

Lean Thinking was Forged in Similar Economic Times

Toyota Managers Dealt with Financial Challenges Systematically; the Science of Lean

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The current recession is the fifth in my working career. And it is beginning to feel like the worst. I can't imagine that any manager or improvement team member in any industry in any country isn't feeling a bit queasy at this point, as the world economy keeps recessing toward an unknown bottom. Where should we go to calibrate our North Star in times like these, to reassure ourselves that we are on the most promising path? Recently I've found one answer.

In carefully reviewing a new publication from the Lean Enterprise Institute, I've had the opportunity to spend a lot of time with the "fathers of Lean." By this I mean the small band of Japanese line managers who made the original breakthrough to create a Lean enterprise and who were interviewed at length much later about what they did and why. The relevant point for this moment is that a small group of managers achieved a Lean leap in a time of severe stress, making some of their boldest moves during the financial crisis of 1950.

As the Japanese economy entered a steep recession in that year, the Toyota Motor Company ran out of cash, which was tied up in inventory for products customers no longer wanted. The company fell under the control of bankers who chopped the company in two, creating separate firms to divide the marketing and sale functions from the product development and production functions. (These firms were only recombined in 1982 to create the current Toyota Motor Corporation.) Founding President Kiichiro Toyoda (new Presi-

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dent Akio Toyoda's grandfather) was driven out in the process. The pursuit of what became the Toyota Production System, along with the product development, supplier management, and customer support systems, was the creative response to this crisis.

As I started to read these interviews, I expected to discover that Toyota's managers had a clear plan all along. Surely leaders like Taiichi Ohno, Kikuo Suzuki, and Eiji Toyoda knew exactly where they were going and how to get there. I also expected to find a clearly chartered improvement team and a formal program to go with it. (Perhaps "The Way Forward", Toyota's recent tag line in its advertising?)

What I found instead was that a few line managers had some very simple ideas and an extreme sense of urgency: Minimize lead time from order to delivery (to free up scarce cash.) Remove waste from every step in every process (to reduce costs and enhance quality.) Take action now (because there wasn't

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much time.) But what they also had – and this was critical – was a tight scientific discipline. While they did act quickly, they also took the necessary time to document the current state, to state their hypothesis very clearly, to conduct a rigorous experiment, to measure the results, and to reflect on what they had actually achieved, sharing their findings widely.

What they didn't have was a "program" or even a name for the system of scientific discovery they were creating. Indeed, the label "Toyota Production System" was only introduced in 1970 – after the system had been fully invented – to explain it to suppliers. What they also didn't have was a program office or a dedicated improvement team. The fabled Operations Management Consulting Division was introduced at about the same time as the label TPS and only after TPS was deployed across the enterprise. Toyota's remarkable act of creation – based on a scientific process of systematic discovery – was conducted by line

managers as the most important part of their daily work. And – here's the really inspiring part – they did most of their research in midst of a fierce battle for survival.

In learning more about Toyota's achievements in the 1950s as the company struggled to survive, I've gained a new appreciation for the fact that we have no excuses in our current period of chaotic markets and falling demand. Systematic science works wherever it is applied to any process. And it is more and not less useful in the depths of a crisis. The only ingredient that may be lacking today is our determination to respect rigorous science in the current crisis.

And that you can quickly rectify!

