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The Supply Chain Awakens: A Call for Awareness in the Age of AI

By: Art Mesher



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New Hype, Same Mistakes

We find ourselves at another inflection point in supply chain history—an era echoing the exuberance of the dot-com boom (gaslighting). Back then, lines drawn between clouds promised instant supply chain reinvention. Today, buzzwords like AI, ML, knowledge graphs, end-to-end orchestration, and autonomous cognitive enterprises dominate vendor pitch decks. Once again, we risk confusing novelty with reality.

This isn't a lament. It's a simple call. A call to pause. A simple call to get real and to begin again with something simple and far more enduring than hype: **A simple call for supply chain awareness.**

Déjà vu – part 2

We've seen this movie before—today's double feature stars "Instant Supply Chain Reinvention" and "AI Saves the Day." Same plot, just with different costumes. History, loves a reboot. The narrative is already picking up speed, fueled by promises that technology alone can deliver certainty, simplicity, and control. But if you stick around for the second act, you'll recognize the twist: **the great big lies** come back for an encore.

The Big Lie #1: Instant Pudding Supply Chains

The first big lie is the promise that technology will instantly "solve" the supply chain.

The year 2000 was the golden age of the dot-com hype cycle, where supply chain vendors painted a picture of reinvention fueled by the magic of the internet.

Clouds, connectivity, and collaboration would "effortlessly align the world—and for a brief moment, it seemed like anything was possible.

Then came the crash. The trough of disillusionment hit hard. Companies had made big investments in technology platforms, only to discover they didn't deliver the promised results. But it wasn't only the vendors who missed the mark. Enterprises themselves failed to realize that these tools required more than installation—they demanded introspection. They required rethinking how decisions were made, how processes aligned across functions, and how people were trained to use these new tools with intent, not just giving them access, and lord knows that the quality of data just might have had a little to do with it all.

Now, two decades later, history repeats itself. Many of today's supply chain leaders weren't even in the industry the last time this happened—and yet the cycle is playing out again, only the buzzwords have changed. This time the monster has two heads, those that are desperately seeking certainty through synchronization and those following the siren song of sapience; AI, digital brains, autonomous enterprises, cognitive lights-out planning.

The gaslight déjà vu: Digital transformation—"the long play"—is once again being confused with incrementalism—"the short play."



Vendors are chasing use cases for their shiny new tech instead of solving deep-rooted problems that businesses face. Companies are buying “solutions” without clarity on what they’re solving for.

The fear is that we’re already in the next wave of disillusionment. We’re seeing black-box tech paraded as intelligence, AI deployed for tasks that don’t need it, and watching decision science and foundational awareness get shoved aside in favor of the next PowerPoint promise. 83% of SC projects fail to deliver expectations.

If we, as supply chain leaders, want to avoid repeating the mistakes of the past, we need to put the learning on our side. **The first step is supply chain awareness and the search for truth.** Awareness of our people, our processes, our goals, and the outcomes that are critical to our success.

THE TRUTH

If you don’t know what you’re trying to transform, no technology, however advanced, can transform it for you.

The Big Lie #2: One Platform to Rule Them All

Let’s call this what it is: **The Monolith Myth.**

It goes like this: “We have the platform. It does everything. It’s your single source of truth, your all-knowing digital brain. Just sign here.”

We’ve heard it all before. In the dot-com era, platforms pitched as the backbone of enterprise reinvention. Market caps soared, promises expanded, and PowerPoint decks bloomed. But once contracts were signed, many companies were left with complex systems that couldn’t deliver. Much of the technology ended up as shelfware. Implementation lagged. Expectations outpaced reality. And worst of all, decision-making didn’t improve.

The more modern version of this myth is no less alluring, wrapped in smarter packaging, featuring newer buzzwords: autonomous orchestration, composable control towers, AI-driven digital twins. The big lie isn’t just that the platform can do everything—it’s that a single solution can do it all. One vendor. One interface. One master plan. **But supply chains are messy, federated ecosystems constantly evolving in response to change, not monoliths.**

What this new wave doesn’t address is the underlying fragmentation of decisions. Decisions live across teams, time horizons, technologies, and ecosystems. Yet many platforms aren’t designed to support that—they’re designed to centralize, not federate; to control, not orchestrate.

The result? Companies become trapped in architectures that can’t keep pace with uncertainty, complexity, and volatility. Companies sign up for a utopian vision of control, only to find themselves boxed in—unable to adapt, extend, or respond in real time. Meanwhile, the promise of agility and transformation is met with the inertia of platform maintenance.

To put it simply: vendor lock-in is in play. Vendors offer the illusion of progress while slowing down actual change. What organizations really need isn’t a one-size-fits-all brain—they need the ability to think clearly across functions, to model decisions before locking them in, and to support an evolving architecture that adapts as the business changes.

THE TRUTH

The winners won’t be those who chase the biggest platform. They’ll be the ones who stay focused on value, alignment, and time to decision, not just time to deployment.



So How Do We Break the Cycle?

A Call for Awareness

It starts with understanding who we are and what we do and why what we do matters, for whom and when? Something remarkable happens when you start asking simple questions inside many companies:

- What is our supply chain strategy?
- How do we use our strategy to achieve competitive advantage?
- What makes a good/bad customer?
- Where do we lose and make money?

Often, the answer isn't unclear—it's missing entirely.

Despite decades of investment in supply chain technologies, the foundational awareness needed to run these systems with impact remains elusive.

Companies are spending millions, tens of millions on platforms, AI, and digital twins without a clear understanding of the problems they're trying to solve.

They implement tools without understanding process bottlenecks, and automate decisions without knowing why or who's making them. There is a remarkable lack of visibility into how supply chains actually behave, where value leaks out, and what trade-offs are being made day to day.

We call this **the root of disillusionment**: enterprises diving headfirst into digital transformation without first developing self-awareness. Without knowing the questions that matter—about how decisions flow, where friction hides, and what outcomes really matter—getting lost in the race to deploy the latest buzzword.

The irony? If you don't know what's broken, you can't fix it, let alone automate it. **The best technology in the world can't save you from a lack of self-awareness.** It's not about platforms or algorithms. It's about perspective. If you don't know where you're going, I guarantee you won't get there.



Build on Bedrock, Not Buzzwords: Awareness Before Automation

Before diving headfirst into the next bright, shiny solution, let's hit the brakes and talk fundamentals. Real fundamentals. Not the kind that fit neatly onto a vendor's PowerPoint demo, but the kind that companies have been wrestling with for decades—and keep ignoring at their peril. It's not glamorous. It won't get a standing ovation at a tech conference. But if you don't build on bedrock, you're building on quicksand. Every successful supply chain transformation I've ever seen—every real one—started by nailing three things:

Know Yourself

Know Your Network

Know Your Why

These aren't just motivational slogans. They are survival principles. They're the three pillars that keep the roof from caving in on you when the hype collapses and reality comes knocking.

Know who you are—what you're good at, where you bleed money, and where your leverage hides. Know your network—who's really on your team, who's riding your coattails, and where are your blind spots. But above all, know your why—because if you don't know why you're making a decision, no platform, AI model, or orchestration engine can save you when the market turns.

Get these three right, and everything else—technology, processes, performance—has a fighting chance to deliver.

Start with the basics: know yourself, know your network, and know your "why".

The Three Pillars of Supply Chain Awareness



1. Know Thyself

Knowing yourself also means understanding the data you have, the decisions you make, and how those decisions ripple through your network. Most firms don't know. They buy systems hoping they will.

Do you know:

- Your supply chain's core strengths?
- Your financial levers?
- Where do you make and lose money?
- Are you a good supplier?
- A good customer?

2. Know Thy Network

Resilience is built on real transparency—not just to tier 1, but tier 2 and beyond. The ability to pivot begins with the knowledge of who is really in your ecosystem and what they bring to the table.

Do you know:

- Who are your suppliers?
- Your customers?
- Which relationships drive value, and which quietly drain it?
- Are you designing your operations based on actual capabilities or wishful thinking?

3. Know Thy Why

Strategic clarity begins with understanding the downstream impact of every policy, forecast, and allocation decision. Without a clear sense of why, even the best systems will flounder.

Do you know:

- Why are you making **this** decision, and not another?
- Why are you applying AI when a simpler method might work?
- What is your cause-and-effect model? Do you even have one?



Toward a New Architecture: Organized by Design

We need architectures that reflect how decisions are really made— across time horizons, partners, and constraints. Systems **organized by design**, not dictated by legacy platforms. A federated, living model of the supply chain that can accommodate change without collapsing under it.

Business is accelerating.

The issues of today won't be the same ones facing us in days, months, or years from now. We have to start with a model that can understand true cause and effect across time to plan horizons; we need to embrace simulation, design of experiments, and discrete event simulation. Bullwhips will snap. Interest rates will recalibrate priorities. Inventory will once again come with consequences. Meanwhile, external pressures—from ESG mandates to consumer scrutiny—are injecting a new level of transparency and accountability into global supply chains.

To keep up, companies need architectures that can think. That begins by building decision intelligence into the core of the system. Architectures must support continuous design evaluation and real-time scenario simulation. This will allow organizations to stay ahead of change rather than being left to react to it.

Get Back to Basics: Forget the Magic Tricks—Start Engineering Outcomes

The funny thing about strong fundamentals: they don't make headlines or highlight reels, but they never go out of style. Let's get back to the basics. There are tried and tested methods that have been around for a very long time. When the latest buzzwords fade and the PowerPoint promises dry up, it's the basics that keep the doors open and the supply chains moving. Methods like Design of Experiments, discrete-event simulation, and structured decision modeling—these have been solving real-world problems long before anyone slapped "cognitive" onto a dashboard.

Before we, as business leaders, sprint toward the next miracle solution, maybe it's time to circle back to the practices that actually work. Tried, tested, and proven—not in some vendor's lab, but in the messy reality where companies live or die by the decisions they make.

To be clear: AI and ML do have a place in decision engineering. Some decisions can and should be augmented—or even automated—by artificial intelligence. But you can not build a skyscraper without a solid foundation. First, your organization must build its supply chain awareness. Then, build an architecture that supports intelligent decisioning.





The Path Forward: Awareness First

The supply chains of the future will be engineered, using decision intelligence supported by decision science, distributed systems, and a model that lets you simulate first, then act. So, as SC leaders, let's agree to stop worshipping false idols. Let's reject the idea that transformation must begin with total reinvention.

Let's return to first principles and ask the fundamental questions:

- Who are we?
- What do we want to achieve?
- How are we going to use the supply chain for competitive advantage?
- What decisions truly matter?
- And why are we making decisions the way we are?

Self-awareness, not self-driving, is the foundation of transformation. If we can get that right, everything else gets easier—and real change becomes possible.

About the Author

Arthur Mesher is one of the supply chain industry's most influential and visionary voices. Mesher provides strategic insight as Chairman of the GAINS Solutions Council. He's best known for introducing the foundational "Three V's" framework—Visibility, Variability, and Velocity—a widely adopted model for understanding and improving supply chain performance. Arthur's impact on the industry spans decades.

An inductee of the Supply Chain Hall of Fame, Arthur continues to push the industry forward by championing composable, AI-powered, decision-centric approaches to planning and execution. His expertise plays a central role in helping GAINS and its customers design smarter, more resilient supply chain networks that thrive in uncertainty.



Ready to take the next step?

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