Stimulating Creativity: Quality Efforts as a Catalyst for Sustainable Innovation

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Is Six Sigma over? No more big headlines about GE and Jack Welch, negative articles in *Business Week*, dissed in Dilbert. It's as though all that knowledge and all those gains had been useful for a time, but things have moved on.

Whatever the media attention or lack thereof, the fact is Six Sigma resurrected quality and took it to a new level—and now is firmly entrenched globally. Why? In part because it incorporates a variety of quality tools into an integrated deployment approach. As importantly, it has reinfused the field with a whole new generation of bright ambitious talent, many of whom are moving into positions of increasing leadership.

Well beyond "cracking the code" on tough problems and strengthening process performance, quality tools (whether Six Sigma, Lean, Lean Six Sigma, Work-Out, Design for Six Sigma or others) can be strong catalysts for stimulating creativity and innovation. To take these proven quality tools to the next level (and truly fulfilling their promise), it's critical to recognize – and actively manage – their deployment to transform and energize your organization.

Ten key levers, if consciously built in to a quality effort (from an individual Greenbelt project to an organization-wide LSS deployment), can dramatically improve results and create a sustainable culture of creativity and continuous improvement. Taking the time to think about each lever at the individual and the organizational level can make a big difference toward replacing bureaucracy with a broadly-shared entrepreneurial spirit of excitement, innovation, and creative problem-solving.

THE TEN KEY LEVERS TO CATALYZE CREATIVITY

AT THE INDIVIDUAL LEVEL, DOES THE EFFORT:

1. Affirm the legitimacy of frontline, individually perceived issues and opportunities?

It's a not a new idea but bears repeating. Some of the best ideas for process improvement lie in the minds and experience of those who deal with the process daily. Frequently, these are frontline people, who don't often have the chance to participate in improvement efforts. While they may not have formal training in quality tools, they do have intimate knowledge of the process, and their closeness to the process is a vantage point second to none.

Every project or deployment needs to ask the question: “Who knows the process or sub-process best, and how are we accessing their unique knowledge and insight?” Often improvement efforts are staffed by technical experts and mid to senior level managers. While their guidance and expertise is essential, too much focus on the elites can miss key opportunities that frontline people identify instinctively through their daily experiences.

Participation in most projects needs to be designed to be broad and inclusive to counteract the tendency to overweigh in favor of elites. This can be done in a variety of ways, including interviews and group brainstorming sessions, or through direct participation on the team.

Not everyone is adept at eliciting creative insights from a diverse array of down-the-line personnel, and technical expertise has little correlation with effective group facilitation. At a minimum, effectively accessing this critical front line knowledge means that belts and project leaders need facilitation skills training, coaching, and practice.

2. Enhance individual accountability, thereby alertness to problems that are solvable?

It’s a very human tendency to lay the blame for problems on something or someone else. But the fact is, virtually everyone wants to do a good job and is sufficiently skilled at what they do—where there are performance problems, the fault almost always can be found in the process, not the people.

Conducting root cause analysis that focuses not on who is to blame, but rather on “what has prevented the organization from achieving this target level of performance?” can help lead to an objective shared understanding. The key then is to build action plans with very specific individual accountability and commitments into every stage of a project.

Not only does this engage a broader group and focuses their effort on solutions, but by getting small steps done (and incremental change implemented), people become much more alert to identifying problems that are solvable.

Somewhat paradoxically, a strong emphasis on task completion can spur creativity, both in identifying problems and in understanding the range of feasible solutions.

3. Provide for structured, but relaxed and excited atmosphere that contributes to spirit of play and creativity?

When people are relaxed and having fun, the potential for creative insight is dramatically increased. It's true that the suite of process improvement tools draw heavily on the left side of the brain, the part that deals with logic and analysis. Essential, of course, but that leaves much of the human capacity for problem solving untapped.

Team leaders should have a "hip pocket" set of warm-up exercises, brain teasers, and social events that contribute to a sense of play. Attention to a creativity-enhancing environment can't hurt either—from setting up off-site meetings to better workspace design. In broader deployments and longer projects (or any effort where building trust and teamwork is particularly critical) more elaborate events like Ropes Courses and other challenging team building events can pay very significant benefits, for the project itself as well as having a strongly positive impact back into the day to day workplace.

Next generation quality efforts need to create multiple contexts and environments where participants draw on the right side of their brain, where they move outside their comfort zones, where they can relax and have fun, and use creativity to move the goalposts.

4. Define stretch goals (with a clean sheet) that develops mindset of challenging underlying assumptions?

Remember that part of the power of Six Sigma lies in setting highly aspirational goals. A few defects per million opportunities is an almost unheard of level of performance for most processes. Yet we experience it everyday—heartbeats without missing a beat, flight take offs and landings, letters delivered. The examples of processes that exceed Six Sigma performance surround us.

Recently a transaction-oriented company adopted Six Sigma goals – and realized with some initial dismay that achieving them meant they could have virtually no errors. Rather than being deterred and aiming for 'best in class' (which in this case was about the 3 Sigma level), they stuck to their aspiration and realized that in addition to applying the tools they would have to 'reinvent' parts of their business. Eventually, as they blended creative insights with DMAIC and moved close to their seemingly unattainable goals, they realized they could capture substantial market share while transforming their industry.

Clearly goals should not be manifestly impossible, but laying out aspirational stretch goals with sufficient 'white space' and flexibility for their attainment can spur new thinking. A well-structured DMAIC or LSS process virtually guarantees incremental improvement—but setting lofty goals and allowing for flexibility in their attainment can help avoid the trap of incremental process improvement that (in part because of its evident virtue) blinds us to questions like, "Do we need to do this process at all?"

5. Uncover change champions and future leaders?

Asking sensible, “naïve” questions can stimulate creative insight in surprising ways. Sometimes the most efficient route to insightful new solutions is the most direct: “If you owned this company, what would you do?” We want our most thoughtful and creative people invested in addressing these kinds of questions; process improvement tools and expertise is essential, but we also want to access judgment in an ‘unscripted’, intuitive way. Involving bright, inquisitive, ‘non-technical’ people can be an important ingredient in delivering innovative solutions.

Quality initiatives provide a great opportunity to deliberately include the best talent available—regardless of their current level of technical skills. Beyond this, involvement of non-technical high potential people grooms them for being champions of process improvement efforts later in their careers. In addition, projects are a terrific testing ground, as the crucible of project teams provides a ‘fish bowl’ view of individual talent, and insights into special capabilities.

AT THE ORGANIZATIONAL LEVEL, DOES THE EFFORT:

6. Explicitly help create an organization with fluid boundaries, where formal organizational relationships are overlaid with process-linked connections?

A process improvement effort that features the active participation of those directly involved in the process will inevitably create new cross-functional conversations, and foster new connections. Specialized tools and expertise should be positioned as an adjunct to and enablers of these new connections, not the drivers of change in their own right.

Viewing quality improvement efforts as providing the techniques and context for these connections (rather than defining the optimal solutions and delivering the “answer”) has obvious benefits in terms of investment in and commitment to solutions selected. But it also is important for uncovering creative ideas that might be opaque to analysis alone.

The immediacy and practicality of potential solutions can best be accessed through direct cross-functional exchanges. With this in mind, it is important to make ongoing cross fertilization deliberate: not only should process improvement efforts feature direct cross-functional involvement, but part of the solution should encourage and enable ongoing dialogue and coordinated responses, e.g., through shared metrics, coordinated governance, and regular joint problem solving sessions.

7. Utilize and disseminate common frameworks and vocabulary, to facilitate a shared approach to issue identification, prioritization, and joint problem-solving?

Insisting on a clear and consistent menu of terms and methodologies, 'mandated' by the corporate center, would seem at face value to be antithetical to creativity and innovation. In fact the reverse is true. Allowing the proliferation of techniques and nomenclature is a formula for bogging down a broad scale deployment and stifling creativity.

Clearly it is important to have a (limited) set of tools that collectively can be drawn on to address improvement opportunities that reflect the diverse needs of the business. But allowing any approach to be adopted, and terms and vocabulary to be continually reinvented and loosely applied results in confusion and wasted effort. One of the key roles of a centralized support group (in addition to providing specialized expertise and guidance) is to ensure that methodologies are employed in a standard, consistent way—tailored to the individual needs of the business, to be sure, but disciplined in their application.

Common approaches and a shared understanding of terms focus discussion on clearly defined problems. Minimizing frictional debate that is based more on misunderstanding (or competing approaches) than substantive disagreement is an important element in an effective deployment plan. While seemingly constraining, it is in fact critical to freeing up people to focus on creative, collaborative solutions.

8. Help to break perceived constraints on lower levels interacting with senior managers, and challenge traditional models of how each level adds value to the organization?

What is done routinely generally does not stimulate creativity. A process improvement effort should deliberately be designed to 'stir the pot" and this applies as much to vertical connections as it does to cross-functional brainstorming. Just as accessing the ideas and experience of frontline people can have unexpected benefits, having frontline people directly involved in presenting recommendations to senior management can yield unexpected insights.

A classic example of this is the Decision Making Panel presentations at the conclusion of a Work-Out event, where participants (typically drawn from all levels of the organization) present recommendations to senior leadership, with shared expectations for "on the spot" decisions. Participants get insight into the thinking of their managers, and reinforcement for the creative contributions they are expected to make. Senior leaders are generally impressed with the quality of thought from people they don't typically interact with, and are usefully reminded of the reservoir of latent innovation they can help to unlock.

Building in this kind of vertical connection and idea sharing can infuse energy and creativity into any project or deployment. Care needs to be taken to allow for adequate preparation so that everyone shines in these discussions, and the observation is reinforced that innovative ideas can (and should!) come from every level.

9. Set a model for rapid decision-making and swift follow-through?

Thomas Edison tried 10,000 different approaches in the course of inventing a workable light bulb, saying, "**I haven't failed, I've found 10,000 ways that don't work**." As Edison famously remarked, genius is "1% inspiration and 99% perspiration."

One feature of an innovative organization is its attitude toward failure. Another is the stepped-up pace with which approaches are tried, evaluated, and adopted or discarded. Projects and broader deployments should be designed to include multiple 'go/no-go' decision points, and methodologies selected (other considerations equal) with an eye toward short duration to deliver results. From an organizational perspective, 'shots on goal' may be as important as flashes of creative insight in driving innovation.

The pace of change internally needs to at least slightly exceed the pace of external changes (evolution of market needs and competitive offerings) for an organization to be "innovative"; rapid decisions and swift follow through are essential to keeping an organization on the right side of this innovation curve.

But designing projects and deployments with this in mind is not enough. Too often innovation is unintentionally stifled by what leadership recognizes and rewards:

- innovation takes time, but firefighting is rewarded;
- innovation involves making mistakes, but being consistently right (i.e, "safe") is highly valued;
- innovation often requires collaboration and creative partnerships, but making the numbers and optimizing within a particular part of the business is often an exclusive priority.

To create an innovative organization, management has to be willing to reward the right things—and do it consistently.

10. Lay the groundwork for orchestrating a set of interrelated processed toward harmonic optimization and systems thinking?

One of the most seductive pitfalls, particularly in an organization-wide process improvement effort, is to become comfortable with doing projects that are in themselves attractive, without paying sufficient attention to overall optimization. It is common to find deployments filled with "random acts of process improvement"—projects that have

attractive ROIs but that don't 'move the needle' on performance parameters that matter in the marketplace. In selecting projects and building a portfolio of improvement initiatives, clear linkage to strategic priorities needs to be established, not just at the outset but on an ongoing basis.

Creativity is not generally associated with defining the portfolio of projects, but ongoing re-evaluation can uncover opportunities for innovation: "If we combine improvements in these three processes, do we create something that doesn't currently exist in the marketplace?" "Should we fix this process or outsource it?" "In light of our dashboard indicators and balanced scorecard, are we deploying resources in a way that optimizes value creation for all stakeholders?" Regularly addressing questions of this type involves the highest levels of the organization in creatively shaping the way ahead—after all, the sum of where time and attention for improvement is being placed defines strategic direction.

IN CONCLUSION

Consciously considering each of these ten key levers in any project or deployment can help stimulate creativity and serve as a catalyst for innovation. Taken as a whole, the elements build on each other and are proven drivers to help take business process improvement to the next level— the level that truly fulfils its promise to energize your organization and create a sustainable culture of creativity and continuous improvement.