LEAN PROGRESS

Ideas for helping your company transition to lean effective and rapidly.

LEAN LEARNING CENTER

ISSUE 14
September 2008

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Lean Learning Center

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Case Study: Northeast Health

A Slow and Steady Approach Results in Faster, More Reliable Processes

When it comes to achieving sustainable performance improvement that cuts across all divisions, the prognosis at Northeast Health looks good. Thanks to a slow and steady approach to lean implementation.

Northeast Health was formed in 1995 with the merger of Samaritan Hospital and The Eddy, which offers senior care and services. Albany Memorial Hospital joined the network in 1997. Today, the system provides care to approximately 350,000 people with an array of services. From hospitals, diagnostic services, and rehabilitation to nursing homes, home care and retirement living options, Northeast Heath, headquartered in Troy, New York, reaches out to 15 counties and employs more than 4,000 people.

In 2003, Northeast Health began investigating the idea of initiatives to improve processes throughout the organization. Its Board Performance Improvement Committee was asked to research options and examined a number of them including Six Sigma, the Baldridge Award, and ISO 9000 before deciding to pursue lean. Lean was chosen because of its simple, straightforward approach of focusing on process standardization ~ something that Northeast Health thought would differentiate it from competitors.

Northeast Health.
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After sending out RFPs to various lean providers, the decision was made in early 2004 to work with the Lean Learning Center of Novi, Michigan. "We liked the fact that partner and co-founder, Andy Carlino had healthcare experience," explained Tricia Brown, vice president of corporate affairs. "And, because they helped us see how applicable lean was to specific projects as opposed to other groups whose high-level approach we just couldn't get our arms around."

In conjunction with this decision, Northeast Health made another important one. "We understood that implementing the initiative with a one inch deep, 100 foot wide approach would mean proceeding at a slower pace," explained Brown. "But it would give us the opportunity, within our budget constraints, to ultimately touch a larger population of the system."

Scoring quick yet decisive wins

Northeast Health rolled out its lean initiative in 2004 with the intent of giving people a "taste" for lean. Carlino introduced the principles of lean to 35 top managers in a two-day session. Then, one of Center's Sr. Consultants, came in to conduct four kaizen events that first year ~ two in the acute care hospital, one in

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These early victories not only gave staff members a taste of lean, they made believers out of them.

home care and one in the nursing home division.

Focusing on targeted issues in a particular unit or department, team members mapped out specific processes step-by-step, breaking down every task in detail. Goals were established, root causes examined and ways to save time and eliminate waste were identified in order to improve process flow.

A kaizen in the patient care division, designed to streamline prep time in ambulatory surgery, proved successful because of its narrow focus and well-defined scope. The key goal was to decrease the amount of wait time in pre-surgery by one half hour. Post-event review showed that the goal was not only met - it was sustained in nine out of nine surgeon-identified specialties. Another early kaizen in the nursing home division identified yet another opportunity to save time and its goal was also achieved.

In a third 2004 kaizen - this one at Samaritan Hospital - the team focused specifically on decreasing operating room turnaround in GYN cases where a physician performs two surgeries in a row. Pre-kaizen data showed that the average turnaround time was 21 minutes. Process mapping indicated that it could be done in 13.63 minutes for more than a 30% improvement. When the new process was put in place, the aggressive goal was not quite met ... however, by achieving a 20% gain in turnaround time savings, the team could still call the event a success

These early victories not only gave staff members a taste of lean, they made believers out of them. One was Patrick Archambeault, a supervising community health nurse who recalls, “The kaizen was a lot of work but it was well worth it. There is such a need for this process. It brought us together as a team to share ideas, which is wonderful. I wish we had done it a long time ago.”

Reaching out ... touching more

In 2005, Northeast Health branched out a bit more with its initiative, conducting a total of 11 kaizens that touched even more areas of the Northeast Health system. In a residential services lab kaizen, the expected measure was bold - no missing labs in patient charts and 100% processing and reporting of physician-ordered labs. How did they do? A three-month sampling at 3 facilities and a full-year sampling at another showed only 2 missing labs at one facility. Almost on mark but not quite, so a new action plan was put in place. During that week the IT department developed a new way to use the system that enters and checks lab results. And, a closer relationship between two divisions - in this case the nursing home and Samaritan's lab was forged.

Another kaizen team in the community services division set a goal to meet promised (expected) home medical equipment pickup dates. Pre-kaizen data showed an on-time pickup 63% of the time. Post-kaizen data showed an average on-time pickup of 84% for 9 months in 2005. 2006 data continues to sustain the results at 92%. Also, driver productivity increased from 1.16 average deliveries/hour in 2004 to 1.21 in 2005.

"The kaizen tool has worked very well for us," says Brown. "Even negatives have been positive. Sometimes our events seemed a bit too big. Like the one where we had all four nursing homes involved. In it, we had to overcome hurdles because of the size of the group. But, in the end, without what I call a 'world hunger' approach, I don't think we could have standardized the process across the whole division so quickly."

Another step toward lean implementation was taken when Tricia Brown was sent to the Lean Learning Center's five-day Lean Experience in Novi. Here the objective is for participants to internalize lean through personal experience and application. As Andy Carlino explains, "Our form of instruction is certainly not the norm. Lean concepts are taught through discussion and hands-on discovery, not lectures." A popular part of the experience involves the airplane simulation exercise. On day two of the session, student groups build model airplanes. Typically, each group only builds one airplane in the allotted time. The second time around -- at the end of the week-long session -- using lean methods, tools and applications - most groups build at least nine.

Brown found the "learn, apply, and reflect" aspect of Lean Experience to be just what the doctor ordered. "The goal is to send participants back as walking examples of lean thinking and I couldn't wait to get back to share the experience with others." As a result, the lean team is growing all the time. In addition to Brown and Dr. John Collins, chief medical officer, four people have attended the Center's Kaizen Boot Camp class in order to learn how to plan and facilitate their own kaizen events.

Easy-to-digest learning

Another key component of lean implementation is the Lean Learning Laboratory, a place where small groups learn, practice and apply lean rules and tools. The lab consists of orientation meetings, module training by Brown and Dr. Collins, post-training and reflection. Subject areas include Scoreboards; Waste Walks; Five S's; Standardized Work and Problem Solving. In 2004, the Lean Learning Center helped Northeast Health launch its first Lean Lab in the central intake department of its community services division. Three additional labs are now up and running -- one in the pre-admission testing area at Samaritan Hospital; one on the floor of a nursing unit at the Eddy Ford Nursing Home and one at Northeast Home Medical Equipment.

"The labs are perfect for learning about lean tools in an easy-to-digest way. They've helped us realize -- and sustain - real, concrete achievements," says Dr. Collins. "Our people are going out into a particular unit, applying a lean concept that has just been learned, figuring out a key improvable and then tracking it in weekly or bi-weekly huddles." Adds Brown, "The labs have been wonderful. Though they take time and they're concentrated on a little department we are really seeing groups that grasp these ideas and start using it day to day as they question the waste in their area and work on eliminating it."

Reaping the results ... spreading the word

While financial-savings was not the primary motivator of the lean initiative, significant dollars can be attached to the improvements Northeast Health has made. "What really is amazing, though, is the time-savings we've been able to attach to lean," says Trish Brown. "This has been huge in terms of our being able to improve the service we deliver to our patients and residents, not to mention the improved quality of care." Dr. Collins is quick to point out that employee development has been key as well. "Many people - over 250 - have been touched by lean now. And

ANOTHER KEY COMPONENT OF LEAN IMPLEMENTATION IS THE LEAN LEARNING LABORATORY, A PLACE WHERE SMALL GROUPS LEARN, PRACTICE AND APPLY LEAN RULES AND TOOLS.

Northeast Healthcare Continued

rising lean stars are being identified all the time. We're in this for the long haul. And, educating even more employees - particularly providing a higher level of knowledge to a broader base of senior people -- will help us realize even greater results in the future."

"The hardest part of lean is sustaining it over time," admits Brown. Which is why the action review process and system-wide communication are so important. The kaizen teams get back together after three and twelve months to discuss key measures met, barriers encountered, successes to build on and weaknesses to improve on. One-page kaizen summaries are prepared and sent across the system.

Affiliate newsletters record lean successes, progress is discussed at staff meetings and senior leaders, including Northeast Health CEO, Dr. James Reed attend kaizen events regularly. Northeast Health is also working on a quarterly publication, called the "Green Book" that pulls together the various performance improvement initiatives being undertaken across the whole system. "It's like a three-legged stool that will include patient satisfaction data, the results of a series of patient safety metrics and results of our quality initiative, including lean," says Collins. Eventually this information will be shared throughout the organization.

Balancing rollout with reality

Northeast Health has been heating things up a bit in 2006, with new kaizens and learning labs. And, in the next rollout phase, education will play an even greater role in growing the culture of lean. "What we're facing now is that as more people see what lean tools can do, they want to do more with them," says Collins. Which is why Northeast Health is working right now on a plan that will help strike a balance between demand for lean and its supply of resources. "We all seem to agree that kaizens alone won't do it," says Brown, "and learning labs are valuable for helping us in specific areas only, so ultimately we will have to broaden our approach."

Admits Carlino, "Northeast Health's growing commitment and experience base means that they don't need us as much. And, that's a good thing." Back in 2003, the board was grappling with the what and the who of lean implementation. Now the big question for senior leaders is, "How fast can we afford to go?"

"WE'RE IN THIS FOR THE LONG HAUL. AND, EDUCATING EVEN MORE EMPLOYEES - PARTICULARLY PROVIDING A HIGHER LEVEL OF KNOWLEDGE TO A BROADER BASE OF SENIOR PEOPLE -- WILL HELP US REALIZE EVEN GREATER RESULTS IN THE FUTURE."

Leading Lean A-Z

By Jamie Flinchbaugh

Decades of knowledge in lean have been passed on, written down, turned into curriculums and even documented in the annual reports of some companies. But why do so many fail to achieve the potential of lean? When I speak at diverse industry conferences or programs, I ask who is doing something about lean and who is wildly successful. Unfortunately, both based on those surveys and my own observations, the rate of companies succeeding at lean is probably around 1 %. This is far too low.

What is the differentiator? It is far too complicated to suggest one answer, however if there were one answer, the one that has universal agreement is LEADERSHIP. Lack of leadership, or lousy leadership, can prevent any organization from moving forward, and it can be blamed for many failures beyond lean including the slew of corporate ethics collapses.

Why present Leading Lean concepts in A through Z? Well, if I didn't limit it to the 26 letters of the alphabet, I would probably never finish the project. Here I will actually start with Z. Enjoy.

Z: Be a Zealot

What is a zealot? Defined, it is a person who is fanatical and uncompromising in pursuit of their religious, political and other ideals. If I were to only pick one single leadership trait, it would not be zealotry.

Being a zealot can have both a good side and a bad one. In isolation, zealotry can be narrow-minded, blind, unforgiving and ultimately destructive to the objective. Zealotry must be balanced with pragmatism, partnership and a focus on others' real needs and perceptions. With the right balance, being a zealot is a critical component of leading lean.

The obvious reason for being a zealot is to convince others. But a less obvious reason is that if you're not a zealot, it is too easy to give up. A zealot spends most of his or her days frustrated. Why? Because not everything is the way you think it should be, and not everyone thinks the way you think they should either.

If you are not frustrated, you are probably not working on the right problem. Being a zealot helps you keep your focus and direction through that very frustration. Without it, you may focus on what is easy and doable, instead of the important, right and seemingly impossible things. To accomplish big goals you must be deeply committed to what you are pursuing.

Being a zealot helps you win others to your cause. The passion you show in your words and actions has many benefits. If you were pursuing something just because it was assigned to you, you would find it hard to show real passion. Passion and zeal can be contagious. People want to believe in something. They want passion, and will never jump in with both feet if they don't think they'll feel that same passion. And perhaps most importantly, when you become a zealot you never again deliver a canned speech or presentation. You speak from the heart. You speak from experience. You own the idea.

To be a zealot you first must become one and then must sustain that role. The first can take some time, but the second takes forever. To become a zealot takes belief, which comes only through experience. Don't attempt to become a zealot without experience because that leads to the kind of unbalanced zealotry that can be dangerous. To become a zealot you have to start with the head. Is getting it into your head the same as experience? You have to get the ideas, language, and knowledge in there. You have to learn it. Then, you must get it into your hands. What about your heart? That is the real test. Lean begins with you.

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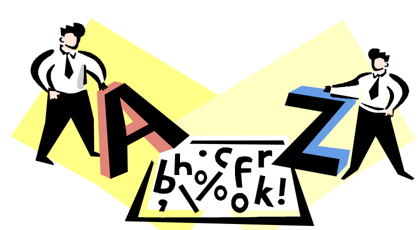

Lean Quick Tip: 5S E-mail Accounts

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WANT TO APPLY LEAN IN A SIMPLE WAY TO THE KNOWLEDGE INDUSTRY? TRY THIS LEAN QUICK TIP

Do you have one (or more) of those e-mail accounts where the scroll bar is so small because the number of e-mails in your account is so large? Do you find yourself hunting through hundreds of messages to find the one you're looking for? If so, it is probably time to apply the 5S's to your account.

Step 1: Sift

First things first, it's time to get rid of all of the messages that are old and obsolete. Be aggressive in this step. Don't keep messages that you know will never be returned. If there are attachments that need to be saved or printed, do so now. Get rid of as much as you can.

Step 2: Sweep

Since we're talking about computer applications, there really isn't the necessary cleaning activities that would be required in a physical workspace. Still this is a good time to make sure your e-mail pages have the appropriate toolbars and proper layout. Clean-up anything that doesn't look right.

Step 3: Sort

Now that what needs to be kept has been identified, the next task is to find a place for all of your e-mails. The easiest and most obvious way is to create folders based on tasks or other buckets of work where e-mails can be neatly filed for future use. The goal is to remove as much from your inbox as possible.

Step 4: Sanitize

This step is critically important as you will now set rules for yourself to keep your e-mail account clean.

Some rules you may consider are setting a maximum number of e-mails in your inbox. Once that number is exceeded, complete another sorting and sifting cycle. You can also set rules on how many e-mails are permissible in each folder. Another rule might be that any unopened e-mail will be automatically deleted after a certain number of days. The key is to set rules for yourself to keep things organized.

Step 5: Sustain

The final step in the process is setting up a quick audit process to make certain rules are being followed and your account is staying in good shape. In the beginning, this audit may need to be everyday to force the discipline to adhere. Overtime, it will become a learned way of working and you will be the envy of all your co-workers.

Give it a try. You will no longer look at your e-mail workspace with dread and you will be far more responsive in replying to other's requests. At the very least, this exercise is a great way to apply one of the cornerstone lean tools to the knowledge world.

Lean Toolkit: Cascade Teaching

Proper Uses of Tool

1. To provide standardized education of lean, either broadly or topic-focused, to the entire organization

2. To provide top-down connection through the organization establishing leadership expectations and practices

Improper Uses of Tool

1. Cascade teaching as something good for every level below the primary leader but fails to include the leader

2. Cascade teaching without proper change management preparations will likely create skepticism and cynicism in the organization

Description of Tool – How-to

Cascade teaching is a method to drive knowledge into the organization. It is done in order to provide specific knowledge throughout the organization in a standardized way. Two elements must be standardized – both the content, or message, and the process, or design.

Let's take an example to understand the process.

The CEO may begin teaching something like a lean overview, a concept like continuous flow, or a tool such as error proofing. The CEO would teach the Vice Presidents at the company.

The Vice Presidents, having taken the class from their boss, now prepare to teach their direct reports, perhaps the Plant Managers. The Plant Manager then prepares and teaches their staffs. The staff members then prepare and teach their reports. This continues through to the front-line employees so that everyone has been provided the same teaching and messages.

There are two primary benefits to this approach. First, when the teaching is received from the boss, the student is likely to take it much more seriously than if it is taught by some corporate staff. Second, if the executive or manager must teach it they must prepare to teach, and this helps extend the learning process much further than if they were just a student. These two benefits are very significant and powerful in spreading a message and creating alignment within the organization.

There are some barriers to success:

1. It is hard to maintain a standard message when each leader is responsible for teaching.

This barrier can be combated, although not eliminated, by preparing extensive teacher's notes for the managers.

2. Managers are not trained to be effective instructors.

This barrier can be mitigated by coupling each instructor with a trained instructor who can help them with the process, coach them on teaching, and take over any extremely facilitation-heavy activities.

3. It is hard to schedule.

Instead of open classes that people can attend as their schedule works, you are asking a manager and his entire staff to be at the same place at the same time for an extended time. The only solution to this

CASCADE TEACHING IS A GREAT TOOL TO PUT LEADERS IN THE ROLE OF TEACHING IN THEIR ORGANIZATIONS

Cascade Teaching (Continued)

is the strong emphasis on the importance and then making it happen.

4. The executive's or manager's behavior may not be consistent with what is being taught, leading to cynicism.

This is a barrier regardless of who is doing the teaching, but is somewhat reduced through the cascade teaching approach.

It is best to have an extended plan for cascade teaching; don't just do one module then ask "what's next?" Because of the significant work that you must do to remove barriers, it is best to leverage this over an extended series of cascade teaching. Have a plan for this. What will be taught first, second, third? What frequency will new classes be distributed? How will we link one course to the next? If cascade teaching is done for more than a year, executives will eventually choose this process to send any important message to the organization.

The teaching that will be done of course must be designed. The approach to this will depend on the organization and the capabilities of the senior executive leading the effort. It may be designed by the executive herself, or by a central support staff or even by an outside organization. The designer of the materials must then prepare the first teacher to do the teaching. They may also be involved in preparing other levels of managers to do the same teaching, depending on need and availability.

Variations on the Tool

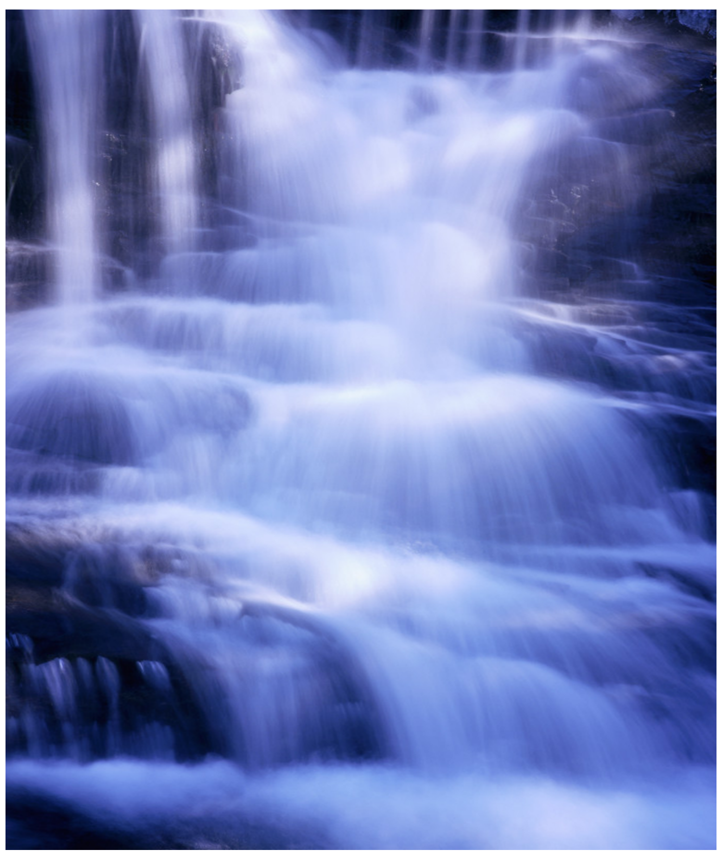
The practice can start at any level depending on what level the teaching needs are identified. For example, if a plant manager decides to transform safety practices in the plant, a cascade teaching program may begin at that level and be driven down throughout the organization.

How Tool Relates to Rules and Principles

Cascade teaching applies the principle of **Create a Learning Organization** by strongly valuing learning. It turns the leaders into teachers, and in order to be teachers they must also be learners. The exchange between boss and subordinate, or mentor/mentee, begins to build a learning culture.

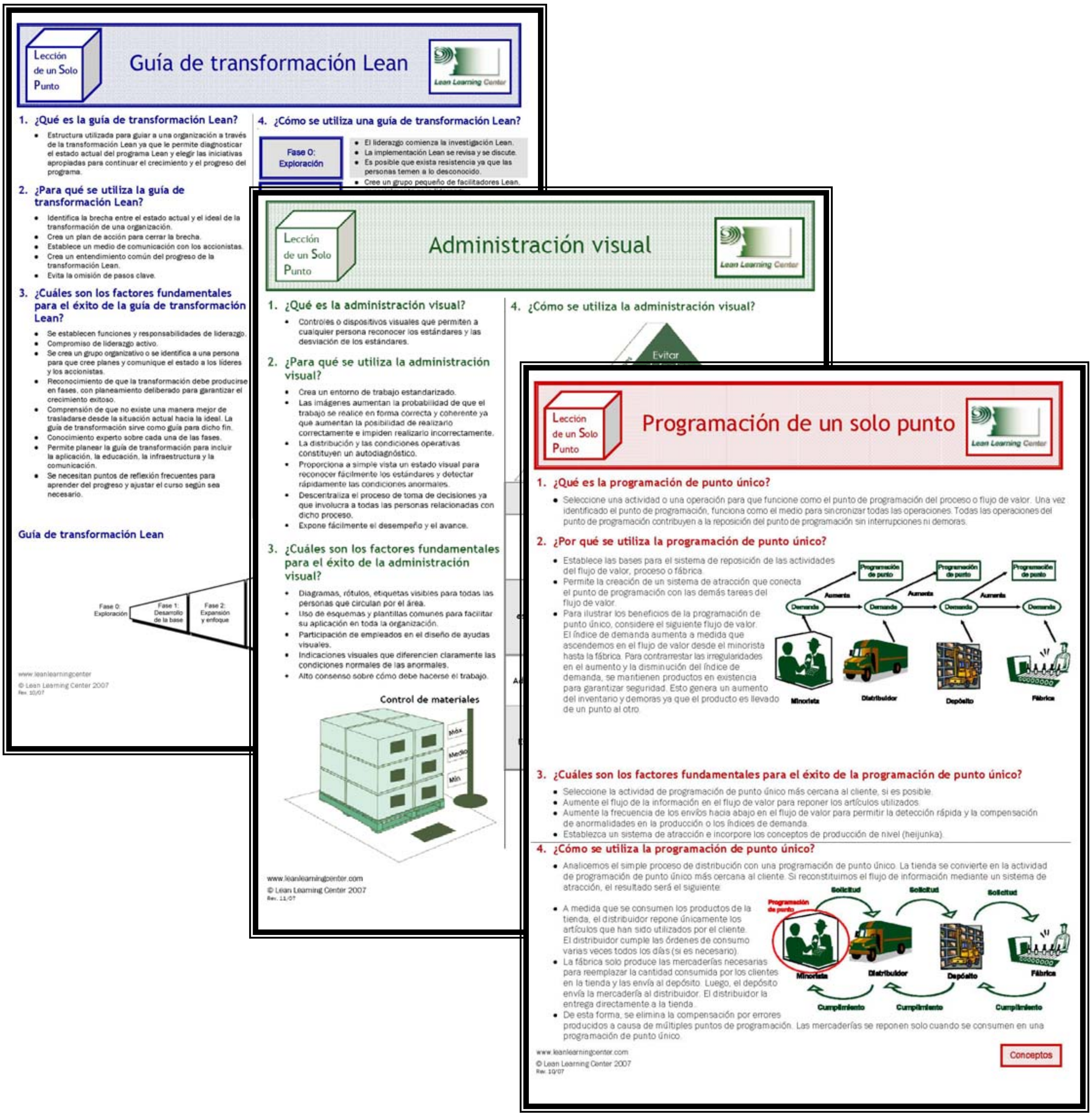
Cascade teaching also **Establishes High Agreement of Both What and How**. Through teaching, the company's approach to a practice or tool is taught in a standardized way, providing a consistent application among students.

Lean **Rule #3: Specify and simplify every flow path** is applied as the teaching flows throughout the organization



Single Point Lessons Available in Spanish!

The Lean Learning Center is pleased to announce that our Single Point Lesson package comprised of over 60 concepts, process tools, change management and improvement tools, and lean rules and principles is now available in Spanish. To review Single Point Lesson samples or to obtain more information on the package, pricing or ordering options, please review the products section of our website at http://www.leanlearningcenter.com/products/products__singlepoint.cfm or by contacting us directly at 248-478-1480.



Lección de un Solo Punto

Guía de transformación Lean

Lean Learning Center

1. ¿Qué es la guía de transformación Lean?
   - Estructura utilizada para guiar a una organización a través de la transformación Lean ya que le permite diagnosticar el estado actual del programa Lean y elegir las iniciativas apropiadas para continuar el crecimiento y el progreso del programa.
2. ¿Para qué se utiliza la guía de transformación Lean?
   - Identifica la brecha entre el estado actual y el ideal de la transformación de una organización.
   - Crea un plan de acción para cerrar la brecha.
   - Establece un medio de comunicación con los accionistas.
   - Crea un entendimiento común del progreso de la transformación Lean.
   - Evita la omisión de pasos clave.
3. ¿Cuáles son los factores fundamentales para el éxito de la guía de transformación Lean?
   - Se establecen funciones y responsabilidades de liderazgo.
   - Compromiso de liderazgo activo.
   - Se crea un grupo organizativo o se identifica a una persona para que cree planes y comunique el estado a los líderes y los accionistas.
   - Reconocimiento de que la transformación debe producirse en fases, con planeamiento deliberado para garantizar el crecimiento exitoso.
   - Comprensión de que no existe una manera mejor de trasladarse desde la situación actual hacia la ideal. La guía de transformación sirve como guía para dicho fin.
   - Conocimiento experto sobre cada una de las fases.
   - Permite planear la guía de transformación para incluir la aplicación, la educación, la infraestructura y la comunicación.
   - Se necesitan puntos de reflexión frecuentes para aprender del progreso y ajustar el curso según sea necesario.
4. ¿Cómo se utiliza una guía de transformación Lean?

Fase 0: Exploración
- El liderazgo comienza la investigación Lean.
- La implementación Lean se revisa y se discute.
- Es posible que exista resistencia ya que las personas temen a lo desconocido.
- Cree un grupo pequeño de facilitadores Lean.

Guía de transformación Lean

Fase 0: Exploración | Fase 1: Desarrollo de la base | Fase 2: Expansión y enfoque

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Lección de un Solo Punto

Administración visual

Lean Learning Center

1. ¿Qué es la administración visual?
   - Controles o dispositivos visuales que permiten a cualquier persona reconocer los estándares y las desviación de los estándares.
2. ¿Para qué se utiliza la administración visual?
   - Crea un entorno de trabajo estandarizado.
   - Las imágenes aumentan la probabilidad de que el trabajo se realice en forma correcta y coherente ya que aumentan la posibilidad de realizarlo correctamente e impiden realizarlo incorrectamente.
   - La distribución y las condiciones operativas constituyen un autodiagnóstico.
   - Proporciona a simple vista un estado visual para reconocer fácilmente los estándares y detectar rápidamente las condiciones anormales.
   - Descentraliza el proceso de toma de decisiones ya que involucra a todas las personas relacionadas con dicho proceso.
   - Expone fácilmente el desempeño y el avance.
3. ¿Cuáles son los factores fundamentales para el éxito de la administración visual?
   - Diagramas, rótulos, etiquetas visibles para todas las personas que circulan por el área.
   - Uso de esquemas y plantillas comunes para facilitar su aplicación en toda la organización.
   - Participación de empleados en el diseño de ayudas visuales.
   - Indicaciones visuales que diferencien claramente las condiciones normales de las anormales.
   - Alto consenso sobre cómo debe hacerse el trabajo.
4. ¿Cómo se utiliza la administración visual?

Evitar

Control de materiales

Máx
Medio
Mín

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Lección de un Solo Punto

Programación de un solo punto

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1. ¿Qué es la programación de punto único?
   - Seleccione una actividad o una operación para que funcione como el punto de programación del proceso o flujo de valor. Una vez identificado el punto de programación, funciona como el medio para sincronizar todas las operaciones. Todas las operaciones del punto de programación contribuyen a la reposición del punto de programación sin interrupciones ni demoras.
2. ¿Por qué se utiliza la programación de punto único?
   - Establece las bases para el sistema de reposición de las actividades del flujo de valor, proceso o fábrica.
   - Permite la creación de un sistema de atracción que conecta el punto de programación con las demás tareas del flujo de valor.
   - Para ilustrar los beneficios de la programación de punto único, considere el siguiente flujo de valor. El índice de demanda aumenta a medida que ascendemos en el flujo de valor desde el minorista hasta la fábrica. Para contrarrestar las irregularidades en el aumento y la disminución del índice de demanda, se mantienen productos en existencia para garantizar seguridad. Esto genera un aumento del inventario y demoras ya que el producto es llevado de un punto al otro.

Programación de punto | Programación de punto | Programación de punto
Aumenta | Aumenta | Aumenta
Demanda | Demanda | Demanda | Demanda
Minorista | Distribuidor | Depósito | Fábrica

3. ¿Cuáles son los factores fundamentales para el éxito de la programación de punto único?
   - Seleccione la actividad de programación de punto único más cercana al cliente, si es posible.
   - Aumente el flujo de la información en el flujo de valor para reponer los artículos utilizados.
   - Aumente la frecuencia de los envíos hacia abajo en el flujo de valor para permitir la detección rápida y la compensación de anormalidades en la producción o los índices de demanda.
   - Establezca un sistema de atracción e incorpore los conceptos de producción de nivel (heijunka).
4. ¿Cómo se utiliza la programación de punto único?
   - Analicemos el simple proceso de distribución con una programación de punto único. La tienda se convierte en la actividad de programación de punto único más cercana al cliente. Si reconstituimos el flujo de información mediante un sistema de atracción, el resultado será el siguiente:
   - A medida que se consumen los productos de la tienda, el distribuidor repone únicamente los artículos que han sido utilizados por el cliente. El distribuidor cumple las órdenes de consumo varias veces todos los días (si es necesario).
   - La fábrica solo produce las mercaderías necesarias para reemplazar la cantidad consumida por los clientes en la tienda y las envía al depósito. Luego, el depósito envía la mercadería al distribuidor. El distribuidor la entrega directamente a la tienda.
   - De esta forma, se elimina la compensación por errores producidos a causa de múltiples puntos de programación. Las mercaderías se reponen solo cuando se consumen en una programación de punto único.

Programación de punto
Solicitud | Solicitud | Solicitud
Minorista | Distribuidor | Depósito | Fábrica
Cumplimiento | Cumplimiento | Cumplimiento

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Conceptos

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The Lean Learning Center was founded in 2001 by manufacturing and consulting industry veterans Andy Carlino, Jamie Flinchbaugh and Dennis Pawley to address the gaps and barriers that are holding back companies from successful lean transformation. In addition to the advanced curriculum, the Center has developed a learning environment designed specifically for adult learning, utilizing techniques that include discovery simulations, case studies, personal planning and journaling. Together, with affiliate Achievement Dynamics, founded by Andy Carlino in 1991, the companies offer a complete array of lean transformation services.

Lean Learning Center Announcements

Lean Value Stream Improvement

November 10, 2008

Lean Experience

November 3, 2008

December 15, 2008

Lean Experience-Europe Edition

November 17, 2008

Leading Lean

October 27, 2008

For more information visit:

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