



Sigma Breakthrough Technologies, Inc.[®]

Leading Six Sigma

www.sbtionline.com



Author: Daniel M. Kutz
President
Sigma Breakthrough Technologies, Inc.

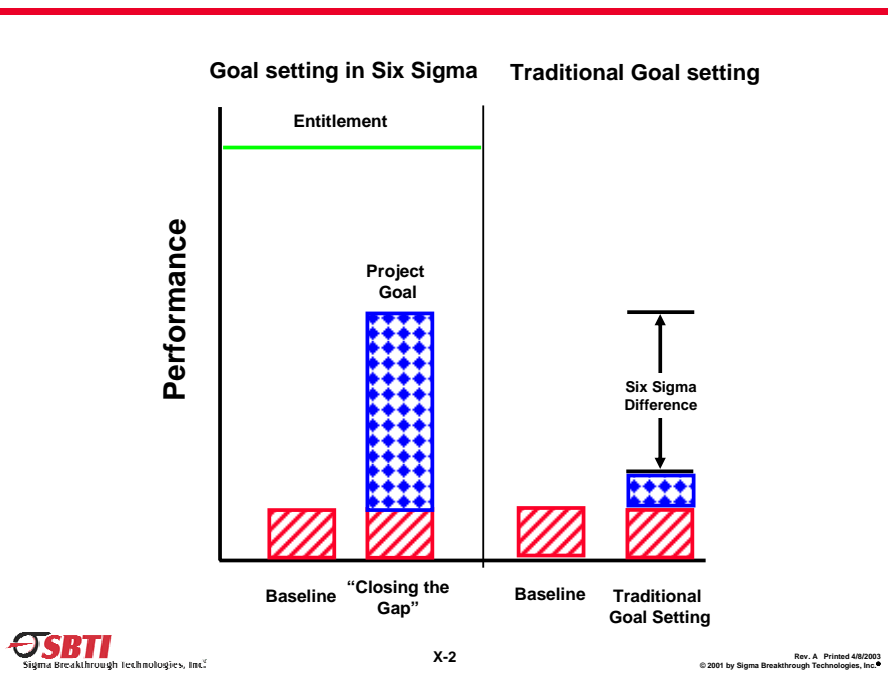


What is Six Sigma?

Six Sigma is a breakthrough process improvement method which delivers tremendous growth and productivity improvements and financial benefit to organizations who apply it systematically and with conviction.

Six Sigma methods reduce problems in business or manufacturing processes through improved measurement and management of these processes. Some example processes include invoicing, payroll, manufacturing assembly or production processes, sourcing of supplies and materials and logistics processes like shipping, receiving, packaging, etc. Six Sigma methods also seek to create new products, new processes, and new services by using a structured, step-by-step methodology in marketing, design and development areas.

To deliver these improvements, process owners measure the “baseline” performance of the key process output measures, establish a statement of the process “entitlement” and then seek to rapidly close the gap between baseline and entitlement through one or more structured, step by step Six Sigma projects.



Each Six Sigma project should have a project charter, usually one page in length documenting the process to be improved, the measures needed to assess progress (baseline, goal, and entitlement is stated for each) and the financial and non-financial benefit of the project to the organization and suppliers and customers. The charter is essential to a successful project because it also assigns accountability for delivering the project to a Champion (the political leader of the project) a Black Belt or Green Belt (the project team leader) and the project team members (usually 3 to 5 people who know the process area well. Leaders of the Six Sigma process in an organization are responsible for choosing the project set and for setting the project and program level goals.

General Six Sigma Project Areas

- **Increase the capacity** of a manufacturing or business process
- **Improve the quality** of a product feature (a dimension or measure)
- **Reduce cycle time** of a quotation, invoice, or delivery to a customer
- **Design a profitable new product** to meet a customer's need in as short an amount of time as possible
- **Re-design an existing product** to improve quality, performance or profitability
- **Design a new business service**, or re-design a poorly performing business service
- **Conduct marketing** studies for business growth
- **Conduct research** to improve our ability to design new products

Six Sigma is started in organizations as a way to significantly improve performance of key processes and deliver financial benefits to customers and owners in a short amount of time. A successful launch of a Six Sigma program is expected to deliver at least ten (10) times the cost of the training and travel required within 18 months of the start of the program. It is also a great way to challenge employees and to find and develop new leaders of an organization. Six Sigma programs that are successful have two key goals: Improve processes to deliver rapid financial benefit and develop a new group of leaders for the organization who are armed with new problem solving and data analysis skills. If you enjoy generating real measurable dollars to the bottom line of your business and enjoy building a new team of leaders in your organization, Six Sigma is a fantastic and fun way to do it!

Leading a Six Sigma process

If you're interested in \$\$ and leadership development, you'll need to know how to make this happen. Fortunately, there is now a lot of valuable experience on how to lead the Six Sigma process. Many companies have already done this, so you will not be the first, and can avoid some problems by putting into practice the methods we use at SBTI to help our clients with the large changes required. Actions necessary for Six Sigma culture change are detailed in the following paragraphs. The tenets of John Kotter of Harvard Business School drive this model and can be found in a book titled Leading Change published by Harvard Press.

Creating a Sense of Urgency^{1,2}

To start a successful culture change, your organization's leadership must create a sense of urgency for change. Usually an executive workshop is needed to clarify the key challenges which MUST be met for the organization to be successful in the future. Leaders need to explain this clearly as part of the communication package of the Six Sigma deployment. We strongly recommend two drivers for this urgency – a culture focus and a business focus.

The culture focus: The culture focus defines how Six Sigma will dovetail with other company initiatives such as Lean Manufacturing / JIT and other continuous improvement initiatives. This culture focus creates positive tension in the organization by placing the Six Sigma program in a position to yield a more competitive company.

The business focus: The business focus gives your organization a business tension in the form of a measurable financial goal or a percentage productivity improvement goal, some of which should be achieved directly by Six Sigma projects. A Six Sigma financial goal should be somewhere between \$250k and \$500k per Black Belt in pre-tax income for the current year. For example, a six percent (6%) annual productivity improvement goal is also an excellent goal, albeit

¹ John Kotter, Leading Change, Harvard Press

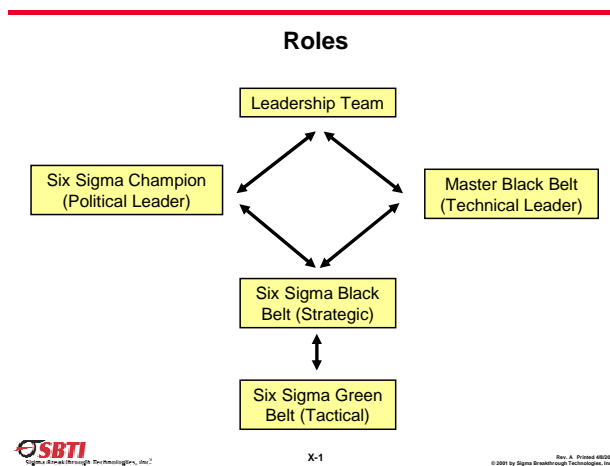
² Sigma Breakthrough Technologies, Inc., Proposal Documents



only a certain percentage of that 6% should come from Six Sigma. Stating a financial goal, say \$15 to \$25 million in pre-tax income improvement per billion dollars in revenue in the current year, is the best way to start the program, with the percentage productivity improvement goal as a driver for all operational programs (i.e., Lean Manufacturing, Six Sigma, etc.)

Creating a Guiding Coalition

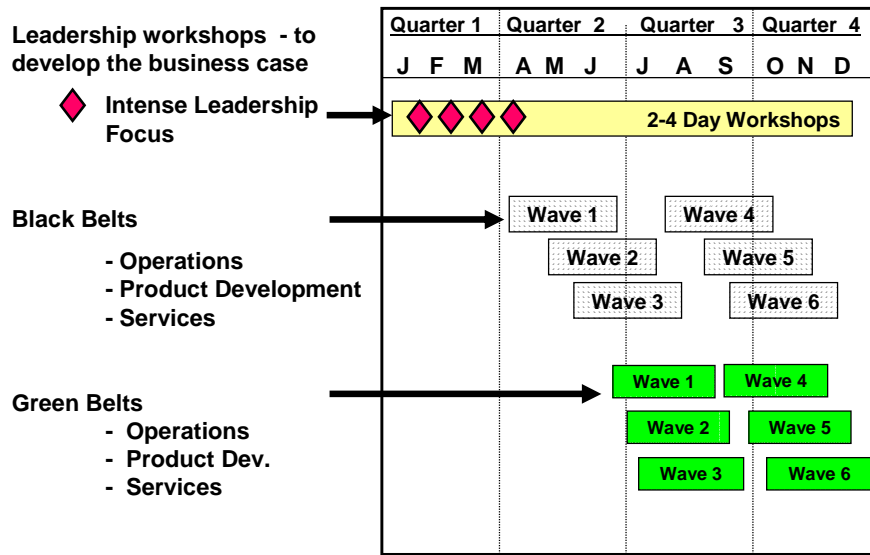
In support of the culture focus, a guiding coalition is created through the Six Sigma Champions and another position, called the Master Black Belts. Six Sigma Champions are essential to the success of the Six Sigma program. Champions ensure that breakthrough projects are identified, tracked and producing results. Therefore, the responsibility for success should be clearly reflected in performance reviews of the Champions. The business leadership teams will develop the list of Champions for their organizations. Master Black Belts provide mentorship to project leaders (usually called Black Belts and Green Belts) and, provide training, project coaching, and help share best practices that are discovered and documented in the Six Sigma projects. Master Black Belts are often referred to as the “Technical Leaders” of a Six Sigma process, and in well run Six Sigma deployments Master Black Belts will replace outside consultants in many areas within one to two years.



In short the beginning (or deployment) of a Six Sigma process in your company can look something like the timeline below³. The first few months are spent establishing a sense of urgency and creating a guiding coalition. This needs to be firmly in place before launching a training effort to train project leaders. If this work is not done, your program will likely struggle and deliver less than optimal results.

³ Sigma Breakthrough Technologies, Inc., Executive Workshop Materials.

Example of a Six Sigma Deployment Plan



X-3

Rev. A. Printed 4/8/2003
© 2001 by Sigma Breakthrough Technologies, Inc.

Approximately six months after the start of the first Black Belt projects, you should be closing projects and have measurable financial results. As an example, one successful client company had a median Black Belt project value of \$380k per year, as measured by their financial controllers, and as tracked to profit and loss statements, quarter by quarter.

International Concerns

Many clients have asked us if these returns are possible in Asia, Latin America, South America and India where wage rates are lower than other parts of the globe. Our experience from working with clients in Mexico, China, India and other lower wage rate environments is that there are many opportunities for financial benefit outside of labor productivity, but some discounting of benefits per project is realistic.

One key to success is the same as in the U.S., Europe or elsewhere around the globe: keep your Financial Controllers directly engaged in the effort of identifying opportunities for financial improvement, selecting specific projects that improve these areas, and certify any benefits through the financial team. Also, remember that a great many of the successful projects we have seen engaged the customer and created new products and services, which deliver increased revenues and profits. While Six Sigma is a proven way to deliver cost reductions, we have never seen cost reduction alone generate radical improvement in a company's financial performance.

A review of your Six Sigma project set, to determine which projects work on customer issues, which work on cost reduction, and which work on new services and products for additional revenue and profit is a great way to tell if you've selected a good set of projects. SBTI clients in China, India, Mexico and Brazil have all delivered solid cost profit improvement through both cost reduction and revenue increasing projects.



Summary

Here are some Do's and Don'ts to keep in mind when leading your Six Sigma program.

Do

- Establish a sense of urgency, created and communicated by leaders of the organization.
 - Explain how Six Sigma fits with other initiatives in the organization
 - Create a business tension by setting clear financial goals for the Six Sigma Program
- Create a "Guiding Coalition" of senior leadership, Champions, and Master Black belts.
- Expect financial results of ten (10) times your investment in training within 18 months of program start
- Use the concept of "Entitlement" to set project goals
- Use clear and simple project charters to establish project accountability
- Hold Champions primarily accountable for project results
- Set aggressive goals!
- Think positive!

Don't

- Work on cost reductions only, make sure you look for revenue increasing projects, through new service and new product designs.
- Assume that lower wage rates will make Six Sigma results low
- Fail to include your Financial team or customers in identifying opportunities and selecting your key projects.
- Set conservative goals that you know you can reach. If you shoot low, you will get low results!
- Find reasons why Six Sigma won't work here!

Finally, remember: The most exciting reason to start a Six Sigma program is to challenge your employees and yourself, and to begin the creation of a new group of future leaders in your organization who will develop excellent problem solving, communication and team leadership skills.

Contact: Kelley Furgason at 1-888-752-7070 & kfurgason@sbtimail.com for further information.

