

Chapter 11

People—Predictable Interruption, Source of Ideas

People and their ideas for improvement are close to the heart of Lean production. People can also seem to be close enough to the neck to cause a pain there. Perhaps that is because of Lean leaders' experience when they go to start the production day only to find one or more people have "called in" as unplanned absences. It is a big deal to be missing a person or two when the day's labor plan has been matched to the rhythm of takt time, or the allotted time per workflow, or the expected number of patients or customers. Without just the right number of people, flow does not flow, pull can deteriorate into stock-outs, and the takt beat is uneven and sporadic.

People issues may not seem to lend themselves to the process-focused comparison of actual and expected. In actual application, the Lean management approach works well with matters of attendance, rotation and staffing, performance issues, and employee involvement in process improvement suggestion systems. This chapter shows how. Learning Lean is a hands-on proposition. Effective Lean training calls for something different than the typical classroom approach. The training group in human resources (HR) can help develop coaching-based training if they understand the need. HR policy issues also come into play when talking about people issues in a Lean conversion. Matters such as job grades and classifications, pay systems, start and break times, job rotation, and layoff policies are likely to need attention in support of a Lean environment.

Whom Do I Expect Today? The Attendance Matrix

The first people-related issue is the most frequent one to arise: Who is here for work today? We know people will be absent; we just do not know who and when. Typical arrangements for handling absenteeism include carrying extra people—as many as 8 to 10 percent seasonally—to call on when people unexpectedly call in to say they will not be at work today. So, there are extra people in the building or on the network. Just try finding them when you come up short! Often it is a time-consuming scramble that ends in frustration for all involved. I cannot get the person I need or have been promised; the person I do get did not want to come and is not trained in the work I need to have done. There is a striking lack of process in many places, just like this scenario. The first question a Lean sensei will ask is: What is the process here? In the case of attendance, there is none. Is an absence process possible?

Many attendance tracking processes are limited to the number not expected at work. That is, we use calendars for the coming year to write in those workers we expected to be off on vacation, in large part, so we do not grant too much vacation in any single week to handle seasonally expected demand. So, the vacation log tells me who will *not* be available.

A different approach is to use an attendance matrix (all the people on the team, by every day of the month, a page per month for the year) filled in to tell me those whom I *can* expect to be at work tomorrow. Entries in the matrix identify:

- Those with planned vacation for the day (usually coded yellow for that person's row for the days of planned vacation)
- Those loaned out to another area or otherwise assigned (for example, to a project), and thus unavailable for work for a period of time (coded blue)
- Those on medical or other leave (coded green)

I should be able to count on everybody else showing up, ready to go. When people call in, they get coded red for the day. If they are late, they are coded half red (Figure 11.1).

Do people dislike being coded red? Sure they do! Do we count on everyone we have planned on to show up in order to have a productive day? Sure we do! Should people be accountable for their presence when the team plans on it? You bet! Toyota is said to hold start-up meetings at the beginning of the shift in large part to tell who has reported for work so plans can

be adjusted as needed. At its assembly plant in Kentucky, employees with perfect attendance for the year are eligible to participate in a raffle where new cars are the grand prizes. Showing up is important in a Lean workplace! Think of the savings associated with not having to deal with as much absenteeism as you do today. Of course, unforeseen things will happen to cause even reliable people to have an unplanned absence on occasion. Still, showing up when planned is important in a Lean environment—for everyone.

Who Starts Where Today? The Labor and Rotation Plan

Job rotation through a home rotation pattern is a common feature in the Lean workplace. Rotation helps prevent ergonomic injury from repetitive motion where this is an issue. It results in a cross-trained workforce with the flexibility to move to any of several jobs as needed. And, it means that many people are looking at each job, making a more fertile field for producing suggestions to improve the job for ease, safety, quality, or efficiency. Or, in an office setting, people might be assigned to handle different duties on a rotating basis. This might be to balance different kinds of tasks, or as with the design engineers in Case Study 10.5 in Chapter 10, to isolate interruptions, whether for handling unplanned breakdowns, requests for technical support or customer service, or being on-call for unplanned urgent needs.

Rotation also requires more work for the team leader, who has to establish quickly who starts where at the beginning of work. Relying on memory is one way. But, can the team leader reliably recall who started where yesterday, or where everyone ended? Probably he or she cannot. What about asking people where they started or finished the day, or the same questions, but for people who are off today? That does not seem like a good plan either. An alternative is a simple set of visual controls that go along with the expected attendance matrix and a qualification matrix. Taken together, these form a suite of tools for labor planning.

Completing the Labor Planning Suite

A labor or assignment and rotation plan is a map that identifies the workstations or the range of assignments in a work area—production workstations, team leaders, water spiders, etc., as well as types of service or on-call roles. In most cases, an abstract schematic that identifies only the workstations

or the names of other assignments works best. A label (magnetic is helpful here) for each team member's name goes on the map at the location where that person starts or the day's opening assignments. A rotation schedule (clockwise, zigzag, or a matrix of names and workstations or roles) completes the picture. The attendance matrix shows who is expected to be available for the next shift. It only takes a few minutes at the end of the day to set up the next day's labor and assignment plan, moving the name tags from where they were yesterday. This way, people can quickly find their starting assignment at the shift start-up meeting (see Figure 11.2a and b).

Labor and Rotation Plan: Sled Assembly

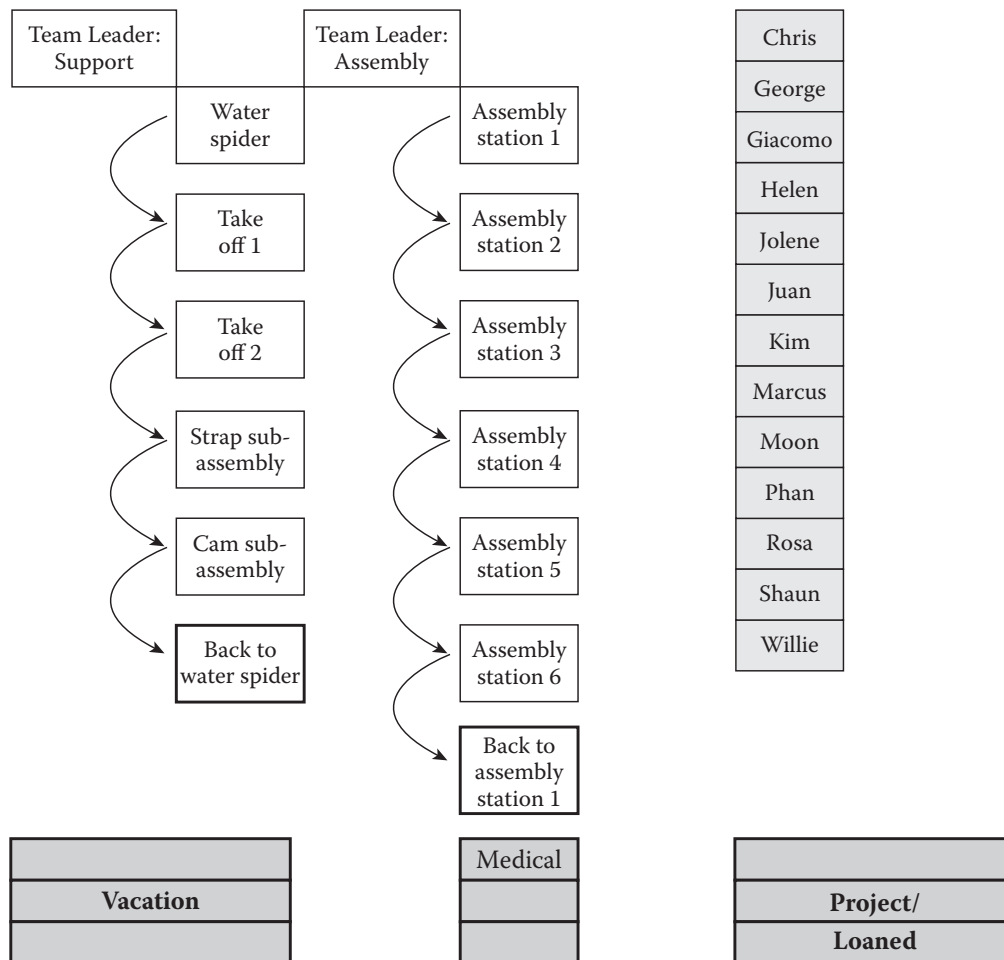


Figure 11.2 (a) Labor and rotation plan. Column 1 lists support positions. Column 2 shows workstations for (in this case) assembly. Column 3 lists people assigned to this work area or department. The names of people on vacation, medical leave, and Project/Loaned assignments are moved to the applicable list, indicating their unavailability for assembly or support assignment.

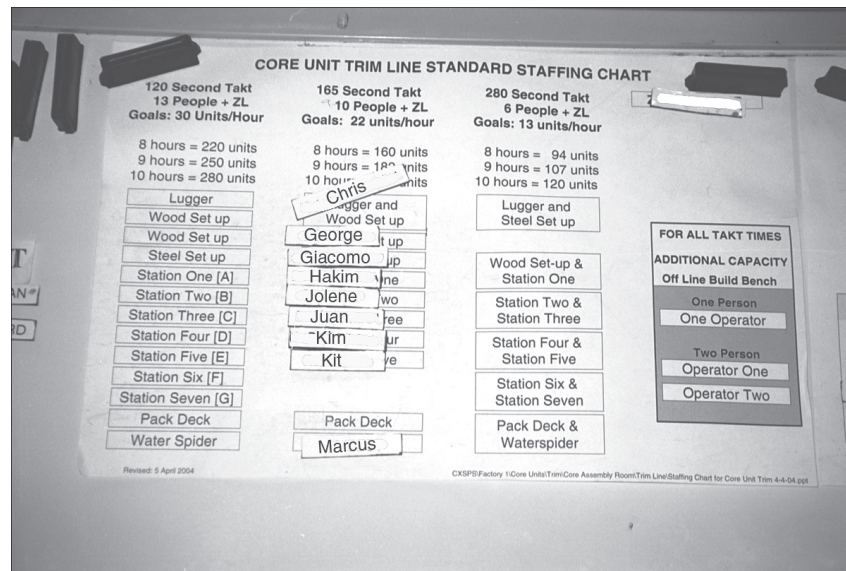


Figure 11.2 (Continued) (b) Photo of a labor planning board.

Who Is Qualified for Which Jobs?

Training records usually reside in a file cabinet somewhere, either in a supervisor's drawer (not great) or in the training department or in an HR database file (worse). When someone calls in as an unplanned absence and production is set to begin, you need to know *right now* who you can call on to fill in, even if only briefly to get production going. A qualification matrix (see Figure 11.3) tells you who is qualified at what level for which jobs. It includes information for all the people on your team as well as some from outside it. For example, if others have been interested enough in your area to become qualified in it, or have moved on from your area to another, they would appear on the matrix with the level of qualification they had achieved.

With this information, you are not simply asking for warm bodies to fill in, hoping they can learn the work, keep up, produce good quality, and avoid injury. Instead, you can go to your three-tier meeting, at which labor balance is high on the agenda, and make a specific request for Giacomo and Eva, who you know are qualified to fill the openings you suddenly find yourself facing.

These four tools—the expected attendance matrix, labor plan, rotation map, and qualification matrix—make up the labor planning suite. They provide, at a glance, information about availability, daily starting position, and qualification. Like other visual controls, the labor planning suite raises the level of accountability, especially the case for attendance with the attendance matrix. The suite also makes patterns visible that may not have been seen as clearly, such as

Qualification Matrix
Area: _____

Position Name	Assembly 1	Assembly 2	Assembly 3
Chris	1 2 4 3	1 2 4 3	1 2 4 3
George	1 2 4 3	1 2 4 3	1 2 4 3

1 = Being trained
2 = Can do the work with assistance
3 = Qualified; can do the work without assistance
4 = Qualified as a trainer

Figure 11.3 Sample skills matrix entries. Gray cells are filled in, representing completion of a given (numbered) level of qualification.

positions where too few people are qualified, the extent of cross-trained people from other departments, or patterns of attendance that had gone unseen.

How Can I Encourage Participation? The Idea System

Setting up conventional employee suggestion programs is quite straight forward. Making them work is another story. Traditional suggestion systems require considerable overhead: engineers costing-out proposed improvements; managers sifting, sorting, and culling; administrative people recording and routing information; and often several months later, the employee being thanked for a suggestion that “we just can’t commit resources to at this time.” Not very motivating!

When Lean is truly an improvement system, it produces a steady stream of employee-generated suggestions for improvement. The question is how to get the stream started and then, how to keep the ideas flowing. Before an improvement idea system can work, the organization has to want it to work and has to believe employees actually have ideas to contribute and a desire to do so.

And, as I suggested in Chapter 5, the organization must have developed the capability for tapping leaders’ latent potential for making

bite-sized as well as larger improvements while they also attend to their daily run-the-business tasks. The vacation paradox plays an important role in sustaining process improvement suggestion systems, in the following way.

In a takt-paced Lean production environment or high-volume service operation such as a call center, hospital ER, or urgent care clinic, virtually no time is available in a routine production day for operators or frontline staff-ers to work on improvement activities outside of structured improvement events, such as kaizens or problem-solving teams. Most of their day is consumed by their standardized work; break time is about all that is left. So, operators are going to have no time to work on implementing improvements they have suggested. And, the benefit from suggestion systems does not come from the suggestions; it comes from implemented improvements. The question becomes: Where do the resources come from to work on implementing employees' suggestions for improvement as an improvement suggestion system is getting underway, and once it is established?

Who Will Work on Suggested Improvements?

The answer is found in the long-term effect of the vacation paradox. Supervisors and team leaders learn through experience with daily task assignments that they really *do* have time most days to work on improvement, especially in a stabilizing Lean environment. This previously unavailable capacity becomes part of the new "way we do things around here." As it does, it becomes possible for team leaders, supervisors, and support group representatives to allocate the time for working on improvement ideas, including those that come from operators through the improvement suggestion system. That is the key that unlocks the gate to sustainable participation in the suggestion process. Consider Case Study 11.1.

A Visual Improvement Suggestion Process

As with much else in a Lean operation, there is power in making the improvement idea process visual. The usual reasons apply: when actual versus expected is visible and followed up, accountability for commitments and performance increases. Posting suggestions for all to see can encourage more suggestions as well as stimulate ideas that build on each other. A visually controlled suggestion process can convert the concept of listening to something you can see.

CASE STUDY 11.1: WHAT HAPPENS WHEN IDEAS ARE NEGLECTED

This case is a composite portrait that is typical of well-intended Lean implementation projects. When suggestion programs are introduced, especially in the course of a Lean transformation process, many frontline people will submit ideas. Partly, this is a function of the attention the area is getting from the project team working on the Lean implementation. The team will often solicit frontline workers' input on design and feedback on its initial operation. Suddenly, lots of ideas are flowing, because ideas are being listened to and acted on—by the extra resources in the area from the project team.

Then the team begins to pull out and eventually disbands and moves on. They indeed have been able to act on many of the ideas from the area's people who, as a result, typically continue to submit them. The ideas not directly related to the project are often left on a to-do list. And, new ideas continue to come in as people gain experience with the new process. The poor supervisor is left with a pile of suggestions to go along with an entirely new production system to debug and learn how to run. Figuring out the newly redesigned area is where the supervisor puts his or her attention, generally leaving the pile of ideas untouched. The pace of work on ideas slows dramatically and typically stops altogether. At the same time, the stream of ideas is drying up and stopping.

This is usually a frustrating mystery to the leaders in the area, who often genuinely want the help and support of frontline people to make the area successful. The leaders have seen the quality of the suggestions and the lift people experience from seeing them implemented. And now, nothing! But much else is pressing, and soon the leaders' attention has understandably shifted to things about which they know how to do something.

APPLYING THE VACATION PARADOX TO IMPLEMENTING SUGGESTIONS

The second illustration involves a case of waiting for the vacation paradox to take hold, and then applying it to an improvement suggestion process. This is an example of dramatic change and improvement from the first blush of a Lean transformation in an assembly area. Management was rightly pleased with the change, but the value stream manager knew much remained to be accomplished. She began using

a version of the three-tier meeting process plus regular routine audits and gemba walks to generate task assignments to the supervisor, team leader, and support group representatives who worked with the area.

Just as you would like to see, the area did not rest on the accomplishments of the project team. Instead, it kept improving, driven by the ongoing process of assessments from the production tracking data, conversion into short-term assignments, and follow-up for daily accountability. This process went on for several months, becoming a routine. The value stream manager then initiated a suggestion system for process improvements. One of its features was that it was a visual system, described below. Second, and most important, was that it involved the supervisor and team leader sorting the suggestions and taking responsibility for getting them implemented in a few days or at most a week, in just the same way they had become used to taking responsibility for acting on daily improvement task assignments.

The value stream manager recognized that implementing some of the suggestions was beyond the scope of the team leader or even the supervisor. So, she separated the idea board into two segments. The upper half displayed the ideas and status of submissions from the team members that were being worked on or were in queue for the supervisor or team leader. The lower half of the display held team members' suggestions that the value stream's support groups were working on. The value stream manager held a portion of the stream's support group capacity in reserve for assignment to work on employees' worthy suggestions that were beyond the scope of local line management to complete. She held a weekly meeting with her value stream support group representatives, the area supervisor, and the team leaders to evaluate the week's ideas. At this meeting, they agreed on ideas to be assigned to support group members. Those idea cards were then moved to the to-do column in the lower half of the board with the assigned person's name noted on the card.

The result was a continuing steady flow of suggestions from operators who were reinforced by a steady stream of often modest improvements in the process, which continued to improve its performance. Not all the improvement was attributable to employee suggestions. Nevertheless, the team has remained open to change, in large part because they have the regular experience of being listened to when they make suggestions for change.

This is a powerful attribute, especially in the context of Lean conversion projects where the target is changing long-entrenched ways of doing things. Failure to listen to employees' ideas is often among those old ways. Coming from that kind of history, one might think frontline people actually have been “checking their brains at the door,” and either do not have any ideas worth listening to or are uninterested in improvement.

In my experience, nothing could be farther from the truth. For one thing, the opportunity to be heard is powerfully motivating for people. This is true even when the only outcome is having been listened to. Further, in most cases, those on the frontline have not stopped having ideas. They have only given up on making suggestions. Indeed, in the project scenario above, when project teams ask for suggestions and feedback, they are typically inundated with ideas. The problem becomes the organization's inability to respond to them. At that point, ideas stop coming, and quickly.

Making Listening Visible

So, how can a visual control make listening visible and accountable and give frontline workers a sense of ownership and pride in improvement?

Use a format that encourages brief, readily displayed ideas. That is, require suggestions in writing on cards or Post-its®. This way, they are brief, easily displayed, and quickly moved. (For those who cannot write in English, dictating the idea to one who writes it down is perfectly acceptable.)

Keep your spreadsheet application in its holster; do not make lists of ideas! Remember the fingerprint factor. Keep and manage the ideas in the original form—the idea card. People have more sense of ownership when suggestions retain their fingerprints, their own handwriting and signature. Computer-generated lists can be intimidating, especially for those who do not work in this medium every day. If it is in the computer, the idea has become “yours.” If it is in my handwriting, it stays “mine.”

Create a visual representation of the way ideas move through the improvement process:

- First, ideas are submitted.
- Second, they are screened and either advanced to a queue or rejected.
- Third, they are actively worked on.
- Fourth, implementation is complete.

Such a process can look like Figure 11.4a and b. In it, you can see column headings for “ideas,” “to do,” “doing,” and “done.” As the cards move across

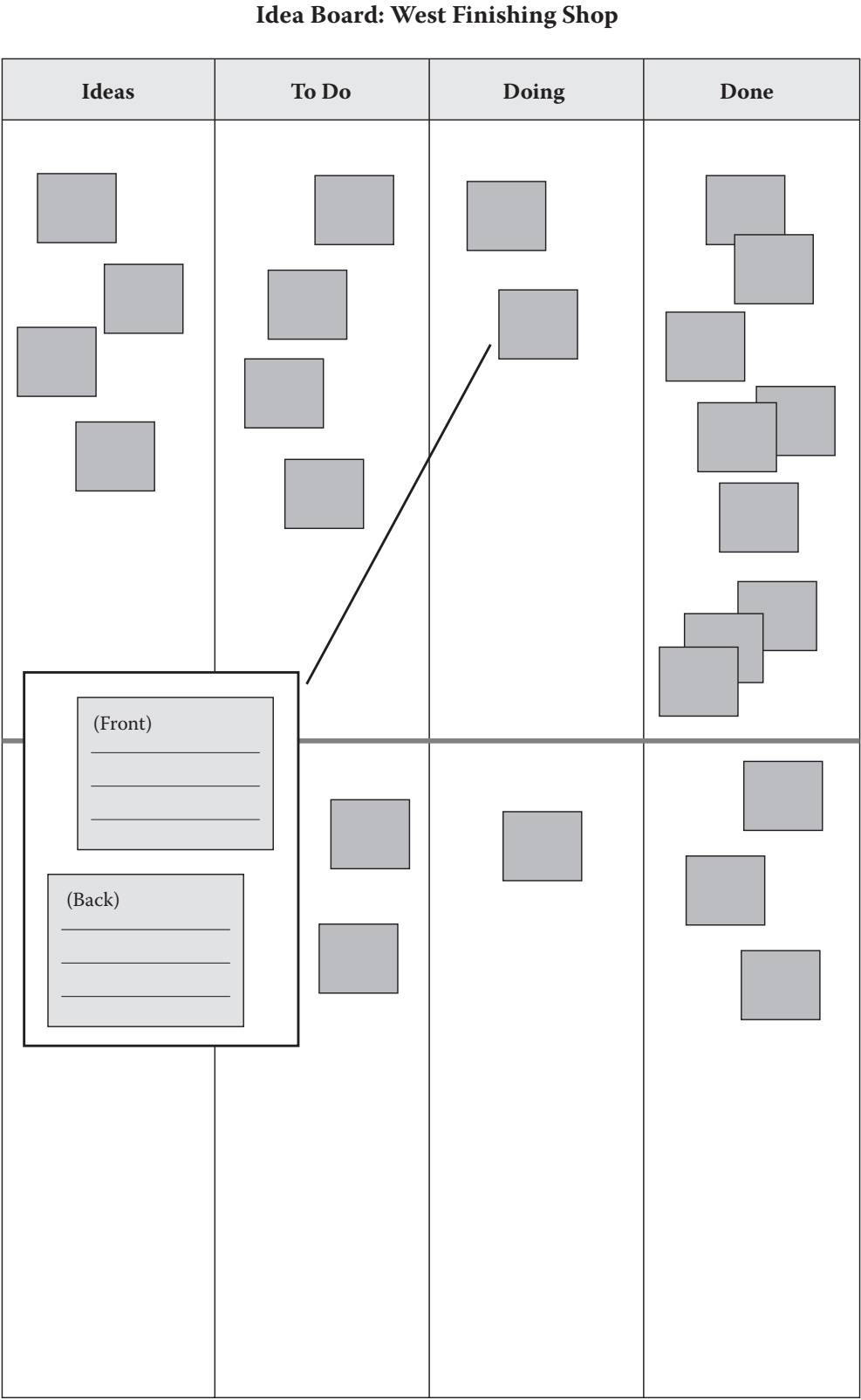


Figure 11.4 (a) Suggestion system idea board.

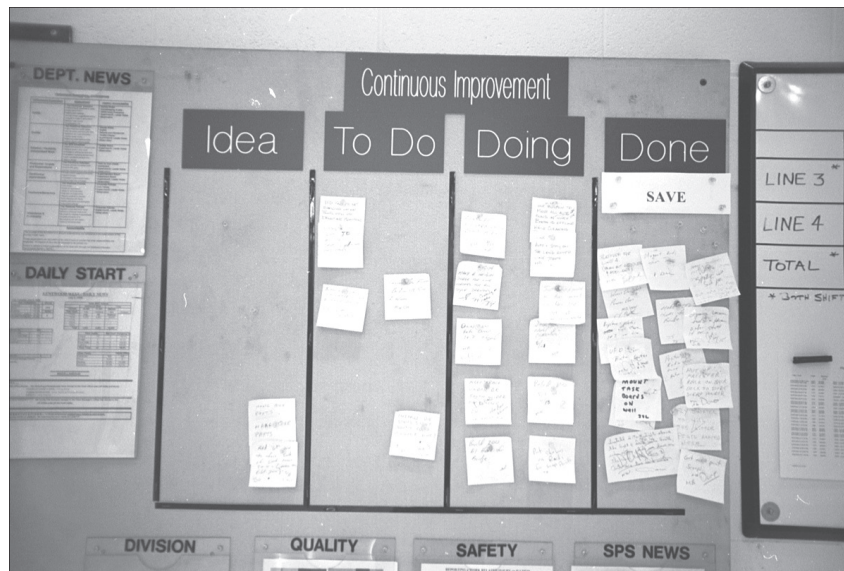


Figure 11.4 (Continued) (b) Photo of an idea board.

the board and the tally of implemented suggestions climbs, it is difficult for holdout curmudgeons to maintain that “management never listens to us.” Take them to the board, show the movement of cards, and point out the number implemented—each still in the handwriting of the person who made the suggestion—and suggest this way of being heard is open to them as well.

The process is uncomplicated, and it lends itself to variations that fit your particular circumstances and creative bent:

- Step 1: Employees write idea cards (or Post-its), including their name, and post them in the “ideas” column.
- Step 2: Once a week or more often, the supervisor and team leader review newly submitted ideas to advance them to the “to do” column or reject them. They note the reason for rejection on the back of the card, and talk with the author about the reason for rejection. In practice, few ideas are rejected. Reasons for rejection are typically scope (things for other departments to do), relevance to the business, or conflict with Lean principles.
- Step 3: At least once a week, the value stream manager, supervisor, team leader, and value stream support group representatives review the new submissions. They identify ideas that are beyond the resources or ability of the supervisor and team leader. Those ideas get moved to the support group segment of the board (below the dividing line in Figure 11.4) and assigned to a specific individual.

Step 4: The supervisor and team leader move ideas from the “to do” to the “doing” column and assign them for implementation, noting the assignment on the card. The assignments are usually to the supervisor or team leader. The number of active suggestions is based on the capacity to get them done within a week. As work progresses or is completed, brief notes on the back of the card document plans and actions.

Step 5: As an idea is implemented, move the card to the “done” column and update the tally of implemented ideas.

Step 6: The team leader covers the status of the suggestion process once a week in a daily tier one start-up meeting, congratulating those whose ideas are done, or implemented, and reviewing ideas that have moved to the “doing” column.

Step 7: Some organizations use team rewards for reaching designated levels of implemented suggestions, such as pizza upon reaching one implemented suggestion per team member (or the equivalent number). Others find the motivational impact of people being able to influence their environment and being recognized for it is enough to keep the process healthy.

The improvement suggestion system is explicitly connected to the three-tier meeting process. The same expected versus actual accountability review applies to employee suggestions as with any other improvement assignment. Ideas assigned to team leaders show up on the department-level (tier two) task assignment board. Those assigned to support group representatives show up on the value stream-level task assignment board.

Quick Wins and Just Do It Processes

Some organizations effectively use a less structured approach instead of or as well as one like the idea board process, variously referred to as “quick wins,” “just do it,” or “quick kills.” A worker or workers submit an idea and its anticipated benefits on a brief form. The supervisor or, more typically, the team leader okays it, and the worker or workers implement the suggestion during breaks in the schedule or in slower times. These programs typically occur in smaller work teams where team leaders are responsible for the day-to-day work process and are close to the hands-on or heads-down work. Descriptions or photos of these improvements are usually displayed once they have been implemented.

Lean Training for Line Leaders

A person's rank in an organization does not have much bearing on how he or she learns to be a Lean thinker and implementer. There is some benefit in learning from a book, class, or presentation, but people in any position really learn Lean by hands-on involvement and one-to-one coaching.

This is both useful and inconvenient! It implies that mass classroom training on Lean principles, though efficient, does not get the job done. Unfortunately, we cannot expect Lean training classes alone to transform first-line supervisors, team leaders, and frontline people into Lean thinkers.

It is not unusual for initial Lean training in an organization to come from outside, from a Lean consultant or sensei, as noted in Chapter 7. The sensei may do some limited classroom training but mainly the sensei spends one-on-one time with executives, plant managers, and perhaps with second-level production leaders, selected engineers, and specialists. One-on-one coaching from a sensei can be very effective, but it goes slowly and is costly. (Indeed, this is a constraint Toyota has experienced; its growth has outpaced its sensei resources.) As a result, the sensei's exposure to the rest of the organization is limited and, even with the original select group, typically does not continue beyond a year.

The key point is that hands-on experience and coaching is the way people learn Lean. This raises important questions: How can organizations bring personal coaching to the large number of team leaders and supervisors? And what are alternatives to the expensive external sensei?

Where Conventional Training Fits In

Conventional training does play a role in improving Lean knowledge and applications. My preference is for Lean training to be delivered by Lean implementers. After all, *sensei* translates as “teacher,” or one who has gone before. The training delivery of an experienced Lean hand might not be polished compared to a professional trainer. But deficits in style are usually more than overcome by the authenticity that comes from personal experience, especially from within the organization. Many consulting firms and universities offer weeklong or longer Lean training programs. If you have no access to internal resources, these can be a starting point. But, keep in mind this Lean advice: smaller quantities more frequently, delivered to the point of use. As in Case Study 11.2, where you can, provide Lean training when and where it is needed on the tool, skill, or principle to be used. Where possible, avoid

CASE STUDY 11.2: TRAINING BY THE BOOK OR BY THE FLOOR?

A new manufacturing VP thought more Lean training was the answer to improving performance, and requested help from the corporate training group. A year later, corporate training delivered a curriculum that filled a 3-inch binder. The contents were organized in modules, each covering a separate topic such as value stream mapping, plan for every part, kanban pull systems, leading team start-up meetings, and standardized work. The modules were lengthy, each at least half a day in class, and included classroom tests and assessment forms to rate applications on the floor.

Some plants ignored the material; others struggled to deliver it. In the company's most advanced Lean plant, the plant manager and Lean leader knew they needed a better way to develop the Lean skills of team leaders and supervisors. They decided to use what they could from the binder.

Phase 1: Training. With help from their plant trainer, they revised and shortened each module to no more than two classroom hours. The plant manager told the plant's support group leaders, team leaders, and supervisors that to remain in those positions, he expected them to complete all the (revised) modules and pass each test. The plant devised a flexible sign-up schedule for classes, and also put the modules online. A few team leaders chose not to complete the series and returned to production jobs. The plant staff and the rest of the team leaders and supervisors completed the modules and passed the tests. So far, so good.

Phase 2: Assessing on the job. Several months after the training was completed, the plant manager and Lean leader recognized the Lean training had been only partially successful. Some of the "graduates" were effectively able to use the skills and tools in their daily work, while others were not. Again, the plant modified the material in the training binder to fit its needs. This time, it reworked the assessment for each training module into a development plan, expanding a generic numeric scale to descriptive comments on each module's practices, noted in three categories: below expectations, meets expectations, exceeds expectations.

Blank development plans in hand, they met individually with a small pilot group of team leaders in their own areas to assess the practices covered in the applicable training module. The pilot revealed different gaps in performance from a variety of causes. Some leaders understood a concept but not how to apply it. In other cases, a given module did not directly apply in a particular work area, such as flow design in a lot-by-lot fabrication area. Some lacked the computer skills to create or update forms or tracking charts, or needed coaching in leading meetings, or in interpersonal skills.

Phase 3: A team of coaches. The assessments and development gaps uncovered a need for tailored follow-up. The plant decided to experiment with one-on-one coaching using its own resources. It assembled a coaching team of individuals with the skills needed to address the development plans. One of the coaches had deep technical Lean expertise, one was good at spreadsheet programs, and another coached interpersonal skills and how to prepare for and lead stand-up meetings. An individual team leader might have 20- to 30-minute coaching sessions from one, two, or three coaches a week, on the floor in his or her work area.

Phase 4: Expanding development. The pilot leaders were reassessed after four to eight weeks of coaching. All had closed the gaps identified in their development plans. Based on this success, the plant extended the approach to all the team leaders, again a small number at a time to match the capacity of its coaching team. During this process, it became clear that some supervisors had development needs similar to those of the team leaders who reported to them, so the plant began including developmental assessments and coaching for supervisors as well, particularly on the skills needed to be more effective coaches for their team leaders.

The outcome: Overall, most of those who passed the training module tests were able to close the gaps identified in their individual development plans, but some did not. The plant manager, reflecting on the process and improved Lean skills among plant leaders. He calls the multiphase approach of training, assessment and development plan, and coaching a critical factor in the plant's continued Lean progress and improved operating results.

training that batches all the tools and principles together; in other words, avoid overproduction in training just as elsewhere.

Where you can, understand the need for a specific Lean tool or concept, and then focus training on it. Consider needs like these: the ability to do root cause problem solving to eliminate a flow interrupter, knowing how to use a machine balance chart to calculate kanban quantities, or learning to make observations in order to balance work so it flows among people in a work group. This is a more effective approach than referring people to tab 11 in the binder they brought home from their weeklong training session. When using this modular approach to training, you can increase its effectiveness by immediately assigning students to apply in their work areas what they have learned in class. Then, follow up by assessing the application and giving feedback on what was done well and what could be improved. The close linkage of concept and real-world application can be powerful.

Knowledge, Practice, Feedback: The Role of Coaching

Sometimes, that “ah-ha!” experience is enough for an individual to firmly cement the understanding and how-to skill, but not very often.

When the sensei works with a student, he or she tailors the approach to the individual. What part of a concept have you mastered? What needs more work? If you can see the need for an application in situation A, can you recognize the concept’s application in situation B, in a different part of the operation, or in an altogether different part of the enterprise? A repeated algorithm behind the sensei’s approach to teaching and learning is “knowledge, practice, feedback.” The sensei should work with you, as long as you show motivation and progress, until you can see, for example, how the concept of load leveling or production smoothing (heijunka) applies in an engineering, healthcare, or marketing department just as it does in a physical production value stream. In fact, taking office and technical-professional people to a manufacturing setting can be helpful. Seeing in a physical, three-dimensional operation an otherwise abstract concept can help make the connection between concept and its potential applications.

Lean knowledge comes from practice in seeing and in doing. Knowledge, whether from training or another source, is only the beginning. Knowledge along with practice and feedback (an application of plan, do, check, act) leads to knowing *what* the concept is, *why* it is important, *how* it works, recognizing *where* it can apply, and being able to *implement* or *teach* it in disparate and apparently unrelated circumstances.

Conventional training, regardless of approach, can open the door to the Lean journey, but coaching is needed to see the path and progress along it.

What If Frontline People Don't Buy into Lean?

Problems with buy-in are almost always problems with leadership. These often include at least some of the following: a poorly articulated or weak case for change, failure to respect people's legitimate questions, not setting clear expectations at all levels, and weak or inconsistent follow-up on newly announced accountabilities and processes.

Even when none of these problems is present, some frontline people are just ornery, whether on the production floor, in the office, or in service positions. They bring a variety of personal and personality problems to work that lead them to refuse to accept the team leader's authority. That is especially a problem when you have just established team leader positions. A few people are likely to test the system in ways that can be difficult or impossible for a supervisor to observe or document.

Providing team leaders with a measure of authority is an effective way to respond to these initial challenges, as well as those that arise later from time to time. This stops short of including team leaders in the process of administering formal discipline. That should be left to supervision. Instead, it involves authorizing team leaders to make documented observations of problem behaviors that the supervisor can act on as a basis for disciplinary action.

That is not the same as the team leader administering formal discipline, and the documented observations do not always lead, and do not require, the supervisor to take disciplinary action. Further, each instance that results in a team leader's documented observation should be part of a conversation between the team leader and the employee in question. The authority comes from the fact that the team leader's notes are a sufficient basis, by themselves, for supervisors to take such disciplinary action as they see fit, without needing to have observed the behavior themselves. The effect on the responsiveness to team leaders' requests and suggestions is positive and dramatic.

Several conditions must be present for this process to be effective:

- First, supervisors and team leaders need to reach a shared understanding of what constitutes enough to trigger documenting a problem.
- Second, the supervisor must follow up on the team leader's action, if only with a conversation with the employee acknowledging the incident.

Table 11.1 Typical Items on Team Leader Notes

<i>Thanks for</i>	<i>Please Work to Improve</i>
Volunteering	Starting/stopping work on time
A positive attitude	Keeping up with standardized work
Offering a suggestion	Handling kanbans properly
Preventing a problem	Meeting requirements for quality
Extra effort	Following 5S standards/procedures
Other:	Other:
Team leader comments	Team leader comments

Otherwise, employees will have no more reason to pay attention to the team leader's requests than before.

- Third, the process has to be simple and easy to use.

One example of this is supplying team leaders with a pocket-sized pad of preprinted notes. The notes list categories for behavior that needs improvement on the front side. On the back, to acknowledge and reinforce helpful behavior, the categories list positive contributions (Table 11.1). When the team leader observes either positive or problematic behavior worth noting, he or she talks with the employee, shows him or her the note, and then signs it and gives it to the supervisor. The supervisor responds within a shift, either talking with the team leader to better calibrate standards or talking with the employee.

Of course, it is important to be sure in advance that team leaders have the interpersonal skills to handle these kinds of interactions potentially involving conflict. It is important for supervisors and team leaders to reach a mutual understanding as to what kind of behavior warrants what kind of response, and timeliness of follow-up.

Responding to Low Performers

As work becomes balanced and flow depends on everyone in the system meeting expected outcomes, low performers show up like they are under spotlights. These low-performance situations can be troubling for leaders to deal with, but keep in mind that everyone in the workplace is watching what you do. Does everyone have to keep up, or are we willing to sacrifice performance for one or two? There is a direct 5-point checklist to review in

determining what to focus on when working to turn around problems in individual performance.

- Are the tools and equipment the person is using calibrated and working properly?
- Are parts and materials they are using within specifications? Or, is the information they are using current, complete, and accurate?
- Has the person been appropriately trained?
- Have expectations for performance been made clear?
- Has there been regular feedback on performance?

If you rule out these benign explanations for a person's inability to do the work in a newly Lean area, your options become limited. As you go through these considerations, it can be helpful to keep a distinction in mind. There are those who can't do the work, perhaps unable to keep up in a takt-paced or high-volume setting. Then there are those who won't do the work, for many reasons. Your organization may have a place for people who can't meet expectations in a given production environment. Whether or not such a haven is available, you almost certainly have a progressive discipline system. You may be used to using discipline only in cases of objectionable conduct, especially in a production workforce. More likely you use the discipline system for performance problems among the salaried workforce. You will need to seriously consider using your progressive discipline system for performance in the factory, office, or service delivery setting as well.

Progressive Discipline

In these instances, the use of progressive formal discipline is an unambiguous sign to the employee that the performance problem is a real one that might eventually cost the employee his or her employment. When the alternative becomes unavoidable, some from the won't group suddenly become able to do the work everyone else does. In other cases, formal discipline is an increasingly clear signal for the person to find another position to move to where he or she can meet expectations, if such a position exists.

This is not a happy situation to encounter, but it is an implication of moving to well-defined and documented work processes, with clear expectations for outcomes overall as well as step-by-step. If these cases are not managed, many in the operation will find commitment to the Lean initiative open to question. It will be that much more difficult, if not impossible, to develop disciplined adherence to standards if the standards do not apply universally.

Human Resources Policy Issues in Lean Management

Lean management will almost inevitably involve changes to your organization's human resource policies. Any change is best accompanied by a restatement of the business case for the change to Lean production and an explicit connection between the case for change and the specific change at hand. Table 11.2 summarizes some of the policy areas that may be involved, their connection to Lean work processes, and some potential obstacles to overcome in making the change.

The changes in policies may be dramatic and far reaching, such as changing hourly pay systems from piecework to a flat or day rate. They may involve changing the policy that governs job elimination related to process improvement activity and subsequent exposure to layoff. They may involve the kinds of changes in authority and application of the discipline system outlined above. Some changes are more mundane, like changing break or start times, though any and all of these changes are capable of sparking emotional reactions. Having a firm grasp of why you are making the change and anticipating the questions and reactions you are likely to face are important preparation for working through these potentially contentious issues. Keep in mind that the best reaction often has nothing to do with stating the logic behind the change. Giving people the opportunity to make their displeasure heard is often the most effective thing you can do, especially since you are unlikely to be able to satisfy the desire to turn back the clock to the way things were before.

Involve HR in Lean

Your HR group is more likely to respond to your requests for support if they know something about the rationale for converting to Lean production. HR is likely to be interested in how Lean is changing the shop floor, office, and service delivery process, people's jobs and access to information, and their opportunities to participate in changes that affect them. Involve HR as much as you can, as early as you can—changing policies can take quite a bit of time in many organizations.

Take HR executives to the floor and show them what the new ways—and new performance measures—look like in comparison to the old. Share with them the case for change. Introduce them to the statistics on ergonomic benefits from the new job designs, process documentation, and rotation. Show them the visual proof of your methods for involving employees, for listening

Table 11.2 Potential Policy Issues in a Lean Conversion

<i>Policy Area</i>	<i>Link to Lean Production</i>	<i>Potential Obstacles</i>
Rotation	Rotation mitigates risk of repetitive stress injuries in work elements repeated at a takt pace; it results in a multiskilled workforce with many able to step in when needed; and it provides many eyes on each job, which increases the chances to see and suggest improvements.	Rotation must apply to all or it may be unenforceable. When initiated, not all may be able to succeed at each job in the rotation pattern. Will that disqualify those who cannot meet quality and takt requirements? What options will they have?
Layoff	Even though Lean will result in elimination of some work, nobody will lose employment as a result of process improvement. Lean should make us more competitive, preserving jobs in the long run. Layoffs might be needed if business conditions change.	Are you willing to temporarily absorb employees made surplus by Lean improvements? If not, forget about employees' cooperation and involvement in improvement.
Classifications and grades	Lean works best with a flexible, multiskilled workforce. Specialized knowledge is now contained in standardized work; previously complex jobs have been redesigned to support flow or to make them easier, like quicker setups. Existence of many grades and classifications is no longer warranted because of the changes in the jobs.	Many are proud of the grade or classification they have achieved and will see consolidation as a loss. Are you willing to work your way through this with your people? Can you reach agreement with your union, if applicable, balancing other changes with this one?
Pay	Lean works best with a flexible, multiskilled workforce. Because work has been restructured into smaller elements, and we have begun rotation and consolidated grades and classifications, the pay system needs to change to catch up with changes on the production floor.	Reducing distinctions in pay may end up reducing the pay of some employees. Are you willing to work your way through this with people, perhaps by phasing in the change?

Continued

Table 11.2 (Continued) Potential Policy Issues in a Lean Conversion

<i>Policy Area</i>	<i>Link to Lean Production</i>	<i>Potential Obstacles</i>
Common or synchronized start times	Lean reduces buffers of inventory between processes. To maintain Leaner, lower levels of inventory, production needs to begin and end at specific times so we make what we need when we need it.	Start times can be surprisingly emotional. Are you willing to work your way through this with people? Can you phase in this change to give people time to adjust personal or family arrangements?
Common or synchronized break times	We need to make what we need when we need it. Synchronizing breaks in continuous process areas may be required for that. With balanced, takt-paced work, when one person leaves, everything stops. That means when one breaks, all break.	Some have been able to manage their own schedules, including longer or extra breaks. You will have to be willing to enforce break times more than you may have in the past, often an unpleasant duty.

and responding to their suggestions. Enroll them on your team; they'll come to help out eventually, if not right away.

Summary: Resolving People Issues to Support Lean Production and Lean Management

Predictability in the daily availability of people and a structured approach for responding to unplanned absences would be desirable in any production environment. It is especially important in a Lean production environment paced by takt time. Lean management provides a suite of labor planning tools that make attendance more visual, thus raising the level of public accountability for coming to work. Lean management's labor planning tools bring stability at least to the process of responding to unplanned absences.

An effective employee improvement suggestion system can be deceptively demanding if those in leadership positions are not prepared to respond to what is, in effect, new work being delegated to them in the form of improvement suggestions. The vacation paradox builds new capacity for acting on suggestions. Until that capacity is in place, it is best to hold off implementing an idea system. Actual versus expected and

visual control applies in managing the suggestion system just as it does in most of Lean management. Employees appreciate being able to see the progress of their ideas, and leaders benefit from the increased trust in Lean that comes from the visual evidence of having listened to and acted on ideas from frontline workers.

Training is often part of HR's responsibilities. Lean training is most effective when the training group partners with operating units first to understand Lean and the role of coaching in Lean learning. With this foundation, the training group can help develop the materials and approaches the operating units need to develop, train, and effectively prepare people for Lean skills and thinking throughout their workforce.

A Lean implementation can raise questions about a number of HR policies. Lean requires much more precision in execution than a batch-and-queue system, or in environments where the work process had previously been left to the discretion or preference of individual employees. So, issues that interfere with disciplined adherence to Lean processes must be addressed quickly. Equipping team leaders to make authoritative observations of problem behaviors is one step. Preparations for applying progressive discipline to "can't" and "won't" performers is another. Beyond that, a series of policy changes may be called for, ranging from pay and consolidation of grades and classifications to required performance in job rotation, alterations in layoff policy, and changes in break and start times.

It is a good idea to involve the HR organization early and thoroughly in Lean. With a context in which to view the requested changes to support Lean production and Lean management, HR is much more likely to understand and work to accommodate your requests.

Study Questions

1. What are the implications, if any, for employees who miss an abnormally large number of workdays? For employees who virtually never miss workdays? Is there any discernable effect on overall morale?
2. Are jobs and tasks regularly shared here, or do people always do the same work in the same place? Do you think this has any effect on the ability to improve processes?
3. Are there standards for jobs that people need to meet, or are people allowed to just do the best they can? Does this affect morale one way or the other?

4. Do people have a regular, effective vehicle for suggesting changes to the work process, tools, task sequence, or other aspects of how the work is performed? Are suggested changes regularly tried out and put in place? Do people have the opportunity to work on implementing their suggestions? What is the overall effect on morale of whatever the current suggestion process may be?
5. What kind of Lean training is done here? Classroom, self-study, hands-on coaching, PDCA (plan, do, check, act) experiential learning? How effective has it been in supporting a robust Lean initiative?
6. Is progressive discipline used here for performance problems as well as for problematic conduct? What is the effect on the sense of equity in the workplace?