

# Learning To Be LEAN



LEAN Six Sigma requires hands-on, results-oriented training. As a trainer, you have to build a foundation by showing why it matters and how it's relevant. **BY GAIL DUTTON**

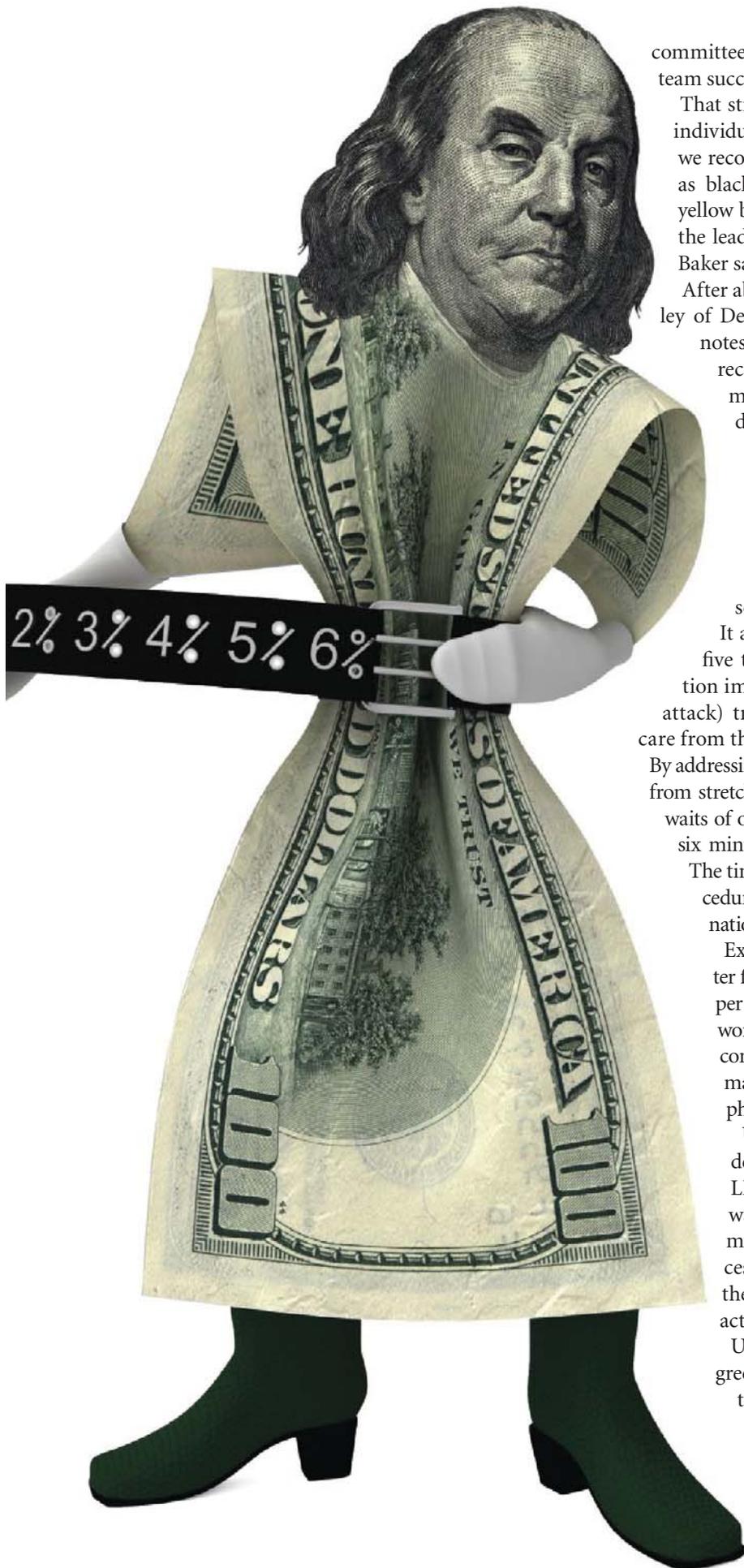
**“IF IT’S NOT ADDING VALUE, ELIMINATE IT,”** SAYS **JUAN AMADOR**, director of LEAN Six Sigma at Underwriters Laboratories (UL). That’s the idea behind LEAN Six Sigma, but although leadership often “gets it,” selling the idea to employees can be challenging.

There are several misconceptions about the approach. When LEAN Six Sigma was introduced at UL, “people thought it was the flavor of the month,” Amador says. To counter that perception, ensure leadership thoroughly understands the concepts and is committed to continuous improvement. The CEO also promised no one would lose his or her job because of it. That increased buy-in, so the process could get the best results possible. UL also had to overcome the perception that LEAN Six Sigma was only for manufacturing environments. “We had to show it worked and translate manufacturing examples to UL processes.”

“The urge to jump to solutions is a common temptation,” says Donald Baker, Ph.D., executive director, The John D. Hromi Center for Quality and Applied Statistics, Rochester Institute of Technology. At Crouse Hospital in Syracuse, NY, “project leaders often complained, ‘I can’t believe it takes so long.’ Yet, when they bring in a LEAN Six Sigma black belt, the project takes off,” according to Michael Jorolemon, DO, senior quality officer for emergency medicine for Crouse Hospital. According to Dr. Baker, who worked with Crouse

Hospital on the project, “The structured improvement process of Define, Measure, Analyze, Improve, and Control (DMAIC) leads to a more holistic, sustainable, and preventive solution.”

Project leaders tend to allocate insufficient time to work on the project outside the training classes, leading to one of the most common implementation mistakes: not establishing an organizational structure to support the program, Dr. Baker says. “This includes selecting a champion to coordinate, assign, and monitor projects, and a steering



committee to establish policies and to evaluate and celebrate team successes.”

That structure should include a method to identify which individuals will be trained at which level. “As a general rule, we recommend that 1 percent of the employees be trained as black belts, 10 percent as green belts, 20 percent as yellow belts, and the remainder as white belts. Training for the leadership team and sponsors also can be added,” Dr. Baker says.

After about a year, “many organizations go through a ‘Valley of Despair,’ and people start pushing back,” Dr. Baker notes. He advises, “Solicit feedback, make course corrections, and then hit the accelerator even harder to make it out of the valley.” It also helps to maintain a database of projects in progress and completed that is open to anyone in the organization, so they can build on prior experiences.

## EVOLUTION

Crouse Hospital used LEAN Six Sigma in house before expanding it to 15 emergency management service (EMS) agencies in five counties in April 2012.

It approached training on a project basis, developing five teams. They focused on prompt care, transportation improvement, handoff, myocardial infarction (heart attack) treatment, and EMS protocols to improve patient care from the field to the catheter lab and hospital.

By addressing the root of the problem, by July, “EMS offload time from stretcher to bed had been cut from 20 minutes (although waits of one to two hours were not atypical) to approximately six minutes, thus freeing EMS crew for other emergencies.”

The time from the door to the beginning of angioplasty procedures has dropped to as few as 20 minutes, beating the national goal of 90 minutes, Dr. Jorolemon says.

Experts from Rochester Institute of Technology’s Center for Excellence Personnel trained personnel for one day per week. “During their time outside class, participants worked on their specific projects. When the projects are complete, they can use the methodology as a project manager and sustain the improvements” and extend the philosophy throughout their own organizations.

UL started its LEAN Six Sigma process in 2005, dedicating two days of a three-day global meeting to LEAN simulations. “At this point,” Amador says, “it was all about awareness. Our leaders chose to use this method, and used value-stream mapping of our processes to show all of our employees around the world the actual processes and say, ‘Can you believe we’re actually doing this?!’”

UL also taught the language of change. That one-day green belt training focused on Kaizen events. “We still teach the language of change, but we are moving to LEAN leadership, so they lead an environment of daily improvement,” Amador says. “Today, nearly half of UL’s 10,000 employees have had some degree of LEAN training.”

At Menlo Worldwide Logistics, “we worked with several methodologies and practices to

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drive continuous improvement between 2000 and 2005,” says Anthony Oliverio, VP for Supply Chain Services. “When the organization got serious about choosing a single methodology, we chose LEAN as our standard operating philosophy. We then defined a change management strategy and determined how to navigate obstacles and set goals in major areas—including some with immediate results.”

Inmar, which operates collaborative commerce networks, began LEAN Six Sigma as an outgrowth of its 5S (sort, set in order, shine, standardize, and sustain) program to make

workplace optimization easy to understand. “We’re a process-intensive business, so it’s commonsense to apply these tools. In our experience, employees are happier when the organization runs well,” notes Steve Dollase, EVP of Strategy.

## EXPECTATIONS

“If you don’t have a goal, you don’t have a plan,” Dollase notes. Inmar sets goals related to net present dollar savings from LEAN. Without metrics, he says, success simply can’t be determined.

At UL, leadership expects continual improvements, but lets employees set the goals. “Our employees are empowered to innovate,” Amador says. As such, employees are encouraged to solve issues daily, “not just for big projects.” When employees decided to cut turnaround time by half, they ended up cutting it by 60 percent.

## BUY-IN

LEAN Six Sigma requires hands-on, results-oriented training. People have to make a difference. As a trainer, you have to build a foundation by showing why it matters and how it’s relevant. One of the challenges is to explain that change is necessary for the continued success of the organization. Success depends upon keeping people energized, and that requires follow-through.

“Top leadership buy-in and transparency are essential,” Oliverio stresses. “Employees understand the process. They’re empowered, so there’s no fear around making changes and recommendations. We weave continuous improvement into the organization’s core value.”

## METRICS

Like other successful LEAN companies, Meno measures its outcomes. “Teams should identify the key objectives in implementing LEAN Six Sigma and how these are to be measured. Data on these key indicators must be gathered and reviewed regularly to identify further opportunities for improvements,” Dr. Baker says. Certified financial improvements are one measure of success. Others include improved customer and employee satisfaction, better turnaround time, higher efficiency, and the ability to work on more projects.

LEAN Six Sigma is continuous process improvement. “It will never be completed because things always change,” Dollase says. “There will be new technology, new clients, a new business environment, etc. The side benefit is that employees start to understand that change is essential. It’s not just something to be endured.” 

## ADAPTING LEAN SIX SIGMA LEARNING DESIGN

*By John Best, Master Champion and LSS Blended Learning Expert, The Quality Group ([www.thequalitygroup.net](http://www.thequalitygroup.net))*

Today’s LEAN Six Sigma (LSS) training professionals are under immense pressure to be more effective and efficient in improving performance and business excellence, often with reduced training budgets. Advances in technology have changed the learning landscape dramatically, allowing for a highly effective model: blended learning.

Innovations such as browser-based solutions, e-learning modules, and interactive project simulations offer new training options. LSS blended learning integrates self-paced online modules, both pre- and post-class, with live hands-on classroom elements to achieve better outcomes, faster, at a lower cost.

The U.S. Department of Defense (DoD) is known for its innovative methods to keep America safe, and protect its “warfighters.” Driven by Dr. Charles Brandon, the director for The Continuous Process Improvement and LEAN Six Sigma (CPI/LSS) Program Office, the DoD has become a recognized LSS training and implementation innovator. In 2011, working with IBM Global Services and The Quality Group, Dr. Brandon implemented the first-ever blended LSS Green Belt learning program, augmenting his traditional live-only training. Says Dr. Brandon, “We are focused every day on finding opportunities to not only increase DoD process efficiencies and effectiveness but to improve the performance of the department as a whole in all Business Mission Areas (BMAs).”

So how does one accomplish the mission of blended learning for LEAN Six Sigma?

1. Create a “pull” system for learning by treating students as adults, providing them learner-centric access to quality e-modules and making them accountable.
2. Enable instructors to thrive as coaches and mentors. A combination of media allows better knowledge transfer, and instructors can greatly decrease time to proficiency.
3. Make it fun, relevant, and hands-on so students experience a value-added, not “time-wasted,” experience. Capstone simulations improve knowledge transfer, resulting in better ROI for your training investment.

Rapid and measurable ROI from LSS initiatives is imperative for success. According to Dr. Rob Golhofer, the IBM lead on the DoD implementation, “The blended Green Belt training program has produced the fastest and highest-impact improvement projects compared to live-only Green Belt training.”

Process improvement is more critical than ever to an organization’s ability to succeed. A blended learning design allows LEAN Six Sigma instructors to add more value by inculcating LSS throughout the organization. Better LSS training increases ROI on actual projects, and is more sustainable over time.