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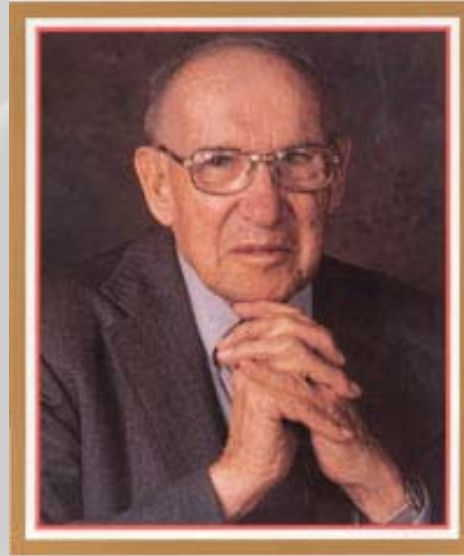
Army Materiel Command

Lean/Six Sigma

Small Business Conference

16-17 November 2004

Effectiveness and Efficiency



Effectiveness is the foundation of success—efficiency is a minimum condition for survival after effectiveness has been achieved. ***Effectiveness is doing the right things. Efficiency is doing things right.***

- Peter F. Drucker

Effectiveness

(Doing the right things)

- Producing products and services that meet the required standards and fulfills the needs of the customer.
- Effectiveness is achieved through implementation of ***Six Sigma*** tools.

Efficiency

(Doing things right)

- Efficiency is doing things right and with minimum waste.
- Efficiency is achieved through implementation of ***Lean Enterprise*** tools.

What is Six Sigma?

Six Sigma (6 σ): Methodology providing tools to improve ***capability*** of their processes so they do the ***right things*** all the time.

Purpose: Reduce cost by eliminating root causes of problems.

Focus: Using fact-based decisions for reducing variability in operations.

Method:

- Infrastructure for improvement
- Disciplined, systematic methodology (Define-Measure-Analyze-Improve-Control)
- Improvement projects selected on ROI
- Teamwork

What is Lean Enterprise?

Lean Enterprise: A methodology providing tools to reduce waste and increase ***capacity*** of processes.

Purpose: Reduce cost by eliminating root causes of waste.

Focus: Eliminating all activities that do not add value to the products or services.

Method:

- Disciplined, systematic methodology (Define-Measure-Analyze-Lean-Control)
- Improvement projects selected on ROI
- Rapid Improvement Events
- Teamwork

Lean Six Sigma

Lean Six Sigma is a disciplined, structured methodology to achieve measurable improvement in effectiveness and efficiency.

Continuous Measurable Improvement

How is Lean Six Sigma Implemented?

- Establish organization goals and objectives
- Establish infrastructure
- Six Sigma improvement projects
- Develop Value Stream Maps
- Identify improvement opportunities
- Establish improvement projects
- Conduct Lean Rapid Improvement Events
- Focus on the bottom line

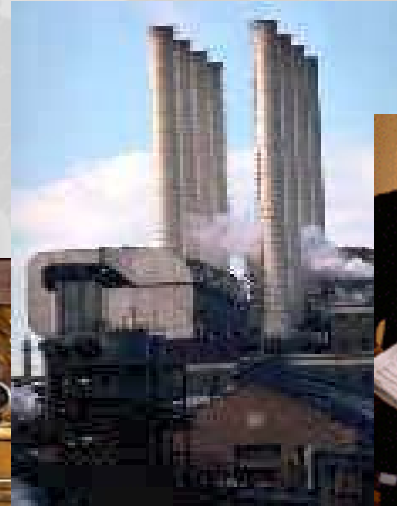
Benefits of Lean/Six Sigma?

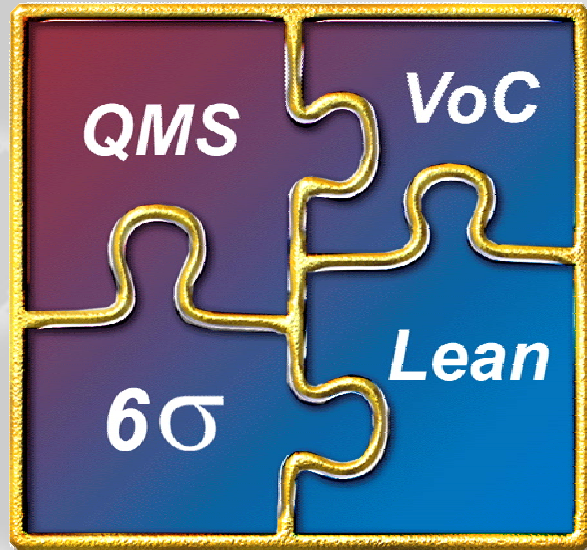
- Six Sigma improves *effectiveness*
- Lean Enterprise improves *efficiency*
- Supports fact based decision making
- Lean Six Sigma integrates Six Sigma and Lean and *transforms* the enterprise

Lean Six Sigma

Applicable to:

- Manufacturing
- Administration
- Management
- Engineering Processes





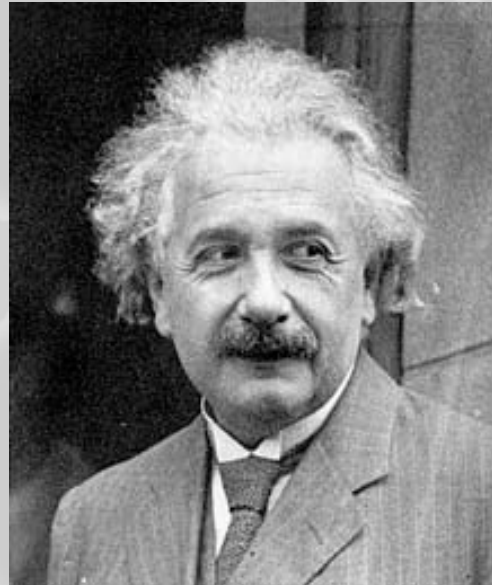
EnterpriseSM Excellence



Enterprise Excellence

“We can not solve our problems with the same thinking we used when we created them.”

- Albert Einstein



ARDEC L/6σ ROI

2300

- \$2.3B Estimated Savings to Date
- 19:1 VE Validated Returns
 - Value Engineering Adds Rigor
 - Recognized Standard
 - Independent Verification
 - Hard Numbers Only
- All Aspects of Q\$SR
 - Q: Quality/Customer Satisfaction (93% of Projects)
 - \$: Cost (69% of Projects)
 - S: Schedule (63% of Projects)
 - R: Risk (84% of Projects)
- Improvement Projects in:
 - Engineering (36%)
 - Production (32%)
 - Management/Administration (31%)

