

## **THE LEAN INITIATIVE**

(Taken from a speech from Toyota's Chairman)

"Failure to change is a vice! I want everyone at Toyota to change. At least do not be an obstacle for someone else who wants to change."

-Hiroshi Okuda, Chairman,  
Toyota Motor Corp.

*IMAGINE THE CHAIRMAN OF TOYOTA*, the most successful automotive company in the world, asking everyone in his company to change - to improve their skills and the processes around them. It is quite a challenge. In fact, he asked every supervisor and manager at Toyota to write their annual change plans and also initiated quarterly measures to see they are living up to their plans.

Many North American companies have started Lean initiatives, but very few knew how to sustain their efforts. We get excited about new programs like Lean and Six Sigma, and we often show excellent initial results, but somehow our enthusiasm wanes and we look back on them as passing fads.

Why do we lose our enthusiasm and can we sustain our improvement efforts? I believe we can. I believe we can if you involve all employees in the improvement effort through their own creative ideas. We can get everyone's **buy in**, if we educate employees on the importance of our new initiative and empower them to be responsible for the improvement efforts through their own ideas, not those specific ideas imposed by management.

### **A Brief Look at the History of Management.**

A hundred years ago, young trades people spent many years in apprenticeship, perfecting their skills until they became journeymen. After many years of learning and practicing new skills, they became a full journeyman, able to handle the entire breadth of their profession. There was great variety at work; it was not easy work, but there was a satisfaction to working on the entire process and utilizing the various skills.

Then along came Frederick Taylor and Frank and Lillian Gilbreth, who developed Scientific Management and the Division of Labor. Through their studies, they determined that there was a best way of doing things and then standardized work, asking all workers to follow an exact procedure. The positive result was much greater productivity and quality, and companies like Ford Motor Company acquired enormous wealth.

But work was simplified and became repetitive and boring. Ironically, while people were more productive and were able to produce better products for the consumer, the very process of making those better products became deadly. People were asked to *just do your job*, and *leave your brains at home*.

This dichotomy of leaving your brains at home began to change slowly in Japan, especially at Toyota in the late 1960s as two men - Taiichi Ohno, vice president of production at Toyota, and Dr. Shigeo Shingo, teacher and independent consultant for the company - restudied the work of Taylor, the Gilbreths and Henry Ford and invented the Toyota Production System, also known as Just-In-Time or Lean manufacturing. Two powerful pillars were discovered: one that focused on the elimination of nonvalue-adding wastes and the other on respect for humanity.

While Western industry constantly focused on speeding up the processes with new machines, Toyota stopped and made a significant shift toward the elimination of the nonvalue-adding wastes. Value-adding is converting raw materials to finished goods, or value-adding is doing those things that the customer is willing to pay for. If we would stop for a moment and, with a stop watch, time-out our processes or even our own activities, we might discover that most of the time we are involved in doing nonvalue-adding activities. In fact, we might discover that close to 95 percent of the time we are adding waste, not value.

One day in the late 1960s Ohno said to Dr. Shingo, "We must reduce the set-up time on this punch press from four hours to two hours." Dr. Shingo agreed, and a few days later, Ohno came to Shingo again and said, "Two hours is not good enough, we have to reduce the set-up time to less than 10 minutes." Dr. Shingo then sat and watched for days the change-over of the press and discovered a new science he called SMED (single-minute exchange of die). Shingo was able to reduce virtually all set ups at Toyota to less than 10 minutes, resulting in a 90 percent and higher reduction of inventory.

The second pillar of Toyota's success story is focusing on "respect for humanity," building their employees skills, recognizing the latent talent within each person and that it is management's prime responsibility to find ways to tap into the creativity of their workers. Once again, Toyota went back and looked at the early American suggestion system and found a great tool to get all of their employees involved. What better way is there to give people "respect," then to allow them, to listen to them, to encourage them to implement their own ideas? At one

time, Toyota was getting 50 ideas per employee per year. Recently, Technicolor (Detroit, MI), with 1,800 employees, went from 250 suggestions with 113 implemented in 2001 to over 22,000 ideas with over 12,000 implemented in 2003. ArvinMeritor (Troy, MI) claimed recently that they received 21 ideas per employee last year and saved \$4,285 per idea per employee.