OPERATIONAL EXCELLENCE NEWSLETTER

Why Separating Lean and Six Sigma is a Waste of Time.

The continuous improvement process requires merging waste elimination with variability understanding.

Lean · Six Sigma · Continuous Improvement · Manufacturing Operations

> The newsletter for leaders who understand that true operational maturity is found in the overlap between two disciplines.

The Problem: The Myth of Two Separate Toolkits

In many manufacturing plants, I see a recurring pattern that creates more work than it solves. It starts with a leadership team—or a consulting group—trying to decide which "methodology" they want to adopt for the next year's improvement goals. They treat Lean and Six Sigma as if they are two different sports played on different fields. One is for speed, and one is just for quality.

This is what I call **The Divided Toolbelt**.

It’s a false choice that creates a fractured culture of "either/or." When you treat them as separate tools, you end up with half-baked solutions. You might implement Lean to move parts faster across the floor, but because you aren't looking at variation, those parts are inconsistent. You end up with speed without stability. Or, you might lean into Six Sigma on a specific station to tighten tolerances, but because you

haven't addressed the waste of motion or waiting in the overall flow, that "perfect" part sits in a bin for three days before it moves an inch.

Lean is not just about moving faster; it is about creating a smooth flow of value. Six Sigma is not just about complex math; it is about making sure the process behaves exactly how you expect it to every single time. When you separate them, you are essentially trying to build a high-speed train while ignoring whether the tracks are straight or if the wheels stay on the rails. You aren't solving the problem of production; you are just picking which half of the headache you want to deal with today.

What Actually Happens When You Treat Them Separately

When we treat these disciplines as mutually exclusive, it isn't a theoretical failure—it shows up in the scrap bins and on the frustration levels of your operators. We often tell ourselves that "Lean is for the floor" and "Six Sigma is for the engineering lab." That distinction creates a dangerous gap between what we say we want and what the process actually delivers.

The Comfortable Rationalization	The Underlying Reality
"We’re using Lean to get the line moving faster and reduce lead times."	You are accelerating a broken process, which simply moves defects further downstream where they become harder (and more expensive) to catch.
"Six Sigma is too complex for the daily work; we'll just use it for 'major' projects."	You are leaving common-cause variation in your daily tasks, forcing operators to "adjust" things manually until they happen to get a good part.
"Lean is about waste; Six Sigma is about quality. They don't overlap."	Quality *is* the absence of waste caused by rework, scrap, and inconsistent outputs. You cannot have one without the other.

The Real Challenge: Mastering Variation in Flow

The core truth that many leaders miss is that speed only matters if it is predictable. If you remove a bottleneck on the line (a Lean win) but the process still has high variability (a Six Sigma failure), you haven't actually improved anything. You have just moved the problem to someone else’s station.

I’ve seen this play out on the floor: A team "improves" a welding station by streamlining the material feed—great Lean work. But because they didn't address the variation in the gas flow or the operator's manual alignment, the weld quality fluctuates. Now, instead of failing at the welder, the part fails during final assembly three stations later. The problem didn't go away; it just traveled.

True flow requires a marriage of both disciplines. You need to remove the waste so that work moves smoothly, but you must also tighten the "process window" so that every movement is purposeful and predictable. If your process drifts even slightly from the standard, the flow breaks. Lean gets the product moving; Six Sigma ensures it stays on track. One provides the speed, the other provides the rails.

Three Pillars of Integrated Continuous Improvement

To move past this myth, we have to stop looking for "which one" and start looking at how they work together as a single operating system. I suggest focusing on these three pillars:

1. **Standardizing Flow (The Lean Foundation):** This is about the physical reality of the shop floor. We must identify where parts are sitting, where operators are walking unnecessarily, and where information is stalling. If the flow isn't steady, you can’t see the variation clearly enough to fix it.
2. **Reducing Variation (The Six Sigma Core):** This is about the technical integrity of the process. Once we have a stable flow, we look at every step and ask: *Why does this vary?* Is it the machine? The tool? The raw material? We use Six Sigma tools to shrink the "swing" in your results until the process produces the same result every time.
3. **Embedding Ownership (The Cultural Glue):** This is where many programs fail. It doesn't matter how much Lean or Six Sigma you do if the operator feels like they are just following a rulebook written by someone who hasn't touched a wrench in ten years. We must move from "compliance" to "ownership," where the team understands that both flow and precision are what allow them to do their jobs without frustration.

Action Plan: Merging the Disciplines on Your Next Gemba Walk

The next time you walk the line, don't just look for waste or just look for defects. Look for where they intersect. Use this three-step approach during your next scheduled rounds:

Step 1: Identify "Workaround" Hotspots. Look for places where an operator has to make a judgment call. If an operator says, *"I usually have to adjust the feed slightly because it's been running a bit long,"* you’ve found a Six Sigma problem (variation) hidden inside a Lean process. They are "fixing" the variation manually so that they can keep the flow moving. This is a red flag for both systems failing simultaneously.

Step 2: Audit the Stability of your Improvements. Find an area where a "Lean" improvement was made recently—perhaps a new layout or a faster changeover. Ask the team: *"Since we changed this, has it stayed consistent?"* If they say it's still "hit or miss," you have successfully improved the speed but failed to lock in the quality. You need to apply Six Sigma tools to that specific point of flow immediately.

Step 3: Verify the Standard Work. Check a piece of equipment—a torque gun, an oven, or a press. Is it running on a set parameter that is checked daily? If you find a station where "the operator just knows how to do it," you have no standard work. Without standards, Lean cannot be sustained and Six Sigma has nothing to measure against.

Practical Takeaways for Tomorrow's Shift

You don't need a new consulting contract to start integrating these two. You can begin tomorrow by shifting your focus from "tools" to "results." Here is what you can do:

- **Stop the "Quick Fix" trap:** If an improvement only makes things faster but doesn't make them more consistent, it isn't a finished project. It’s a half-finished task.
- **Target your audits:** Instead of looking for any waste, specifically look for "variations in the flow." Find where the process is inconsistent and stop trying to just "speed up" those sections.
- **Redefine success at the station level:** When you talk to your leads, don't ask if they are following Lean or Six Sigma. Ask them: *"Is this process predictable?"* If it isn't, they need both tools to fix it.
- **Update your training language:** Stop teaching "Lean" and "Six Sigma" as separate modules for the staff. Teach them as a single methodology of **Stable Flow**.
- **Focus on the 'Why':** When an operator performs a workaround, don't just tell them to stop. Ask why it’s necessary. Their answer will tell you exactly where your Six Sigma tools need to be applied to support their Lean goals.

Call to Action

Where are you seeing your teams treat Lean and Six Sigma as separate toolkits? Share what works best in the comments below.

Newsletter replies: newsletter@sixsigmakaizen.com · X: @kaizen_6sigma

Stay curious, stay improving,

David Rodgers
SixSigmaKaizen.com

References: IndustryWeek Podcast: Myth No. 4 – Lean Is About Velocity; Six Sigma Is About Quality