

# Executive Action Brief

LEAN SIX SIGMA

This brief outlines a simpler and more cost effective roadmap for deploying Lean Six Sigma. Along with a set of guiding principles and easy-to-understand models, the brief provides practical advice for accelerating gains and avoiding common sources of waste in Lean Six Sigma deployments. Whether considering the adoption of Lean Six Sigma or searching for ways to improve the return on an existing deployment, the "Lean Path" to Lean Six Sigma offers valuable insights.

## The "Lean Path" to Lean Six Sigma Deployment

**How organizations can deploy this powerhouse improvement method faster, better and at lower cost.**

By **Rick Tucci** President, Leap Technologies, Inc.  
and **Bob Crescenzi** Vice President Business Excellence, Standard Register.

### Highlights:

#### The Need for a Different Path

#### Five Big Wastes in Lean Six Sigma Deployment

#### The "Lean Approach" to Lean Six Sigma

#### The 4-Box Project Map

#### Building a "Lean Factory" for Lean Six Sigma Deployment

#### Deploying to Deliver Bigger Returns from the Start

In a popularly quoted speech in 1962, John F. Kennedy said "We choose to go to the moon in this decade and do the other things, not because they are easy but because they are hard." In this decade, many CEO's may feel they are facing a no less bold and risky decision in deploying Lean Six Sigma. The decision to "go for it" usually entails big upfront investment, a steep learning curve and long wait for results. Nonetheless, standing on the sidelines runs the risk of falling behind the competition and being second guessed by stakeholders.

Does the path to Lean Six Sigma results need to be a "moon shot" decision and undertaking? Our research and experience suggests that CEOs and their organizations (*particularly mid-sized businesses, healthcare and government*) have the opportunity to reap the rewards of Lean Six Sigma without the "bet your career" cost, risk and headaches that often accompany it.

This Action Brief outlines the case for an alternative path to achieving Lean Six Sigma results along with key principles, strategies and practical advice for getting it done faster, at less expense and with fewer headaches.

### The Need for a Different Path

The long-term benefits of hardwiring the discipline and tools of Lean Six Sigma into any organization are hard to argue against. From early Six Sigma adopters such as the General Electric Company to service industry pioneers like Bank of America, more and more organizations are reporting impressive results from Lean Six Sigma.

Our review of successful deployments indicates that superior Lean Six Sigma returns (*versus prior experiments in continuous improvement such as Total Quality Management and reengineering*) are less a function of new tools and methods and more the result of senior leaders recognizing the importance of treating continuous improvement as a permanent business function that, as such, requires infrastructure investment and should be expected to earn its keep from the start.

So why haven't more CEO's - *particularly downstream from the big name companies* - jumped on the bandwagon? Two practical factors make the decision to deploy Lean Six Sigma more than a "no-brainer" for leaders - budget and staffing.

Based on conventional deployment formulas, Lean Six Sigma is expensive to install and relatively slow in delivering payback. The biggest upfront

hurdle is the time and cost associated with training Belts and establishing infrastructure.

While the proliferation of consultants and training providers along with greater availability of alternative delivery methods has reduced fees, the down stroke investment for launching a conventional Lean Six Sigma deployment is simply out of reach for many organizations.

Perhaps an even greater hurdle than out of pocket cost is the staffing barrier. It's very tough to staff full-time Black Belt roles in downsized organizations where the daily challenge is to just keep the organization running.

Hiring "ready to go" Black Belts from outside is a potential solution. But this approach is often accompanied with its own problems, including internal "tissue rejection" by those doing the work and long learning curves for newcomer Black Belts getting acclimated to the organization and its culture.

For existing converts to Lean Six Sigma, the tendency is to write off these start-up barriers as simply the price of admission for getting traction and going beyond the "flavor of the month" syndrome that has doomed many continuous improvement initiatives in the past. In fact, a recent survey conducted by *iSixSigma Magazine* suggests that organizations reporting the best returns on Lean Six Sigma are ones investing the biggest dollars in deployment.

But does it have to be that way? Despite the compelling results, conventional Lean Six Sigma deployment strategies are ironically characterized by waste and performance variation - *the antithesis of what this powerhouse continuous improvement strategy promises.*

**Here are a few revealing (though rarely reported) statistics on waste and variation in Lean Six Sigma deployments:**

- Close to 50% of organizations making a significant investment in Lean Six Sigma, complete fewer than 10 projects in the first two years of deployment. Yet these same organizations train 5 to 10 times the number of people that actually participate on those projects.

- Less than 15% of Green Belts trained in Lean Sigma methods (*requiring up to 80 hours of classroom time*) actually complete a project.
- Close to 40% of Black Belt training is devoted to teaching Design of Experiments (DOE), yet a majority of Black Belts report never applying the method to an actual project.
- More than half of the organizations investing in Lean Six Sigma project tracking software say the ROI did not justify the installation cost.
- Lean Six Sigma Deployment Leaders cite high turnover and replacement of Black Belts as a top five concern.
- Despite a stated goal of changing the culture, employee participation in Lean Six Sigma projects averages less than 10% of the workforce.

These statistics, while sobering, do not refute the long-term benefits of deploying Lean Six Sigma. For companies with deep pockets and large management and professional staffs, these are acceptable costs for executing a large-scale change initiative. But for the thousands of organizations that have yet to "get into the Lean Six Sigma game", these findings call for consideration of a different deployment game plan - *one that can still deliver the benefits of Lean Six Sigma, while leaving the waste behind.*

## Five Big Wastes in Lean Six Sigma Deployment

Lean Six Sigma provides a straight forward and elegant prescription for improving performance in any organization: Start with customer requirements; eliminate process delays and any activities that don't add value; design products to delight customers and redesign processes to eliminate defects; and, finally sustain it all with effective measurement and corrective action.

Curiously, most approaches to Lean Six Sigma deployment violate many, if not all, of these prime directives. The result is a "hidden factory" of waste created in the wake of implementing the very methodology designed to eliminate such excesses.

Superior Lean Six Sigma returns (*versus prior experiments in continuous improvement such as Total Quality Management and reengineering*) are less a function of new tools and methods and more the result of senior leaders recognizing the importance of treating continuous improvement as a permanent business function.



Less than 15% of Green Belts trained in Lean Sigma methods (requiring up to 80 hours of classroom time) actually complete a project.



More than half of the organizations investing in Lean Six Sigma project tracking software say the ROI did not justify the installation cost.



What are the common areas of waste in Lean Six Sigma deployment?

**1. Waste of Over-Training**

“Build to demand” is the mantra for Lean production. Yet when it comes to training employees on Lean Six Sigma methods and tools, the standard is “teach it all upfront just-in-case you need it”. Most Black and Green Belt training curriculums are modeled on a college or university lecture-driven course of study condensed into week long classes. These certification courses teach a deep body of knowledge organized around the Six Sigma DMAIC (*Define, Measure, Analyze, Improve and Control*) project management model.

This approach creates waste in a number ways. First is the waste of re-learning. As is the case with physical inventory, knowledge that “sits” or is rarely applied, is value lost and subject to obsolescence. In the case of Belt training, over-training creates a big demand for post-training class expert coaching and support, which adds costs and lengthens project cycle times.

Second is the waste that comes from the need to fill classes with bodies to justify the expense of delivering the training. The result is often more Belts than viable projects leading to “make work” projects and idle resources.

**2. Waste of Over-Analysis**

If you were to think of performance improvement opportunities as customers to be served, the goal from a Lean perspective is to respond to each opportunity with just the right resources for the need. However, the norm in Lean Six Sigma deployments, is to treat all problems as equally complex.

Data, charts and statistical analyses often substitute for clear thinking, creativity and common sense. As a seasoned Black Belt commented, “I think we are so enamored with the tools that we do statistical analyses not because it’s needed, but because we know how to do it.” The end result of this “one size fits all” problem-solving mentality is longer than required project cycle times and improvement opportunities left on the table because Belts are too busy “running down the data”.

**3. Waste of Idle-Resources**

Even at the peak of its popularity in the late 1980’s companies using TQM (*Total Quality Management*) rarely achieved direct employee participation rates of more than 10 to 15 percent. Unfortunately, Lean Six Sigma has done no better. In fact, the percentage of employees actually participating on Lean Six Sigma project teams is usually less than five percent of the total workforce.

While Lean Six Sigma makes up for some of this

**Five Big Wastes in Lean Six Sigma Deployment**

- 1 Waste of Over-Training**  
 Lean Six Sigma training follows a “teach it all upfront just-in-case you need it approach” resulting in low-retention and high re-learning costs.
- 2 Waste of Over-Analysis**  
 Treating all problems as equally complex, requiring data gathering and statistical analysis, results in longer than required project cycle times as well as improvement opportunities left on the table because Belts are too busy “running down the data”.
- 3 Waste of Idle-Resources**  
 Lean Six Sigma has made it harder, not easier, for rank and file employees to participate in continuous improvement due to its complex language and lengthy training requirements.
- 4 Waste of Project Waiting Time**  
 Waiting for project resources, data and decisions can make the most expensive resource in Lean Six Sigma deployments - Black Belts - the least productive on a return on investment basis.
- 5 Waste of Complexity and Over-Investment**  
 Supporting processes and tools (such as project tracking software, communications programs, Champion training and the like) often overwhelm attention on the primary objective: Improve and sustain better performance.

engagement deficit in better project selection and tracking of results, the method has made it harder, not easier, for rank and file employees to participate in continuous improvement due to its complex language and lengthy training requirements.

#### 4. Waste of Project Waiting Time

Most Black Belts will tell you that the biggest drain on their productivity is wait time: Waiting for project resources; waiting for data; waiting for decisions, etc. As a result, the most expensive resource in Lean Six Sigma deployments - *the Black Belt* - is often the least productive on a return on investment basis. Waiting time produces fewer project completions per Black Belt and in many cases, Black Belt frustration, which in turn creates costly turn-over.

#### 5. Waste of Complexity and Over-Investment

A popular handbook for deploying Lean Six Sigma lists over two hundred steps to establishing a robust infrastructure for Lean Six Sigma launch. While supporting processes and tools (*such as project tracking software, communications programs, Champion training and the like*) have utility, they often overwhelm attention on the primary objective: Improve and sustain better performance.

By the third year of deployment, many organizations have abandoned their initial Lean Six Sigma infrastructure and moved to a leaner, more responsive one. The cost of under-utilized infrastructure is rarely accounted for in deployments but it has contributed to the perception that Lean Six Sigma is not affordable for many organizations.

A recent survey of organizations deploying Lean Six Sigma reported that most organizations achieve break even return on investment within two years. But neither these results, nor other published reports of Lean Six Sigma success, take into account the significant “hidden factory” costs that accompany the conventional path to Lean Six Sigma deployment.

### The “Lean Approach” to Lean Six Sigma

Attend any of the public conferences featuring war stories from veteran Lean Six Sigma Deployment

Leaders and, more than likely, you will hear about modifications and innovations made to get a bigger return on Lean Six Sigma. For the most part, these changes are responses to the wastes built into the initial deployment strategies.

What’s surprising is that so few of these changes and lessons learned have found their way back into start-up deployment strategies. The same mistakes appear to be made over and over again. It is almost as if organizations are required to go through this costly rite of passage to prove their commitment to the religion of the method. But as Lean Six Sigma has passed from the deep-pocket organizations to the more frugal and resource constrained, there is more pressure to get it done for less.

Unfortunately, investing less but staying with the traditional deployment model rarely works. For example, sending a few people to Black Belt training and then expecting them to perform miracles, but without the assistance of expert coaches, usually yields confusion, frustration and paltry returns. The more effective solution is to take a “clean sheet approach” that rethinks and redesigns the current conventions of Lean Six Sigma deployment.

The starting point for a better, faster approach to Lean Six Sigma deployment is recognizing a fundamental truth about performance improvement: **Improvements don’t happen in a single, orderly path.** In fact, Lean Six Sigma operates much like a multi-product production environment. The products being produced are improvement projects that respond to a wide range of stakeholder requirements. The inputs vary, as do the time, effort and resources needed to produce a solution.

For these reasons, operating with a “one size fits all” approach to executing Lean Six Sigma improvement projects, often results in either under or over-investment of resources; unnecessary delays; inadequate solutions; and, frustration for those doing the work.

### The 4-Box Project Map

Applying Lean thinking to the “one size fits all” problem in Lean Six Sigma deployments

What is surprising is that so few of the changes and lessons learned about Lean Six Sigma have found their way back into start-up deployment strategies.



The starting point for a better, faster approach to Lean Six Sigma deployment is recognizing a fundamental truth about performance improvement: Improvements don't happen is a single, orderly path.



starts with a fundamental question: *What factors distinguish one improvement project from another with respect to processing requirements?*

Two factors stand out immediately. First is problem complexity and risk. The question here is: *How clear is the line of sight to a solution? Are there facts and data to tell us what needs to improve?*

The second critical factor is level of engagement required. The question here is: *Who and how many people need to be involved to analyze and implement a solution?* Putting these two factors together yields a useful way to categorize improvement projects in order to target the best resources and tools for the job to be done.

The 4-Box Project Map, depicted on page 6, highlights four improvement project domains each with different outputs, inputs and processing requirements.

### **Leadership Decision Domain**

One of the biggest hidden wastes in organizations is leadership decisions-in-waiting. Most often these are policy, people assignment and budget decisions that bottleneck improvement. Incorporating a disciplined process as well as specific tools for making, communicating and enforcing leadership decisions is essential to maintaining momentum in Lean Six Sigma deployments.

In the 4 Box model, Leadership Decisions can be thought of as mini-DMAIC projects that launch anytime the following conditions exist:

- Action required to improve performance is absolutely clear and specific.
- Experience and data indicate there is low risk/high gain potential to making a decision.
- Not making a decision will slow or block other improvement efforts and diminish motivation.

By executing Leadership Decision “projects”, leaders model a disciplined approach to assessing problems and taking action on opportunities, while they run the business. For this reason, success in the Leadership Decision domain requires more than just herding leaders

through Champion training on Lean Six Sigma concepts, or asking them to check-off the approval box on Lean Six Sigma projects. Breakthroughs in performance result when leaders are compelled to make decisions that speed project completion and remove barriers that only those with authority can make happen.

### **Rapid Action Domain**

A great deal of rhetoric in Lean Six Sigma is devoted to the importance of changing the culture. However, outside of the big company deployments that have taken a saturation training approach (*at great expense*), most Lean Six Sigma deployments have done little to move the needle on employee engagement in continuous improvement.

This doesn't imply that employee participation should be elevated to be an end objective of Lean Six Sigma. The value of the Rapid Action domain is in creating a productive outlet for the large field of opportunities for performance improvement that are best addressed by tapping the know-how and experience of employees closest to the action.

Rapid Action Projects are characterized by the following conditions:

- Action required to improve performance is relatively clear, but how to get it done is not.
- Experience and data indicate there are small risks/high gain potential in taking focused and fast improvement action.
- There is the ability to enlist support for change from employees doing the work.

What makes the Rapid Action domain attractive in Lean Six Sigma deployments is the big return over time that can be gained from enlisting hundreds, or even thousands, of employees to think about and take ownership for improving performance. What makes it challenging, and why most deployments show little action in this domain, is that the conventional DMAIC project model, as well as the skill base of Black and Green Belts, are not responsive to the success requirements in this domain.

Tapping employee know-how and experience requires a disciplined, but less technical approach than classic DMAIC projects. While the addition of Kaizen Events and 5S campaigns from the

Lean toolbox have helped, neither are sufficient for capturing the full potential for gains from the Rapid Action domain.

**Breakthrough Domain**

While it certainly can be argued that a key objective of Lean Six Sigma is achieving breakthroughs in process performance, the reality is that true breakthrough projects usually occupy a limited space in the Lean Six Sigma project portfolio. As characterized in the 4-Box Project Map, the Breakthrough domain addresses opportunities for radically rethinking how work is done, how products are produced and how information is exchanged across organization lines.

More specifically, Breakthrough Projects respond to the following conditions:

- Achieving significant improvement will require action on many levels and across many functions of the organization.
- Observation, performance data and benchmark comparisons, make it clear that incremental change to the existing process or system will not solve the problem or fully leverage the opportunity.
- There is executive level urgency and high likelihood that stakeholder support for real innovation can be secured.

The Breakthrough domain is often under-addressed in Lean Six Sigma deployments because successful execution of Breakthrough Projects requires much more than the application of

statistical analysis. Fundamental redesign of core processes, organization roles and responsibilities as well as supporting systems is more dependent on managing politics and stimulating creative thinking than presenting facts and data. Nonetheless, success in this domain is critical to elevating Lean Six Sigma from a “quality program on steroids” to a vehicle for transformational change.

**Expert Study Domain**

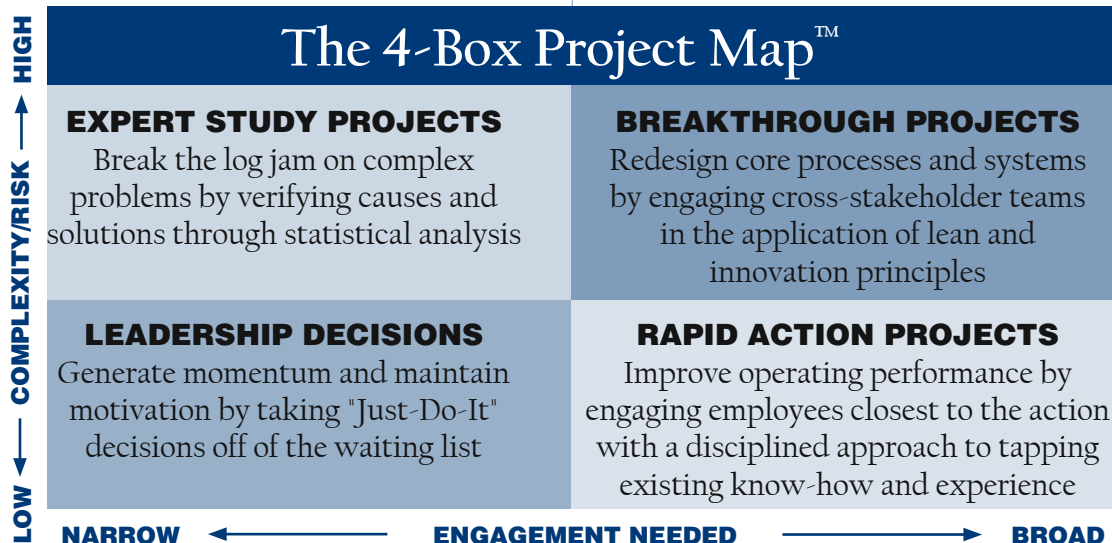
The Expert Study domain is the project space most associated with Lean Six Sigma deployments. It is also where the biggest waste in resource allocation often occurs.

Expert Study Projects respond to situations where:

- Prior improvement actions have not been sufficient to optimize performance.
- Existing performance data (*both Y and Xs*) are not capable of pinpointing why problems exist.
- The lack of consistent and irrefutable data has created conflicting opinions on what to do.

In the right applications, Expert Study Projects will break the logjam on solving persistent problems by presenting data based, statistically sound analyses for making decisions. In the wrong applications (*where one of the other three domains is a better fit*), Expert Study Projects extend project cycle times and waste time in re-proving the obvious or trying to persuade

Instead of adding more training (*such as Lean or Innovation tools*) on top of the traditional DMAIC curriculum, a more effective and “Lean” approach is to tailor the DMAIC discipline to different project needs.



The 4-Box Project Map disaggregates Lean Six Sigma deployment from a single channel, rigid process for continuous improvement to a much more responsive, agile and robust approach to managing a portfolio of improvement processes.



through rational analysis when engagement and dialogue are more important to moving forward.

In summary, the 4-Box Project Map disaggregates Lean Six Sigma deployment from a single channel, rigid process for continuous improvement to a much more responsive, agile and robust approach to managing a portfolio of improvement processes. Admittedly, other domain labels and project categorization models can be applied to achieve similar ends. The value of shifting to the 4-Box Project Map, or some other variant of this approach, is the door it opens to faster, less wasteful deployment with no loss in rigor.

### **Building a “Lean Factory” for Lean Six Sigma Deployment**

In their landmark book, *The Machine That Changed the World*, Jim Womack, Dan Jones and Daniel Roos describe the transition from mass production to Lean operations across the global automotive industry. In many ways, Lean Six Sigma deployment needs to undergo a similar transformation to remain competitive and grow.

How does a “Lean Factory” approach to deploying Lean Six Sigma differ from today’s model? Outlined below are five key Lean Deployment Strategies and the benefits realized when incorporated into Lean Six Sigma.

#### **Lean Deployment Strategy #1: Just-In-Time Training and Project Launch**

Long set-up times to production are an anathema to Lean operations. Yet, in conventional Lean Six Sigma deployment models, quick set-up seems to be a foreign concept. Between long lead times for completing Champion and Belt training, as well as delays in recruiting and orienting team members, it is not uncommon for Lean Six Sigma deployments to take four to six months just to reach project launch. The biggest bottleneck is a passive training model.

Champions and Belts are exposed to volumes of theory in the classroom - *much of which is not immediately applicable to early project assignments*. It is not unlike building up inventories of raw materials ahead of demand. The result is early obsolescence and slow start-up speed as the

receiving docks get overloaded (*or in this case, over-taxed brain cells*).

In the Lean deployment model, projects pull the demand for training and teams on a just-as-needed basis. Projects are selected and teams recruited ahead of training. Training in Lean Six Sigma concepts and tools is tailored to the need (*versus teach it all, just-in-case*) and packaged in action learning formats. Belts and project participants learn concepts and tools as they complete their projects.

This just-in-time approach to training and project launch reduces end-to-end project cycle times and downtime in the classroom. To make it happen, however, organizations need to organize training to fit the different demands highlighted by the 4-Box Project Map.

#### **Lean Deployment Strategy #2: Multiple Toolsets, Standard Project Management Discipline**

An appealing aspect of Six Sigma is the potential it offers for institutionalizing a standard, customer-focused and fact-based approach to performance improvement. But when discipline becomes dogma, as is often the case in Six Sigma deployments, loss of speed, flexibility and agility can outweigh the benefits of standardization.

As is the rule in the multi-product factory, the solution to the standardization vs. customization dilemma is separating where value is added by having one versus the other. In Lean Six Sigma deployments, there is no reason why organizations can’t have both a standard discipline for managing projects and a flexible toolkit to efficiently meet different improvement needs.

The solution to the problem is not additive. Instead of adding more training (*such as Lean or Innovation tools*) on top of the traditional DMAIC curriculum, a more effective and “Lean” approach is to tailor the DMAIC discipline to different project needs. For example, using the 4-Box Project Map introduced earlier, Rapid Action Projects follow the DMAIC discipline but put less emphasis on the Define/Measure/Analyze steps. Greater emphasis is given to the Improve and Control steps because the improvement needed is already defined *but how to get it done and how to sustain*

*results is not.* For this reason, there is high value in teaching Rapid Action Teams the concept of failure mode and effects analysis (FMEA) but much less value for instruction in Design of Experiments or other advanced statistical tools.

Conversely, for Expert Study Teams, defining customer requirements, establishing effective measurement systems and analyzing root cause are essential, so teaching these advanced tools for these tasks makes sense.

In the case of Breakthrough Teams, a heavy focus on Lean process design wrapped into the DMAIC steps make sense given the mandate for these teams to take a clean sheet approach to improving process performance.

In the Lean multi-product factory, different production lines operate under the same roof and share resources. Different tools and methods are used based on the product, yet universal standards (such as 5S or Source Quality Control) are applied across production lines to improve total performance and make it easier to share resources.

Lean Six Sigma deployments can operate in much the same way and reap significant benefits in reduced project cycle times (*no delays due to application of the wrong tool*) and more productive project teams (*from better matching of capabilities to needs*).

### **Lean Deployment Strategy #3: Step-Ladder Belt Development**

Perhaps the most under-reported expense in deploying Lean Six Sigma is Black Belt turnover and Green Belt drop-out. Although most organizations position the Black Belt role as a developmental step for high potentials, the reality is that many Black Belts are assigned to the role on the basis of accommodation - *i.e., managers trying to transfer a problem performer or simply slotting the most available or least essential member of their team*. This is particularly true in organizations that don't have the means to backfill Black Belt positions.

On the other hand, when the best and brightest are chosen for Black Belt roles they often become targets for external search firms. "Black Belt Wanted" has become a growth segment in the talent transfer industry.

With Green Belts, there is a more straightforward lack of return on investment problem. As noted earlier, the track record for Green Belt success leading Lean Six Sigma projects is poor. In larger organizations, the small percentage of learning transfer at the Green Belt level is often written off as a cost of changing the culture. For smaller organizations, the loss is harder to bury. In either case, it doesn't have to be the rule.

The answer to a better return on Belt investment is to borrow a page from the Lean factory playbook: *Improve quality upstream to increase downstream value*. In recruiting and training Belts, it is very difficult to predict success. That's why a step-ladder approach to Belt development makes good sense. Instead of anointing candidates as Black or Green Belts ahead of performance, adopting a "quality at each step of production" approach places every Belt candidate in the same starting blocks.

The first hurdle for any Belt is to prove his or her ability to lead an improvement team. Whether destined to become a Master Black Belt or a one project Green Belt, an individual's ability to lead a relatively simple Rapid Action Project is a more telling indicator of future potential than the ability to pass a post-training examination on statistical theories.

In the Step-Ladder Belt Development Model, training and project assignments are staggered from relatively simple to more complex. All Belts start by learning how to lead a Rapid Action Project. Success on Rapid Action Projects is the prerequisite to leading Breakthrough and Expert Study Projects. Candidates who don't demonstrate the desire or aptitude for project leadership are not promoted to the next level. The benefit of this approach over the conventional Belt training model is significant: Three days of training and a 60 to 90 day cycle time to project completion versus up to four weeks or more of training and eight to 10 months or more *before knowing if the investment in a Belt has paid off*.

The first hurdle for any Belt is to prove his or her ability to lead a team.





Instead of adding more training (such as Lean or Innovation tools) on top of the traditional DMAIC curriculum, a more effective and “Lean” approach is to tailor the DMAIC discipline to different project needs.



#### **Lean Deployment Strategy #4: Sprint Timeframes for Project Completion**

Time is the enemy in any Lean operation. When the product sits, no value is added, yet overhead and opportunity costs continue to accrue. In Lean Six Sigma deployments, project waiting time is another under-reported problem with undesirable consequences, including: Slow pull-through of results; over-staffing of Black Belts; and, disinterest by employees to participate on project teams.

While rarely tracked and reported, most Lean Six Sigma Deployment Leaders acknowledge that project cycle time averages between eight to 10 months in the first two years of deployment. Project cycle times can and often do improve over time as Black Belts gain experience and learn the ropes. However, these gains are usually the result of Black Belts going around the biggest causes of project delay (*gathering data and waiting for team members to complete assignments*) by doing more project work themselves.

The problem with these heroics is the same as with any substitute process added to compensate for a flaw in production: While the end result may improve (*in this case, a faster project cycle time*), the total cost of deployment increases because more and more full-time Belts are needed to meet savings targets.

The Lean manufacturing revolution was ignited by challenging the prevailing paradigms around production cycle times. Making a breakthrough in Lean Six Sigma project cycle times requires a similar leap in thinking. In the Lean deployment model the standard moves from eight to 10 months to complete projects to 60 to 90 days as the target for completing all projects.

Why 60 to 90 days as the yardstick for project completion? The reason is that motivation to change is perishable - *particularly for people doing the work who, unlike Black Belts, aren't paid to make improvements*. Leap Technologies' research with over 4500 improvement teams consistently shows that projects that extend beyond 60 to 90 days inevitably require more expert support, have lower scores in terms of team member satisfaction and produce smaller ROIs. And, as is true in any factory operation, when project

work-in-process is slow moving or is start and stop, there are more errors and more waste.

How can Lean Six Sigma projects be completed in sprint timeframes and still produce sustainable results? The key is effective chartering and prelaunch planning of projects. The first step is identifying improvement requirements and change readiness. This is where 4-Box Project Mapping pays big dividends. Understanding the “change domain” of a project before launch provides the insight needed to determine what needs to be done to achieve the results desired and what resources are best for the task. With this data in hand, challenging, but achievable sprint milestones can be set for each project team.

For example, the target for the Rapid Action Project Team is to create and implement solutions within 60 days. For the Expert Study Team, the 60 to 90-day target is to design and verify solutions with implementation to follow (*perhaps by a Rapid Action Team*).

Shifting projects from marathon-like to sprint timeframes, changes the tempo and energy level of Lean Six Sigma deployments. With sprint projects, more people can be engaged without over-taxing the organization. In addition, there is a reduced likelihood of project team fatigue and frustration.

#### **Lean Deployment Strategy #5: Engaged Leadership from Start to Finish**

In an era where nearly anything can be outsourced, lines of authority and responsibility can easily blur, creating problems in accountability and ownership for results. In Lean Six Sigma deployments, the outsourcing of projects to Belts often has the unintended consequence of undermining management responsibility for improvement. Part of the problem is language. As Belts emerge from training, they are often prone to confuse managers with complex concepts Belts are still learning for themselves.

A conventional solution is “Champion Training” or circulation of leaders through Green Belt training. But these strategies, in addition to being costly and time consuming, rarely close the leadership engagement gap that cause Lean Six Sigma deployments to operate as add-on versus

integrated functions of the organization.

In the Lean factory, “Going to Gemba (*the workplace*)” is a daily leadership discipline. Only by seeing the actual problems in the actual place where they happen can managers be properly informed to support removal of those problems.

The challenge in Lean Six Sigma deployments is defining the “Gemba of Improvement Projects”. Too often, managers’ participation in Lean Six Sigma projects is limited to toll gate reviews - *somewhat sterile and often boring reports on project activities*. What’s missing are simple ways to engage managers where their involvement has leadership leverage - *doing those things that can’t be delegated and have a multiplier impact on deployment results*.

In the Lean deployment model, leadership roles shift from passive reviewers to active integrators between improvement projects and the realities of running the business. The first place for leveraging leadership involvement is project selection. Rather than limiting the focus to finding projects that lend themselves to statistical analysis, in the Lean deployment leadership teams are challenged to look at the entire field of improvement opportunities and then prioritize projects based on potential impact and readiness for change.

This activity is crucial for “level loading” Lean Six Sigma projects to balance strategic priorities with current demands of running the business. In many cases, the most important outcome of this “full field” project selection approach are decisions to sunset current or planned projects that are judged to be of low value, which frees up resources for executing higher value projects at sprint speed.

The second leverage point for leaders is at project completion. Too often Lean Six Sigma deployments “fumble the ball at the goal line” by not paying more attention to the transition from project outcomes to sustainable performance improvement.

The most important of these transition points is clarifying and cementing clear roles and responsibilities for sustaining results after performance improvements have been installed. Also important is the role leaders must play in

encouraging transfer of knowledge and best practices across the organization. Finally, leaders must not miss the opportunity to build enthusiasm and maintain momentum by recognizing employee contributions, both team and individual.

Making effective transitions from project completion to ongoing process management don’t happen by chance. Leaders need to do more than just show up. In the best Lean Six Sigma deployments, leaders use project completions as a tool for “Getting back to Gemba” and connecting project results to ongoing operations.

Taken as a whole, the five Lean Deployment Strategies outlined provide a platform for planning and executing a Lean Six Sigma deployment that can deliver fast results at investment levels any organization can afford.

## Deploying to Deliver Bigger Returns from the Start

Imagine an improvement effort that pays back start-up costs within four to six months of launch; delivers a 5x return on investment after one year; and, is operating at a sustainable 10x return on investment within two years. It’s not fantasy. In fact, it’s the norm for organizations that follow the “Lean Path” to Lean Six Sigma deployment.

Outlined below is a three-stage deployment plan for installing Lean Six Sigma down a faster and more cost-effective path to results. The LAUNCH/ EXPAND/ HARDWIRE approach is scalable to fit deployments in organizations with 500 or fewer employees to large-scale, multi-organization installations. It is also flexible to match the differences in improvement portfolios across industries.

### LAUNCH STAGE: The First Four to Six Months

Lean Six Sigma deployments following the Lean Path start fast and frugally. The goal is to target a manageable number of improvement opportunities and then, move down the learning curve quickly to capture early results. The strategy minimizes upfront infrastructure investment and avoids lots of fanfare in favor

Shifting projects from marathon-like to sprint timeframes, changes the tempo and energy level of Lean Six Sigma deployments.



In the Lean deployment model, leadership roles shift from passive reviewers to active integrators between improvement activities and the realities of running the business.



of clearing the path for quick wins and broad engagement.

Key actions in the Launch Stage are:

**Readiness and Scope Assessment**

As opposed to “pushing production”, Lean Path deployment aims where there is existing demand. Scope assessment is no more complicated than answering the following questions:

- Is there an executive leader (or leaders) ready to support team-based improvement action in their organization?
- What is the need for better results (the Big “Y” goal)?
- How broad is the scope of improvement (the field of “x” factors)?
- What is the internal capacity to populate improvement teams for 60 to 90 day projects?
- What level of funding can be committed to support training and coaching?

The answers to these questions shape the agenda and structure participation in a leadership event that will “jumpstart” the Lean Six Sigma initiative into action.

**Leadership Jumpstart**

The starting point for achieving fast results

from Lean Six Sigma is engaged leadership. The Leadership Jumpstart Event (typically, a day to day and a half meeting) brings together sponsors, stakeholders and Belt candidates to plan the launch of initial Lean Six Sigma projects.

What’s different about Jumpstart Events versus conventional project planning meetings is focus and engagement.

Jumpstart Events guide expanded leadership teams through a disciplined process of identifying and prioritizing improvement opportunities linked to key performance targets - not a list of ad-hoc or pet project ideas. The team uses 4-Box Project thinking to define the portfolio of priority improvements that are both critical to achieving targets and within the scope of the organization’s improvement capacity. Based on this analysis, project charters and team rosters are created.

The end product of the Launch Stage Jumpstart Event is a focused plan for launching Rapid Action Project Teams and making Leadership Decisions that will gain ground quickly on the target goal. Other priority opportunities (Breakthrough and Expert Study Projects) are “banked” for future launch. This “start with the foothills” approach (much like starting up a Lean production line) emphasizes the importance of getting down the experience curve quickly to build confidence and create the foundation for tackling more complex projects.

**The “Lean Factory” for Lean Six Sigma Deployment**

- 1 Just-In-Time Training and Project Launch**  
Belts and project participants learn concepts and tools as they complete their projects. The goal is to reduce the time from knowledge acquisition to knowledge application.
- 2 Multiple Toolsets, Standard Project Management Discipline**  
Tailor the DMAIC discipline and selection of tools to different project needs using the 4-Box Project Map.
- 3 Step-Ladder Belt Development**  
Instead of anointing candidates as Black or Green Belts ahead of performance, a “quality at each step of production” approach places every Belt candidate in the same starting blocks where the first hurdle is to demonstrate the ability to lead a team.
- 4 Sprint Timeframes for Project Completion**  
Move the standard for project completion from eight to 10 months to 60 to 90 days to increase engagement, reduce fatigue and speed cycles of learning.
- 5 Engaged Leadership from Start to Finish**  
Shift the role of leaders from passive project reviewers to active integrators between improvement activities and the realities of running the business.

## Just-In-Time Champion and Belt Training

The focus on quick wins in the Launch Stage facilitates rapid ramp-up of project leaders. In contrast to conventional Lean Six Sigma training, there is no pressure to teach all of the tools at once. Instead the focus is on teaching “first wave” Belts the basics of Lean Six Sigma thinking and then developing hands-on capability to lead a Rapid Action Project Team using the DMAIC discipline, but with a simplified tool set.

Champion training is oriented to equipping leaders with skills and tools to model Lean Six Sigma thinking in daily operations and support project teams with effective coaching and recognition. The result is culture shaping through top-down behavior and action.

## Execute Rapid Action Projects and Leadership Decisions

The faster you get to productive team activity, the sooner learning takes place and results begin to flow. In Lean Path deployment, the goal is to minimize the time between the decision to launch and training of Belts, to the actual start-up of teams.

In the Launch Stage, Rapid Action Teams are operational within 10 days of Belt training. Within another 10 days, these teams are already identifying and, in many cases, implementing solutions.

This fast-start approach is made possible by applying two principles from the Lean factory playbook. First, reduce team set-up time by having Champions and Belts develop team charters prior to launch that define clear improvement targets, establish baseline performance measures and identify the field of issues or causes to be addressed. The nature of Rapid Action Team Projects (*known problems attacked with local knowledge and experience*) lends itself to this accelerated DMA pre-work, leaving the heavy lifting of innovating, implementing and controlling performance to the team.

Accelerated team start-up is also helped by using an action learning model for running team meetings. Much like “kitting” of tools and parts in the Lean factory, Belts are equipped with team kits

that include tool guides, job aides, supplies and the like. The goal is to take the delay, rework and variation out of team meetings and allow Belts to focus their full attention on leading their teams in tackling the assignment.

Operating with focused charters and supported with team meeting toolkits, Rapid Action Teams are typically able to identify, test and implement between five to ten action plans within 60 days - *accomplishing as much or more than a conventional first wave Six Sigma project team in a fraction of the time.*

Another critical ingredient to this accelerated team process is supportive leadership. Sponsors/Champions play a key role during the Launch Stage by responding quickly to barriers “pushed up” by Rapid Action Teams. In most cases, these barriers are delays in decision making and resistance to change by managers that are sitting on the sidelines waiting to see whether or not Lean Six Sigma is just another program of the month.

By supporting teams with quick decisions and coaching resistant managers, Champions not only ensure team success, they also signal to the organization in visible ways that Lean Six Sigma is for real and is a safe zone for breaking away from past, unproductive practices.

## Listen, Learn and Leverage (L3) Meeting

The launch stage is the “live practice run” for demonstrating the benefits of Lean Six Sigma deployment - *both bottom line and cultural*. That’s why it’s important for the finish to be as strong as the start. In the Lean Path deployment, the vehicle for achieving a strong finish is the Listen, Learn and Leverage or “L3” Meeting.

Modeled on the after-action review pioneered in the military and later adapted for use in Lean operations, the L3 Meeting brings Lean Six Sigma “soldiers, officers and the commander” together to review results, capture learning and recognize contributions.

L3 Meetings close the loop on project team actions and set the stage for launching the next wave of teams. In the Launch Stage, the

Operating with focused charters and supported with team meeting toolkits, Rapid Action Teams are typically able to identify, test and implement between five to ten action plans within 60 days - *accomplishing as much or more than a conventional first wave Six Sigma project team in a fraction of the time.*



There is no substitute for hands on experience when it comes to executing complex projects. It is wishful thinking to expect inexperienced Belts to effectively and efficiently execute more complex projects based on classroom training alone.



L3 Meeting also serves as a key checkpoint for making adjustments to the deployment plan to improve future results. This accelerated deployment learning cycle - *90 days versus nine months or more in the case of a conventional Lean Six Sigma deployment* - is a big competitive advantage of the Lean Path deployment alternative.

### **EXPANSION STAGE: Months Four to 12**

The Expansion Stage of Lean Path deployments produces the opportunity to replicate the fast-track pattern established in the Launch Stage and expand capability to take on the other domains of the improvement portfolio - *i.e., Breakthrough and Expert Study Projects*. The strategy is to maintain momentum by launching more Rapid Action Projects to capitalize on Launch Stage experience, while selectively launching more complex projects to gain new experience at minimal risk.

Key actions in the Expansion Stage are:

#### **Launch Next Wave Rapid Action Projects and Execute More Leadership Decisions**

Another hidden loss factor in Lean Six Sigma deployments is failure to replicate solutions across the organization. The tendency is to declare victory at project completion and assume by publishing a solution or labeling it as best practice, other areas of the organization where it applies will make it their own.

Unfortunately, organizational and human behavior doesn't work this way. As a result, Lean Six Sigma solutions are often under-utilized and subject to reinvention or duplication as deployment expands.

Rapid Action Teams, with their focused assignments and simple toolset, are ideally suited for quickly expanding deployment down already proven, high-return paths. The most obvious path is replicating solutions in other locations and work units. The key here is using Rapid Action Teams to engage other work areas to take a proven solution from the Launch Stage and make it work in a different environment.

Another high pay-off path for expansion with Rapid Action Teams is to attack next level challenges related to initial improvement

targets. It's rare that any improvement opportunity is completely won with a one attempt. That's why Launch Stage Rapid Action Teams, as part of their charters, identify "what's next to be done" which provide a fresh inventory of opportunities for chartering Expansion Stage teams.

As more Rapid Action Teams launch, more frontline employees are productively engaged, converting their experience and know-how into sustainable improvements. Just as important, more managers are enlisted in Champion roles and get the opportunity to both learn Lean Six Sigma thinking by working with teams they sponsor and by responding quickly and decisively to barriers.

#### **Just-In-Time Training in Breakthrough and Expert Study Tools**

There is no substitute for hands on experience when it comes to executing complex projects. It is wishful thinking to expect inexperienced Belts to effectively and efficiently execute more complex projects based on classroom training alone. As noted previously, this is a major cause of project delay and high external mentoring/coaching costs in conventional Six Sigma deployments.

In Lean Path Deployment, the long learning curve and inefficient use of resources on more complex projects is overcome by employing a "see-learn-do" approach to training Belts on Breakthrough and Expert Study Project tools and leadership skills.

High priority Breakthrough and Expert Study Projects are targeted for launch in the Expansion Stage to provide a learning ground for Belts that have demonstrated project leadership capability on Rapid Action Teams. These demonstration projects also leverage the use of external consultant resources or experienced Back Belts already on the payroll and increase the ability to achieve fast results while training more Belts.

Inexperienced Belts participate on Breakthrough or Expert Study demonstration projects as team members to see and learn the tools in a live setting. Given the same 60 to 90 day fast-cycle approach to completing these projects, Belts can quickly matriculate from operating as participants to leading their own Breakthrough or Expert Study Project.

Training in these more complex tool sets is similarly structured to the Rapid Action “team-kit” approach. Belts are equipped with meeting guides organized on the DMAIC platform and with support materials that reduce their preparation time. The net result: Higher success rates and project results that only more experienced Belts might be expected to deliver.

## Execute High Priority Breakthrough and Expert Study Projects

During the Expansion Stage, it is critical to select the right Breakthrough and Expert Study Projects. These projects require more resources to execute; typically challenge deep rooted and unproductive paradigms or beliefs within the leadership team of the organization; and, will likely result in structural changes in the organization and reallocation of budget and other resources.

Lean Six Sigma deployments easily become over-extended and can over-tax the improvement capacity of the organization when too many of these complex, cross-functional issues are loaded into the project mix. In Lean Path deployment, the strategy is “less is more and bigger is better” when it comes to selecting Breakthrough and Expert Study Projects.

Instead of over-loading the plate with projects just to give Belts the opportunity to use newly learned statistical tools and earn their certificates, Expansion Stage Breakthrough and Expert Study Projects are directed at the handful of BHAG (“big, huge, audacious, & gnarly”) opportunities. These opportunities cross organization lines, are usually politically charged and have large dollar investments in capital and operating costs in the balance.

Successfully executing a few of these “home run” opportunities provides a much better return on investment in Breakthrough and Expert Study Projects versus applying these tools to “base hit” opportunities better attacked with Rapid Action Teams.

In addition, the psychological impact on people in the organization is much more likely to be one of “This Lean Six Sigma stuff is great!” versus “This is a big waste of time and money and isn’t addressing the big problems”.

## Maintain L3 Meeting Discipline

One of the more difficult disciplines in any Lean Six Sigma deployment is maintaining leadership attention. The pace in most organizations today will often out run even the Lean Path deployment model. That’s why the discipline of L3 Meetings is so important. It mitigates the risk that leaders will move on the next big thing and leave Lean Six Sigma for the staff to run.

Scheduling L3 Meetings at the start of each Expansion Stage wave of projects places a marker in leaders’ calendars never more than 60 to 90 days out that says, “Here is your chance to motivate the troops and put the next burning platform on the table.”

Maintaining L3 discipline also provides a motivational lift for project teams by signaling there is a clear finish line and an “open microphone” for communicating up to leaders on important issues often buried in the day-to-day rush of running the organization.

## HARDWIRE STAGE: Year Two and Beyond

What does it take to move a Lean Six Sigma deployment from another improvement project office to an integrated, core business function of the organization? Unfortunately, many Deployment Leaders are seduced into equating Lean Six Sigma success with the size of their staffs and budgets, as well as the number of bells and whistles added to the program.

After a year or two, many Lean Six Sigma deployments exhibit characteristics of bureaucracies: Pre-occupied with fighting with line executives for Belt candidates; getting compliance on reporting project activities and results into software systems; and, continuing to sell and put the right spin on the approach to senior management.

In the Lean Path deployment, the Hardwire Stage is more about function than form. The goal is to move toward a more seamless integration between the daily routine of running the organization and the discipline of making sustainable improvements. The strategy is to make a few key infrastructure investments that make it easier to access Lean Six Sigma tools and

---

Unfortunately, many Deployment Leaders are seduced into equating success with size of their staffs and budgets as well as the number of bells and whistles added to the program.

---

When Lean Six Sigma becomes the process for identifying, prioritizing and managing all performance improvement efforts across functions and layers of the organization, it has truly arrived.



methods across the organization, yet at the same time, harder to avoid their application wherever justified.

Key actions in the Hardwire Stage are:

**Build Master Coach Capability**

A fair amount of mythology and misconception surrounds the concept of the Master Black Belt in Lean Six Sigma. In some cases, the title reflects the number training days completed and examinations passed. In other cases, it is the number of projects completed that show application of advanced statistical tools. Whichever the criterion, what is not always clear is the value-add this role brings to Lean Six Sigma deployments.

In Lean Path deployment, the “Master” role is reserved for individuals that are full-time staff, skilled and dedicated to expanding effective application of the entire Lean Six Sigma toolkit. However, these Master Coaches are not classroom fixtures. They manage a portfolio of clients inside the organization helping leaders achieve their goals using Lean Six Sigma methods.

What’s different about the Master Coach versus the traditional Master Black Belt is their breadth of capability and job tenure. Master Coaches provide stability and continuity to the deployment. They cut across organization lines in their assignments to both capture new learning and spread best practices. They train leaders, Belts and rank and file employees. They

co-lead high profile, complex projects to ensure success.

By year two in Lean Path deployment, a key decision to be made is how many and who to promote into the Master Coach role. Adhering to the wisdom that “less is more and longer is better” turns out to be the best selection strategy. The return on investment horizon for Master Coaches is a minimum of three years and even better at five years tenure. One longer tenured, highly qualified Master Coach is worth much more than a revolving room full of technically smart, but experience limited Master Black Belts.

**Integrate Leadership Jumpstart and L3 Meeting into the Strategic Planning and Budgeting Process.**

At the end of the day, the biggest difference between Lean Six Sigma deployments that never go beyond the status of another improvement project program to one that evolves into a strategic function of the organization is *alignment*. When Lean Six Sigma becomes the process for identifying, prioritizing and managing all performance improvement efforts across functions and layers of the organization, it has truly arrived.

Making this a reality, however, requires more than Deployment Leaders getting a seat at the CEO’s conference table. Hardwiring requires that the discipline of systematically reviewing all improvement opportunities and prioritizing them against strategic objectives and resource capacity becomes the standard practice for leaders across the organization. The path for accomplishing

## The “Lean Path” Deployment Plan for Lean Six Sigma

LAUNCH	EXPAND	HARDWIRE
<b>First 4 to 6 Months</b>	<b>Months 4 to 12</b>	<b>Year Two and Beyond</b>
Readiness and Scope Assessment Leadership Jumpstart Just-in-Time Champion & Belt Training Execute Rapid Action Projects and Leadership Decisions Listen, Learn & Leverage (L <sup>3</sup> ) Meeting	Launch Next Wave of Rapid Action Projects and Execute More Leadership Decisions Just-in-Time Training in Breakthrough/Expert Study Tools Execute High Priority Breakthrough/Expert Study Projects Maintain L <sup>3</sup> Meeting Discipline	Build Master Coach Capability Integrate Leadership Jumpstart and L <sup>3</sup> Meetings into Strategic Planning & Budgeting Process Complete Supporting Infrastructure Investment Repeat the Expand Stage

this requires integration of Lean Six Sigma (through vehicles such as Leadership Jumpstart Events and L3 Meetings) into the goal setting and resource allocation processes of the organization (annual performance planning and budgeting processes).

This is not as daunting a task as it sounds, provided there is an agreement among top leaders to give up some functional control in return for a more cross-functional and need-based prioritization and funding process to support improvement projects.

The benefits of moving to a consolidated and aligned approach to improvement project planning and budgeting are two-fold: First, Lean Six Sigma projects are more realistically resourced and supported because they are chosen in the context of other improvement efforts operating in the organization; and second, the process of taking projects off the table to free up resources is out in the open and becomes less of a tug of war because no one is excused from the process of vetting their projects against strategic objectives and resource availability.

### **Complete Supporting Infrastructure investment**

While the goal in Lean Path deployment is to keep the infrastructure lean and agile, there is a business case to be made for a few additional infrastructure investments beyond the essentials of a Master Coach staff, just-in-time training curriculum and a deployment planning office. The two biggest leverage points for investment are leadership training and knowledge sharing.

Leadership training to support Lean Six Sigma is not the classic Champion training normally delivered as part of conventional Lean Six Sigma deployments - i.e., heavy doses of statistical theory and project toll gate management.

A better return is earned by investing in training that improves leaders' capabilities to lead their work units using key Lean Six Sigma concepts including: Establishing leading performance indicators to detect problems and anticipate opportunities; creating an improvement agenda and weekly discipline for tracking progress; 'one-meeting' problem resolution using "DMAIC Lite" thinking and tools; and, sustaining performance

through effective process controls and process owners.

Delivery of this type of leadership training can be accomplished over time as Lean Six Sigma expands across the organization. This training should be integrated into the organization's formal leadership development process and become a key experience for new managers.

Many options exist for establishing a knowledge sharing system, from high-end proprietary software systems to simple use of internal websites and off-the-shelf software programs. However, any knowledge sharing system, no matter the sophistication level, is only as good as the data going in. Deployment Leaders often make the mistake of investing in a system ahead of demand. When Belts spend more time key-stroking and less time leading projects, these systems can actually undermine versus enhance productivity and sharing.

Nonetheless as the deployment matures, putting a robust and user-friendly system for tracking results and sharing learning is essential to making Lean Six Sigma more reflexive and part of running the organization.

### **Taking Lean Six Sigma "To the Moon and Back"**

President Kennedy's challenge to the U.S. Space Exploration Program to land man on the moon and return safely to earth spurred a revolution in thinking and execution about manned space flight. The race to the moon was ultimately won by challenging the existing conventions and paradigms of those who had paved the early path.

In much the same way, the next generation of Lean Six Sigma adopters must be willing to challenge conventional wisdom and practices in forging a faster and better path for reaping the results of this unarguably, powerful methodology for continuous improvement. While no plan is without limitations, the Lean Path to Lean Six Sigma deployment provides a practical and affordable alternative for organizations looking to buy "a leaner cut" of the methodology that delivers bigger and faster results.

### **About Leap Technologies, Inc.**

Since 1993, Leap Technologies has worked with organizations across the globe to speed results through engagement-based improvement strategies. Organizations like Burger King, BASF, Cott Beverages, Health Partners the IRS and Wyeth among more than 250 clients, have turned to Leap Technologies to add speed and results to their improvement initiatives. For organizations looking to deploy Lean Six Sigma for the first time, Leap Technologies rapid implementation strategy offers a cost-effective way to get results, without wasted effort and unnecessary overhead expense. For organizations already deploying Lean Six Sigma, Leap Technologies suite of tools workshops can dramatically improve Belt productivity and overall initiative return.

### **About the Authors**



Rick Tucci is President of Leap Technologies and developer of the firm's

Rapid Lean Six Sigma product line, which provides a faster and higher return approach to deploying Lean Six Sigma. Rick has worked with leaders across a broad range of industries to add speed and improve results from Lean Six Sigma deployment.



Bob Crescenzi is Vice President for Business Excellence at Standard

Register, a Fortune 500 Services Company headquartered in Dayton, Ohio. Bob has directed the deployment of the firm's innovative and highly successful approach to Lean Six Sigma which features the application of multiple toolsets to reduce waste and improve Belt productivity.

To comment on or discuss this article, please email



Rick Tucci at [rtucci@actionworkout.com](mailto:rtucci@actionworkout.com) and Bob Crescenzi at [bob.crescenzi@gmail.com](mailto:bob.crescenzi@gmail.com)

For more information, visit [www.actionworkout.com](http://www.actionworkout.com) or call (800) 254-6805

Speed to Action and Results - Simplicity - Teamwork and Partnership with Clients