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**COVER:** Largest FIA member exhibitors at Forge Fair 2019.

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# "We're Different" Applying Lean to Knowledge Work

By Drew Locher Managing Director,  
Change Management Associates

For almost 30 years now, I have been applying and teaching the application of Enterprise Excellence concepts to a wide variety of business audiences.

In fact, my earliest applications were for the information processes in aerospace businesses within General Electric Co. Building satellites and other near-one-off-type products taught me how information flow drives the material flow. Without timely and accurate information, production would forever be under the gun to meet project or program schedules.

Of course, this meant dealing with engineers and office professionals of various titles. It was also where I first encountered these common arguments and other similar statements:

- "We're different."
- "You cannot apply process improvement techniques to creative work."
- "Everything we do varies."

The fact is, knowledge work and knowledge workers are different; but that doesn't mean we cannot apply process improvement concepts to such work. It does mean that we often have to adapt our concepts and approach to do so.

Perhaps you, too, are encountering similar resistance as you bring lean off the shop floor and apply it to office and service environments. Or perhaps you never had a shop floor to begin with but are encountering similar statements and could use a bit more insight and counterargument to the more common arguments. So here goes.

## The Needs of Knowledge Workers

I once read that knowledge workers have three needs:

1. A sense of purpose
2. A sense of mastery
3. A sense of autonomy

Frankly, it can be argued that these apply to all people, regardless of the type of work they do, but at different levels. Knowledge workers feel a much stronger need for each of these, though, particularly the latter two. Knowledge workers feel great pride in the mastery they have achieved in performing their roles and fulfilling their responsibilities. Lean and continuous improvement, in general, are viewed as an affront to the existing sense of mastery with the current process ("Don't you think that if there was a better way, I would have

figured it out by now?").

Standardized work, a foundation of lean, is often viewed as taking away the autonomy of the individual—the sense of freedom or independence. It's as if they're saying, "Why do you care how I do it as long as I get the work done?" This need is particularly strong in Western cultures.

Clearly, we have some significant hurdles to overcome to engage knowledge workers in lean efforts. These needs cannot be glossed over. The likelihood of disengagement is great, and if strong enough ... well, great knowledge and experience can walk out the door and be forever lost to the organization.

Not to say we can get everyone on the train. But the fewer we lose on the journey the better, don't you think?

## Provide Purpose to Get Started

This is where the first need, a sense of purpose, is so important. We must give people a valid and compelling reason to change. Leaders need to provide a challenge to knowledge workers—for example, "Our competitors are getting new products to market 25 percent faster than we are. We need to reduce our time to market by 50 percent." People tend to rally around challenges, particularly when they're based on reality.

Or perhaps leaders can demonstrate the negative impact of current practices on customer service, organizational performance or quality. People often are unaware of such impact or its magnitude.

For example, I was working with an organization to improve their quote process. As is often the case, longer service-time individuals were involved in this process, drawing on their experience to estimate material and labor costs to develop a quote that they would provide to a customer (with the hope that the company would win the business in the near future).

Someone suggested that the company give three different estimators the same request for quote and see what happens. The results were very interesting. Each person calculated a significantly different price. Not much more needed to be said—their individual and collective pride kicked in, and the three began to delve into the sources of the variations, properly motivated to improve the process.

Another example involved an insurance adjustment process. All of the adjusters used the same computer-based tool, so how much variation could there be? A significant amount, it turned out. It depended on the questions that they asked (or didn't). The results

varied based the experience of the adjustor. The responses to those questions determined the inputs to the computer-based system.

Experience is a good thing, but it varies by person. And experience that is not adequately shared with others creates a missed opportunity, indeed. People want to do the best job that they can, and they typically believe that they are already doing that. The group of adjustors learned that there could be a better way, and as a result, they were properly motivated to improve their process.

Leaders need to find that sense of purpose that resonates with knowledge workers, but that is just to get started.

### A New Sense of Autonomy

The sense of autonomy in performing the role of a knowledge worker needs to be supplemented by getting involved in changing a team's activities for the purpose of improving them. Knowledge workers can have the freedom to improve activities in ways that they believe are best. However, they must do so in a collaborative effort with others performing the same work, as well as suppliers and customers (internal and external).

These conditions can feel like a loss of individual autonomy and will need to be coached accordingly. However, in general, most knowledge workers can make the transition from individual autonomy to group autonomy. It just makes sense.

Another bit of advice on standardized work: It is imperative that standardization only happens where it matters. Knowledge workers will quickly challenge standards that do not affect the performance or the outcomes of the process.

In lean terms, in regaining mastery when changes are made, there will be a period of discomfort for the people affected. In fact, process performance may be negatively impacted for a time until the changes become habit. Knowledge workers will quickly point this out as a reason to return to old ways, but leaders must stay the course while being supportive as people become more and more comfortable with the new process and thereby regain their sense of mastery.

It will take time. How much time will depend on the nature of the changes. Are the changes affecting the value-adding decision processes that knowledge workers perform or non-value-added activities that those same folks must also do? Even changes that affect the latter create discomfort, but that discomfort tends to be shorter-lived. In any case, a company must gather facts from the new process as part of the "check" step of "Plan-Do-Check-Act (PDCA)."

Company leaders, in turn, must share this information with the people affected. Assuming positive outcomes, that information will reinforce the new behaviors and help people regain a sense of mastery sooner.

### There is always a Process

Finally, a key to all of this it to get knowledge workers to see that there is a process to what they do. This is not always obvious to them. You'll likely hear, "Everything we do is different." Outcomes can

indeed vary, but there is a process to create the outcome. Often that is a decision process. It is important to recognize those processes and identify opportunities to improve them. Process and system thinking are key to lean thinking. When problems arise, they cannot be explained away as a natural part of a highly variable process. Deeper reflection is needed.

Many knowledge workers already are involved in a form of problem solving, whether it be an engineer designing a solution to a market problem in the form of a new product or a technical support person helping a customer with their computer. However, solving process-related problems seems to be challenge.

I often ask, "What similar issues have we seen that might be indicative of systemic causes that can be addressed and future recurrence prevented?" Too often, the response is a form of, "This has never happened before." Taking time to reflect on where the decision process went awry, without affixing blame to an individual, is not easy. But it is necessary. With sufficient practice in root-cause analysis, knowledge workers can develop their process thinking, and their ability to improve their processes usually follows.

Acknowledging that the nature of knowledge work is different, and that the approach to lean must be adapted accordingly, can greatly help to defuse some of the initial resistance encountered in such environments. Attending to the three needs of knowledge workers throughout the lean transformation process also will help leaders gain greater acceptance.

For more information on the application of lean principles to knowledge work found in office and service environments, consider these two resources: "The Complete Lean Enterprise: Value Stream Mapping for Office and Services" and "Lean Office & Service Simplified: The Definitive How-to Guide".



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