

# LEAN PROGRESS

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

LEAN LEARNING CENTER

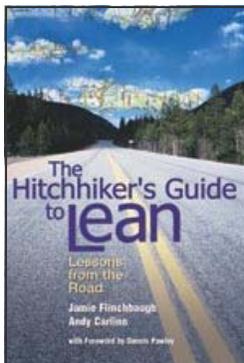
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## Mother Knows Best

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### New Book Inside



*Perhaps Lean did exist before Toyota as this story by Paul Mullenhour suggests.*

While visiting my parents recently, one of the topics of discussion starts with my Father's question "Just what is it you do all day when you visit all these companies?" I explain to him that I work with these companies as they are implementing lean rules, principles and tools to improve their processes. I explain further that Lean thinking is the foundation for driving waste out of processes and improve the bottom line. My Father's response was, "So it is one of those weight loss programs -- the way you look, you could stand to "lean" a few pounds off of your chubby body." Obviously, he is playing with me to get me gone; Dad's have a way of doing that.

However, this one time my Mother was listening to the conversation and she chimed in with "We did that." Of course I had to know more, "Mom, what are you talking about?" I respond. She begins her story:

"In 1941, when your Father and I were juniors in High School, we entered World War II. Your Father and our brothers

joined the Army and the Navy. As it turns out, your Grandfather was working double shifts at the plant that was going to start making tanks for the war effort. He was exhausted and it was obvious since all the younger men joined up that they needed help in the factories because all the skilled labor was gone.

"People like myself, in fact the majority of women, were encouraged to take jobs at the plants, so I became a material handler at the tank plant. My understanding was that this was the first time that women actually worked on the factory floor. They trained us and I started my job.

"So, as a junior in High School, I went to school during the day and worked 2<sup>nd</sup> shift at the tank plant seven days a week. I got home at 11:30 pm, did my homework and went to bed.

"When I heard you explaining to your Father, what it is you do all day, I had to pipe in. Every day we got together as a team to discuss and implement ways to better improve the tank assembly process. And (*I need to add here that these were her words*) we were always trying to identify

waste in our process and eliminate it without sacrificing safety or quality. We were encouraged to give our input and we were always told to think about the overall process and how our job duties impacted the process. I don't know where you got the Lean word. We never called it any thing; we just were doing it every day so that we could get good tanks overseas. It was just the right thing to do."

As I reflect on this story, I wish I could have had Mom on video for people to truly see and understand the passion and pride that you could hear in her voice as she shared her experience. I guess what goes around comes around -- the journey of continuous improvement never ends.

***Paul Mullenhour is a partner at the Lean Learning Center and a frequent contributor to Lean Progress.***



## New Book by Lean Learning Center's Founders: *Hitchhiker's Guide to Lean: Lessons from the Road*

*"You can be sure this book will be required reading throughout our organization"* -Bob Finn, CEO, RSR Corporation

### Book Description

Hitchhikers do not travel a fixed path. They intentionally wander so they can learn and grow along the way. Embarking on the lean journey is similar, 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 authors' combined 30-plus years of exploring the lean highways.

One of the book's lessons from the road is you need to pay attention to where you are and where you are going, just as you do when driving a car. Lean leaders add value by changing things, moving them forward, and producing different results than the day before. To lead, you must go beyond creating a vision. You must develop the vehicle that will deliver it. "The Hitchhiker's Guide to Lean" is the vehicle that will help you move beyond the tools and take lean to a self-sustaining and continuously improving level.

The book's 10 chapters cover lean principles and thinking, lean leadership moves, the roadmap for lean transformation, common pitfalls of lean jour-

neys, building an operating system, lean accounting, lean material management, lean in service organizations, and how individuals can apply lean to improve themselves. The book concludes with interviews of lean practitioners on the front lines of change at Chrysler, Ross Controls, DTE Energy, RSR Corporation, and Nemak.

### Reviews of the Book

"Wisdom transcends data, information and knowledge. Jamie Flinchbaugh and Andy Carlino truly are wise men. They show us how data, information and knowledge about management processes interact to direct lasting and meaningful change. Readers of this book will be able to rescue "lean", one of the most important management concepts in decades, from the dustbin in which TQM, reengineering and other flavors of the month now reside. But process change must start and stop at the top so this book is as important for CEOs as it is for operating managers. The book is easy to read but every page requires the reader to pause and reflect. I have been tilling in the authors' fields for more than forty years but I studied their book twice, not as a chore but as a feast. I will send a copy to every CEO I know."

This very timely book shows that lean is much more than bolting parts together in small batches. It

requires—among other things—a new business operating system, and leaders with the vision and stamina to put it together. With a welcome sense of humor, The Hitchhiker's Guide will help us all face the need to retool the as yet incomplete transformation of American business."

*-John O. Whitney, Professor Emeritus and former Chairman of the W. Edwards Deming Center for Quality Management at the Columbia Business School*

"Have you hit the wall in your implementation of lean manufacturing? Pick up *The Hitchhiker's Guide to Lean*. This very timely book shows that lean is much more than bolting parts together in small batches. It requires—among other things—a new business operating system, and leaders with the vision and stamina to put it together. With a welcome sense of humor, The Hitchhiker's Guide will help us all face the need to retool the as yet incomplete transformation of American business."

*-Tom Jackson, author of "Implementing a Lean Management System" and "Corporate Diagnosis"*

More than any other industry, healthcare is being criticized for its slow response to the call for improved efficiency and quality. The Hitchhiker's Guide to Lean is the most practical, straightforward book I have seen for jump-starting that process.

### BOOK AUTHORS



**ANDY CARLINO**



**JAMIE FLINCHBAUGH**

*-James Reed, MD, MBA,  
President and CEO, North-  
east Health*

"Thank goodness we finally have a book that addresses the true nature of lean- a journey that can be taken by anyone, in any function, in any industry. In addition to dispelling many myths about lean, *The Hitchhiker's Guide to Lean* provides an excellent map for leading your own transformation and avoiding pitfalls along the way. What a fantastic resource for those of us who have been jaded by the "lean" initiatives (and failures) of our past."

*-Ryan Blanchette, ASC*

### To Find out More

Visit  
[www.hitchhikersguide  
tolean.com](http://www.hitchhikersguide.tolean.com)

At the book's website, you will find additional content including an overview of each chapter and sample chapter that can be downloaded. Also, a number of additional reviews from executives and experts in many different industries are available.

*The book sells for \$30 and can be purchased through Amazon or through SME. Orders of 30 or more can be*

*made directly on the book's website for a discounted price of \$25 per copy.*



## Great Non-Lean Books

### ***First, Break All the Rules,*** **by Marcus Buckingham** **and Curt Coffman**

As you embark on your Lean journey, a critical element will be the talent of those around to move the organization forward. The engagement of these star employees will make or break your Lean program. So how do the best managers go about selecting, training, cultivating, retaining top performing people? How do they go about unleashing the very best that these individuals can offer?

*First, Break All the Rules* is a provocative book for managers that attempts to answer these questions. The authors studied leaders of high performing, highly engaged work teams to determine what makes these leaders different from the rest. Through surveys, inter-

views, and observation, a core set of disciplines were discovered that correlate to successful leadership.

Great Leaders are great at doing the following:

#### **1. Selecting talent.**

Though this may seem obvious, great managers spend a tremendous amount of time thinking about what skills and behaviors are important for the mission, and then finding the right people that meet these requirements. To the best managers, filling positions is not about finding the next person, it's about finding the right person. The impact of this on the work team should not be missed. The amount of effort put in by the leader communicates the value that is placed on the organization's people. Also, employees want to work alongside talented, committed peers, so finding

the right people is important to keep existing talent motivated.

**2. Defining the right outcomes.** The great managers spend most of their time asking the strategic questions around priorities and how their work fits in the larger organizational context. Then, they spend their time communicating and reinforcing the vision and direction. At that point, it's time to get out of the way and support the talented employees in achieving these goals. Let them find their own paths using their natural abilities.

**3. Focusing on the strengths.** How many times during employee reviews do we go to great lengths to lay out the weaknesses of an employee? The great managers instead spend of their time laying out the strengths of em-

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ployees. They make sure their employees know what makes them superior and develop those talents rather than trying to compensate for the skill gaps. Also, the great leaders spend most of their time working with the top performers instead of trying to develop their lower performers. This is certainly not the norm for most managers.

**4. Finding the right fit.**

Assuming we've done our diligence and recruited talent, the most important step is to make certain that we've cast our employees correctly. In keeping with item #3, the best managers focus on the strengths of their employees and for a given project or initiative, ensure that the tasks assigned align

with those strengths. Talent doesn't equate to an omnipresent set of skills, usually it manifests itself in a few superior skills. Identifying those skills and providing opportunities to use them separates the great leaders.

Although the book is a general overview for managers of any discipline or function, the lessons for a lean transformation are significant. Do you have the right people on the bus for your lean transformation? Are you tapping into the talent that exists in your organization to make it happen? Do you focus your energy on the top performers, or are those that are getting in the way getting in your way? Have you focused the organiza-

tion so that the vision and mission are clear?

If the answer to any of these questions isn't entirely clear, then this is a great book the lays out some very practical and simple examples for you to follow. The book will make you think about how to lead your lean transformation differently.

HOW DOES YOUR ORGANIZATION VIEW PROBLEMS?



**Tool Box Reference Guide**

*Applying the right lean tool at for a given problem follows directly from mastery of the lean principles.*

**5 Why's Problem Solving**

**Proper Uses of Tool:**

1. As a structured approach to solve problems as they occur
2. As a framework for a team to work through a more complex problem

**Improper Uses of Tool**

1. To emphasize the person or blame, turning the 5 Whys into the 5 Who's
2. To emphasize documentation at the expense of applying the tool. When problem solving becomes a tedious, desk-intensive process, it is a punishment that gets used as little as possible.

**Description of Tool – How-to**

The 5 Whys is a simple process to follow to solve any problem. It starts with writing or having an effective problem statement. Problem statements determine the direction we head next. If we get it wrong, every step that follows will be wrong. Problem statements should describe the current condition, use data where possible, and describe the gap in performance. You should also be open to changing the problem statement as you learn more during your investigation. In writing problem statements, you should avoid describing the solution, postulate as to the expected cause, be vague or ambiguous or combine multiple problems into one. Some examples of good problem statements in-

- clude:
- Currently entering data into two different systems; Tasks are on average 20% late from scheduled time
  - Overall customer complaints are up 50 percent
  - The #3 press is consuming \$2,000 in repairs monthly

One the problem statement is determined, you can begin using the Five Whys to determine the root cause. Ask why to the problem statement and then why to that and again five times. Five is not a magic number, sometimes it might be two, others nine. You should not try to jump whys but precede one why at a time. You can test each answer to your "why" by asking "If I remove this, will the previous answer go away?" If the answer is no, you

## 5 Why's Problem Solving *Continued*

haven't answer why correctly and you should explore it further. If you can't immediately answer a why, go and observe or collect data until you can see the current condition clearly enough to answer. Because of this, you may not complete a Five Why in one conversation but may have to observe, collect data and other activities at each level of why. You have gotten to the end, or the root cause, when you can describe the cause of the problem in terms of an activity, connection or flow.

An example follows with the problem that a key piece of equipment failed. *Why did the equipment fail?* Because the circuit board burned out. *Why did the circuit board burn out?* Because it overheated. *Why did it overheat?* Because it wasn't getting enough air. *Why was it not getting enough air?* Because the filter wasn't changed. *Why was the filter not changed?* Because there was no preventive maintenance schedule to do so. That is now a root cause that can be solved.

By focusing on the question WHY, we are more likely to avoid using the other W question: WHO. The purpose is to fix the system, not just remove the symptom. If aren't clear about the difference between symptoms and problems, we will not find the root cause effectively. Symptoms are the part we see, the part on the surface. Symptoms are how we know we have a problem. Problems themselves are

the cause of that symptom. As an example, if I see oil on my garage floor and I clean up the oil, is the problem fixed? No, you just fixed a symptom of the problem, not the problem. The problem is the engine leaks.

Once the root cause is determined, a countermeasure to the problem must be found. Creativity and lean tools are your most powerful allies in this part of the process. Focus on nothing but the root cause in determining the proper countermeasure. All the other work from problem statement to the Five Whys helped to get you to this point.

A vital final step of the process is verifying that the solution worked. This should be done by first seeing that the countermeasure is sustainable and then making sure that the original condition, the symptom, has been eliminated. There are two purposes. The first is to of course ensure we met our objective: eliminating the adverse condition. The second is perhaps even more important. This is where learning occurs. By verifying each countermeasure, we learn what works and what doesn't improving our knowledge both of the process we are trying to manage and improve but also the problem solving process.

### Variations on the Tool

The Five Whys can be built into many other problem solving processes. Many companies create proprie-

tary problem solving processes that are based on having a common way to communicate or save for learning and history. The Five Whys can be utilized as a formal part of a larger process or by the user to determine the root cause which then gets input into the formal process.

Also, tools such as Six Sigma can help find the answer to each successive 'why' being asked but does not replace the process of digging down layer by layer.

### How Tool Relates to Rules and Principles

The Five Whys most obviously and directly relates to the principle of **Systematic Problem Solving**. Without the intent of the principle behind you, the Five Whys will likely be a shell of a process and not used effectively. Key behaviors that must accompany the Five Whys include (a) surfacing problems quickly, (b) using them as opportunities to move closer to the ideal state, and (c) focus on the process, not blaming the person.

The principle of **Create a Learning Organization** is also greatly enabled through the practice of the Five Whys. The Five Whys can become the primary driver of daily learning about the management and improvement of the process. By finding the root cause and then verifying the effectiveness of the countermeasure, deep knowledge of the process can become institutionalized.




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**ASKING "WHY?" 5  
TIMES DRIVES  
PROBLEM SOLVING  
TO THE ROOT  
CAUSE LEVEL**

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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 Announces 2006 Class Schedule

### ***The Lean Experience***

**Lean Experience (5 Day Program)**

**Begins:**

February 13, 2006  
April 3, 2006  
May 15, 2006  
July 31, 2006  
September 18, 2006  
October 30, 2006  
December 11, 2006

### ***Lean Six Sigma Leadership***

**Lean Six Sigma Leadership (2 Day Program)**

**Begins:**

May 8, 2006

### ***Lean Kaizen Workshop Bootcamp***

**Lean Kaizen Workshop Bootcamp (5 Day Program)**

**Begins:**

May 1, 2006

The Lean Learning Center develops lean training and leadership training for client specific needs. Please call the Lean Learning Center at (248) 478-1480 for any needs that you may have.

The Lean Learning Center also will provide these programs on-site for your company. All classes will be held at the Lean Learning Center's unique training environment in Novi, Michigan.

