manual

Challenge	GAINS DEO Response
Planner burnout	Automate replenishment for stable SKUs
Inconsistent execution	Apply rule-based triggers for suppliers and reorders
Inefficient resource allocation	Redirect human energy to value-driving choices

#### Key Tactics:

- ✓ Deploy GAINS AI for policy monitoring and updates
- ✓ Implement hedging strategies to optimize order frequency
- ✓ Use DEO dashboards for continuous performance tuning

## Stage 4: Network Resilience

### External Collaboration & Scenario Testing

Challenge	GAINS DEO Response
Supplier shutdowns	Simulate alternate routing and supplier changes
Geographic risk exposure	Use network design to optimize hub locations
Partner misalignment	Enable real-time collaboration and shared visibility

#### Key Tactics:

- ✓ Run simulations on lead times, demand spikes, and shocks
- ✓ Test contingency plans before they're needed
- ✓ Improve resilience through partner visibility & shared data



## Why GAINS?

GAINS is purpose-built to help companies make better decisions—faster. With our embedded AI, composable architecture, and DEO methodology, you can proactively engineer your supply chain for whatever lies ahead.

- **Outcome-Driven – Optimize for cost, risk, service, or strategic goals**
- **AI that recommends actions—not just reports on trends**
- **Composable tools that work with your existing systems**
- **Decision Engineering that scales across strategy, planning & execution**
- **Incremental & Scalable – Start small, then expand decision-by-decision**

**We don't just help you respond.**

**We help you prepare, act, and outperform.**

## Take the Next Step with GAINS

Is your supply chain ready for what's next? Don't just react—engineer smarter outcomes with GAINS.

**Learn More** – Explore case studies and DEO insights

**Book a Demo** – See how GAINS enables better, faster planning

**Talk to a GAINS Expert** – Contact us at [Solutions@GAINSystems.com](mailto:Solutions@GAINSystems.com)

**GAINS Engineer resilience. Orchestrate confidence. Move forward faster.**

