



A lesson in Lean: How to train senior executives

I recently delivered a Lean introduction seminar to a group of senior executives, and I'd like to share some of my observations from this experience.

The training was pretty simple, almost a white belt level. The executives got a general introduction to the tools, played a Lean game and then we finished with their role in change management.

Introduction to the tools

I kept the presentation of the tools pretty high level so as not to bog them down in operational procedure. I needed them to understand that while 20 percent of Lean's success was from the tools, 80 percent was from the culture and their management. They seemed to understand the importance of the tools and of their contribution.

I covered the basics:

- I introduced the concepts of flow and waste, and used the analogy of the drive home to really make the flow point. I asked if they wanted to drive home without the use of brakes or if they wanted to always be stopping and starting or crawling along at a snail's pace. We covered the seven-plus-one wastes with a little humorous vignette for each waste.
- I made sure that everyone knew when something was value adding or just waste. I made sure that they understood the three things about adding value from the customer's perspective: The customer would be willing to pay for that good or service; that good or service must transform something; and it must be done right the first time.
- I covered 5S, mistake proofing and voice of the customer from the perspective of knowing when those tools have been implemented well. I finished with the importance of problem solving — to get at the right root cause and not just put a Band-Aid on the presenting problem.

The Lean game

I introduced the Lean Paper Airplane game. In this game, we had four operators, a plant manager, a timer, an inventory person and a customer. It was the responsibility of the four operators to "manufacture" 30 good paper airplanes in 10 minutes. The first operator had to fold the paper in half along its length. The next operator had to fold the nose section. The third and fourth operators had to fold the wings. The first operator had to ask the inventory person to get them three sheets at a time, once they ran out. The fourth operator had to pass three finished planes to the customer.

The factory manager was allowed to cheer them on, but couldn't do any work. The customer had to inspect the planes, look for defects and put the planes into an accept or reject pile. The timer was responsible for keeping track of the time that it took for a different coloured sheet to go from the inventory pile to the customer.

Don't feel you need to hit your senior management over the heads with everything you know about Lean.

The point of the game isn't how many airplanes they built; it's using Lean tools and problem-solving skills to get at the root cause. I've seen some senior teams get it right away and others have taken up to four attempts at the game. What they learn, through a unique value stream that they look at from start to finish, is that the process is more difficult than they thought. They learn how the Lean tools actually work, as well as the folly of adding people, inspections or overhead. They learn about the value of eliminating a problem instead of just putting a Band-Aid on it.

Their role in change management

After we had a chat about what Lean really means to them and thrashed through their results from the paper airplane game, we talked about the role of senior leaders in change management. Basically, we talked about their roles in Hoshin Kanri:

- "Ho" means direction
- "Shin" means needle
- "Hoshin" means compass
- "Kan" means control or channelling
- "Ri" means reason or logic

I asked them about their key performance indicators (KPIs) and whether they're measurable and actionable. I then introduced Hoshin Kanri by asking them whether the kaizen suggestions that they're getting from the floor co-ordinate with their KPIs. If they do, that's great. If they don't quite align with their KPIs, they might deliver some feedback that will help them to do so. In this way, they'll be playing toss or "catch ball" between the originator of the idea and the senior management team. I then pointed out that each level in the company should be doing this.

In this way, everyone remembers the big goals, but is free to determine how to best reach them.

It is precisely this back and forth that is behind the tremendous success Toyota enjoys. Senior management sets the stretch goals and people on the floor achieve those goals one small step at a time. Suppose that Toyota wants to reduce engine weight by half. It sets that as a stretch goal knowing that people will not achieve this all at once. They know, however, that they will reach that goal eventually. So they keep all suggestions on track, note the progress that's being made and communicate the successes along the way.

I also told these senior managers to celebrate their successes. They should have regular hansei discussions (meet right after a kaizen and talk about it in the team). They should do something to celebrate their successes (and their failures); not something big, but something memorable. They should also have the yokoten discussions where they talk about their accomplishments.

In short, don't feel that you've got to hit your senior management over the heads with everything that you know about Lean. They know that you know your subject matter. Give them some of the most popular tools — those that you'd use in 90 percent of all instances. Keep it light. Play a game, and then discuss how Lean applies to that game. They won't all get it right away, but be patient because they will by the time you're done with them. Emphasize their roles in acquiring and keeping a sustainable Lean culture. Keep it about doing the kaizens and keep it a process, not a project! 🍁

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Question from the floor...

QUESTION: How far back does Lean go, historically speaking? There had to be someone doing "Lean" before Toyota!

ANSWER: You're absolutely right that Lean and its principles go back farther than Toyota, but they're the ones that have embraced Lean above all else. In the 1500s, the Venetian arsenal introduced a floating assembly line for boats. The boats were all constructed from a set of design standards and they moved through standard assembly stations. Even before that, the ancient Chinese had introduced standards and standard work for their boats. By the 1780s, French Army Ordinance had interchangeable parts for weapons and this took off. In 1799, they had automatic production of simple parts, and by 1822, they had complex parts for gun stocks. This was likely the first instance of cellular work design in the west. By 1908, Henry Ford brought about truly interchangeable parts and, in 1913-1914, brought about flow production. The year 1924 saw quick changeovers at Toyoda Loomworks and, by 1937, just-in-time made it into the Toyota Manufacturing Company. By the 1930s, German aircraft engineers introduced takt time. By the 1950s, Taiichi Ohno and Shigeo Shingo introduced kanbans with Taiichi Ohno taking the lead to develop the Toyota Production System in the 1950s and 1960s. From there on in, we can trace Lean's advancement throughout Japan and out into the rest of the world.

Reference: www.lean.org/WhatsLean/Timeline.cfm

From the bookshelf...

Womack on Lean Management (DVD)

I'll recommend just about anything by James Womack simply because he led the MIT research team that coined the term "Lean" to describe Toyota's ground-breaking TPS.

In this DVD, Womack explains how to manage and lead in a Lean management system. He makes the point that Lean or TPS is the logical successor to obsolete "modern management" methods. He notes that most managers and executives are working very hard to fix their existing systems that really are descendants from such systems as those brought about by Sloan in the 1920s. For the most part, it was just plain wrong then, and time hasn't made it any better.

In *Womack on Lean Management*, you'll hear how managers and executives must think and act in new and different ways as part of Lean management. You'll

learn:

- How modern management became the predominant management model, even while being irreparably flawed;
- Why Lean management is a fundamentally different and superior system;
- Why attempts to implement Lean tools in the context of a modern management system are doomed;
- How to manage and lead in a Lean environment and how it differs fundamentally from what you do in a traditional management environment;
- What the three main tools of Lean management are and how to use them effectively; and
- What you can do if you are in an environment that is resistant to change.

