

## How Lean Ready Are You?

*By Mark S. Doman*

Student teams in my Oakland University Lean Principles & Practices in Organizations course have conducted more than 20 lean assessments during the past four years. Many of these assessments have been conducted at small manufacturing companies in southeastern Michigan.

Several of these companies have implemented a lean system and are well on their way to reducing waste, improving productivity as well as engaging their employees in continuous problem-solving.

Unfortunately, the student teams have witnessed too many failed lean journeys and abandoned lean start-ups. Several were 5S attempts that were really 2S one-and-done events.

Many leadership teams did not understand what a lean journey entails. And many did not appreciate the changes to a company's culture that need to take place for a lean transformation to be successful.

Before plunging into lean, I suggest that interested companies participate in a lean readiness self-assessment practice run. This would permit the leadership teams to take the lead — in other words, get on the field, grab the ball and run some plays before making a commitment to a lean transformation.

I recommend that any leadership team considering a lean initiative complete the LRA as set forth in box at left. From that, you can make an informed decision about whether to commit to start your lean journey.

Will the LRA take time away from the leadership team's busy, hectic schedules?  
Yes.

After taking part in a LRA, will the leadership team better understand lean and be ready to make an informed commitment to start and stick to a lean journey?  
Definitely.

Will you need a consultant to complete a LRA? Not necessarily. A trained lean consultant would certainly help, but the LRA can be completed without one.

## Lean Readiness Assessment (LRA)

The following Lean Readiness Assessment (LRA) will help leadership teams better understand and appreciate:

**Purpose:** List the key reasons you are considering a lean initiative.

**Philosophy:** Gain leadership commitment required for a lean transformation.

**Problems:** Identify operational problems as well as opportunities for improvement.

**Process:** Identify how to use basic lean tools and techniques to fix problems.

## LRA Steps

Every member of the leadership team should participate in the first three steps of this four-step hands-on, data-driven LRA exercise:

**1. Go to the Gemba:** Get out of your offices and see what is really going on.

**2. Value Stream Mapping:** Understand where value is produced and where the waste is with data and metrics.

**3. Problem Storming:** Identify (not solve) major problem areas and where they are in the value stream with pictures and frontline input.

**4. Kaizen:** Solve a problem identified in the Problem-Storming exercise using the A3 process and train a cadre of your employees at the same time.

### **1. Go to the Gemba**

This is a critical first step in the LRA exercise. Each member of the leadership team needs to clear his or her calendar for at least half a day, put on safety glasses, grab pen, paper and camera and head out to see where the work is done and value is produced by your company.

Don't just go to the factory floor. Look at the administrative areas as well. Don't do a typical executive tour. Stop and really look at the people and processes. Make notes and take pictures. Record your observations and gather facts. Write down what you know and what you don't know. Ask questions if you don't know what is happening and why it is happening.

If you don't think you are seeing anything new, then you need to stop in a place you have always wanted to learn more about and just stand there (don't move, no phone calls or texting). Stay put for one hour and really watching what is happening around you.

When you have completed your Gemba experience, go to your office, shut the door, review your notes and pictures and answer the following questions as honestly and accurately as possible:

- Did you hate what you saw? Why or why not?
- If time and money were no object, could you improve the business by 50 percent?
- Do you feel excited about the improvements that are possible?



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## **2. Value Stream Mapping**

This is a team exercise. Clear the calendars for the entire leadership team for at least half a day. Each member of the leadership team should have completed the Go to the Gemba experience and everyone should bring their notes, pictures and answers to the three questions.

Each member should also bring whatever relevant data and metrics they have regarding the basic processes and functions of the business.

A lean consultant would be helpful for this exercise. Alternately, your team could read *Learning to See: Value Stream Mapping to Add Value and Eliminate MUDA* by Mike Rother and John Shook before the exercise.

Find a conference room with bare wall space and room to work. Buy a roll of brown paper and lots of different colored sticky notes. Tape the brown paper to the wall and ask everyone to visualize the primary value stream of the business. How do you produce value for your customers (what they will pay for) from customer request for quotation (RFQ) to delivery?

On the sticky notes, list all the action steps (both value-added and non-value-added) that are currently required to bring your primary product family through the essential material and information process flows. Place the sticky notes on the brown paper in the sequence the steps occur today. Make sure that the current flow is honestly reflected, warts and all.

Under each action step, add the data and metrics you have collected, particularly the number of operators, cycle time, overall equipment effectiveness (OEE), changeover time, work in progress (WIP), inventory, scrap rate and lead time. Also note what you don't know about each action step.

Use the data and metrics to get out of your comfort zone and confront reality.

When the leadership team has completed the Value Stream Mapping exercise, roll up the value stream map, go to your respective offices, shut the doors, reflect on what happened in the meeting and answer the following three questions as honestly and accurately as possible:

- How well did the leadership team work together?
- Did you see the abundance of waste in your processes that makes your company less competitive and profitable?
- Do you still feel excited about the improvements that are possible?



*Problem storming is a team exercise, but with a different team. It includes more than the leadership team. Invite employees who know the business from all levels and functions.*

### **3. Problem Storming**

This is a team exercise, but with a different team. It includes more than the leadership team. Invite employees who know the business from all levels and functions. Not too many, but get a good cross-section of people. Again, clear the calendars for at least half a day.

Unroll the value stream map and tape it back on the wall. Walk through the value stream map so that everyone in the room has a basic idea of the action steps and process flow. Ask for input from your invitees about missed steps, erroneous data and other issues.

When there is a consensus that the value stream map is complete and accurate, break into small groups of four to six people who will Problem Storm (follow brainstorming rules) and identify problems in the value stream that can possibly be fixed in the short term, won't cost an arm and a leg and will positively affect the business.

Have a spokesperson from each group report his or her three top problems that fit the criteria. Write all of the problems on a flip chart and then multivote by giving each participant three dots to stick by his or her problem(s) of choice.

Thank your invitees for participating and excuse them from the meeting. The leadership team collectively should answer the following questions:

- How open and honest were the participants, especially the invitees, in identifying problems during the Problem Storming session?
- Do you still feel excited about the improvements that are possible?
- Do you want to take the next step to form a small kaizen team to select a problem from the list and conduct a problem-solving exercise (using an A3 Report format)?

**Based on your team's answers, either decide to stop the LRA now or move forward to the fourth and final step. Select a lean champion from the leadership team, appoint a team leader from the invitees, form a kaizen team of five to six members from different levels and functions to choose a problem from the list of problems identified in the Problem Storming session and complete an A3 report.**

#### **4. Kaizen**

This would be a good time to retain a lean consultant to do some basic teambuilding and training on lean tools and techniques. If that is not in the budget, I would recommend reading *The A3 Workbook: Unlock Your Problem-Solving Mind* by Daniel Matthews.

The lean system is designed to uncover problems and make them highly visible and then have trained employees who are closest to the problem area fix the problems. The most advanced lean companies use kaizen to train their employees to be able to identify and fix future problems. Many North American

companies, however, use kaizen to fix immediate problems and as a byproduct train their employees.

The best approach at this early stage is to use kaizen to demonstrate the power of a small team working together to solve a significant problem for the business in a short period of time. This will help create momentum for a lean transformation and also create a cadre of trained employees. With that in mind, it is important to select the right champion, team leader and team members who are willing to give this a fair shot and have credibility with the leadership team.

The kaizen team needs to be briefed about the purpose and progress of the four-step LRA exercise by the leadership team. The leadership team needs to communicate clearly the ground rules for reporting, timing and resources available to the kaizen team.

After the team's initial lean training, show them the list of problems identified and voted on from the Problem Storming session and ask the team to choose a problem to perform an A3 Report on.

The kaizen team should first get as much background information about the problem so that it can define the problem as accurately as possible at this early stage. Many problems can be defined as the difference between the current situation and the established standard or leadership expectations. Based on the team's problem definition, establish a general timeline (no more than two months) for the team to complete the A3 Report.

Once this has been completed, the kaizen team should make a presentation to the leadership team to communicate the problem definition and projected timeline for its A3 Report completion so everyone is on the same page from the onset.

Then the team should schedule regular meetings at least once a week for up to the next two months.



The kaizen team should make a formal presentation to the leadership team upon completion of the A3 Report. The leadership team should publicly recognize the learning and contributions of the kaizen team.

The team should follow the A3 Report format below:

- 1. Problem Situation:** Determine what the current situation is, what the standards are and what the gap is.
- 2. Target:** Establish a specific improvement target with specific metrics that is achievable and realistic in the time frame.
- 3. Cause Analysis:** Identify the root causes of the problem so they can be eliminated or reduced.
- 4. Countermeasures:** Evaluate and select the best countermeasure(s) to fix the problem.
- 5. Implementation Plan:** Create, communicate and execute the plan.
- 6. Follow-Up:** Evaluate the results and metrics and compare against the target.

### **Next Steps**

The leadership team has invested no more than two days in the LRA and has experienced some of the fundamentals of lean first hand. The team has identified problem areas in the company's value stream and evaluated whether there is room for improvement that would justify a major initiative such as lean. Members of the leadership team have learned a great deal about their capabilities to lead a lean transformation. They have now seen lean in action with the kaizen team. The litmus test is emotional (Is there genuine excitement?) and rational (What is the projected ROI?).

The leadership team now has the knowledge and experience it has gained from the LRA to make a decision about whether it wants to start a lean initiative. It can

make an informed decision and firm commitment to go forward with the next steps of a lean transformation or call it a day and go back to business as usual&ellips;having learned more about themselves, the business and lean in the bargain.

*Mark S. Doman is a Pawley Professor in Lean Studies at Oakland University in the Human Resource Development Department and a member of the leadership team at the Pawley Lean Institute. He is a recent recipient of a Fellowship in Lean Studies from Oakland University and the Pawley Lean Institute. Doman received his Juris Doctor degree from the University of Minnesota. Prior to joining Oakland University, he had 25 years of business experience with Ford and AT&T, where he held various executive positions in operations, human resources and legal. He has led several major organizational change initiatives throughout his career that included Lean Workouts, employee involvement, quality circles, TQM, process reengineering, kaizens and corporate restructuring. He has worked with several organizations as a lean consultant and mentor. He is a member of the Michigan State Bar Association. He is the author of "A New Lean Paradigm in Higher Education: A Case Study." Quality Assurance in Education, Vol. 19 No. 3, 2011.*