

When Chokepoints Close: Running Your Business in a World of Supply Shock.

How operational continuity depends on anticipating geopolitical choke points, not just commodity price swings.

Supply Chain · Risk Management · Energy Security · Geopolitics

The newsletter for C-Suite executives who prefer robust contingency planning over reactive crisis management.



What the Headlines Miss: The Operational Impact

When you see a headline about a conflict in the Strait of Hormuz or tensions in a major shipping canal, it's easy to treat it as an "economic" problem—something for the folks in the C-suite or the procurement office to worry about while they watch ticker symbols. But on the shop floor, these aren't just numbers on a screen; they are physical barriers to production.

The media treats this as a geopolitical crisis. You need to see it as a logistics failure of inputs. If a tanker cannot move through a specific corridor because of risk or conflict, the oil doesn't reach the refinery, and the gas doesn't reach the chemical plant. It is that simple. When you are running a manufacturing operation, your ability to produce depends on the physical movement of raw materials—the steel for your frames, the chemicals for your coatings, and the energy required to keep the lights on and the machines running.

We often mistake "market volatility" for "supply chain disruption." They are different animals. Volatility is a price fluctuation; disruption is a missing component that keeps an assembly line stationary. When a primary shipping lane closes or becomes unsafe, it isn't just a "risk factor"—it is a physical blockade of your ingredients. If you aren't looking at your supply chain as a series of literal, geographic paths and pipelines, you are managing based on the news rather than the reality of your production schedule.

The Hidden Failure Point: The Seamless Flow Fallacy

The core failure in most modern manufacturing plans is what I call **The Seamless Flow Fallacy**. This is the dangerous assumption that because a part has arrived every day for the last five years, it will continue to do so regardless of what happens outside your gates. It assumes that global trade routes are stable infrastructure rather than fragile paths through volatile regions.

In many cases, "Just-in-Time" was built on the premise of perfect stability. We optimized our inventory levels and narrowed our supplier base to shave off pennies in carrying costs, assuming the ocean would always be calm and the gates would always stay open. This is not a strategy; it is an oversight of geography.

Consider your primary sources for heavy freight or specialized chemicals. If those materials pass through a single geographic bottleneck—a specific strait, a narrow canal, or a single cross-border pipeline—your operation has a hidden single point of failure. When that chokepoint closes, the "just-in-time" model collapses instantly because there is no buffer and no alternative route planned for when the primary path becomes impassable. You aren't just relying on a supplier; you are relying on a specific stretch of water or land to remain peaceful.

Why We Are Blind to Chokepoints (The 'Just Works' Myth)

We often ignore these risks because we fall into **The Just Works Myth**. It is easier, and often cheaper in the short term, to believe that your procurement team's contracts are sufficient protection against global events. Most managers focus on "contractual obligations" rather than "physical availability."

A contract says a supplier *promises* to deliver; it doesn't ensure they have a way to get the goods to you if a primary shipping lane is blocked. We choose the comfort of a low-cost, single-source agreement over the complexity of building geographical redundancy because the reality of the latter is harder to manage on a day-to-day basis.

The Comfortable Rationalization	The Underlying Reality
"Our contract guarantees delivery."	A contract cannot move cargo through a closed port or a blockaded strait.
"We'll just find another supplier if things change."	Finding, vetting, and onboarding a new source takes months—not days.

The Comfortable Rationalization	The Underlying Reality
"The risk is too remote to plan for now."	The cost of an idle line during a crisis far outweighs the cost of redundant planning today.

What a Chokepoint Closure Actually Costs

When a chokepoint closes, the costs don't just hit your bottom line; they degrade your ability to execute on quality and production targets. This isn't about "higher prices" in the abstract—it's about the literal absence of materials required for work.

For example, if energy inputs like LNG or crude oil are squeezed by a maritime blockade, the cost of power spikes immediately. In many regions, this leads to forced rationing or higher operational overhead that eats your margin before you even ship a finished product. Even more critical is the impact on specialized raw materials. For instance, a disruption in certain coastal routes can cripple the supply of fertilizers (essential for chemical feedstocks) or specific minerals used in electronics and high-grade alloys.

The costs manifest in three ways:

1. **Direct Scarcity:** You simply run out of a component because the alternative shipping route is too long or expensive to be viable on short notice.
2. **Quality Erosion:** When primary sources are cut off, you may be forced to source "substitute" materials from less-vetted suppliers just to keep the line moving, risking your quality standards.
3. **Lead-Time Expansion:** Even if you find a way to get the material, the detour required can add weeks or months to your cycle time, making it impossible to meet customer demands.

Building Operational Resilience: Three Pillars for Physical Redundancy

To move past the "Just Works" myth, we have to build resilience into the physical reality of our operations. We need to treat geographic diversity as a requirement of the design process, not an optional luxury. There are three pillars to this approach:

1. **Geographic Multi-Sourcing.** You must identify your top five most critical components or raw materials and map their journey from origin to your dock. If any of these items travel through a known geopolitical chokepoint, you must establish a secondary source located in a different geographic region. This isn't just about having two suppliers; it's about having two *different* supply routes that do not share the same maritime or overland bottlenecks.
2. **Strategic Inventory Buffers.** "Just-in-Time" works for stable environments; "Just-in-Case" is required for volatile ones. For critical components with long lead times or high risk of transit disruption, you must maintain a physical buffer. This isn't just piling up extra parts in the warehouse; it's identifying exactly which items are at risk and ensuring you have enough on hand to survive a 90-day disruption of your primary route.

3. Diverse Transport Modes. Relying solely on ocean freight for critical components is a gamble on maritime stability. Where possible, diversify how things arrive. This might mean utilizing rail, aired cargo for high-value items, or localized sourcing that bypasses international waters entirely. If the primary sea route is blocked, having an established contract with a different mode of transport provides a "relief valve" for your production schedule.

The Next Step: Stress Testing Your Global Dependencies

You don't need to be a geopolitical expert to start fixing this today. You just need to look at your inventory and your logistics maps with more honesty. Here is what you can do on your next leadership meeting or during your next procurement review:

The Dependency Audit Checklist:

- ☐ **Map the Path:** For every "critical" item, identify its primary transit route. Does it pass through a known chokepoint (e.g., Suez Canal, Strait of Hormuz)?
- ☐ **Identify Single Points of Failure:** List any components that are only available from a single supplier located in a high-risk zone.
- ☐ **Quantify the "Gap":** If your primary route for [Material X] were cut off tomorrow, how many days could you continue production? (If the answer is less than 30, this is an immediate priority).
- ☐ **Audit Your Substitutes:** If a primary supplier fails, do you have a pre-vetted "Plan B" source that can be activated in under 14 days?
- ☐ **Review your "Safety Stock":** Adjust your minimum inventory levels for materials sourced from high-risk geographic zones to account for potential shipping delays.

Stop assuming the world will stay as it is today. A plan on paper is not a contingency plan; a contract with a supplier in a volatile zone is not a guarantee of delivery. Start looking at the physical paths your goods take and build some breathing room into the system before the next headline becomes your reality.

Call to Action

What single, non-negotiable commodity input would halt your entire operation for 30 days? Share this issue with a colleague facing similar risks and let me know which chokepoint keeps you awake at night.

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

Stay curious, stay improving,

David Rodgers

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References: IndustryWeek: Strait of Hormuz Watch

