Project Management -Putting Lean into Action

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Discussion Agenda...

- The Evolution of Lean
 - Principles & Tools
- The Link of Lean to Project Management
 - Processes & Systems
- Putting Lean into Action
 - Practice & Application
- Your Questions

The Evolution of Lean

Principles and Tools

What is Lean?

A business philosophy that focuses on providing "Value to the Customer" by organizing to reduce costs, complexity, lead time and waste in all operational processes in any enterprise.

Finding a better way to get the work done, rapidly!

The Evolution of Lean

Scientific Management – Increasing Productivity

Fredrick Taylor

Man & Machines

- Work methods designed to increase worker productivity
- Focus on worker and machine relationships
- Creation of jobs that economized on time, human energy, and productive resources

Frank Gilbreth

Time & Motion

- Break down job into its component parts, then streamline the process
- The belief that there is one best way to perform an operation
- Time study is defined as a scientific analysis of methods and equipment, and time requirements for job completion

Peter Drucker

Knowledge Workers

- The "Responsible Employee;" making work productive and the worker achieving
- Integration of work and the worker
- Managing knowledge work and the knowledge worker is dependent upon developing the right policies and practices

Lean Today

- Customer value
- Right resources
- Standardized processes
- Attacking waste

Benchmark is the Toyota Production System documented by James Womack focusing on...

- Lead time and process speed
- WIP (work-in-process)
- Delays/queue time
- Value-added and non-value-added
- Process efficiency
- Waste

Principles of Lean

- Define Customer <u>Value</u>
- Focus on the <u>Value Stream</u>
- Make customer value <u>Flow</u>
- Let the customer Pull the work
- Establish a relentless pursuit of <u>Perfection</u>

The Link of Lean to Project Management

Processes & Systems

Types of Waste

Type of Waste	Examples
Motion	Looking for information, tools, material
Transportation	Moving material, hard copies, walking items through the system
Inventory	In box piling up, batch processing, extra "stuff"
Rework	Defects, redlines, late changes
Over Processing	Approvals, reviews, hand offs
Waiting	No work being done, dead time
Over Production	Gold plating, excess capacity

How Does Lean Help Project Managers

Lean methods and tools apply to anyone who...

- Chases information in order to complete a task
- Must jump through multiple decision loops
- Is constantly interrupted when trying to complete a task
- Is engaged in expediting (work, reports, approvals, etc.)
- Hand carries signature sheets to individuals for signing
- Finds work lost in the "white space" between organizational/ department silos

Project Management

A project is a series of interrelated steps undertaken to achieve a specific measurable goal or end result, completed within a specified time frame.

Successful project management means completing projects on-time, on-budget and within scope while managing the <u>technical</u>, <u>analytic</u> and <u>people</u> components.

Phases of project management (in alignment with PMI)

- Feasibility Phase "Can we do it (funding, people, resources)?"
- Planning Phase "What's the plan and how can we avoid problems?"
- Implementation Phase "How do we insure success and capture lessons learned?"

Keeps a business focused on its goals and priorities!

Project Management Waste

- Unplanned overtime
- Additional inspections
- Excessive expediting costs
- Weekend production contingencies
- Poor quality/productivity
- Excessive approvals
- Supporting organization's processes

Lean Project Management

Implementation Phase

Executing - Controlling - Closing

Excellence

Control Process and Sustain Performance

- Mistake Proofing
- Standard Work

Improve & Innovate Process to Meet Customer Needs

Planning Phase

Analyze Process for Improvement Areas

- - Waste Identification
 - Flow Diagrams
 - Cause and Effect
 - To-be Process

Feasibility Phase

Measure Capability to Meet Customer Needs

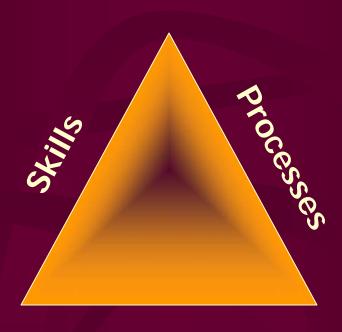
- **Define Customer Value**
- Value Stream
- As-is Process

- Value Stream Analysis
- Customer Value
- Cycle Time & Efficiency

Kaizen

- Lean Processes
- Brain Storming
- 6σ Applications
- Visual Controls

Successful Project Management



People

Skills + Processes + People = Performance Excellence

Executing Lean in Projects Finding Opportunities

Feasibility Phase

- Clarify Customer Value scope & requirements
- Understand the Value Stream the right tasks & activities

Planning Phase

- Analyze process gaps & causes along critical path
- Innovate to meet customer needs

Implementation Phase

- Pursuit of Perfection control & sustain improvement
- Manage project issues support a lessons learned environment

Lean Reference Tool The *L I S* Model

Learn

- Understand the workflow
- Define the areas of waste & complexity
 - Develop a Value Stream Map to pinpoint opportunities

Improve

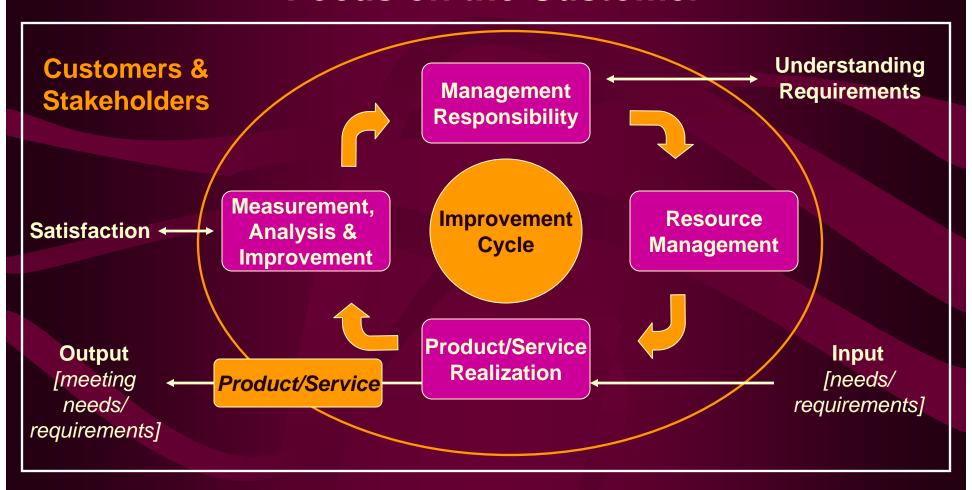
- Analyze for cause of variation & time bottlenecks
- Develop action plan and mistake-proof the processes
 - Define criteria for evaluating & measuring success

Sustain

- Eliminate or reduce barriers to success
- Monitor performance and make on-going changes
 - Modify systems & procedures

Strategic Lean Management

Focus on the Customer



Excellence Through Lean

Process Integrity

Designing processes to help the enterprise

Service Integrity

Delivering what the customer wants

Productivity Improvement

Working as efficiently as possible

Resource Management

Managing resources to expectations

Your Questions?

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