# **LEAN PROGRESS**

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

**LEAN LEARNING CENTER** 

ISSUE 8 IUNE 2006

## Conversations from the Road

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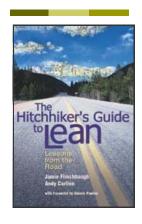


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The following is an excerpt from The Hitch-hiker's Guide to Lean:
Lessons from the Road.
Chapter 10, features five conversations with lean leaders from different perspectives and different journeys. This discussion profiles Gary Smuda from Technicolor providing an indepth look at their lean journey.

Gary has been with Technicolor, A Thomson Service, for 23 years in several positions including supervisor, scheduler, superintendent, production manager and director. Currently as Director of Continuous Improvement he oversees Technicolor's Canadian and Michigan facilities continuous improvement initiatives. Functions reporting include employee training & development, purchasing. His lean journey with Technicolor began in 1999. As a Plant Manager and "Lean Champion" he lead, coached and mentored a team of change agents at Technicolor that have been successful at changing the culture and thinking in their organization. Gary has taught and used the basic lean tools such as 5 S, value stream mapping, standardized work, 8 wastes identification, 8 step problem solving and mentoring to develop this team of change agents. He is the Canadian and Michigan operations, rapid plant assessment team leader that has performed assessments identifying opportunities for improvement. Gary is the Technicolor Improvement Process (TIP's) manager and the Thomson corporate "Cost Killer" for the Michigan operations. In 2004 these initiatives helped cut costs by \$10 million. Estimates attribute at least 70% of these savings directly to the TIP's program. In 2005 the 1,820 employees of the Michigan facilities submitted 27,420 suggestions (Tips) of which 17,313 were implemented. Gary is also a frequent speaker on lean.

Question: "How has your lean journey unfolded so far?"



Smuda: "It has been up, down and all around. It started like many other lean journeys with exposure to lean concepts by a mentor. Then came lean education via reading, tool specific training, lean certification program, seminars and networking via groups i.e. AME, Lean Learning Center Alumni, SME, etc.

"As the education piece unfolded the urge to practice the fundamental tools (Kaizen, five S, visual work place, Kanban, etc.) took over. During our first attempt at implementing a suggestion program we realized we had missed the human side, culture if you will, of a lean enterprise.

"We found help with this and have made significant progress in the empowerment of our employees and their lean understanding. All the while we have made improvements in our cost, quality and processes. We are now working towards a learning organization. The challenge of transitioning our line managers from taskmasters to coaches, mentors and teachers has been daunting."

Question: "What has been your greatest vic-

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tory?"

Smuda: "During our lean journey I have been able to participate in the development of numerous employees. Through the transfer of lean knowledge, skills and thinking many of our employees have increased their value to the organization while improving our processes. This has improved our profits and has made us more competitive in the market place. It has also made our employees more marketable and secure come what may."

Question: "What has been your greatest failure or struggle?"

Smuda: "Managing up and across the organization has been my greatest failure or struggle. In the beginning of my lean journey our operations were at the forefront of the company's lean thrust. As our successes multiplied our customers took notice and challenged senior management as to why lean was not taking hold in other parts of the organization that serviced them.

"At this time I and other members of our team were sent into these organizations to perform rapid plant assessments that we were already performing in our operations. However, we were not able to get complete buy in from these teams. In the meantime we were bombarding the same management teams with consultants and help without clearly understood policy deployment plans.

Question: "What result has most surprised you?"

Smuda: "Two things have

surprised me, equally, the most: one, my change in management style and, two, the level of involvement in the process that we have received from our employees in many parts of the organization. The change from a micromanager to, hopefully, to a coach, leader, mentor, strategist and teacher has been my biggest personal challenge and surprise. It has taken me out of my comfort zone and has helped me grow. My day is as full as it ever was; however, we are getting more done now than

TECHNICOLOR.

moving entertainment

ever before. The experts are doing what they should do and I am clearing the way for them to do it.

"My biggest surprise overall has been the level of involvement in the process that we have received from our employees in many parts of the organization. Numerous team members of our workforce have embraced continuous improvement through participation in our suggestion program and in this process have used lean tools to affect many improvements in our "5 Points of Excellence" metrics: Safety, Quality, Delivery, Inventory Accuracy & Cost. The large number of line employees' involvement is probably the most gratifying accomplishment of my lean journey."

Question: "How have you deployed lean tools through the organization?"

*Smuda*: "Lean tools have been deployed in several ways. We have conducted

several Kaizens and lean tools have been deployed during these events to address issues discovered during them. We have received numerous improvement suggestions via our TIP process which have lead to the deployment of lean tools. Teams use lean tools whenever a situation arises that a lean tool can make an improvement.

"We have used visual workplace and standardized work to communicate to a multilingual workforce. We have used five S to organize technicians' and machine operators' workplaces improving efficiency, quality and safety. Visuals have been used to make the workplace neater and safer and to improve inventory accuracy. Kanban has been used to establish VMI [vendor managed inventory] on critical materials and supplies increasing inventory accuracy, lowering inventory carried and lowering cost."

Question: "How do you know if the lean culture is catching on and becoming sustainable?"

Smuda: "The involvement of our employees in our TIP Process has been a good indicator as to whether or not lean is catching on. Another good indicator is whether or not you hear lean language being used in day to day operations and business conversations. 'Is the lean language understood when you use it in the organization?' is a good indicator of whether lean is catching on and becoming sustainable."

Question: "What would you have done differently if you could start over?"

Smuda: "I would have done

more to affect a change in the organization's thinking and culture. I would have worked harder on changing my management style. These two are the most important things I would have done before implementing lots of lean tools. However, I do not regret our visual factory initiative which was our very first lean initiative."

Question: "What have you changed about how you do your own work?"

Smuda: "I am definitely less of micromanager now than I was six years ago. We as a team argue more with facts. We are more of a learning organization than we were six years ago. We not afraid to fix something now even if it is not broke, if the fix will improve our processes. I listen more and see more

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of the operation. I have learned to look and see more, ask more questions and to listen more, and to act on it."

Question: "What are your next steps? Where will you go next on your lean journey?"

Smuda: "We as an organization are now working towards becoming a learning organization. The transitioning of our line managers form taskmasters to coaches, mentors and teachers has be daunting. Training has been and will continue to be an important step in our lean journey.

"We also must work on the entire value stream including our customers, our suppliers and our customers' customers and suppliers. This is challenging because we perform a manufacturing, packaging and distribution service for our customers. Teaching our workforce how to identify waste is a number one priority. Once this skill is transferred to the workforce then and only then does the use of tools become effective. Then the tool training will be the focus. Training will be an important step.

"I will personally be moving from a line position to a staff position with the focus being continuous improvement. And in my case a lean enterprise is the best and most efficient way to achieve continuous improvement."

For more value-added content, visit:

www.hitchhikersguide tolean.com



"RON'S LEADERSHIP EXPERIENCE HAS BEEN AN INCREDIBLE ASSET TO OUR LEAN TRAINING TEAM" -ANDY CARLINO

## Lean Learning Center Announces Newest Partner

The Lean Learning Center, has announced that current lean consultant and trainer Ron Holcomb has been made a partner in the company.

Prior to joining the Lean Learning Center in 2001, Holcomb spent 30 years focused on improving automotive manufacturing processes at Ford Motor Company and Visteon Automotive Systems. He served as the founding director of the Ford Production System (FPS) Institute and managed the deployment of the FPS to 73 plants in Ford's worldwide operations. Holcomb was published as a competitor in the Franz

Edlehman Award for excellence in Industrial Operations Engineering.

"I am proud to be part of a business that is improving operational excellence in a wide range of industries," said Holcomb. "Lean thinking is not isolated to discrete manufacturing operations... it is equally effective in improving any process in any company. We work with clients and processes ranging from poultry processors in Arkansas to defense contractors in Michigan and just about everything in between."

"Ron's leadership ex-

perience has been an incredible asset to our lean training team here at the Center," said founding partner Andy Carlino. "We are pleased we could offer him this partner opportunity and know that his knowledge will contribute to the strength of our product offerings."

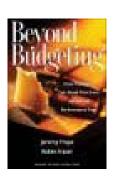
Holcomb holds a bachelor of science in Computer Science and an MBA in Manufacturing Planning and Control Systems from the University of Michigan (U of M). He is a regular guest lecturer at the U of M, Michigan State University, University of Detroit Mercy and has been active in teaching and research at Michigan Technological University.



RON HOLCOMB BECOMES THE NEWEST PARTNER OF THE LEAN LEARNING CENTER

#### Great Non-Lean Books





Beyond Budgeting
By Jeremy Hope

# Book description: what's the key message?:

Beyond Budgeting attempts to take on the problems that most companies face when setting budget targets and monitoring performance. Among the problems detailed:

- 1. Always negotiate the lowest targets and the highest rewards
- 2. Always make the bonus-whatever it takes (which often leads to corrupt behavior)
- 3. Put targets ahead of adding value for the customer
- 4. Failure to share resources with other teams, other internal teams are the enemy competing for scarce resources
- 5. Ask for more resources than necessary; keep large resource buffers
- 6. Always spend what is in the budget
- 7. Explaining variances is more important than countermeasures or improvements
- 8. Never provide accurate

forecasts, especially if it is bad news

9. Strive to meet the numbers, not beat them. Avoid risks

Of course we all have our experiences with various budgeting processes, and probably most of these experiences have not been positive. A Bob Lutz quote, "Budgeting is a tool of repression, not innovation," probably captures the central theme best.

The authors' recommendation to attack these problems rests in three fundamental concepts:

Create adaptive processes for strategic planning, budgeting, and performance management. Since so many internal and external factors impact a business, it is critical to be adaptive, versus a fixed, annual business planning process. The primary way to build adaptive planning is to create more periodic planning and monitoring events. For example, many best practice organizations hold quarterly to bi-monthly business planning updates.

Eliminate fixed annual targets and replace them with relative, moving targets. The authors advocate that performance should be measured relative to peers, both internal and external. The goal should be to close performance gaps, and success in terms of rewards should be measured based on progress toward closing those gaps. Fixed targets potentially drive the wrong behaviors, whereas relative targets keep an organization focused on value creation, assuming they are chosen correctly. Also, metrics should be able to spot trends over time, not just snapshots of current state.

Radically decentralize the organization. Push decisions for improving performance and creating more value to the lowest units of the organization. The book profiles a bank which established each branch as being responsible for P&L. The corporate leaders objective was to provide them the resources and guidance to help make them successful. Decentralization puts decision making in the hands of those most capable of making decisions.

# How does it contribute to the lean knowledge base?:

One of the underlying principles of the book is how to make the planning and budgeting process more focused on value creation. Many business planning processes focus on deconstructing an organization into its parts and establishing fixed contracts for service and performance. Very often, the individually pieces (business units, departments, etc.) become fixated on their goals and metrics. Resources are not shared, subordination of one department to another is difficult, and the overall business loses site of its value proposition. This book prescribes a system with tools and techniques to drive value

TAKE ON THE PROBLEMS

FACED WHEN SETTING

BUDGET TARGETS AND

MONITORING

PERFORMANCE.



creation throughout the business planning process

While current reality is more than just measurements, the book also provides insights on how to better understand current reality through measurement systems. The book details a few specific mistakes that many organizations make with their performance metrics. First, they are often fixed at the beginning of the year without any mechanism for renegotiation as events emerge. Second, they ignore relative comparisons to peers. Benchmarking, according the book, is a critical tool behind any strong performance management system. Third, most performance measures tend to be snapshots at a point in time. Good metrics will show trends over time using charts, moving averages, etc.

# What are the high-lights? What works?:

The authors provide some very tactical exam-

ples of governance systems, planning meetings, reward systems, benchmarking processes, etc. The book is anything but a conceptual dissertation. Instead a few companies are profiled which provides specific examples that can be easily adopted. Although none of the examples are particularly groundbreaking, the overall system prescribed helps the reader to see the budgeting process as a part of a larger planning process.

# What are the weaknesses? What's missing?:

Although many of the concepts appear to make logical sense, the authors do draw many conclusions from a relatively few companies. The performance of these companies was very strong, but it was not clear how significantly the practices outlined contributed to their success versus other contributions. The result is a fair amount of redundancy with the same key points hammered home over and over.

Some of the concepts may not have universal appeal or fit. For example, the book advocates for radical decentralization and used the example of a large European bank as the case study. The bank made each of its branches stand alone businesses with full P&L responsibility. The theory was that each branch understood its customer best so it only made sense to make the branch leaders responsible for the business. From a performance standpoint it worked for this bank, however, it may not work for a much more integrated company such as a utility or product-centric organiza-

# How should I read this to get the most out of it?:

There is a chapter summary after every chapter. First, read the introduction and each of the chapter summaries. This will give you a good idea of where to focus more of your attention, perhaps paying particularly close attention to the examples most like you. A deeper reading is the reader's choice as the key points can be gleaned quickly.



CREATE ADAPTIVE
PROCESSES FOR
STRATEGIC
PLANNING,
BUDGETING, AND
PERFORMANCE
MANAGEMENT.

## Lean-Focused Web Sites to Help Your Journey

Some outstanding Lean web-sites have emerged over the years. Here's a few that we believe are worth perusing.

#### 1. www.leanblog.org

This site was founded by Mark Graban and experienced lean practioner who provides lean consulting services in the Healthcare Industry. The site provides a great portal to many authors, articles, and features related to lean. This lean site has very little in the way of marketing and sales which makes it unique from many organization sponsored sites.

#### 2. www.sme.org/lean

The Society of Manufacturing Engineers website also provides a wealth of lean information. On this site can be found links to conferences, training op-

portunities, and other lean organizations.

#### 3. www.nwlean.net

The Northwest Lean Networks site is another great site to find links to many lean resources. A very active listsery provides a chance for lean practitioners to communicate directly with each other, asking questions and providing advice.



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### Lean Tool Kit-Andon



# Proper Uses of Tool

To enable rapid containment of problems

To directly connect an employee performing a task with the specific individual who can help resolve a problem with the task, as soon as it is detected

#### Improper Uses of Tool

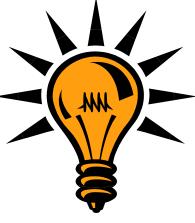
To institute Andon mechanisms without clear standard work procedures and strong problem solving processes

#### Description of Tool - How-to

Like so many lean tools, the Andon tool has its roots in the Toyota Production System. As first conceived, when an operator on the assembly line would encounter a problem (defined as any deviation from the Standard Work Instruction), the operator would flip a switch which would turn on a light over the work station. The team leader would see the light and immediately head to the workstation to help the operator. The team leader and the operator would work to fix the problem at the workstation, even if that meant stopping the line.

The word Andon literally means "lamp" in Japanese as the concept originated from this first design in the Toyota Production System. Over the years, many companies have adopted the tool using widely different mechanisms to signal operators needing assistance. Bells, music, lights, flags, and many other visual and audible signals are commonly used.

Although many techniques can be used to set up an Andon system, there are some fundamental requirements for any system to f



function properly.

Simple Mechanism to Signal for Help: As discussed, this can be any type of visual or audible device. A construction company that implemented an Andon System used flags to signal for help. The key is to make it easy for the operator to signal for help and to make it noticeable for the helper so that they will quickly respond.

Specific Person to Help: For each person who can signal the Andon, there must be one (and only one) person who should respond. Failure to do so creates ambiguity as to who should respond and risks providing a timely response to the person requesting the help.

High Agreement as to What is a Problem: A successful Andon system requires application of many other lean tools, especially in creating clarity as to when there is a problem. Standard Work Instructions create high agreement as to the sequence, timing, and content in carrying out a Any deviations from these instructions constitutes a problem and a reason to signal the Andon. Errordetections devices and visual management techniques are also helpful ways to clearly delineate normal from abnormal conditions.

Robust Problem Solving Process: Whenever the Andon is signaled, there should be a mechanism for recording the type of problem experience. This will initiate the problem solving process so that the same problem does not occur again. Without and problem solving process, recurring problems will greatly reduce the throughput of any process.

Designing the Andon System around these fundamental requirements will result in a process that quickly contains problems and provides input to an improvement cycle. Though the Andon process is conceptually simple, many organizations have struggled greatly with implementation because these design requirements have not been fully addressed.

#### Variations on the Tool

The main variation with Andon is the type of mechanisms used to signal for help. Lights, bells, sirens, music, monitors, etc. are all devices that are often used in Andon Systems. Creativity is the only

ANDON IS A
CONCEPTUALLY
SIMPLE TOOL, YET
MANY COMPANIES
STRUGGLE TO MAKE
THE TOOL WORK IN
THEIR OPERATING
ENVIRONMENT

limit on how an Andon can be designed. At a motor cycle manufacturing company, sticky notes on placed on a wall describing work to be done each month and by which engineer. This allows for quick visibility of problems to forecast potential delays in the product launch. There are many simple, low-cost ways to design an Andon System.

# How Tool Relates to Rules and Principles

Andon is an application of Rule #2, Clearly Connect every Customer and Supplier. Andon connects the customer (operator requesting help) with a supplier (person that can provide assistance) through a visual or audible device. The connection designed through an Andon System unambiguously specifies the people involved and the way requests for help are made by each customer.

Andon supports the principle of **Systematic Waste Elimination**. The Andon process enables quick containment of quality problems which prevents Waste of Defects. Coupled with a

strong problem solving process, improvements driven through the Andon system eliminate defects from recurring.

Andon is also an application of Systematic Problem Solving. Implementing Andon necessarily means that problems are valued as opportunities to improve. Andon requires an organization to make the choice that problems should be exposed, as quickly as possible. Of course these problems must be addressed with a problem solving approach that drives to the root cause of the defect.



#### New Simulation Creates Engagement for Lean Implementation

The Lean Learning Center has developed a unique do-it-yourself simulation based on a game that we are all familiar—Mouse Trap. The simulation creates engagement, enthusiasm, and understanding for your lean implementation.

The Mouse Trap® simulation is designed to demonstrate the value, potential impact and importance of learning through experimentation and reflection.

Participants will recognize that incremental improvements can be continuously sought and achieved regardless of where their organization is on the lean implementa-

tion journey.

The Mouse Trap® simulation is designed to appeal to diverse audiences with varying levels of lean knowledge and who are at various stages of the lean implementation process. Organizations that are currently contemplating lean implementation and organizations that implemented lean some time ago will both make significant revelations and gains by participating in Mouse Trap.

At the completion of the course, participants will recognize the value of experimentation by directly observing its impact on the activities, connec-

tions and flows of the Mouse Trap® process.

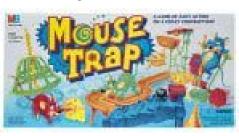
Participants will strengthen their lean knowledge and understanding through application and testing of scientific method principles to improve the process of catching a mouse...the objective of Mouse Trap®.

The Agenda for the simulation is as follows:

- •"Lean Isn't For Me:" Assumptions and Other Barriers
- •Lean is Born From How We Think: The Importance of a Learning Organization
- •Mouse Trap®: The Simulation
- •Key Lessons and Call to Action: What You Can Do

To learn more about this product, contact the Lean Learning Center at 248.478.1480 or info@leanlearningcenter.com

THE LEAN
LEARNING CENTER
WILL CREATE
CUSTOM
SIMULATIONS TO
PROVIDE
EXPERIENTIAL
TRAINING IN LEAN
SYSTEMS



## Planning 5S? First Know Why



SUSTAINING 5S IS
WITHOUT A
QUESTION THE
HARDEST
PART...AND A FEW
INDIVIDUALS FAIL TO
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COLLAPSE.

The true purpose of 5S is to spot problems writes Lean Learning Center Co-Founder, Partner Jamie Flinchbaugh in this column for Assembly Magazine.

Companies have applied 5S so pervasively that many regard it as a system or process unto itself. Unfortunately, the vast majority of 5S applications that I witness do not live up to their full potential in terms of delivering results. Given how many companies are traveling down the 5S road at full speed, we should periodically look at the 5S map to ensure that they're going in the right direction for 5S success.

The term 5S is derived from five Japanese words that describe a process to organize the workplace. Translations into English vary significantly but, generally speaking, 5S means "a place for everything and everything in its place."

The first-and most importantstep toward success with 5S is to get the purpose correct. Failure to do this is endemic and leads to problems of all kinds. The basic principle is that you must know why you want to implement 5S before being concerned about learning how to do it. Most people, when they are asked the purpose of 5S, cite safety, discipline, employee morale, reduced waste of motion and-perhaps the worst reason of all-being tour ready.

All of this is wrong. The true purpose of 5S is to spot problems quickly.

To illustrate, let me share an observation from a visit to Alcatraz island, site of the former federal penitentiary in San Francisco Bay. If you tour the kitchen, you will see a large white board with outlines of all the knives and a hook for each one. In 5S lingo, this is called a shadow board. The purpose of this shadow board was to call immediate attention to the absence of one or more knives.

Before the shadow board, a missing knife usually wasn't detected until it turned up stuck in an inmate. After the shadow board, the problem-a missing knife-was detected with a quick glance before the inmates left the kitchen. Most importantly, the problem was found before anyone was attacked. The same is true in a factory. Get the purpose of 5S right before you start.

The second step toward success with 5S is to continue managing the process after the initial implementation. Sustaining 5S is without question the hardest part. Employees and supporting staff must have all the tools they need to sustain, self-audit and continuously improve the 5S program. The missing element is often the simple requirements of management. If someone doesn't follow a formal policy for safety, doesn't come to work on time, or doesn't do an assigned task as specified, there are consequences. Whether those consequences consist of coaching, discipline or even firing, it is simply not OK to ignore the standards. Why should 5S be any different?

If you invest everyone's time and commitment in 5S, and a few individuals fail to maintain the standard, the program will collapse. I can promise you that the 99 percent of people who are willing to follow the standard will be happy you held the other 1 percent accountable for failing to do so. This isn't mean; it's management.

Many companies feel that they can not go on with lean until they do 5S first. There are valid reasons for this: 5S is visible. simple and gets people's attention. However, you don't have to start there. If you won't get measurable gains from the impact of 5S, perhaps it is not the best starting point. This goes back to knowing why you are applying 5S. If you don't have a compelling reason, don't do it. Furthermore, make sure that everyone knows your purpose-that compelling reason-for 5S. Applying 5S is not a fashion trend-don't do it just because everyone else is.

This is a reprint the Leading Lean column from Assembly Magazine's June issue. Visit www.assemblymag.com for more information.



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For more visit www.leanlearningcenter.com

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

## The Lean Experience

Lean Experience (5 Day Program)

Begins:

July 31, 2006 September 18, 2006 October 30, 2006 December 11, 2006

### Lean Kaizen Workshop Bootcamp

Lean Kaizen Workshop Bootcamp (5 Day Program)

Begins:

October 2, 2006

Embarking on a lean journey is similar to hitchhiking—there are many roads on which to wander and no single one is right for all. The Hitchhiker's Guide to Lean: Lessons from the Road reveals the most critical lessons learned over the author's combined 30-plus years of exploring lean highways. The book shares concepts and stories based on real-world applications-not theory! The authors intentionally focus on the areas where most lean efforts fail to illustrate steps to take to reenergize, accelerate, and sustain a lean transformation.

For more information visit: www.hitchhikersguidetolean.com

