

Lean Enterprise Academy



Jim Womack e-letter –16 January 2007

More Thinking About Lean Transformation

Dear Lean Community Member,

Recently we at the Lean Enterprise Institute have started a new research project trying to answer a simple question: “What is the best way to conduct a lean transformation?”

This is not a new question, of course. A decade ago Dan Jones and I proposed an “Action Plan” in our book *Lean Thinking*. We advised readers of the first four steps in transforming their enterprise: find a change agent, obtain the core lean knowledge, seize or create a crisis, and then map your value streams to determine the current situation and to envision future states.

The difference now is that lean thinking is fast becoming the norm rather than the exception for managers. And a large number of organizations have already taken the first four steps. Yet no one would say they are truly lean. The question therefore is, “Once you have a change agent, the core knowledge, a crisis, and maps for many of your processes, how do you most *effectively* transform your complete enterprise?”

The truth is that we don’t know. We wouldn’t be conducting research if we did! But we have some hypotheses I want to share:

Our first hypothesis is that it’s critical to start by answering the question of *purpose*. What problems do customers want your organization to solve for them and what are the most critical needs of your organization? Dan Jones and I have found in recent years that customers often have more profound needs behind their expressed wants for specific goods or services. An organization that can identify these fundamental needs and truly solve customer problems will have a much better chance of succeeding as a lean enterprise.

Similarly, most organizations have a range of needs themselves – to grow, to increase margins, to preserve cash, to retain talented employees, etc. But what are the few critical internal needs that the organization can tackle right now in order to truly prosper?

When we ask simple questions about customer and organizational purpose and which value streams address them, we often find that managers – lower, middle, and upper as well -- don’t know. And this makes the lean transformation much harder because unimportant wants and needs may be tackled -- even the wrong value streams -- instead of the critical few that really matter. In the worst case, earnest managers may simply apply lean tools at random to every value stream in the hope that wants and needs will automatically be addressed. Yet this rarely happens.



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Our second hypothesis is that it is critical for someone to accept the *responsibility* for transforming each of the critical value streams, each vital process. For value streams that flow only through one department or function, value-stream leadership is easy (or at least easier.) However, the most critical value streams – product development from concept to launch, fulfillment from order through delivery, support of the customer through the life cycle of their goods and services -- flow horizontally toward the customer through many parts of the organization and over extended periods of time. And here we have little experience with the right formula.

When we mention this issue to managers in most organizations their first proposal is to re-draw the organization chart to give specific individuals clear *authority* for each horizontal value stream. But in our experience this often misses the point. The many individuals touching the value stream are located in many different departments and functions for a good reason: This is the simplest way to organize knowledge and careers. Adding another layer of management or re-assigning everyone to a product family team with a heavy-weight manager may do more harm than good to the organization as a whole.

A better approach is for someone to take responsibility for transforming each value stream. This individual needs to *create* their authority by asking insightful questions and tackling persistent problems to a point where those touching the value stream grant the value-stream leader the authority senior managers usually can't. (This is the situation of the Chief Engineer at Toyota, who has responsibility for the success and profitability of the product but who has no formal authority over any of the hundreds or thousands of individuals working on its development. The Chief Engineer leads by knowing more, seeing further, and asking better questions than any individual or single department.) Our hypothesis is that with careful selection of responsible value-stream leaders and by experimentation with the best methods for these responsible individuals to employ, the seeming paradox of responsibility without authority can be resolved to the great benefit of the organization.

Our third hypothesis is that the best way to engage *people* at every level to tackle customer and organizational purpose is to involve everyone in routine, continuous problem solving. People love to solve problems. But they rarely get the chance! Doing this means creating ways for everyone to see the current state of the process they are touching, understand how it serves the customer, and suggest ways to improve it. This includes rapid kaizen, of course. But it's often more important to tackle standard work at the primary level of value creation, to conduct A3 analysis at the value-stream level, and to engage in strategy deployment at the level of the entire organization.



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Our final hypothesis is that most managers have learned to see muda (waste) in the individual steps of their value streams. But they fail to see, much less to tackle, the problems of mura (unevenness) and muri (overburden) that create much of the muda. For example, we routinely see managers with so many out-of-control conditions to work around that they have no time left over for thinking about improvement. They are proud of how hard they work and what they manage to achieve in chaotic conditions. Yet the press of the exceptional -- the thing "gone wrong" -- crowds out the pressing need for true problem solving. As a result few problems ever get solved.

Where does this muri come from? Usually it is created within the organization rather than externally by the customer, as most managers seem to believe. Actions by managers in one part of the organization cause unevenness (mura) in the activities of managers and employees in other parts of the organization. And this causes muri – the overburden most managers feel most of the time. For example, the waves of orders at the end of the reporting period that overburden production and purchasing are rarely addressing the real problems of the customer. Instead, these waves are created by sales incentives and bonuses set by the sales and marketing departments. It follows that to make real progress in organizational transformation managers need to address all three Ms – muda, mura, and muri – at the same time.

As I said at the outset, these are simply hypotheses. We'll inform everyone of our findings. But in the meantime I hope you will devise your own hypotheses about the most effective methods for lean transformation and put them to the test. And I hope you will be willing to share your findings with the Lean Community around the world.

Best regards

Jim Womack

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