

When a Hand-Off Point Becomes Your Weakest Link

Auditing dependencies in the supply chain—from vendor contract to machine operation.

Supply Chain · Process Control · Risk Management · Operational Excellence

The newsletter for operations VPs who want operational resilience built into every process, not just written on a contract.



The Gap Between Paper and Production

A contract is not a process control. It is a legal agreement, a set of boundaries defined in ink that tells you what someone *promised* to do; it does not ensure that what they actually did meets your requirements on the shop floor. Many organizations make the mistake of treating a signed purchase order or an agreed-upon specification as a substitute for a robust receiving inspection or a validated transition point.

When we rely solely on "the contract" to guarantee quality, we are essentially trying to manage risk through paperwork rather than engineering. In reality, every time material moves from one entity's hands to another—whether that is from a vendor's truck to your warehouse, or from the shipping department to the assembly line—there is a transition of responsibility. These transitions are where the most critical failures hide.

A piece of paper doesn't catch a drift in tolerance. A signed document won't stop an operator from using a substitute part because "it looks close enough." If your quality assurance depends on what was promised three months ago during a negotiation rather than what is physically present at the machine today, you aren't managing a process; you are managing a hope. We must move away from trusting the paper and start trusting the physical gates we build to catch reality as it arrives.

Naming the Hazard: The Interdependency Void

We call this **The Interdependency Void**. It is that silent space where one process ends and another begins, often characterized by a lack of clear ownership or verification. In these gaps, "common sense" takes over because no specific control exists to dictate otherwise.

I've seen this play out in several ways on the floor. One common scenario involves incoming components from a secondary supplier. The vendor provides certificates that look perfect—the paperwork is flawless. However, because there isn't a hard stop at the receiving dock for physical verification of those specific dimensions, the parts move into production. They pass through three different stations before an operator realizes the pins are slightly misaligned. By then, you have 50 units in work-in-progress that need to be pulled and inspected.

Another example is the hand-off between shifts. If Shift A finishes a run and leaves it for Shift B without a formal "gate" check—a physical verification of the setup and the first few pieces—the defects from a tool drift on the evening shift become your problem on the morning shift. The gap isn't just between companies; it's between departments, shifts, and workstations. When we don't bridge these gaps with hard controls, we allow errors to travel downstream until they become expensive failures for the customer.

Why We Accept the Risk: The Cost of Convenience

Why do so many organizations allow **The Interdependency Void** to persist? It usually comes down to a calculation where the immediate cost of implementing a control is weighed against the perceived probability of a failure. Because most hand-offs "work" 95% of the time, it feels like a waste of resources to build a rigorous verification step for that remaining 5%.

The Convenient Assumption	The Operational Reality
"The vendor's COA (Certificate of Analysis) is enough."	A certificate doesn't account for shipping damage or manufacturing drift.
"We trust the internal team to do it right."	Trust is not a substitute for a standard work instruction or a physical check.
"Adding an extra step will slow down throughput."	The time lost to rework and scrap from missed errors far exceeds the cost of a gate.

We choose the convenience of a smooth, uninterrupted flow over the friction of a mandatory verification. We prefer the appearance of efficiency—where parts move quickly from point A to point B without stopping—over the actual assurance of quality. But an "efficient" process that produces defective parts is not efficient; it is just fast at creating waste. We must stop viewing these gates as hurdles and start seeing them as the necessary filters that keep junk out of our finished product.

The Three Operational Tests for Hand-Offs

To close the gap, you cannot rely on "better communication." You need a framework to audit where your hand-offs are weak. Use these three tests to evaluate every point where material or information changes hands:

1. **The Triple Verification Test:** Every critical dimension or requirement must be verified at three points: upon entry into the facility, during the transition between internal departments (e.g., from machining to assembly), and before final packaging. If a part moves from a bin to a machine, someone must verify it is the correct part in the correct quantity before the cycle starts.
2. **The Ownership Mapping Test:** For every hand-off point, identify exactly who "owns" the gap. If a vendor sends a component that fails on your line, was the failure at their facility or during your receiving process? Map out these points and assign a specific role to the verification of each step. No one is allowed to say, "I thought the other guy checked it."
3. **The Simulated Failure Test:** Periodically introduce a known non-conformance into the system—a part with an incorrect label or a slightly off dimension—and see if your current process catches it at the hand-off point. If the error makes it past three stations before being caught, your "gate" is invisible to the operator and needs a physical control (like a jig, a sensor, or a mandatory sign-off).

Making the Invisible Visible: Embedding Control

The goal is to move from managing relationships to embedding controls. In high-performing environments, the transition between processes isn't an open door; it's a gate. When we talk about "embedding control," we mean making it physically or procedurally impossible for a part to move forward if it hasn't met the criteria of the current step.

Instead of relying on a supervisor to remember to check a pallet, use physical identifiers. This could be a green tag that only a lead can sign off once a batch is verified at the hand-off point, or a "locked" bin system where parts cannot move forward unless a digital scan confirms they have passed the intermediate inspection.

If you are dealing with an external vendor, your contract should mandate their inclusion in your quality program—not just as a source of parts, but as a participant in your verification process. This means they must provide the specific data points that your machines require to run correctly, and those points must be verified by your team at the point of intake. We want to eliminate "judgment calls." An operator

should never have to decide if something is "good enough" to pass to the next station; the system should make that decision for them based on a clear, predefined standard.

Tomorrow's Gemba Walk Focus

During your next walk through the facility, don't look at what people are doing correctly. Look specifically at where products change hands and identify the gaps. Use this checklist to find the "hidden" risks:

1. **Identify Physical Handoffs:** Stop at every point where a part moves from one area or department to another. Is there a clear, documented check performed at that exact moment?
2. **Audit Information Flow:** Follow a piece of material back to its source. Does the information (part number, revision level, quantity) stay consistent and verified as it travels through different zones?
3. **Test the "Stop" Mechanism:** Find an area where you suspect a hand-off is weak. Ask the operator: *"If this part arrived with a defect from the previous station, how would we know before it reached the next one?"* If their answer involves "it should have been checked earlier," that's your target for improvement.
4. **Verify Labeling and Identification:** Ensure every bin, pallet, and tray has clear markings. A piece of material without a clear identity is a moving hazard in an interdependency void.

Call to Action

Where is your most critical process dependent on an external partner right now? Share what that point of dependency looks like below, or forward this to a VP who needs to stop trusting the contract.

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

Stay curious, stay improving,

David Rodgers

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References: The Illusion of Vertical Integration in Modern Energy Markets (Source)