These are interesting times for lean. On the one hand there are few businesses that have anything to do with manufacturing that don't have some knowledge of, and don't pay some lip-service to, the practices that came out of the Toyota production system (TPS). On the other hand, there are companies that have made a good-faith effort to change to a lean culture, only to find themselves unable to sustain the effort. Companies that are bringing in lean tools—kaizen, gemba, andon—all of those exotic-sounding Japanese terms—likewise find that after eliminating some waste in their processes—the low-hanging fruit—efforts often stall. And the term 'lean' itself is still routinely seen, with some justification, as a code word for increased workloads and ensuing layoffs.

By the 1970s the GM plant in Fremont, CA (top left) was struggling with quality and delivery; it became the home of the GM-Toyota NUMMI partnership (bottom left)—a place where TPS changed the workforce, including Jim Manley. Now the facility is owned by Tesla, the beneficiary of NUMMI's well-trained workforce.

**Lean for All Seasons**

Jim Manley of the Michigan Lean Consortium brings an experienced eye to lean's journey from automotive to other realms

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To get a handle on why this is so and what can be done about it, we spoke to Jim Manley, who brings the perspective of one whose first exposure to lean was decades ago in, unsurprisingly, the automotive industry, and who still works to put lean into the DNA of companies and organizations in his home state of Michigan. In a wide-ranging discussion in late September, he offered some insights as to what lean can be—and what it isn’t.

From Michigan to 29 Countries—and Back

Jim Manley began his career on the assembly line at General Motors at age 19, “welding cars together at Willow Run.” While at GM, he learned about systems thinking from Dr. W. Edwards Deming (see sidebar) and the Toyota Production System from Toyota masters at NUMMI, the GM/Toyota joint venture based in Fremont, CA. At Delphi, the GM-spinoff auto parts supplier, he coached teams in 29 countries as they implemented lean into their plant operating systems. In 2005, Manley received the Delphi Corporate Lifetime Lean Achievement Award. He finished his corporate career as the North American Supply Chain Director for auto parts supplier Faurecia.

But Manley has had a post-retirement mission: to bring lean thinking to businesses and organizations in his home state of Michigan—and not only to those connected to the car-making business. His campaign has two organizations behind it. In 2012 he accepted the position of managing director for the Demmer Center for Business Transformation at Michigan State University’s Eli Broad College of Business. Under Manley’s leadership, Demmer Center de-emphasizes academic research in favor of hands-on work with companies and organizations as the business equivalent of the university’s extension service to farmers and growers.

That same year—2012—Manley joined the nonprofit, all-volunteer Michigan Lean Consortium (MLC) and, to his surprise, found himself kicked upstairs to its board of directors and then, in a matter of months, becoming its chair.

He took the chairmanship under the condition that the organization restructure and poise itself for more influence and growth. Now MLC’s stated mission is to “develop and support lean systems thinkers to transform Michigan’s organizations and economy.” The organization has worked with scores of companies and individuals through conferences, coaching, apprenticeships and seminars, all designed to instill real lean thinking into their DNA.

Manley considers this work to be a responsibility entrusted to him as a second-generation lean practitioner.

“The first generation was Toyota. The second generation is me, and people like me,” Manley said. “Toyota came to the US and started NUMMI, the joint venture with GM, and started exposing American automobile manufacturers to lean thinking. I learned lean from masters—from Dr. Deming and the Toyota guys. But that experience was limited to the auto industry. So now my message to my students and to the members of MLC is ‘you guys are the third generation of lean.’ And with them, we’re now taking lean out of the auto industry and into the wider world.”
Lean

Around 1988, in front of 300 GM execs at a four-day seminar in Warren MI, Dr. W. Edwards Deming, the legendary systems manager whose work influenced the development of the Toyota Production System, loudly berated Jim Manley, then a plant statistician at GM’s Willow Run facility.

Up to that moment, Manley had been happy to be there: GM had hired Deming to educate management on systems thinking and what would later be called lean thinking, and insisted that all of the company’s manufacturing and assembly plant managers attend Deming’s seminars. Manley—not a manager—was there, he explained, because “the guys that I worked with, like my manager at the time, thought the whole thing was malarkey.

“The manager didn’t want to waste four days on listening to some so-called expert tell him how to do his job. So he turned to his second in command and said, ‘you go.’ But the second in command didn’t want to go either, so the assignment tumbled down the line until it came to me.

“I was thinking, this is fantastic! I get to go to Warren! I ran out to JC Penney and got a new suit, thinking that I’d get to hobnob with all of these executives, and they’d see how wonderful I am, and it’s going to make my career path.” Instead, the legendary Deming had Manley at the front of the room with a few others, and was scolding him, saying “Don’t you care about the company? Try harder!”

And now would be a good time to explain that Manley was taking part in Deming’s red bead experiment (see http://blog.deming.org/2014/02/deming-red-bead-experiment/). Manley and others were role-playing workers while Deming role-played a manager—hence the hectoring. The experiment presents the workers with a task: to use a dimpled paddle to remove white beads from a box without removing any red beads. While the workers struggle, the manager measures their success rates, congratulating those who seem to do better and getting tough with those who are doing less well. What the workers and observers come to realize is that there’s no way to succeed. (In Star Trek parlance, it’s the Kobayashi Maru of management training).

Manley recalls that he was on his fourth round as a ‘worker,’ trying and failing at the task, when “I finally thought ‘horse hockey—I’m never going to get only white beads until the red beads are out of the box.’

“I swear that at that just that moment, Dr. Deming smiled at me. He could see that I understood that as a manager it was my job to give workers a system that produced the quality and the output that I was after.

“That was really a turning point in my life. Now I run that experiment with every person I work with. Because as Dr. Deming always said, if you are the manager, you own the system. The workers can only perform as well as the system will allow them to work. It’s important to understand that viscerally.”
**Lean is Not a Life Preserver**

What makes a company a likely candidate to successfully develop a lean culture depends on many variables, but one of them is stability, Manley noted. “Dr. Deming used to say he liked to see a constancy of purpose in an organization. There are a lot of companies that need help transforming and becoming lean thinkers, but lean is not the equivalent of a life preserver that you throw out to somebody who’s drowning.

“I don’t pick companies to work with that are in dire straits. If they’re reorganizing, bankrupt, severely downsizing, or looking to be sold, well, they could benefit from lean thinking—anybody can. But it’s not a good learning environment. The workers are under stress and the company is probably going to have expectations that they can’t meet. Often, the company isn’t going to have the patience that a lean transformation requires. Deming always said, ‘there’s no such thing as instant pudding.’ I don’t think anybody ever listened to him. Learning lean is, as Steven Covey used to say, like the law of the farm: You have to plant, you have to weed, you nurture and tend, and then you reap at the end of the harvest season.”

**Lean is Not Coffee and Cigarettes**

Manley noted that we live in an instant-gratification culture, which doesn’t lend itself for the patience needed to examine and change work behaviors that have been instilled over years or decades. Lean is going to take some time. Unfortunately, there are those who cater to this desire for quick change.

“There’s a consultant out there who advertises something like ‘two-second lean,’ offering quick fixes with some of the lean tools,” Manly said. “I’m sure he’s a fine guy and all. But approach-
and cigarettes for a few weeks, attend the event looking great, and then go back to her usual weight as soon as the event was over. And that’s how a lot of people try to do lean.

“A problem I see in a lot of large companies, like the Detroit Three in the past, is that they believe in lean as long as they’re in trouble. Dr. Deming—he was a devout Episcopalian—used to quote St. Paul in saying [managers should] ‘preach it in-season and out.’ But when it’s out of season, when times are good, a lot of companies don’t preach it. They believe in lean only as long as they’re in trouble—when they can’t fit into that cocktail dress. It’s a very small percentage of people or organizations that, like Toyota, pursue lean in season and out.”

**Lean is Not a Cost-Reduction Scheme**

Manley acknowledged that being a proponent of lean in a state such as Michigan, with its storied automotive and labor history, has its own special challenges—and that the word ‘lean’ itself has been used as a euphemism for cost-cutting and job-cutting by people who should know better.

“First impressions are important. Lean was first introduced to the US auto industry in the 1980s—a tough time. Post-oil embargo, the small, gas-saving imports were starting to get a real foothold, and for anyone with half a brain, the writing was on the wall. So the industry reached for a life-preserver called lean. And we talked about life-preservers.

“At the same time, much of the management at the Big Three had a kind of arrogance—that these pressures were just a blip on the radar and after a while everything would pretty much go back to normal—with them still on top. ‘Even the Yankees don’t go to the World Series every year’—that kind of thinking. On the labor side, the unions had been getting increases in pay and benefits—the cost of which, when the Big Three were ascendant, were simply passed on to the customer, and that weren’t tied to productivity. Once the pressure of the overseas competitors came to bear, that situation changed.

“To be clear, the Big Three didn’t have a wage problem, they had a productivity problem. I tell my MBA students: I can pay you $100 an hour—but only if I’m getting $110 an hour of productivity from you. With market share being lost to the imports, the domestic car companies’ management of that time focused not on productivity but on cost cutting. And that’s not the lean way.

“In TPS there’s an order of priorities: safety, quality, delivery and cost. The mistake back then and the mistake companies in similar straits still make today is to prioritize cost. They jump to the bottom of the list. And what the unions see, behind rhetoric of quality and lean, is a job-reduction scheme.”

**Lean isn’t Copy and Paste**

What’s frustrating to Manley is that this use of lean is anathema in TPS, which has ‘respect for people’ as one of its pillars. “Lean was never used as a job reduction scheme at Toyota,” Man-
ley said, “but rather a productivity-improving system. There, it was safety first, then quality and lead time, delivery time, and once those are handled, the cost issues largely drop out. But that’s not how [the US carmakers] saw things.” Their misuse of lean tools and rhetoric in service of short-sighted cost-savings has affected how the term ‘lean’ itself is understood in the US.

For Manley, this was an example of a danger: copying and pasting a lean solution from one situation to another without truly understanding the differences between them—the danger of thinking “one size fits all.” This mistake came up when the Big Three first made efforts toward moving lean from its Toyota roots to their own domestic production, but it’s still an issue now, as Manley and other consultants work to move lean into other kinds of organizations—outside of automotive or even of manufacturing.

“Lean is not just an automotive trick. It’s an operating system that can be applied anywhere,” Manley said. “Unfortunately, some lean thinkers can’t expand their horizons to include anything except what they did in the auto industry. They run around and try to copy and paste what they did in automotive to other situations, and it doesn’t work. This is something that Toyota severely warned us not to do. Instead, they taught, learn the tools, understand your value stream and your system, and then adapt lean thinking to the new situation. That’s what I try to teach.

“Unfortunately, there are some well-meaning consultants out there who simply try to shoehorn an automotive-based process into whatever kind of place they swoop into. Or they simply teach the tools and don’t really have any systems thinking awareness at all,” Manley said. “‘Two-minute lean,’ my eye.”

Manley noted that of the dozens of businesses the Michigan Lean Consortium has worked with in the past three years, only four were in automotive. “As I said, we’re taking lean to the third generation, and a wider world.” ME