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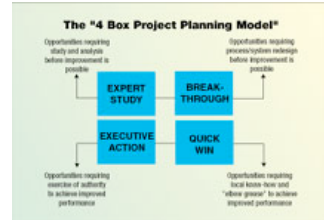
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Features

Six Sigma "Add-ons" Help Companies Make the Leap

Companies looking to improve processes by using Six Sigma can now choose from a variety of complementary strategies to get things underway.



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For a process that has been around for nearly 20 years, Six Sigma itself really has not undergone any significant changes or updates. Still tried and true, many companies find it a reliable and effective way to solve process management problems, and most importantly save money.

Still, there are those out there that are, perhaps, a bit intimidated by this big name tool and the drastic changes it brings; in turn, they eschew delving into such a complex solution. To bring these companies into the fold, a few consulting firms have devised ways for a company to "ease" into Six Sigma.

Seeing the problem before fixing it

Before companies can begin any Six Sigma initiative, they need problem-solving skills to address the difficulties in their organization. Training in problem solving and decision making provides a structured way to solve particular issues or problems. Because of this, Action Management Associates, Inc., Dallas, Texas, a management training company, has developed a training program called the Problem Solving & Decision Making workshop that supplements a company's Six Sigma program, strengthening their problem solving tools and broadening their implementation.

While some companies balk at the amount of money a Six Sigma deployment can cost, Mark Smith, managing director of Action Management, says there are other reasons to first select a problem solving program: ease-of-implementation, robust problem solving tools, and ease-of-use on everyday situations.

- **Ease-of-implementation** Implementing a Six Sigma program can be a huge undertaking for any company. The solution can be simplified by identifying process improvement projects, providing necessary problem solving training, establishing teams to work on the process improvement projects, and getting management to support the efforts by holding regular progress meetings and insisting that the problem solving processes be used.

- **Robust problem solving tools** The problem solving tools used within a Six Sigma program are typically the same "quality tools" that were popularized during the 1980's with Total Quality Management (TQM), where management approaches long-term success through customer satisfaction. TQM requires the participation of all members of an organization in improving processes, products, services, and even the culture in which they work.

- **Ease-of-use** During a Six Sigma implementation, people tend to think that the only time they use those skills is on a large process improvement project. The program from Action Management allows people to use the tool they precisely need in a given situation. This way, people are able to use what they learned when they encounter everyday problems regardless of whether it is part of a large process improvement project or not.

Six Sigma initiatives promote symbiotic relationships

With so many different statistical software to choose from, companies embarking on a Six Sigma project may have difficulty deciding which is the best fit for them. To cut down on the confusion, some Six Sigma consulting firms are offering training in software that they feel best reflects their philosophy and meets the user's needs.

With that, Six Sigma Qualtec, Tempe, Ariz., has revised its course materials to reflect the updates in the latest release of statistical software from Minitab, Inc., State College, Pa. The primary reason for the update, company officials report, is MINITAB Release 14's enhanced ability to graph data gathered during Six Sigma operations. Creating and editing graphs, including multivariate control charts, will be included as part of the training.

Six Sigma Qualtec says it will recommend and resell the software to its clients, making it the first Six Sigma consulting firm to align its training materials with this release. "Six Sigma Qualtec has been a Minitab partner for several years; enabling compatibility between Release 14 and our courseware gives our clients the greater

The 4 Box Approach segments opportunities at a company that is looking to undergo process improvement: "Executive Action" projects can be executed immediately without the need to engage many people in the change process; "Quick Win" projects make fast action possible by employing the people closest to the problem in analyzing and implementing solutions; "Breakthrough" projects require cross-functional stakeholder buy-in for change; and "Expert Study" projects require detailed analysis before action can take place-this is the strike zone for the traditional Six Sigma tools. (Image: Leap Technologies, Inc.)

capability to gain actionable insights from their collected data than ever before," says Lynn Monkelien, Six Sigma Qualtec program manager.

While Six Sigma Qualtec hopes that its training will complement what Minitab's software has to offer, another consulting firm is seeking different avenues by treating its approach as an integrated solution. Six Sigma Consultants, Inc. (SSC), Albuquerque, N.M., has partnered with SigmaFlow, Plano, Texas, a provider of business process analysis software, to provide clients with a software solution that can be easily integrated to enhance Six Sigma training, increase productivity, and sustain project results.

To evaluate projects, Six Sigma practitioners have traditionally had to use a variety of measurement tools, which could inhibit the momentum and sustainability of a project. The SSC/SigmaFlow solution hopes to tie all of the tools together by combining and streamlining training and functionality into one resource.

"We conservatively estimate client resource savings of up to 25% per project in the time value of project savings and time to solve the defect problem," says Greg Brue, SSC president and CEO says. "It's an excellent enhancement in the knowledge transfer process for the classroom."

More info: www.minitab.com, www.sixsigmaco.com

But where should we look?

Six Sigma Qualtec, Tempe, Ariz., a provider of training and implementation services, focuses on the application of Six Sigma, and other related process improvement tools where, when, and how they can, and should, be used. Their Business Process Management (BPM) lets companies define their high-level business processes and establish measurement systems that align the performance of these processes to their critical business objectives. Process improvement efforts then focus on projects that create the greatest positive impact.

"The need to continuously improve processes drove many companies to fund massive implementations of one process improvement tool or another, and train everybody in methods that may or may not be able to drive measurable improvement to the overall business," says Mitch Lawrie, business development executive at Six Sigma Qualtec. Not surprisingly, the results were mixed. While companies recognized that there are many promising tools and methods that will improve their products or services, they needed to deploy these tools in areas of their business where the greatest results can be achieved.

BPM has made this focus possible by using Six Sigma as a powerful tool in designing and implementing process improvement, rather than as a general strategy, where companies have only marginal or compartmentalized success since they don't achieve their initial company-wide goals. Companies more likely to succeed focus on key business processes, not the existing organizational structure, making them able to more readily review the results from their Six Sigma implementation. Their course is designed to "establish customer to business alignment, ensure cross-functional process accountability, and establish metrics to drive customer satisfaction and business performance."

Lawrie points out that a critically important side-effect of BPM is its prioritization and measurement of design and improvement projects, leading to a quicker and greater financial impact. Without these kinds of early measurable results, the support and momentum of change within a company's organization cannot be established and maintained.

Tire giant helps customers help themselves

Goodyear Chemical, a division of The Goodyear Tire & Rubber Company, Akron, Ohio, is helping their customers through their new service organization, Solgenesis, by reducing production costs and improving quality—all while providing compound development and process optimization services.

For a long time, many at Goodyear have been practicing process optimization methods and skills—such as market research, project management, basic quality tools, and statistically designed experiments—which they have since built upon using Six Sigma. They have found that the Six Sigma methodology links these tools more effectively and applies them more rigorously across the entire organization.

Solgenesis can help customers incorporate polymer technology into new products, beating their competition to market with lower costs. Customers then solve their manufacturing productivity problems by maximizing cash flow savings with zero capital investment.

Solgenesis uses custom process modeling and problem-solving tools, including Six Sigma methodologies, to optimize manufacturing, lower overall costs, and maintain ISO certification. Specifically, Six Sigma tools are used to analyze polymer mixing processes. By inputting a customer's raw materials data, equipment parameters, production conditions, and base-line mix protocols into a proprietary mix model, an optimal mix protocol is established, which, in turn, is tested in a non-production environment. A single-batch plant production trial then validates the newly established optimal mix protocol. By simulating mixing processes outside of the actual production environment, Solgenesis makes the mix protocol as effective as possible, with minimal production downtime.

Its applications extend into engineered rubber products, thermoplastics, chewing gum, sporting goods, footwear, latex, asphalt, and healthcare. Solgenesis also offers companies access to their Solution Pilot Plant and Emulsion Pilot Plant facilities, as well as custom services, including process optimization, compound formulation, analytical testing, and custom manufacturing/new product development support.

More info: www.Solgenesis.com

We're on board, but we need changes now

Companies are always looking out for the bottom line; if they see results more quickly, the happier they are with the change process initiated. To increase the speed, flexibility, and engagement of line managers and employees in their Six Sigma effort, organizations look to take an "expanded toolkit" approach.

First, improving processes in different areas needs to be reviewed individually. Variation reduction works in manufacturing, but in R&D much of the inefficiencies exist in the "white spaces" between functions and departments. Since a critical benefit of expanding the Six Sigma toolkit is speed, by matching the right tools and understanding who needs to be engaged early in the change, process project cycle times can be cut in half.

The key to making the transition to an "expanded tool-kit" approach to Six Sigma is having an effective model for identifying and sorting potential projects to match the right tools and resources to the kind of change required. While there are a variety of ways to do this, Leap Technologies, Inc., Chicago, Ill. typically uses a simple "4 Box Project Planning Model" to help leadership teams develop the right portfolio of improvement projects. Each project is then resourced with the appropriate tools so people can accomplish the job. An integral part of a Six Sigma quality initiative, DMAIC (Define, Measure, Analyze, Improve, and Control), remains the core improvement model for every project; however, the amount of time and effort it takes to move through each step of the improvement process is reduced.

"One of the main advantages of adopting an expanded toolkit approach to Six Sigma is the ability to get many more people engaged in the improvement process without the need for weeks and weeks of training in statistics," says John Tucci, SVP of Leap Technologies. "However, companies must be willing to make a bit of a trade-off between the Six Sigma mantra of never making a process change without the statistical data to back the change and the need for speed to respond to the demands of today's business environment."

The application of the core Six Sigma statistical tools does not apply to many projects because the data needed is not available or reliable; plus, poor process performance is often attributable to multiple causes. This expanded toolkit approach develops an exact and effective control plan to ensure sustainability and establish the right measures that can lead to successful application of the statistical tools. This will drive variability out of the process once the new solutions have been installed.

The bottom line = the people

Whatever a company's tactic is when implementing a process improvement plan whether it be honing employees' problem solving skills, evaluating which solutions will make the most financial impact, or devising different levels of problem-solving projects it all comes down to one important common denominator: the employees and their role in the changes.

"In the final analysis, Six Sigma isn't just about facts, data, and statistics, it's about people," says Tucci. "Organizations need to design their Six Sigma initiatives to address both the 'psychology of change' what gets people excited about contributing to the change effort--and the 'science of change'--rigorous analysis and metrics to sustain results from Six Sigma."

Lorraine Joyce

Resources

Action Management Associates, Inc.,
972-386-5611, www.actionm.com
Leap Technologies, Inc., 800-254-6805,
www.actionworkout.com
Six Sigma Qualtec, 800-247-9871, www.ssqi.com

R&D, Reed Business Information, Morris Plains, NJ

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