

The Supply Chain Habit That Keeps You From Being Resilient.

Why the focus on 'just-in-time' often blinds us to systemic risk.

Corporate Taboos Series · Part 3 · Supply Chain · Resilience · JIT · Risk Management

The newsletter for operations leaders who prefer honest diagnosis of supply chain failure over comfortable reliance on lean metrics.



Diagnosis: The Illusion of Efficiency

In many plants today, I see a specific kind of silence that precedes a crisis. It's the sound of an assembly line that stops because one minor component—a bracket, a seal, or a specialized fastener—is missing from the bin. The team stands around the downed machine, looking at a "Just-in-Time" (JIT) inventory system that looks perfect on a spreadsheet but fails the moment reality hits the floor.

We have been conditioned to believe that any buffer is waste. We treat extra inventory as a failure of planning and excess capacity as an unnecessary cost. This isn't just a difference in opinion; it's a fundamental misunderstanding of what "efficiency" actually means for a manufacturing operation.

True efficiency is the ability to meet your commitments consistently over time. If your process only works when every variable—supplier reliability, logistics timing, and raw material quality—is perfect, you haven't built an efficient system; you've built a fragile one. You aren't running a lean operation; you are operating on the edge of a cliff. When we strip away all "waste" to achieve the ultimate JIT goal, we

often remove the very safety nets that allow a production line to survive a single bad day at a vendor’s plant or a delay in a shipping lane.

The Supply Chain Habit That Blinds Us

I call this **The Hyper-Optimization Syndrome**.

It is the tendency to optimize for today's cost metrics while ignoring tomorrow’s operational risks. When we fall into this trap, we treat "lean" as an absolute moral imperative rather than a tool. We see any amount of safety stock as a sign of poor management and any extra capacity as a line item that needs to be trimmed.

The reality is that JIT is not the enemy; incompleteness is. A lean system without a resilience component is like a car with no spare tire because it's "too heavy." You can drive faster for a while, but you are one flat tire away from being stranded on the side of the road.

The Hyper-Optimization Syndrome forces leaders to ignore warning signs. When a supplier starts showing inconsistency or lead times begin to drift, a team blinded by this syndrome will often choose not to build in buffer because they don't want to "mess up" the lean metrics. They would rather risk a total line stoppage later than "waste" inventory today. We must move from optimizing for the best-case scenario to designing for the most likely failure.

Why We Love Just-In-Time Too Much

There is a psychological component to why we cling to these thin margins. It is much easier to report success on a monthly dashboard when your overhead is low and your inventory turns are high. It feels like winning. However, this "win" often comes at the cost of your team's sanity and your customers' trust.

We often mistake activity for progress. Managing a lean inventory is an active task; building a resilient supply chain is a strategic one. The former looks good in a meeting; the latter requires hard conversations about how much "waste" we are willing to tolerate as insurance against chaos.

What We Say (The Comforting Rationalization)	What Is Actually Happening (The Hard Reality)
"We are maximizing flow by eliminating waste."	"We are removing the buffers that protect us from vendor errors."
"Just-in-Time is the ultimate goal of Lean."	"JIT is a tactic for steady states, not an excuse to ignore risk."
"Extra inventory is a sign of poor planning."	"Strategic safety stock is insurance against systemic failure."
"We need to keep costs as low as possible."	"The cost of a stopped line far outweighs the cost of holding parts."

What Happens When the Line Stops Holding?

When the reality of a fragile supply chain hits, the costs are rarely contained. They don't just stay on your balance sheet; they bleed into every part of your organization.

First, you face **The Cost of Reaction**. When a critical component is missing, you aren't just waiting for a shipment; you are spending hours—or days—on "firefighting." This involves frantic calls to vendors, redirecting logistics trucks, and pulling maintenance teams away from planned work to troubleshoot the shortage.

Second, you face **The Cost of Reputation**. When your lead times spike because you have no safety stock for a common part, it isn't just one customer who notices. Your ability to promise a date becomes unreliable. You lose the trust that is hard-won and easy to break.

Third, you face **The Cost of Erosion**. Every time a "minor" shortage forces your team into crisis mode, morale drops. The frustration of having to work around a broken system instead of following a smooth process burns out your best people.

A line that stops because of a lack of buffer isn't just an operational hiccup; it is a failure of the management plan to account for the reality of the world outside your factory walls.

Building a Resilient System (The 3 Shifts)

To move past **The Hyper-Optimization Syndrome**, we must shift our definition of "waste." We need to start managing three specific types of "slack" that provide the foundation for resilience. These aren't wastes; they are investments in stability.

1. **Inventory Slack:** This is your physical buffer. You must identify your "critical path" components—the items with long lead times, high variability from suppliers, or no easy substitutes. For these items, you don't want JIT; you want a strategic reserve. If a part takes six weeks to arrive and only costs \$2 to hold in a bin for one week as safety stock, the "waste" of storage is negligible compared to the cost of a stopped line.
2. **Capacity Slack:** This is your operational buffer. You cannot run every machine at 100% capacity all day if you want to be able to respond to disruptions. If a primary machine goes down or a batch fails quality checks, you need "buffer" in the form of available time or secondary machines that can pick up the slack without requiring an emergency overhaul of the schedule.
3. **Process Slack:** This is your procedural buffer. It means having multiple ways to get to the same result. If one supplier fails, do you have a pre-vetted second source? If one path through the factory is blocked, do you have a standard work procedure for an alternative route? Process slack ensures that when something breaks, the "workaround" isn't a panicked decision but a planned response.

Actionable Steps for Tomorrow

You don't need to overhaul your entire supply chain by Monday morning. You just need to start identifying where you are currently standing on the edge of the cliff.

Start with these three actions during your next Gemba walk or leadership meeting:

1. **Map the "Single Points of Failure."** Walk the line and identify every component that, if missing for even four hours, would stop production. Create a list. These are your candidates for immediate inventory slack.
2. **Audit Your Lead Times.** Don't look at what your supplier *claims* their lead time is; look at how long it actually takes to get the part on the floor during an "unusual" week. If that number varies by more than 10%, you need a larger safety buffer for those specific items.
3. **Develop a "Red Alert" Response Plan.** For your top five most critical components, write down exactly what happens if they don't arrive on time. Who do you call? What is the backup plan? If these answers aren't already taped to the machine or in the supervisor's manual, you are currently relying on luck rather than a process.

The Next Taboo...

In our next issue, we will look at **The Accountability Gap**, where we examine why "trying harder" is not a substitute for having a clear, measurable standard of work.

Call to Action

What 'slack' do you find hardest to budget for—time, inventory, or talent? Share this diagnosis with your operations peer.

Newsletter replies: newsletter@sixsigmakaizen.com · X: [@kaizen_6sigma](https://twitter.com/kaizen_6sigma)

Stay curious, stay improving,

David Rodgers

SixSigmaKaizen.com