

PDCA with Lean and Safe

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Goal: Provide a summary of how lean tools and thinking combined with occupational safety can help make PDCA a reality in everyday life.

PDCA Background

- W. Edwards Deming popularized **PDCA**, which became known as the Deming Cycle. This cycle is the foundation for any management system.
 - Plan** - Identify and analyze the problem
 - Do** - Pilot / implement the planned change
 - Check** - Analyze results and modify or plan for full implementation
 - Act** - Introduce systemic changes and training
- Deming's 14 Points from his 1982 book, "Out of the Crisis" are:
 - "Create constancy of purpose towards improvement"
 - "Adopt the new philosophy"
 - "Cease dependence on inspection"
 - "Move towards a single supplier for any one item."
 - "Improve constantly and forever"
 - "Institute training on the job"
 - "Institute leadership"
 - "Drive out fear"
 - "Break down barriers between departments"
 - "Eliminate slogans"
 - "Eliminate management by objectives"
 - "Remove barriers to pride of workmanship"
 - "Institute education and self-improvement"
 - "The transformation is everyone's job".

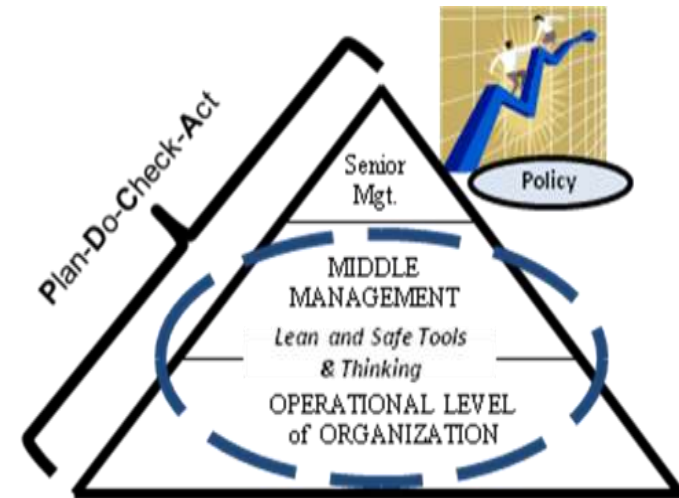
Using Deming for Safety

- Deming's 14 points and PDCA are built upon respect for employees and the recognition that the majority of issues are system related
- Deming's approach requires active leadership which can more fully integrate safety into the day-to-day operation of the business
 - Safety becomes a strong value in the overall organization culture, not a safety culture
- Operational performance, quality and safety are all driven by the same tools and philosophies, e.g.
 - Getting to "zero defects" requires the same thinking and many of the same tools required for "zero injuries and illnesses"
- The philosophy of continuous improvement driven by root cause analysis of problems fits perfectly with safety

The Marriage of Deming and Safety

Safety combined with lean offers tactical tools / processes enabling implementation of Deming's 14 Points and **PDCA** throughout all levels of any organization.

- Deming has been criticized for putting forward a set of goals without providing any tools for managers to use to reach those goals. His typical response to this question was, "You're the manager... you figure it out."
- The marriage of safety and lean allows the practical application of safety fully integrated with continuous improvement efforts in daily work.



Benefits of Integrating Lean and Safety with PDCA

- An organization that safely produces quality services/products that are faster, better and less expensive to the customer
- A culture of teamwork that strives for continuous improvement by the identification and elimination of waste, including injury and illness
- Leadership creates an "I care" culture that improves overall performance
- Respect for employees leads to employees "wanting to" be safe rather than "having to" be safe.

Deploying PDCA with Lean and Safety

Move from a "lean" to a "learn"ing culture by implementing structured processes for operational learning through the marriage of **PDCA, lean and safety** at the:

- Individual or micro level:
 - 5S, safety, knowledge folders, visual controls, standardized work and other kaizen (continuous improvement) tools
- Individual, mid-management or system level:
 - Value stream mapping, problem solving and one-page report writing
- Broader organizational level: Policy deployment / leading PDCA