

Lean: Your Value-adding Model of Continuous Improvement

2016 CQI Conference: In Pursuit of Quality: Achieving Impact

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This brief handout summarizes the key points made in my presentation on Lean for Child Welfare and adds some additional valuable information. I've also included a brief bibliography and list of Web sites for the many sources of information referred to in my presentation.

Elevator Speech

I began my presentation with an intentional reference to a concept that I first heard in Six Sigma Land, the "elevator speech." The idea here is that most ideas can be summarized in 30-45 seconds. Get on an elevator with the President and she says to you, "So what are you working on these days?" What I'd say about this presentation to you is this:

"Hi Ms. President. I believe that Lean process improvement has a lot to offer to the Quality Improvement leaders in Child Welfare in Illinois. I plan to share the best of what I've learned as a student of Lean theory and methods. I hope to facilitate learning of Lean so that the professionals in Child Welfare can continuously improve what they do as they see fit."

Background

About 10 years ago I decided that my work in Quality wasn't allowing me to lead changes. My boss suggested Yellow Belt training in Six Sigma. The training included about 15 minutes on Lean and it captured my interest. The teachers, one of whom is now my manager, suggested a book called The Goal. Within a week I had read it and my life changed.

Now I work as a Lean and Six Sigma Black belt for Optum, the care delivery branch of UnitedHealth Group. I work mostly in the Optum Care part of the company, which includes over a dozen large networks of physician practices.

I started my career in youth services in Illinois as an outreach worker. I gradually trained as a Marriage and Family Therapist. I have also worked as a college professor (NIU), behavioral scientist in a family practice residency, a Best Buy salesperson, and a landscape worker. I am married to Nancy (35 years) and have two adult sons.

Ourselves Today

In the presentation, we discussed many Lean ideas and methods. The methods can be applied to your personal life and your workplace. At its best, Lean is a movement, not just a program or a project. So infect your agency with the Lean bug and everyone will win.

The punch line: Lean is a powerful approach to process improvement and for simply fixing the things that bug you. If you see waste, you can figure out ways to reduce it. The best place to start is to commit to make one "2 second" improvement per day. Take pictures or make a video of the change and share it with your colleagues.

What is Lean?

Lean is creating more value for customers with fewer resources. Lean provides a way to think and methods to improve process efficiency by removing waste systematically. Respect for People is an essential aspect of Lean.

Mark Bogen, SVP and CFO, South Nassau Communities Hospital said, “At the heart of Lean is really taking an interdisciplinary group of folks, leaving egos behind, and really trying to figure out process. Without staff involvement, nothing really succeeds.”

Dan Jones, a pioneer of Lean manufacturing in the US, called Lean “a proven path of learning to work together more,” stressing that Lean is a team endeavor.

Lean in Child Welfare

I met with a variety of experts on Child Welfare in order to tailor this presentation for you. Christina Fly, Executive Director of Training and Professional Development for Tennessee told me that Child Welfare faces many issues including:

- Regulation and red tape
- Limited resources
- Community-based
- Unpredictable/emergencies
- Inter-organization communication
- Cumbersome forms

Christina told me that Tennessee used Lean to accomplish these things in Child welfare:

- Learning for Child Welfare staff on how to use Lean
- Policy review process simplified
- Intake process standardized
- Volunteer onboarding streamlined
- Staff wellbeing improvements
- Youth development centers
 - Admission process streamlined
 - Incident reporting process improved
- Travel claim process simplified

The Wastes of Lean

Lean has taught the world that there are eight wastes in every type of business and service. “Waste is anything other than the minimum amount of equipment, materials, parts, and working time which is absolutely essential to the product or service” (Ohno Taiicho). Our business goal is to eliminate, simplify or reduce every waste.

I believe that if you can perceive a waste, you can address it. So I spent a fair amount of time researching wastes that relate to human services and summarizing them for you. Some wastes are obvious and they will become “things that bug you.” Others are not as obvious. The eight wastes are summarized below.

Waste	Definition	Examples	Causes
Over-production	Doing more than what is needed by the customer or doing it sooner than needed.	Excess printing; duplicate charting, long entries in records. Distributing anything before it is needed.	Unclear goals Misinterpretation of regulations Computer systems not linked Wanting to get ahead

Waste	Definition	Examples	Causes
Over-processing	Putting more (effort, features) into the product than the customer wants.	Re-entering data, clarifying directives, re-printing, reformatting, unnecessary reviews or audits, unnecessary regulatory paperwork, details, or analysis	Customer requirements not clearly defined Lack of communication Complex and/or redundant forms Redundant required approvals
Defects	Producing bad quality services; time spent doing something incorrectly, inspecting for errors or fixing errors	Data entry errors, typos, use of incorrect templates, wrong timelines	Unclear and non-standardized procedures Lack of training or the wrong skillset Employee disengagement Fatigue Lack of error-proofed processes Customer needs unknown or misunderstood
Transportation	Movement of information, documents, reports that does not add value for customers	E-mails copied to many people, long approval chains	Poor understanding of process flow Poor layout; large distances between operations Multiple storage locations Widely-spaced equipment
Wasted Motion	Any movement of employees that does not add value to the service and customer	Excess walking between printers, copiers or people; driving in inefficient routes	Double handling Poor layout Inconsistent work methods Insufficient planning
Waiting Time	Waiting for the next event or next work activity; idle time	Searching for letter templates, waiting for responses or approval	Unbalanced workload Multiple information sources Un-synchronized activities Untimely customers
Unused Employee Genius	Failure to use employees' mental, creative, and physical skills and talents, and abilities	The right person has the wrong job, narrow job descriptions, lack of the right tools for the work	Competitive not cooperative culture Failure to re-evaluate skills Lack of trust for employees or the team

The Methods of Lean

Next we discussed several key Lean methods in modest detail.

PDSA – Deming’s simple version of the scientific method. Plan. Do. Check Act. This basic cycle of continuous improvement can be used for micro projects all the way up to huge projects.

Value Stream Mapping – A value stream map (VSM) is a lean method used to understand how value (for the customer) flows across your organization. Unlike most “process maps, it’s a high level view of the flow of value end-to-end across your services. Typically, the building of a VSM goes like this:

1. Define 5-7 high level process steps
2. Rate each step as Value-adding, Non-Value-adding, or required anyway.
3. Remove any steps you can, assuring that nothing breaks when you do
4. Add time measurements for each step and for the gaps between steps.

2 Second Lean – Paul Aker’s newer and simpler model of lean. Paul started FastCap, a manufacturer of woodworking tools, turned it into a Lean marvel, and now consults world-wide. All of his books are available for free at www.paulakers.net and he has hundreds of videos on his YouTube channel. Paul says start small, fix what bugs you, and get your entire works team to contribute one “2 Second” improvement a day.

Video before and after – Paul Akers goes on to say, make a mobile phone video of every change, before and after. I added that still photos can be effective. The videos promote friendly competition. If you want to make videos watch his YouTube called Paul is a Pig.

One more thing – Paul says that Lean is really all about the people. The goal of work is to be able to have fun while doing it.

5S – 5S is the Lean method used to Sort, Set in Order, Shine, Standardize, and Sustain. This is often an early quick win in Lean because fairly quickly you can show your Lean accomplishments to everyone. Paul Akers refers to 3S, because the first three are the key actions.

Additional Lean Tools – I decided that it wouldn’t hurt to mention a few additional methods. Each of these could be an entire presentation and there are entire books on most.

- Standard work – The idea here is that everyone who does a standard task should do it the same way as everyone else. Once standardized, a process can be improved.
- Daily Stand-up (from Agile) – Agile is a cousin of Lean used in IT circles. One good idea they have is to start every day with a 15 minute assembly. Each person reports what they did yesterday, what they will do today, and what help they need.
- Lean Health (Paul Akers) – Lean ideas can guide efforts to improve one’s health and wellbeing. See Paul Akers’ book by the same title for specifics.
- Theory of constraints – The first time I asked about Lean I was directed to the book The Goal by Eliyahu Goldratt. It’s a fictional business novel that introduces the idea later called the Theory of Constraints. It’s an easy introduction to basic lean manufacturing ideas.
- Kanban – The Lean idea of visual management: See where you are with your improvement projects. I use one of many free web versions, Kanbanery.
- Mistake proofing – This is the idea that it’s far better to prevent a mistake than fix up after it. The 3-prong electrical plug is the most common example.
- Kaizen – In Japanese this means continuous improvement, but it usually refers to a team event lasting 2-5 days in which a problem can be understood, mapped, and solved. In manufacturing, Kaizens result in live changes; in services this is less common.

On the PreZentation

This preZentation was modeled on the work of the current masters of PowerPoint®-based presentations including Garr Reynolds, Edward Tufte, and Guy Kawasaki. These revolutionaries suggest that a great preZentation has 3-parts: 1) The presenter, a person who knows the content and tells a good story, 2) The preZentation itself, which invites the audience in and doesn't distract from the presenter's spoken message, and 3) A summary manuscript with expanded details on the content of the preZentation, like this. The Summary is distributed after the preZentation as a takeaway. The Summary carries more information than the slides and serves as a reference manual to the material later. If it were distributed during to the preZentation, the audience's attention might be divided.

If the style of this preZentation appeals to you, I recommend starting with Garr Reynold's book called PresentationZen (2008). His website is also very rich.

Finally, I welcome all comments, suggestions, and questions on Lean and/or the presentation.

Acknowledgements

I am indebted to all of the wonderful men and women who have taught me, by book and podcast, everything I know about Lean. I am particularly influence by Paul Akers, who in turn has studied with the Japanese leaders of Lean and their American comrades. Paul's enthusiasm has rubbed off on me and encouraged me to redouble my efforts to learn more.

I am also grateful to the program committee and other leaders of the Child Welfare CQI Conference 2016. They took a chance of inviting me and provided lots of resources on Child Welfare. Christina Fly, of the Tennessee Child Welfare Lean program deepened my understanding of how Lean can work in this sector of human services.

Garr Reynolds contributed his world-changing work on PresentationZen. From him and other foreword thinkers I created the style of this preZentation.

And oh, the wonders of Google. Google Images provides access to thousands of free photographs that do not require permission to use. All of the images used in this presentation were available for free and no attrition was required.

Finally, thank you to everyone who has participated. Please keep up all the good work you do for the children and parents of Illinois.

Suggested Readings

Web Sites

Lean Web sites

www.paulakers.net

www.lei.org

Presentation Web sites

<http://www.garreynolds.com/Introduction/index.html> -- Presentation Zen

www.edwardtufte.com

www.guykawasaki.com

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