DAS WIDER-SPENSTIGE PROJEKT

Ein neues Verständnis seiner
Natur und Leitung

SVEN BERTELSEN aps

Das Widerspenstige Projekt

SVEN BERTELSEN

PROJEKTE laufen selten wie geplant ab. Verzögerungen und Budget-überschreitungen sind die Regel und nicht die Ausnahme, hinzukommt, dass der erwartete Wert oft nicht erreicht wird. Bauprojekte sind seit langem für ihre ungenügende Zielerreichung bekannt, aber heutzutage schneiden IT-Projekte noch schlechter ab.

DIE WELT verfügt über eine umfangreiche Literatur zum Projekt-management, Systeme für seine Steuerung und über Berater, die bereitwillig helfen, aber es scheint, dass alles das ohne Wirkung auf die eigentlichen Ergebnisse des Projektes bleibt.

Aber warum?

SUCHE DAS KNOW-WHY und das Know-how wird von alleine kommen, sagt der Autor und ist dabei von Shigeo Shingo inspiriert, und er tut genau das. In diesem Buch legt er sein Verständnis für die Natur des Projektes dar und bietet eine neue Herangehensweise für dessen Management auf der Basis seiner Value-Flow-Operations Theorie, in einer leicht lesbaren und verständlichen –und oft unterhaltsamen– Form.

DAS BUCH IST EINE PIONIERARBEIT, in der der Autor seine eigene professionelle Projekterfahrung von mehr als fünfzig Jahren mit Inspirationen aus den verschiedensten Feldern wie Hydraulik, Theorie der komplexen Systeme und Chaos, sowie Sozialwissenschaften und Kriegswesen kombiniert und auch mit der Forschung in Lean Construction verknüpft.

IM GRUNDE HABEN WIR die wahre Natur des Projektes NICHT VERSTANDEN, ist seine provokative Hypothese, und deswegen gerät es so oft außer Kontrolle. Es ist die fundamentale Annahme, dass Alles geplant werden kann und die Pläne umgesetzt werden können, die wir aufgeben müssen. Pläne werden niemals ganz erfüllt, nicht weil das Planen schlecht war, sondern weil Pläne in der Realität niemals erfüllt werden können, ist seine provokative Aussage, bevor er eine Lean Herangehensweise für das Projektmanagement vorschlägt, eine Herangehensweise, die funktioniert!

Lean Leadership: Creating a Lean Culture

Glenn Ballard

Karlsruhe, Germany

April 2018

Questions I will try to answer

- What is a "Lean Culture"?
- What are common obstacles to creating and sustaining a lean culture?
- What are keys to success?
- What is the role of the organization's leadership?

An Example of Leadership: Paul O'Neill as Alcoa's CEO

What defines a "lean culture"?

- Respect for People: Challenging and helping employees and suppliers to develop their capabilities

- Continuous Improvement: Delivering ever more value to customers with ever less waste

What are obstacles in developing a Lean Culture?

- A lean culture is all about learning. If your organization's current culture is all about knowing, that will be a major obstacle.

- What are signs of a knowing culture?
  - Knowledge is seen as private property to be exploited to the benefit of its possessor.
  - Those in positions of responsibility are incapable of admitting that they do not know everything needed to do their job.

- Are there specific issues in the construction industry?
  - Impermanence of the work force, varying from project to project.

Elements for Successful Implementation

Vision	Skill	Incentive	Resources	Action Plan	Result
✓	✓	✓	✓	✓	Change
	✓	✓	✓	✓	Confusion
✓		✓	✓	✓	Anxiety
✓	✓		✓	✓	Gradual Change
✓	✓	✓		✓	Frustration
✓	✓	✓	✓		False Start

Adapted from Larson, 2003.

What are keys to successfully implementing and sustaining a lean culture?
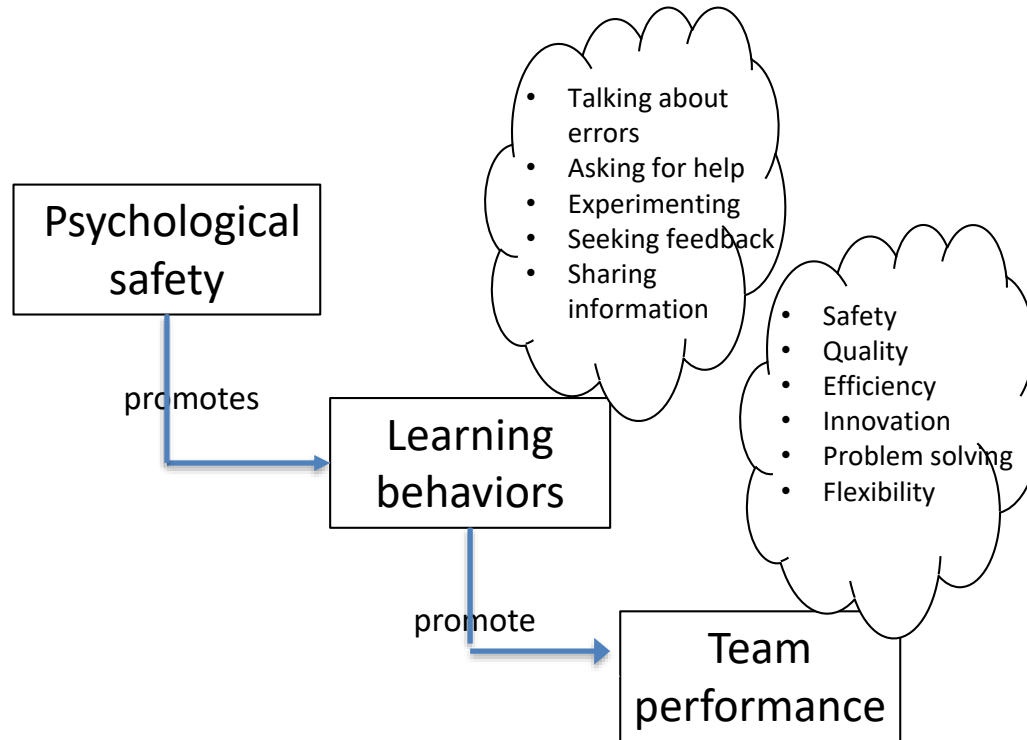
- Psychological Safety
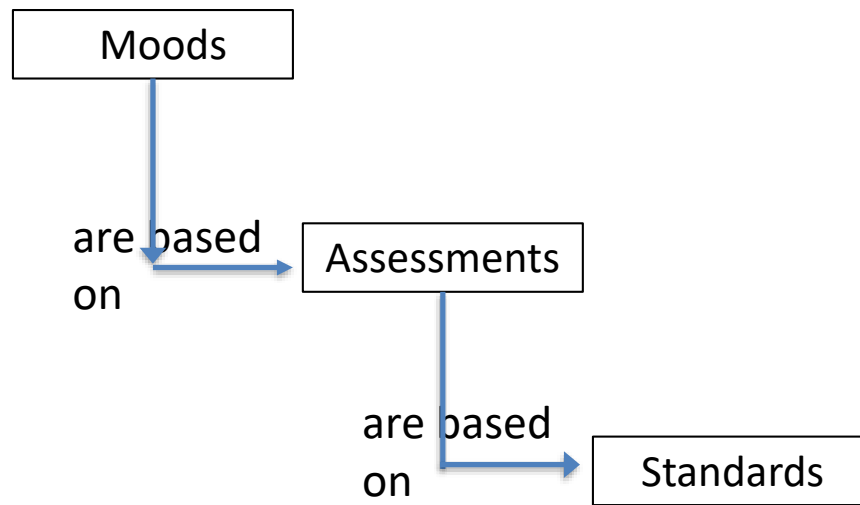- Leader Standard Work

Psychological Safety

A nurse on night duty in a hospital is taking medication to a patient. She glances at the dosage and gasps, "That dosage could kill her! I'd better call the doctor and make sure he didn't make a mistake." Then she remembers what happened the last time she questioned that doctor….and begins to talk herself out of making the call—"This patient is on an experimental treatment; maybe that's why the dosage is so high." She doesn't make the call. She doesn't feel safe.

From Harvard Professor Amy Edmondson's YouTube video: Psychological Safety

Respect for People & Psychological Safety

Psychological safety

promotes

Learning behaviors

- Talking about errors
- Asking for help
- Experimenting
- Seeking feedback
- Sharing information

promote

Team performance

- Safety
- Quality
- Efficiency
- Innovation
- Problem solving
- Flexibility

Respect for People & Psychological Safety

Moods

are based on → Assessments

are based on → Standards

From Gloria P. Flores' book *Learning to Learn and the Navigation of Moods*

Example:

The students in a class on differential equations have always done well in math, but everyone pretty much blew the first exam, and were in a <u>mood</u> of resignation about their ability to learn. Their mood of resignation resulted from an <u>assessment</u> that they will not be able to master differential equations that in turn is based on their <u>standard</u>– that they should easily and quickly learn new skills. Revealing that standard enables them to change it, and hence change their assessment about the future and their mood—moving from a mood of resignation to one of determination.

A Question for Future Research

- When our assessments are grounded, as was the case with the night nurse, change has to come from those she feared: from supervisors and sometimes even teammates.

- When our assessments are not grounded, as was the case with the math students, change must come from within the individual or from the team, and again supervisors play a key role.

- Are we selecting and developing supervisors with the right capabilities and skills to promote learning and hence better performance?

What Supervisors can do to encourage psychological safety

- Frame work as learning problems, as opposed to execution problems
- Acknowledge your own fallibility
- Model curiosity by asking questions
- Be accessible
- Encourage team members to discuss their errors and failures
- Encourage the team to ask for help, clarifications, feedback and information
- Show that reporting of errors is not the same thing as poor performance

The need for leadership in lean

- "Any organized process naturally tends to decline to a chaotic state if we leave it alone." Mike Rother, *Toyota Kata*

- Entropy in management systems

A True Story

- The general manager of a Toyota assembly plant called an all-employee meeting to discuss the drop in problems identified each day from 1000 to 700. He impressed on the assembly the importance of reporting all problems and instructed managers to reduce buffers in the plant to get them back to 1000 problems a day.

Something to think about

As we rise in management ranks, we become progressively more distant from work processes and more focused on the results produced through those processes.

The loss of contact with work processes may cause over reliance on training and motivation for improving outcomes—as opposed to changing the processes themselves.

Leadership Responsibilities

- True North—invest in what matters to your organization

- Leader Standard Work

  - Provide direction

  - Develop your people

  - Improve processes

  - Enforce standardized processes

# Daily Standard Work for Leaders

In a Lean system, leaders:

- Ensure that the **process** causing work to flow is operating as designed.
- Encourage improvements to the **process**.
- Develop the **people** whom they supervise.

	Times Daily	Team Leaders (TL) Design Task Leaders; Jobsite Foremen	Times Daily	Supervisors (Supe) Design Team Supervisors; Trade Superintendents	Times Daily	Value Stream Group Manager Trade Part General S
General	1x	Perform safety tasks. Adjust labor plan for absences	1x	Daily administrative and safety planning. Coordinate any shift change tasks.	1x	Daily administrative tasks
Startup	1x	Lead a brief personnel start up meeting	1x	Attend a startup meeting (rotate)	1x	Coordinate with fello
Verification	1x	Verify activity started as planned	1x	Office/jobsite check production startup.	1x	Formal audit of one
Issue Identification	1x	Attend brief Task-focused meeting led by supervisor; Coordinate with other leaders.	1x	Lead Task-focused meeting attended by foremen discussing goals, misses, issues, improvements, daily task board items due and new items. Ask for suggestions.	1x	Check supervisors and discuss new go suggestions.
Gemba	1x	Area walk with supervisor	1x	Area walk with task leader or foreman one on one.	1x	Daily Area Walk wit supervisor (varies).
Improvement	1x	Attend brief improvement-focused meeting led by supervisor. PDCA breakdowns.	1 / wk	Attend weekly recurring office/jobsite-level meetings. PDCA breakdowns.	1 / wk	Attend weekly recur meetings. PDCA b
Improvement	1x	Lead team in weekly Continuous Improvement meeting; Ask for suggestions	1x	Spot check, sign off each pitch chart. Review status of all other visual controls.	1x	Lead value stream meeting (10-20 min
Plan	1x	Plan labor for next day and prepare for tomorrow's start up meeting	1x	Plan labor, material and equipment needs. Confirm all permits obtained.		Provide goals. Rev weekly plan.
Sustain	2x	Check work progress to goal	2x	Spot-check standardized work in each foreman's work area.	2x	Spot check work
Sustain	2x	Record variance from expected work output (pitch performance)	2x	Office/jobsite time	2x	Spot check, sign of each department

Leadership Behaviors

- Go to where the work is being done to see with your own eyes

- Model desired behavior

- Teach and coach

Improving Processes
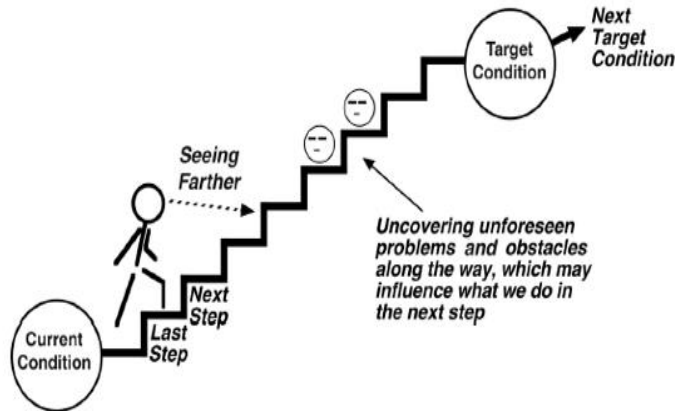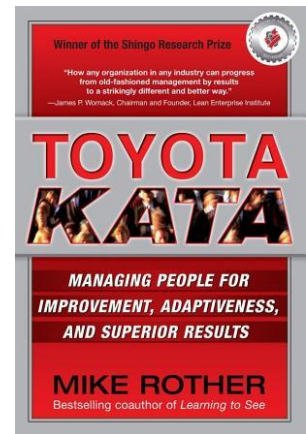
Toyota's improvement KATA: (1) vision, direction , or target; (2) grasp of the current condition, (3) next target condition on the way to the vision is defined, (4) strive to move step by step toward that target condition , we encounter obstacles that define what we need to work on, and from which we learn

In Toyota, line managers carry out 90% of improvement projects.
Training (Sensei) should target: awareness, change, mastery and consistency.
Focus on the purpose of using the methods.

Improving Processes: Last Planner example

- Discovery: chronically low Percent Plan Complete (PPC)

- Target Outcome: Higher project productivity and shorter project durations

- 1st Target Condition: Only well defined, sound, sequenced, and sized tasks are allowed on weekly work plans

- Interim Outcome: Higher PPC and productivity

Impact of PPC on Productivity
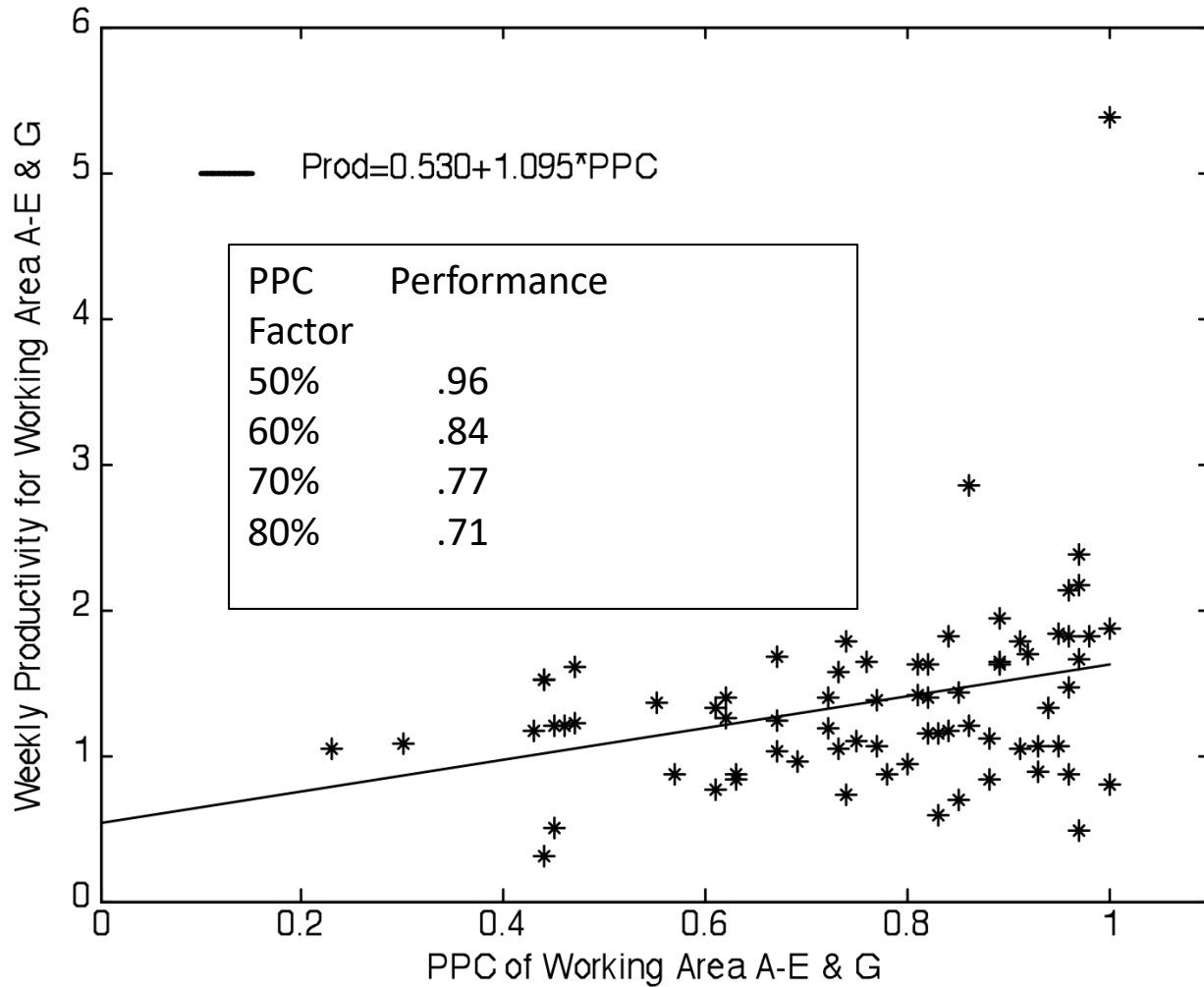
Improving Processes: Last Planner example

- Learning: This outcome can be achieved while failing to stay on program. Need a 'make ready' function.

- 2nd Target Condition: Constraints on tasks planned for execution in the next 3-6 weeks are assumed to exist unless known to have been removed.

- 2nd Learning: Project programs (schedules) tend to be badly structured.

- 3rd Target Condition: Front line supervisors collaboratively plan how to do the work in each project phase, using pull planning.

What is the role of the organization´s leadership?

Your Leadership is Essential

- Declare your personal commitment to lean principles and behaviors.

- Model the desired behavior. To make lean your organization's way of working, it must become <u>your</u> own personal way of working.

- Ask about lean activities in meetings and on visits to offices and sites.

- Treat problems as opportunities for improvement.

- Coach your subordinates in problem solving for continuous improvement. Develop their capabilities.

Who is a leader?

- Obviously C-suite management, but also heads of different functions (marketing, accounting, engineering, production…) and parts of an organization (divisions, projects,..)
- And also individuals with supervisory responsibility at different organizational levels within those departments and divisions (superintendent, foreman…)
- And also people who are not supervisors. Direct workers can provide leadership by modeling learning behaviors

Moving Forward-Some Suggestions

Think carefully before committing to Lean. Lean is not a project that can be completed. It's about continuously developing capabilities and improving performance. It's not a set of tools, but a way of acting in the world.

Once you decide, make a public declaration. But note: declaring intent is necessary, but you can't cause lean behaviors by mere declaration.

Don't 'give lean a try' or lean will fail. Be patient but persistent; constancy of purpose.

First develop, then deploy.

Development has two goals: 1) Learning how to make lean work in your organization, and 2) Creating internal advocates.

Staff can lead development, but only the chain of command can deploy.

Even lean is subject to entropy. Leadership at every level of the company injects the energy needed for staying the course.

I look forward to your comments and questions