Mentoring as a Lean Six Sigma Enabler

USING RESULTS-ORIENTED MENTORING TO BOOST SELF-SUFFICIENCY AND ROI





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Suzanne was a newly appointed Vice President of Quality and Process Improvement for her company. She was excited by the appointment, having been promoted from a position as Director of Operations. Suzanne's company had deployed Lean Six Sigma (LSS) about three years ago and the deployment had gone well. In the early days, the company's brand new Black Belts were being mentored by consultants and had run up some impressive numbers in terms of cost reductions and improved metrics in customer service. There were fewer issues with quality, too. Suzanne's predecessor had moved on to be the Senior Vice President of Operations and had made a real impression on the Board of Directors, which, in no small measure, was due to the success of the LSS program. Suzanne was a firm believer in the LSS methodology and, as an LSS champion for Operations, had set the example by being among the company's first certified Black Belts. Three years have passed since the deployment started, and the program was still alive in the company, but it seemed the latest projects were not delivering the impressive benefits that they had seen early on. Additionally, projects seemed to take much longer to close than they did in the early days. There were plenty of volunteers for the Black Belt and Green Belt programs. However, it seemed that more of the training candidates were out fishing for projects rather than having projects assigned based on the goals of the business.

Suzanne had met with her new boss, the CEO, during her first week in the new position. As they discussed Suzanne's role, he gave her some guidance on how the LSS program needed to shift this year. He told her, "We need to reenergize the program this year. Suzanne, we had great success to date using Lean Six Sigma to reduce costs, but the main focus of the company is shifting toward reducing cycle times for product development and enabling developmental programs to finish on schedule and budget. I would also like to see Lean Six Sigma efforts help the 'front end' of the business to accelerate the sales process."

During the meeting, the CEO also spoke of the need for the LSS program to become more self-sufficient . The CEO summarily stated, "Listen, Suzanne, it is time that we learn how to make sure the continuous improvement program is aligned with the business if it is going to remain viable."

After the meeting with the CEO, Suzanne went back to her office and considered what she had been told. She thought about the great practitioners that the company had generated over the last two years. There were a few Black Belts from the early training classes that had achieved superstar status and were looking to expand on their LSS journey. They had been successful completing their own projects, but how could she really capitalize on their leadership and technical skills?

As Suzanne thought about the group of superstars, the thought occurred to her that enhancing the program's ability to mentor newly trained practitioners could play a big part in reenergizing and refocusing the company's Lean Six Sigma program.

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Suzanne's situation is not uncommon. Many companies have had initial success with Lean Six Sigma deployments, only to find that they did not meet the leaders' expectations after the initial phase. There are several places to examine how a deployment evolves: alignment with strategic goals, project selection, infrastructure, selecting the right people to become involved and so forth. Yet one key area frequently overlooked is the importance of using practitioner mentoring programs as a means to reenergize a program and drive the kind of ongoing project accomplishments that support the enterprise's needs.

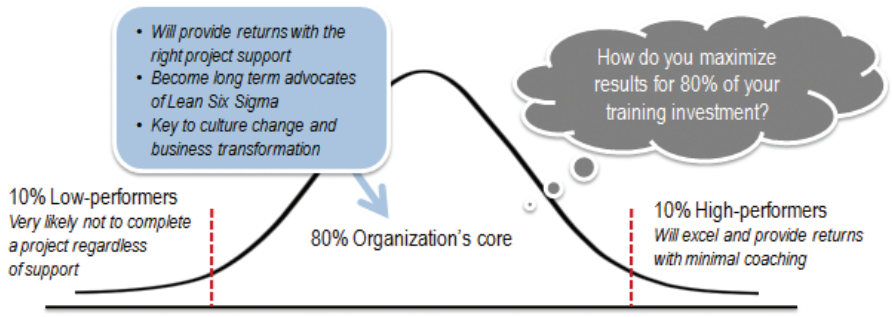

Figure 1. Mentoring as a Lean Six Sigma enabler.

Lean Six Sigma mentoring…looking back

Suzanne decided to follow her hunch and look at how the company approached Lean Six Sigma mentoring. She decided to observe one of the mentoring sessions that the consultant Master Black Belt (MBB) was conducting with one of the newly minted Black Belts from the most recent wave. Suzanne watched the MBB mentor going through the checklist to make sure that the newly trained Black Belt filled out all of the required templates correctly for the measure phase tollgate. When a question arose about how to set up the data for use in Minitab, the MBB gave a very good refresher on how to stack data. However, when the Black Belt discussed problems with team and issues with his sponsor to align resources, the MBB was not terribly helpful in helping with those issues. Suzanne also noticed that there was not much discussion about making sure the project would close on time or if the benefits could actually be achieved. The MBB told the Black Belt that they should meet again next month but if he had any questions, he should call or email.

Several questions entered Suzanne's mind after the session. Although the session had met all of the requirements that the company had laid out for mentoring, this appeared to be more of a project status session. How effective was the knowledge transfer? Had the MBB given the Black Belt what they wanted or what they needed? Lastly, she had expected some sort of focus on the project tasks and how to drive it to a close. After all, the most important aspect was the project results. Right?

Most often, mentoring programs are set up so that the emphasis is on refreshing and reinforcing the tools learned in training. In some deployments, mentoring is designed as a "pull" or reactive system where the mentor becomes involved only at the request of the newly trained Green Belt or Black Belt practitioner. This reactive arrangement makes it the responsibility of the practitioner to determine how knowledge is transferred and, as a result, rarely serves to create a focus on project results.

Moreover, this traditional view of mentoring accepts that sessions are more focused on gathering data about the project with particular emphasis on how to populate forms, templates and presentations. Accountability is typically associated with the accuracy of the project records and tasks. Authority, on the other hand, is associated more with document approval for compliance with organizational procedure.

An examination of roles and responsibilities in more traditional mentoring constructs is worth investigation. In traditional methods, it is the responsibility of the mentor to provide experience, expertise and knowledge, particularly when consultants are utilized as mentors. Accountability in this mentoring construct is usually associated with the accuracy of the project records and tasks

covered rather than project results. Authority is generally seen as not important or is associated with the document sign-offs for compliance with organizational process and procedure.

In the early days of a new deployment, the utilization of consultants is required because the organization does not have the expertise required to achieve the proper level of knowledge transfer. Among most Master Black Belt development programs offered inside a business, the primary focus is on additional training of advanced statistical tools with little or no weight given to formal development of the softer skills, such as communications, relationship building, conflict resolution, and knowledge transfer. So how does a company develop an internal capability to cultivate and develop mentors on its own?

Setting the conditions for success

Mentoring can be looked upon as a combination of "science and art". Science refers to the infrastructure, procedures and metrics, including the need to track project status. The art of mentoring relates to the relationship between the mentor and the belt being mentored. Both of these components need to be developed to ensure conditions are set for a successful program outcome.

The science of mentoring needs to start with an accurate statement of the desired goal. Prioritization of the goals should be driven by the strategic, operational and tactical goals of the enterprise. For example, is project closure a higher priority than knowledge transfer? Or, is project status more important than leadership development? That being said, science also includes the development of standards and procedures that govern the execution. These types of items are often passed down through "tribal lore" or ineffective communications pathways in an organization, which leads to variability in how they are done.

An effective way of establishing and controlling the science of mentoring is by producing mentoring guides and process documentation. Lean Six Sigma mentoring programs should use a Mentoring Handbook that gives mentors a blueprint to accomplish organizational objectives and sets the standard for what is to be accomplished during mentoring engagements.

Figure 2. Mentoring program objectives.

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Alternately, the art of mentoring is more difficult to define and varies from mentor to mentor. It is driven by the fact that there will always be some variability in the conduct of mentoring activities depending upon personality, experience, and respect. The reality is that mentoring cannot be forced on an individual. The art of mentoring can only be applied when the relationship is based on trust and credibility.

In the end, achieving the right balance between art and science is the key, always with a focus on achieving results. Assigning MBB's a large number of administrative tasks associated with project tracking ends up taking away valuable time for knowledge transfer to newly trained Green Belts and Black Belts. On the other hand, having little to no mentor administrative tasks sets the conditions for higher variability and erodes the situational awareness of the program. What is the right mix? As with most corporate wide change efforts, it depends on the objectives and focus of the business.

Having mentors with "skin in the game"

Mentoring is traditionally looked upon as a means to an end and focuses primarily on knowledge transfer between the experienced mentor and the practitioner. To drive true results, the mentor must have "skin in the game". How much vested interest does the Master Black Belt have in a Black Belt or Green Belt closing a project? Do they see their role as simply being there for knowledge transfer or for guiding the student to close the project and produce results?

Where project closure and results are the goals of the organization, the realignment of responsibility, accountability and authority of the mentors is the underlying pre-requisite. An accelerated closure rate on projects and better results occur when mentors are held equally responsible for project closure as the practitioner being mentored. In a case where project closure and results is the goal of the organization one must look at the realignment of responsibility, accountability and authority of the mentors.

In our client engagements, we see an accelerated closure rate on projects and better results when mentors are held equally responsible for the project. Why does this practice lead to higher closure rates? Simply because the mentor typically has more experience with what it takes to close a project and is more skilled in knowing how to use team building and influencing skills to overcome roadblocks. Holding the mentor accountable as well as the practitioner insures that there is "skin in the game" and is the true test of leadership ability.

Mentoring versus feeding the beast

The end state to any Lean Six Sigma effort is the results. A look at some mentoring programs from a value stream perspective observes mentoring as, essentially, an administrative task. As with any process, there needs to be administration, but in process improvement, administration should take a back seat to driving project closure, results and knowledge transfer.

In the industry today, there are many automated project tracking systems to aid in maintaining situational awareness of projects, results and financial benefits. A few of them even advertise that they can replace the role of the mentor in the execution of projects. However, even with the use of advanced project tracking tools we still see a heavy reliance on using mentors to maintain the database and ensure that the most recent information is available.

This essentially means that mentors spend their time "feeding the beast". This practice has a tendency to remove responsibility for project status away from the practitioner, which

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importantly should be part of individual development and understanding of the application of the tools and concepts.

The danger in any deployment is in creating a project visibility bureaucracy that spends more time maintaining program situational awareness and completing templates than actually implementing solutions and obtaining results. When this condition exists, a Lean Six Sigma effort becomes one of the "bureaucratic beasts" that it was chartered to slay.

The solution to this issue is simply to apply the Lean Six Sigma methodology to program management and conduct our own value stream assessment on how we maintain our program situational awareness versus the actual time spent driving project closure, results and knowledge transfer. In essence we need "to practice what we preach."

Mentoring the soft skills is hard

In most Lean Six Sigma training venues, soft skills such as influence without authority, communication, conflict management and obtaining commitment from critical stakeholders receive little emphasis. Instead, the training focuses on learning the technical subjects such as advanced statistics and graphical analysis techniques. Many Lean Six Sigma curriculums address these soft skills in a small portion of the overall content. Taught almost as an afterthought, these topics are used as filler in a Black Belt or Green Belt course and typically lack hands-on application exercises.

Looking at why efforts fail is not an extremely popular thing to do, but it does provide lessons learned for the future. The vast majority of Lean Six Sigma efforts fail not because practitioners incorrectly applied or failed to use a tool or template, but because they did not obtain the commitment, align the teams or apply the appropriate influence skills to close the project. Still, is

Do	Don't
Lead by example.	Do the project for them.
Be a role model for positive reinforcement.	Let them off the hook.
Team with the project sponsor to achieve the results.	Go more than a week without communicating with them.
Let them discover.	Create an environment where the mentoring session is a dread.
At times, meet with the practitioner in "their space".	Give them all the answers all the time.
Be consistent (time, activities, etc).	Be mechanical.
Teach new tools and techniques at every opportunity.	Leave the sessions without asking about the value of the session.
Look for examples of them doing something right .	Discuss their shortcoming with their peers.
Engage others on their behalf when required.	Tell war stories about how you did it on your projects unless asked.
Make them feel the pressure for project completion.	Relate experiences that are not relative.

Table 1: Mentoring do's and don'ts.

the classroom environment the right place to train practitioners on the soft skills? Interestingly, the answer to this question is both yes and no.

The classroom is certainly the place where foundations for communications, influence, conflict management and team dynamics can be laid. The application of these skills, however, must be developed in a mentoring environment. The most effective programs incorporate the best practice of teaching the more difficult soft skills first, followed by the process of adjusting the right mix of tools and technical concepts as mentoring progresses.

The "Coach, Teach and Preach" methodology

The "art" of mentoring is largely ingrained in the relationship between the mentor and the practitioner being mentored. What methodology should one use when conducting mentoring with a practitioner? We utilize a characterization methodology when developing mentors for our clients referred to as Coach, Teach and Preach. Each practitioner has a different learning style, different motivation style and different personality. Hence, each requires a different mentoring approach to address these factors. These approaches are sometimes applied sequentially and sometimes in parallel. During the course of mentoring a project, a mentor may use all three approaches to successfully close the project.

- **Coach** – Guiding a person to find a solution to the problem, offering suggestions, reminding the person of a previously learned skill, offering advice, and motivating.
- **Teach** – Training on new subjects or reviewing classroom training so the practitioner can apply it immediately.
- **Preach** – Reviewing concepts or tools with a practitioner that understands, but who is not actively engaging the methodology.

Taking Lean Six Sigma to a new level

The fundamentals of change management apply internally to a Lean Six Sigma deployment, as well as training an organization to change. The economic environments, customer requirements and even changes in culture and leadership drive business and organizations in different directions from year to year. Some of the changes in focus are dramatic and some are more passive. As the business continues to change focus, the application of the organization's Lean Six Sigma efforts must change with it.

To keep a Lean Six Sigma effort alive and a viable part of a business, the focus must constantly change to keep pace with the need. Good mentors are an essential part of this equation. But the mentors may need to be "re-tooled" to drive the new direction that the company is headed. This may mean training Master Black Belt and Black Belt mentors in a number of best practice methodologies that are applicable to new objectives. These methodologies include such disciplines as Design for Six Sigma, TRIZ (Theory of Inventive Problem Solving), Supply Chain Management, Theory of Constraints (TOC) and its various applications such as Critical Chain Project Management.

In concert with acquiring these additional skill sets, the execution of a plan may necessitate building up some new and clearly defined mentor competencies, including apprenticeship training, to meet the new challenges. During the course of a program, this requirement may consist of the mentors undertaking projects personally so they can build their experience base and hone their skills.

A mentor should customize their mentoring approach depending on the personality, learning style, and motivation of those that they are working with.

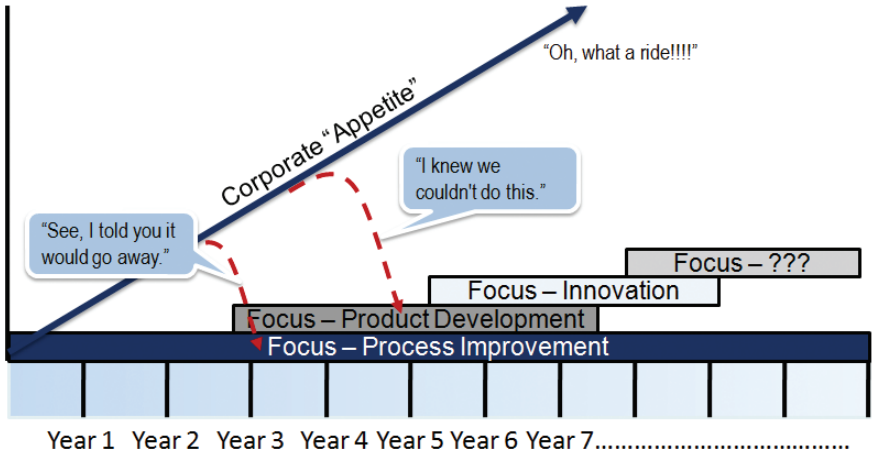

Figure 3. Changing with the needs of the business.

Back to Suzanne and her Lean Six Sigma program

Eight months have passed since Suzanne started her new job as VP of Quality and Process Improvement. During the first month in the position, she began the process of refocusing the mentoring program to find the right balance between knowledge transfer and results. Her team looked at the business strategy and developed a plan that would enable the mentoring program to play a big part to not only support the strategy, but help the LSS program continuously align to the changing needs of the business, too.

Suzanne started an apprenticeship program to develop her own Master Black Belts. They developed standard procedures for mentoring, documented them in a mentoring handbook and set up an infrastructure to support the mentoring activities. Although they needed to make some initial adjustments to the plan, her Master Black Belts took on the challenge and project results improved significantly.

The training program was revamped to emphasize influence and communications skills, and it really paid off. More projects were staying in the green and there was less of a need for "divine interventions" to deal with project roadblocks. She had even done away with the weekly two-hour project status meetings. Now, every two weeks the team only had to discuss the projects that needed attention or additional resources. Many projects still had cost reduction as a primary deliverable; however, there were just as many delivering great benefits in sales, product development and customer service.

One day Suzanne ran into the Senior VP for Product Development as he was returning from a meeting with the CEO. He just went on and on about how great his LSS projects were going, but really needed a breakthrough to drastically reduce product development time. As she walked away from the conversation, the Senior VP said to her, "Suzanne, the CEO told me he wants to talk to you. He has an idea he got from a board meeting the other day… something about Critical Chain Project Management!"

Summary and Conclusions

Many factors must be considered in starting or reenergizing a Lean Six Sigma effort. As part of managing change, the focus and construct of a mentorsing effort needs to be addressed in a more rigorous manner than before. This includes establishing or adjusting a mentoring environment to be a driving force in accelerating project closure or refocusing the efforts to align with business

needs and objectives. Making mentoring more than just about teaching tools is a clear path to the development of the future leaders of an organization.

About the Author

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Tommy has 30 years of experience in operations management and process improvement. He is a certified Master Black Belt and has served in executive leadership roles of Lean Six Sigma implementations at companies such as Raytheon, Information Handling Services (IHS), and as a deployment leader in support of Electronic Data Systems (EDS).

About Us

NOVACES is a premier implementer of today's most powerful process improvement methodologies that strengthen operational capabilities and financial performance. We deliver Lean, Six Sigma, and Theory of Constraints consulting and training to clients in the defense, healthcare, maritime, finance and service industries. We are dedicated to advancing the science of process improvement and leveraging research to provide the most effective solutions in the market.