

Sustaining the Improvement

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Outline

- Measure the Gain
- Training Plan
- Visual Factory
- Monitor for New Constraints
- Rewards and Recognition





Sustaining the Gain

- Document procedures and results
- Publicize benefits and ensure understanding
- Ensure resources/structure are present





Sustaining the Gain

- Identify other places where your work could be applied
 - Other codes
 - Other activities
- Monitor (control charts, control plans, gemba)
- Remain interested/be visible





Sustainment Tools

- Visual Controls
- Mistake-Proof (Poke Yoke)
- Standard Operating Procedures (SOP's)
- Failure Modes and Effects Analysis (FMEA)
- Control Plans
- Visibility:
 - Tours, newsletters, etc.





Sustaining the Gain



Benefits

- confidence in improvements
- realizing actual benefits
- closure/ability to move on
- continuous improvement

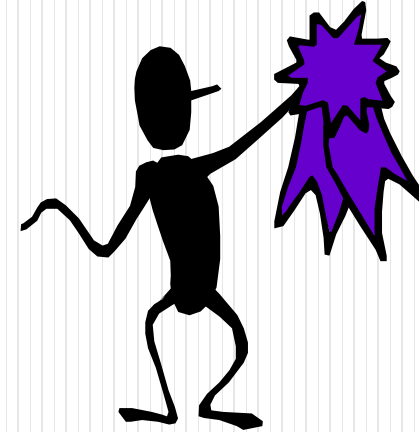
Consequences

- bad press, eroding future support
- wasted resources and effort
- no real improvement
- opportunity cost



Measurement = Score Keeping

- Measures after Implementation are used to:
 - Sustain the gain
 - Prevent “rejection”
 - Drive improvement
- Basics:
 - Simple and objective
 - Self-administered
 - Allow comparisons between current performance, past performance, and “standards”
 - Dynamic (real-time or near real-time)





Measurement Success Keys

- Customer focused
 - Support the Value Stream
 - Support CTQs / CTPs
 - CTQ - Critical to Quality
 - CTP - Critical to Process
- Encourage people to do the right things
 - Drive behaviors
 - Allow smart choices: Qualitative; Quantitative; Financial; Technical



Balancing Measures



- Seek to have a balanced set of measures:
 - Process-related measures
 - Product-related measures
 - Cost, quality, time measures
- Seek to have both predictive and reactive measures
- Ensure you measure things people can control



Discussion

- What are some good measures you have seen or heard of?
- What are some bad measures?





Training Plan



***Things have changed,
do you need to
conduct training on
the new process?***





Definition

- What is the difference between training and education?
 - Training is the process of acquiring proficiency in some skill or skill set
 - Education is the process of acquiring knowledge and information
 - What do the people need?





What Training Will Not Do

- Training will not solve all of an organization's problems
- Training cannot remedy a situation caused by poor performance that is not skill related
- If an individual is not performing but could do so if his or her life depended on it, retraining is not the answer



Training Delivery



- **Workbooks**
 - Advantages and disadvantages
 - Can be taken back to the job site
 - Can become outdated
- **Job Aids/Workmanship Standards**
 - Advantages and disadvantages
 - Simple
 - May require some supervision
- **Coaching/OJT**
 - Advantages and disadvantages
 - Flexible and adaptable
 - Success depends on competence of the coach



Training Delivery

- Self-directed Learning/Computer-based Learning
 - Advantages and disadvantages
 - Allows student to work at his/her own pace
 - No group interaction
- Lectures and Presentation
 - Advantages and disadvantages
 - Handles large groups well
 - Limited individual interaction



Sustain the Gain – Visual Factory/Office

- Sustain the gain by using the “visual factory” concept
 - Production boards
 - Schedule boards
 - Charts
 - Computer information organization

In an ideal situation, anyone can glance across the floor and assess or “feel” the condition of the shop or office



Sustain the Gain – Visual Factory

- Current conditions and progress are evident and any problems can be seen by everyone





Sustain the Gain – Visual Factory

- Visual factory enables management and employees to see the status of the work





Sustain the Gain – Visual Factory

- Visual factory in the computer

The screenshot displays three overlapping File Explorer windows. The top-left window shows the '02 Journi-Tech' folder containing subfolders: 01 Customers, 02 Vendors, 03 Personnel, 04 Payroll, and 05 New Business. The middle window shows the '01 Customers' folder containing: 01 Atlas Oil, 02 TriWest, 03 Ageless, 04 JandJ, 91 Inactive, and 92 Archive. The largest window on the right shows the '01 Atlas Oil' folder with a detailed list of files and folders.

Name	Date modified	Type	Size
01 Oil Dispatch Kaizen	1/14/2016 7:19 PM	File folder	
02 FuelNow Kaizen	1/14/2016 7:19 PM	File folder	
03 Dispatch-to-Delivery Project	1/14/2016 7:20 PM	File folder	
04 Order-to-Invoice Project	1/14/2016 7:23 PM	File folder	
91 Receipts	11/24/2015 5:21 PM	File folder	
92 Atlas Templates	1/14/2016 7:19 PM	File folder	
Atlas Dispatch-to-Delivery As-Is Details 2015...	11/24/2015 5:16 PM	Microsoft Excel Work...	
Atlas Oil-to-Invoice As-Is Details 20151118.x...	11/19/2015 8:55 AM	Microsoft Excel Work...	
AtlasAs-IsDetails 20151116.xlsx	11/18/2015 10:13 AM	Microsoft Excel Work...	
AtlasAs-IsDetails 20151116a.xlsx	11/18/2015 5:46 PM	Microsoft Excel Work...	
FuelNOW BoL Entry 20151118.vsd	11/18/2015 10:13 AM	VSD File	
Order to Invoice_20151122.png	11/22/2015 6:16 PM	PNG File	
Order to Invoice_20151122b.png	11/22/2015 6:31 PM	PNG File	



Sustain the Gain – Visual Factory

- Visual factory in Sharepoint

Lean Six Sigma College Curricula - Microsoft Internet Explorer

Address: https://genuine.spawar.navy.mil/TaskForceLean/Lean_Six_Sigma_College/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2FTaskForceLean%2FLean%5FSix%5FSigma%5FCollege%2F

Lean Six Sigma College
Lean Six Sigma College Curricula
Black Belt

Select a View: All Documents, Explorer View, Approve/reject Items, My submissions, Actions (Alert me, Export to spreadsheet, Modify settings and columns)

This library contains the various curricula associated with the Lean Six Sigma College

Type	Edit	Name	Description/benefit	Modified	Created By	Modified By	Checked Out To
Document		Storyboard Template New		8/15/2005 1:52 PM	Sean Kent	Sean Kent	
Folder		Week 1		1/30/2006 3:40 PM	Sean Kent	Sean Kent	
Folder		Week 2		2/24/2006 10:48 AM	Sean Kent	Sean Kent	
Folder		Week 3		2/24/2006 10:49 AM	Sean Kent	Sean Kent	
Folder		Week 4		1/13/2006 2:17 PM	Cynthia Duncan	Cynthia Duncan	
Folder		Week 5		2/22/2006 10:47 AM	Sean Kent	Cynthia Duncan	
Folder		Week 6		8/30/2005 1:48 PM	Sean Kent	Sean Kent	



Monitor for New Constraints

- Remember the Exercise?
 - You identified the constraint
 - You eliminated the constraint

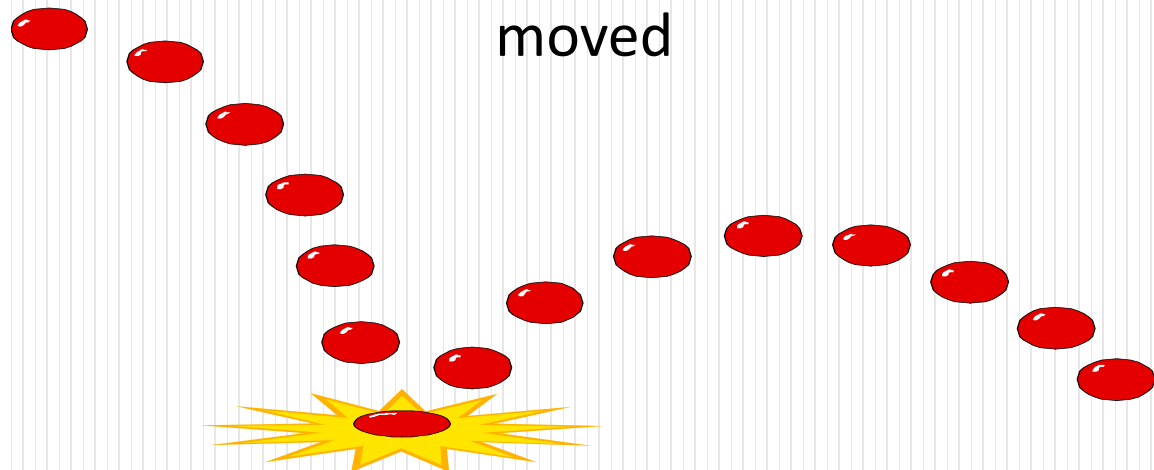
What happened to the constraint? It



Steps to Constraint Management

1. Identify the constraint
2. Exploit - Utilize all resources to balance workloads; address the 4 Partners
3. Subordinate - Focus non-constraints towards supporting the constraint
4. Elevate - Apply Lean
5. Repeat Step 1 - The constraint has probably moved

**Remember
step 5**



From *The Goal*
by Eli Goldratt



Monitor for New Constraints

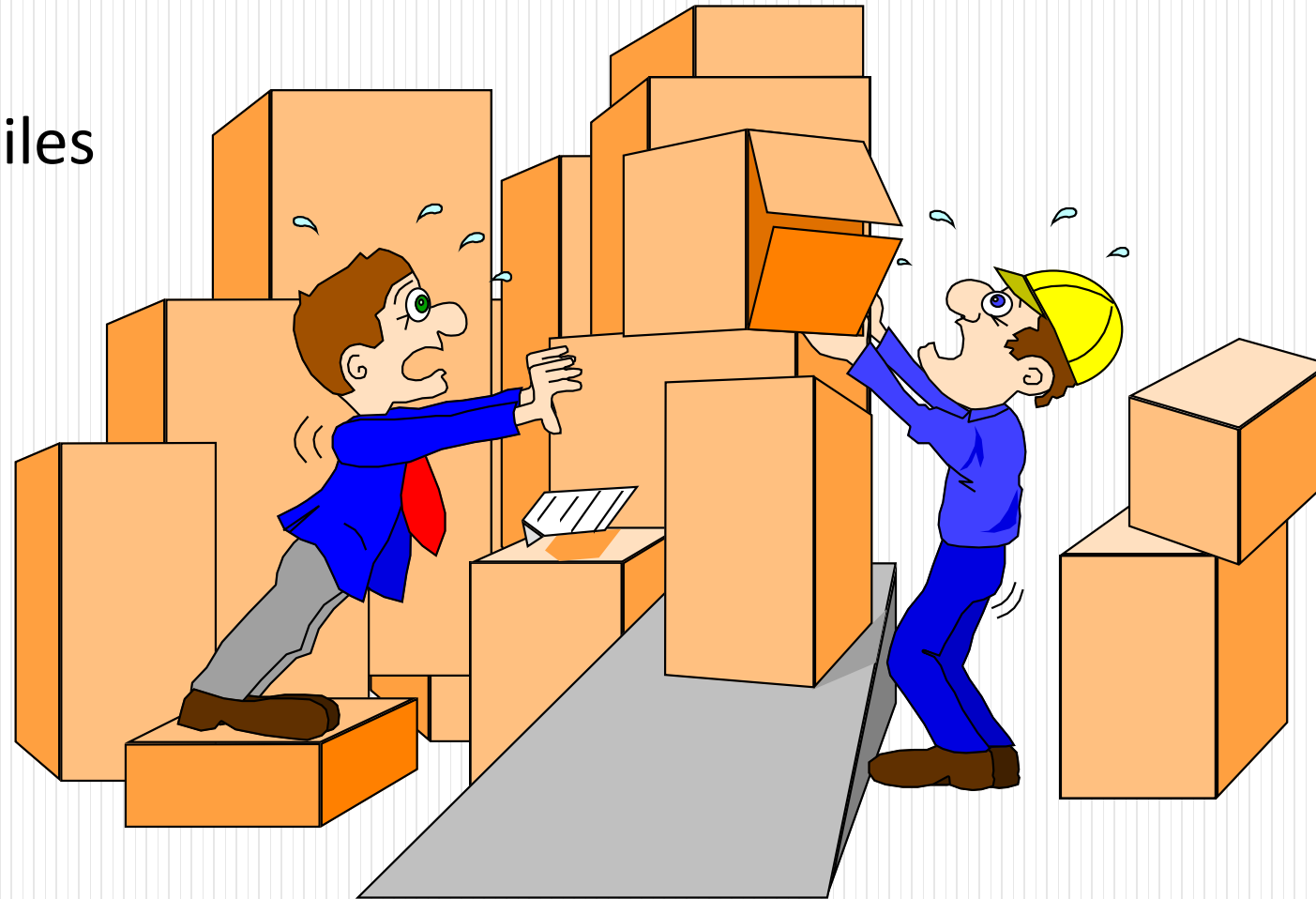
- Once the bottleneck is eliminated, look to see if it has moved
- Once all operations are below 100% Effective Utilization, the constraint lies outside the process boundaries





Monitor for New Constraints

You are looking for piles of WIP again!





Sustain the Gain – Recognition

- Types of recognition and rewards
 - Material items of significant value
 - Material items of incidental value
 - Intangible items





Team Rewards and Recognition

- Material items of significant value
 - Cash greater than \$1,000
 - Vacation time
 - Trip
 - Patent award
 - Bonus of percent of savings/profit
 - Major gift



Team Rewards and Recognition



- Material items of incidental value
 - Cash less than \$1,000
 - Trophy, plaque, certificate
 - Special parking space
 - Picture on bulletin board
 - Meal with boss
 - Name on list



Team Rewards and Recognition

- Intangible items
 - Satisfaction
 - Pleasure
 - Friendship
 - Learning experience
 - Thanks
 - Admiration
 - Notoriety
 - Prestige



Team Rewards and Recognition

The ultimate reason that rewards and recognition are given is to provide positive reinforcement for correct behavior, with the expectation that the correct behavior will be repeated in the future



Celebration



- Top employee satisfiers
 - Achievement
 - Recognition
 - Growth

Successful teams deliver all three!!



Celebration

- The best way to make people feel good about their accomplishment is to let them relive it
- Celebrations should be a time for team members to recount their experience, revel in the old inside jokes they had, to share the ups and downs, and rekindle relationships lost in the firefighting of daily work life

