People and creativity: The lean basics

BY BROCK HUSBY AND JERRY BERLANGA

EXECUTIVE SUMMARY

In many enterprises, the current state of process improvement equals a short-term focus, many Band-Aids and constrained resources for initiatives that don't really engage the creative brain of the staff and leaders. For sustainability, the future state of process improvement must advance to where staff members see process improvement as an outlet for their creativity and expression, rather than changes that are "done to them" and "just one more thing" in their busy day.

Ask most people what lean means and they'll likely reply with a long list of tools: 5S, value stream maps, visual management, huddles and maybe even A3s for solving problems. Ask people why companies should do lean and the most likely answer will be making the company's processes more efficient by removing waste to save time, money and improve the bottom line. Unfortunately, many front-line staffers (as well as leaders and managers) have the misconception that lean tools such as standardized work will turn workers into robots, ridding them of individuality and creativity. And even worse (from a respect for people and culture standpoint), they equate lean with layoffs and lost resources.

However, when practiced correctly, lean isn't a mechanical way to reduce waste and standardize work for the sake of speed and efficiency, it's a structured system to develop each person's creativity and ability to solve problems by aligning the organization to focus on customers and long-term goals. Lean can inject more ownership, passion, excitement and creativity into their work life – which is important considering that your employees will spend more of their waking hours on the job than with their spouse or significant other. But since most organizations don't engage their staff's true creativity, the typical workplace environment forces employees into a much more disenfranchised and robotic state of existence than the feared end-state of lean process improvement. We will explore these disconnects and a different path to a true lean future.

The importance of creativity

Asking a floor nurse what lean means might reveal some surprising answers. In a typical busy hospital, the answers could range from, "It's additional work that gets in the way of us doing our real jobs and taking care of patients" to "They want to make us work harder or rush our patient care."

This almost surely results from a coercive instead of an enabling approach to lean, where improvements are forced on staff. This approach focuses on tools and a worst-case scenario to justify reducing headcount or taking away resources rather than helping staff identify issues and aligning the organization toward a collective goal. True lean practitioners do not violate the central lean tenant of respect for people. Holistic lean's value becomes apparent to staff over time, as lean leaders reveal their inherent belief that the staff is intelligent, dedicated and creative.

By contrast, a coercive or mechanistic approach to lean controls and scripts everything to a certain extent. And leaders who rose to the top might find it difficult to step back from the familiar command and control philosophy. Ironically, these same leaders are often frustrated with being flooded with operational problems from department and staff. They end up bottlenecked and firefighting the litany of issues without ever solving them.

It is truly a chicken and egg paradox for the manager. But the only way to escape is to invest a small amount of time and instill faith in your staff members that they are creative and responsible contributors. The confident lean coach still needs to mentor and oversee this creativity to ensure that it fits into the greater context and results in positive improvement.

For example, the nurse mentioned earlier probably knows the frustrations in his or her work better than anybody else. Proper guidance and support can help this nurse through the problem-solving process to devise a solution to get excited about. Think about it this way: People don't argue with their own ideas. This same nurse can then sell this idea to the other nurses, emphasizing how this is "my/our idea" rather than "the lean consultant wants us to do this." This is the lean concept of nemawashi, or working around the roots to help get buy-in.

This sort of approach begins true culture change, but it doesn't happen overnight.

Another Toyota principle really fosters this creativity focus and approach.

Toyota teams are encouraged to start with solutions that require little or no resources, that can be implemented and evaluated quickly and that need little (or no) approval. They only move on to more expensive or elaborate solutions when the simpler ones have been ruled out. This encourages staff to go to a Home Depot, Walmart or similar store to get simple visual management or other low-tech solutions to experiment with.

Compared to high-tech information technology or more elaborate solutions, these simple experiments are almost free, and some organizations establish flexible funds to encourage this. Staff members often are excited enough to shop after hours and even use their own money, which shows how engaged they are when they genuinely own the process and solution.

Project team members often discuss specific tools and methods like 5S (workplace organization), standard work or A3 problem-solving. They may mention their lean training or a specific challenge. But in successful lean projects, most people remember the collaboration and creativity required for their team to address a meaningful challenge. This critical insight is an important reflection (hansei is Japanese for reflection) on what your lean teams take away from their experience. If they remember mechanical or negative things, like tools or a coercive approach, that will drive a negative cultural change. If their takeaway is creativity, empowerment, fun and ownership, it will drive a positive cultural change and support a groundswell of improvement in the organization.

Unlikely pairing hearkens back to the past

To understand how this concept drives fundamental engagement, reflect on your childhood experiences with creativity. Children have innate creativity and look at the world as endless opportunities to create stories, art and music – being creative is a joy. Children have time to create, using coloring books, musical instruments, Lego building blocks, role-

> **True lean practitioners do not violate the central lean tenant of respect for people.**

playing games, etc. They use what is at hand as well, sort of like the simple, low-cost experimentation discussed earlier. As the old adage goes, "Give children all the toys in the world, and they end up playing with a box!" This illustrates how the foundations of creativity can be simple and inexpensive.

At some time, creativity is driven out of our daily life. The demands of "adult" life place a higher priority on getting things done and conformity with organizational norms. Fast forward 15 years and many hardworking men and women find their work lives devoid of any creativity at all.

Imagine back to childhood. As you grow, Dungeons and Dragons, guitar practice and composing songs all fall by the wayside as you get your first job, perhaps join a school sports team and prepare for college. Budding engineers enter college and learn how to use the left side of their brains to solve problems in a structured way. Formulas and computer programs become the norm, and the right, creative side of your brain isn't being fully engaged. Many such successful engineers express unhappiness with the overall direction of their careers and work lives.

Discovering lean can help light up the creative side of your brain again.

Unlike traditional industrial engineering practices and problem-solving, lean engages all staff in the improvement process. Engineers transform from being stuck designing processes to becoming lean coaches who facilitate process designs and solve problems with staff as equal partners. Instead of going to the production or hospital floor with a detailed design, ISEs go to the floor with an open mind to first learn ("respect for people") in the "gemba" (the real place where value is created or work happens).

Then the engineer asks questions and partners with floor staff and leaders to design collaboratively our new process flows using data as a guide. These simple modifications in your approach can change everything. Lean can develop trust, respect and engagement of staff in

the design and implementation process, but more importantly it can create the sense of joy, fun and excitement that you have been trying to rediscover since your childhood.

True, the words lean and creativity don't seem to go together for many people. Lean implies logically and methodically thinking problems through with a concrete goal. Creativity, on the other hand, is that sudden flash of inspiration that appears out of nowhere and seems to happen to other people. Thinking about creativity in this way is not only erroneous, it is one of the main reasons that many organizations never progress beyond using lean as an internally focused set of process-improvement tools, failing to develop a problem-solving culture.

Lean is most successful when it taps into that deep, untouched creativity in all of us that has been stifled over the years. While not the only key, creativity is important for engagement, innovation, growth and development of staff that, over time, generates sustainable results. Some of our best known creative and innovative companies are not just great at execution (which is key) but also are able to develop daily opportunities for their staff to be creative.

For example, Google allocates each staff member with 20 percent of their time to work on other projects, as they have found some of these ideas become the next multibillion-dollar venture. Toyota's daily problem-solving and improvement (kaizen) is the foundation for daily creativity. As it turns out, daily creativity needs structure and focus to be more effective.

Long-term thinking, creativity and innovation

Long-term thinking, another aspect of creativity, ties closely to lean and the foundational principles of Toyota. Long-term thinking is critical to Toyota's success beyond the next quarterly report or even the next year.

For example, Toyota was an early innovator in hybrid technology (The first Prius was introduced in Japan in 1997.),

Lean can … create the sense of joy, fun and excitement that you have been trying to rediscover since your childhood.

and the rewards of this innovation are coming to fruition after almost 20 years. A company focusing only on short-term profits or the next product cycle would not have undertaken this project. Organizations must look beyond the immediate demands and challenges of the day, which are the focus of so many traditional, noncreative process improvement initiatives that focus on fixing current problems. That is important work – but not the only important work. Creativity and innovation are critical to organizational growth, and organizations must understand that creativity requires an investment in time, resources, trust and support.

To illustrate creativity and innovation and the difference between big and small change, let us show two examples that everybody can relate to:

1. The initial development of the automobile didn't come from continuous improvement of the horse (big innovation, longer-term thinking – discontinuous change).
2. Improvement of automobile safety from the dangerous initial vehicles to the safe cars of today (smaller incremental change that over time accumulates – continuous change).

To use lean terminology to illustrate this, you could equate continuous (smaller/incremental) improvement to kaizen (continuous improvement or change) and radical innovation to kaikaku, which is discontinuous, rapid and/or fundamental change of a process. If you place creativity on a continuum, kaikaku requires a greater degree of creativity than kaizen.

Learning to be creative at Toyota

The Toyota Production System (TPS) has been studied and modeled by organizations worldwide across a variety of industries that have tried to inject continuous improvement into their organizational cultures. Most lean implementations or transformations have focused predominantly on the more obvious continuous improvement

methods and principles of the Toyota house model, such as standardized work/operations, kaizen, pull systems, etc.

In reality, what sets Toyota apart from other companies is "respect for people," a central tenet of the Toyota Production System (TPS) and the Toyota house model. The respect for people exhibited at Toyota is a system and culture that respects the inherent intelligence, problem-solving and creativity of its staff.

Toyota works to leverage this through a culture of experimentation, aligned goals, standard work and a never-ending focus on the customer. At its core, TPS is focused on fostering structured creativity. But what is creativity, and how does an organization such as Toyota foster it?

Creativity and problem-solving are similar at their core. When presented with an ambiguous situation (a gap between a problem and a solution or between a blank canvas and a masterful work of art), the process of closing the gap is not always obvious.

When Toyota staffers work on improvement projects, they are being developed to be more creative through problem-solving. At the same time, the problem-solving has to be structured with purpose, focus and direction, as otherwise it could be detrimental to the organization. This constrained model of creativity through focused problem-solving (Toyota's A3 problem-solving

Creativity and problem-solving are similar at their core.

approach, for example) is desirable to some and disconcerting to others. It is a learned discipline to all.

From the time Toyota employees begin their orientation they are taught the importance of kaizen, which is the art of continuous improvement. Senior healthcare engineer Robert Smith started work with Toyota Motors in 1987 at its plant in Georgetown, Kentucky.

"I remembered the mantra we were taught was to always think of ways we could save the company a penny today," Smith said. "We were reminded at every turn that we were expected to help the company remove waste and make products and processes better each day. When I went through training,

my first 30 days were spent in Toyota City, Japan. I was trained by the best auto manufacturers in the company. I spent these days immersed in the continuous improvement mindset. I was a completely overwhelmed young man from Kentucky who had never seen a working auto manufacturing plant. I was asked every day by my personal sensei if I had any ideas about how I might improve the tasks I was assigned to practice and learn. I thought to myself, how could I make any suggestions about processes or jobs I had never seen or done before?"

After being asked about such ideas for many days, Smith recalled how he came up with an idea so insignificant that he was almost afraid to mention it. To Smith's surprise, his sensei reached over and pulled out paperwork that was printed entirely in Japanese, handing Smith the paper and asking him to fill out the A3 problem-solving form.

"I said to myself, 'What is he thinking? I can't even read it,'" Smith said. "When I told my sensei I couldn't read the form, my sensei then walked me through each section and helped me work my way through it. This experience stayed with me on the bus ride that night back to the dormitories we were housed in for the month of our training. Little did I know the importance this little idea would have over the next days and months."

After 30 long days of working on the line learning the jobs they had to master to come back to Kentucky and teach their newly hired team members, the group was ready to graduate from the Japanese training.

Each person was called up to have their "little" ideas read to the whole group one at a time. Each person was presented a Japanese coin – something Smith still cherishes.

"I don't remember the coin's value," Smith said. "I think it was equivalent to about one U.S. dollar. But what I do remember is the pride of my idea being captured, written down, implemented and then being recognized by a room full of my manufacturing heroes on the other side of the world. This was my first lesson on how to develop a creative workplace. You see, it was not the idea that I had that was so important, it was that I was taught to practice and spread the importance of 'respect for people' exhibited at Toyota. It is a system and culture that respects the inherent intelligence, problem-solving and creativity of its staff, and as leaders we were being trained to model this behavior in our daily work. It was now my responsibility to teach this method over and over to other Toyota team members in Kentucky."

Toyota creativity structures and support

Just as individuals are somewhat different but also somewhat alike, the structures and support for employees' creative ideas are also somewhat different but somewhat alike. Some of the structures or programs are designed for individuals who want to work independently; others are designed for more formal group settings. Some are designed for employees who are content to remain in their current roles, while others are designed to help employees who seek promotion and recognition in the company and even beyond.

But all of the programs are alike in the basic Toyota principles in that they encourage teamwork and creativity, core pieces of the Toyota Production System.

This is not an exhaustive list of the structures and programs in place today at Toyota, just examples of key programs that have been in place for decades.

The suggestion system: This program has a large noticeable exception to the suggestion systems most companies have. Toyota pays or shares the savings with the employee once the idea has been implemented and the savings documented. While an employee can develop an idea and implement it alone, the majority of the ideas involve employees working together.

This is due to two underlying concepts of teamwork development. First, implementation often requires the support and buy-in of others to sustain the effort. What better way to do this than to include them in developing the idea and sharing the success.

The second concept is the sharing of the savings from the implemented idea. Toyota has a somewhat complex system of payouts for shared ideas, but the sum of the financial reward for multiple suggestions can be larger than the payout to just one individual, so working with others can benefit the group as a whole. Both incentives support teamwork.

Quality circles: Quality circles are groups of employees who meet on a regular basis to brainstorm issues, problems, barriers and solutions. While these teams do not get paid for their meeting times, they can get paid for the time it takes to implement, train and make the new processes part of the new standard work (standard work refers to workplace standards for key work processes). Some employees are a member of only one quality circle group, but there is no limit to how many quality circles employees may participate in.

Quality circle facilitators must attend training on facilitating meetings, problem-solving and resolving conflict. This is an obvious step in developing the skill needed by future leaders and gives all team members a chance to hone their skill in leadership development for future advancement. The solutions developed and implemented by these quality circle groups can be selected to compete for recognition at various levels, including attendance and competition at the World Quality Circle competition in Toyota City, Japan.

Final thoughts

As it turns out, the most overlooked lean principle is not waste reduction, standard work, visual management, mistake proofing or any of the well-known "tools and methods." Instead, lean neglect usually looks like ignorance of the center pillar and principle of the Toyota house: respect for people. Respect for people means, among other things, taking the time to develop staff to be more creative and innovative problem-solvers, which is the true key to long-term organizational success and culture change. ❖

Toyota pays or shares the savings with the employee once the idea has been implemented and the savings documented.