

Practical “Lean” -- Using the Six Steps to Lean Six Sigma

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Implementing Lean Six Sigma is not costly

Falling revenues and changing customer requirements are forcing many companies to look for ways to reduce the workload on current staff while developing long-term solutions. When companies are forced to make reductions, the increase in work on remaining employees frequently results in stress and anxiety causing productivity to suffer.

Long-term solutions might lie in developing new and more-automated systems to handle the work. Some take to shifting from mass production of standard products to small-lot production of customized products, with even greater focus on quality. This often proves to be shortsighted in the long run. However, if a company can omit steps from its design, manufacturing, and servicing processes, as well as fine-tune those that remain, it would be able to deliver better products to customers far faster and at lower cost.

Lean Six Sigma has taken root across Corporate America in the past two years. Companies are using the techniques to analyze and improve tasks ranging from simple processes such as customer credit checks to complex product-design challenges. Lean is a systematic approach to identifying and eliminating waste (non-value added activities) through continuous improvement to allow product flow at the pull of the customer in pursuit of perfection. It focuses on eliminating non-value added activities from a company's processes while streamlining value-added activities.

The traditional Six Sigma Black Belt implementation approach can require millions of dollars in investment, dedication of a firm's best full time resources, and lengthy training. This top-down approach is a major barrier to entry for smaller and mid-sized companies, and it does not need to be. There is an alternative Six Sigma deployment model called the *Six Steps to Lean Six Sigma*. Motorola originally pioneered it and it allows smaller and mid-sized organizations to implement at a cost and pace where they can actually grasp the methodology and achieve benefits, without the significant resource commitment and overhead structure of the Black Belt approach

One of the strengths of the *Six Steps to Lean Six Sigma* is that it involves the entire company. Previous quality programs may have addressed a particular factory operation or only a part of it. The purpose is not to

automate complicated processes, but to "lean out" existing processes by removing unnecessary steps and then fix those that remain. As a people-oriented approach that empowers a team to take action to achieve improvements, lean is the best way to effectively use a company's most valuable resource — its people.

One Size Fits All? -- NOT!

One observation I've made about the Six Sigma implementation process is that the majority of benefits are not always derived from Black Belts - they are generated at the Green and Yellow Belt level. Another observation is that Black Belts and Green/Yellow Belts are interchangeable for about 65% of the organization's Six Sigma opportunities. Using a Yellow Belt approach, embodied in the *Six Steps to Lean Six Sigma*, addresses many of the constraints of smaller and mid-sized companies and allows them to implement at a less costly, more manageable pace.

These organizations become just as technically skilled as their larger company counterparts; in fact, many are outperforming their larger customers in terms of both financial results and cultural transformation.

Six Steps to Lean Six Sigma – How It Works

The following is a brief overview explanation of a Six Steps to Lean Six Sigma deployment and execution process, which I recommend for smaller and mid-sized organizations.

1. It begins with elevating senior management awareness on the procedure and benefits of the Lean Six Sigma process. At this time the strategy and implementation approach are aligned with the organization's strategic business plan, focusing on customer requirements. Also at this step, a Steering Committee is established to create, foster and ensure application of the Lean Six Sigma process through out the organization.
2. Here implementation planning is completed. This includes establishing baseline performance factors, expected performance/financial improvements, communicating program goals, implementation strategies, and developing

training schedules for all employees. Employees and management are brought into the training in natural or functional work groups.

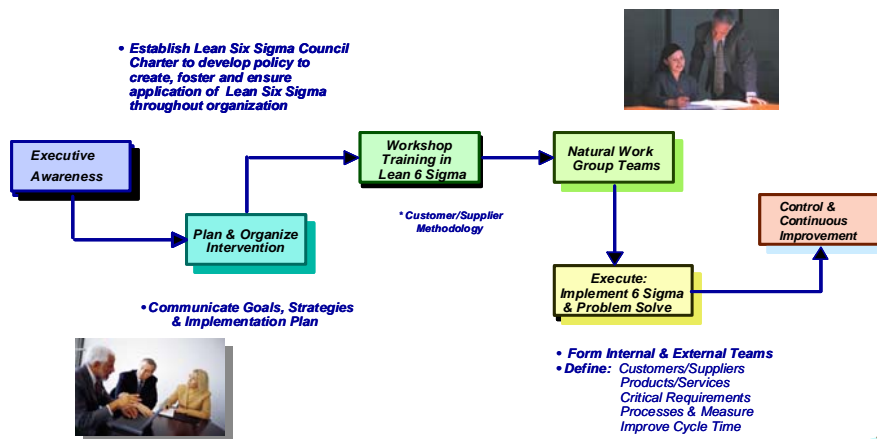
3. In the training, they learn about the *Six Steps to Lean Six Sigma* process, methodology, and tools. This course is designed to help organizations reach their goal of Total Customer Satisfaction through the attainment of reduced cycle time yielding high levels of quality. It does this by showing how functions can increase the extent to which their work meets the expectations of the people they do it for-- their customers.

4. Training and team formation are begun

their critical requirements, define value vs. non-value added activities via process analysis, improve the cycle time by removing defect causing, non-value added tasks, and implement quality performance measures, to assure continuous improvement: kaizen. The team continues this approach focusing on their other products or services for improvement.

6. Later in the progress of the program, certain individuals in the team may be transitioned to the next level of Six Sigma achievement. Some selected team members are developed into Green or Black Belts based on need.

Roadmap To Implementing The Six Steps to Lean Six Sigma



These are the results that Thybar, Inc., of Addison, Illinois, a supplier to the HVAC industry, discovered when it adopted the *Six Steps to Lean Six Sigma* intervention over a year ago. Trane, a major customer of Thybar, was insisting that they adopt the Six Sigma methodology. However, the investment to embrace the traditional Back Belt approach that Trane was taking was too prohibitive for Thybar. The company understood the power of six sigma in eliminating defects but needed a more practical and, economical approach, that all of its employees could learn and apply to improve all processes from "order to cash".

concurrently. In the training employees learn the specific methodology in resolving differences in product/service expectations, so those mistakes, which lead to customer dissatisfaction, can be minimized. Any activity that doesn't add to the market form or function of the product (things for which the customer is willing to pay) is a non-value added activity, or the "wastes" that lean seeks to eliminate. Emphasis is on learning ways of achieving extremely high levels of quality (on the order of 3 to 4 defects per million or Six Sigma) and gives participants a chance to start applying it right away to their own work.

Beginning in January of last year they implemented the *Six Steps to Lean Six Sigma* with all of their employees and management with

significant bottom line results. Each training workshop yielded 25-30 implementable improvement ideas that averaged a 25% reduction in cost and process cycle time. Thybar's president, Bill Evitt, is so convinced of the process that he subsequently implemented it with his other three plants in the U.S.

Using the foregoing approach organizations can accomplish their Lean Six Sigma implementation at a more economical and manageable pace. The number of improvement activities, the levels of education, and the whole deployment and execution approach occur at a suitable rate, using all employees, with a direct link to strategy and results.

5. Upon completion of the training, the natural work group is the yellow belt action team. The team sets about applying the six-step methodology to improve their major product or service. They identify customers, suppliers and

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