Improving Knowledge Work: Lessons Learned

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THE BOTTOM LINE GROUP
ASQ Lean Six Sigma Conference
February 11 – 12, 2008
Session D-11

Learning Objectives

At the conclusion of this session, attendees should be able to:

– Recognize selected forms of waste
– Recognize typical barriers to flow
– Recognize challenges associated with improving knowledge work
Setting the Stage

“Your tax dollars at work”
Results

OBJECTIVE: Reduced Cycle Time

• 12 functional touch point roles
• 30 plus steps
• 16 queues
• 8 work around(s)
• Multiple hard copies
• 12+ review and approval steps
• Average of 28 days processing time

• 8 functional touch point roles
• 15 steps
• 5 queues
• 1 work around
• One hard copy
• 3 review and approval steps.
• Average of 4 days processing time

WAA Process Map
Improving Knowledge Work-Principles

- Outside-In
- Make flow visible
- Measure what matters to customers
- Eliminate barriers to flow
- Connect & align value-added fragments
- Organize around flow
- Manage the flow visually

Outside-In

For a given work product, who is the Customer?
Measure What Matters to the Customer

- Lead time
- Cycle time
- Value-added time
- Complete & Accurate
- First-pass yield or rolled throughput yield
- Throughput volume/time period (related to customer's definition of “on time”)

Make the Flow Visible
Make the Flow Visible

Order to Delivery: Cross-Functional Process Map View

An Integrated View of Workflow

The Secret Sauce to Improving Workflow
Eliminate Barriers to Flow

- Recognize waste (distinguish between value and non-value added work)
- Discover the causes of the waste
- Identify and reduce the barriers to flow

“You Can Observe a Lot by Just by Watching,” Yogi Berra

Recognizing Waste

<table>
<thead>
<tr>
<th>Definition</th>
<th>Knowledge-Intensive Work Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>More or sooner than is really needed right now by the customer</td>
<td>Buying or creating anything before it is needed</td>
</tr>
<tr>
<td>Any form of batch processing, or work-in-process</td>
<td>Work held in in-boxes; storage of office supplies; partially completed tasks or documents; files; online or electronic storage</td>
</tr>
<tr>
<td>Delays</td>
<td>Time spent pending review or approval; time watching logon, screen refresh, or retrieval or manipulation of information</td>
</tr>
</tbody>
</table>
### Recognizing Waste

<table>
<thead>
<tr>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Time spent doing unnecessary steps</td>
<td>Re-keying or reformatting data; extra copies or unneeded documents of any kind; iterations</td>
</tr>
<tr>
<td>Any form of defects or rework</td>
<td>Missing (incomplete), or incorrect data or information</td>
</tr>
<tr>
<td>Movement of people</td>
<td>Retrieving anything essential to the task at hand that is “out of reach”</td>
</tr>
</tbody>
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<tr>
<td>Movement of work between locations,</td>
<td>Email attachments, documents or files routed for multiple approvals or reviews; expertise or</td>
</tr>
<tr>
<td>offices, floors, buildings, systems,</td>
<td>information needed is dispersed rather than co-located or aggregated</td>
</tr>
<tr>
<td>and people</td>
<td></td>
</tr>
<tr>
<td>Failure to fully engage a person’s</td>
<td>Scripted responses; limited decision authority; watching equipment operate</td>
</tr>
<tr>
<td>skills and capabilities</td>
<td></td>
</tr>
</tbody>
</table>
Barriers to Flow

- Workflow Properties
- Physical Layout
- Job/Work Design
- Information Technology
- Policies & Rules
- Measures

Current State Assessment

<table>
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<tr>
<th>Workflow Properties</th>
<th>Physical Layout</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Not visible</td>
<td>• Individually by cubicle</td>
</tr>
<tr>
<td>• Serial, distributed, dispersed, decision-making sequence</td>
<td>• Clusters of similar jobs</td>
</tr>
<tr>
<td>• One size fits all process</td>
<td>• Few visual indicators</td>
</tr>
</tbody>
</table>
Current State Assessment

Job/Work Design

- Shared vs. dedicated resource(s)
- Priorities set individually
- Priorities across roles and throughout flow not aligned
- Decision requirements and criteria for excellence not explicit; ambiguous
- Decision requirements spread across many roles
- Little feedback or guidance provided

Current State Assessment

IT

- Awkward interfaces (doesn’t relate specifically to decisions needed)
- Available information located in many different places
- 100% information needed not always available
- Information often not in a form that speeds throughput
- Timing out of sync with downstream actions
Current State Assessment

<table>
<thead>
<tr>
<th>Policies/ Rules</th>
<th>• Only Comptroller role is authorized to accept or transfer funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures</td>
<td>• None currently collected related to flow</td>
</tr>
</tbody>
</table>

3 Key Areas to Examine

- End-to-End workflow
- Each individual job
- Linkages between all related jobs

Whole, Part, Set of Parts that Make up the Whole
What to Watch For: Workflow

- Workflow pattern
- Handoffs
- Layout
- Distance traveled

Examine The End-to-End Workflow as a Whole

What to Watch For: Job

- Batching practices
- In-bound quality
- Trigger
- Priorities
- Schedule
- Outbound quality

Each Individual "Job" Within the Flow

- Resources
  - Shared vs. dedicated?
  - Available when needed?
  - Workload balanced?

"one to many"
What to Watch For: Job

- TASK SUPPORT
  - Can performers easily recognize the input requiring action?
  - Can the task be done without infringement from other tasks?
  - Are job procedures and work flow logical?
  - Are adequate resources available for performance (equipment, training, information)?

- PERFORMANCE SPECIFICATIONS
  - Do performance standards exist?
  - Do performers know the desired output and performance standard?
  - Do performers receive the standards defined?

- CONSEQUENCES
  - Are consequences aligned to support desired performance?
  - Are consequences meaningful for performance's viewpoint?
  - Are consequences timely?

INPUT ➔ PERFORMER ➔ OUTPUT ➔ CONSEQUENCES

- FEEDBACK
  - Do performers receive information about their performance?
  - Is the information:
    - Relevant?
    - Accurate?
    - Timely?
    - Constructive?
    - Specific?

- KNOWLEDGE/ SKILL
  - Do performers have the necessary knowledge and skills to perform?
  - Do performers know why desired performance is important?

- INDIVIDUAL CAPACITY
  - Are performance physically, mentally and emotionally able to perform?

What to Watch For: Linkages

- Part/whole connections
- Synchronization
- Alignment

Connections between all the “Jobs” Within the Flow

Structural boundary
Connect VA Fragments

Often Involves Re-defining Roles and Responsibilities

Organize Around the Flow

Physically, Logically, Virtually
Manage Flow Visually

- Status
- Progress
- Performance results
- Problems

Built-In, Timely, Information and Feedback

Selected Challenges

- Who is the customer?
- No natural “owner” of the flow
- Specialization
- Narrow flow boundaries
- Alignment of the parts
- Measurement
  - missing
  - existing, but drive the wrong behavior
  - not tied to customer demand
Lessons Learned

- Apply the seven principles
- “System” and “leadership” challenges
- Whole, before parts
- Flow, not Joe
- Respect for people
- Think tortoise vs. hare

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At the conclusion of this session, attendees should be able to:

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Summary

- “Flow” exists whether it is currently being managed or not
- Eliminate the *causes* of waste to reduce cost and increase productivity
- See “Improving Knowledge Work” file next chart
- Check out my blog:
  - [http://knowledgeworkdesign.blogspot.com/](http://knowledgeworkdesign.blogspot.com/)

We’ve Learned to Manage Assets; Now We Must Learn to Manage Flow