

Waste Reduction Value Engineering

Good Afternoon!
Welcome!

Agenda:

1. LEAN as the launching pad of VALUE/ENGINEERING and WASTE REDUCTION.....
 1. Discuss necessity to change our organizations, (DMF)
2. Compare LEAN vs: non-lean companies.
 1. What is, and how to recognize Value added/Non-value-added. (Become waste detectives within your organizations)!
3. Discuss 7 Wastes
4. Define VALUE ENGINEERING (How to implement).
 1. Show slides on yearly cost savings at Bradington-Young as examples of what lies beneath our feet.
 2. Frames, fabric/leather, cushion/poly, cartoning, other raw materials. \$\$\$\$\$\$\$!!

What is LEAN?

*Producing just what the customer needs,
when the customer needs it,
in the amount needed by the customer,
with the minimum materials,
equipment, labor and space*

Key Issues For YOUR Company's Competitiveness

- ✓ Quality
- ✓ Cost
- ✓ Delivery

*"Time is the single best indicator of
competitiveness"*

Quality and Time

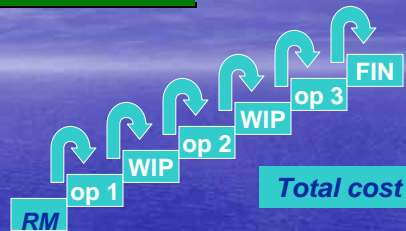
Focus on reducing the elapsed time

- *between when the error occurs and when the error is detected*
- *between when the error is detected and when the corrective action is taken*

Eliminate the root causes-do not do rework!!!

Cost and Time

*Traditional
manufacturing
(batch and queue)*



*Time-based
Manufacturing*

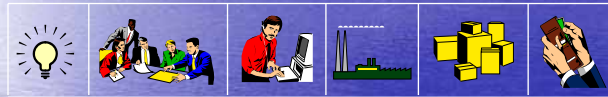


Total cost decreases with lead time reduction!

Total Business Leadtime



Traditional
manufacturer



Initiation
of LEAN



Gain experience
& begin BP events



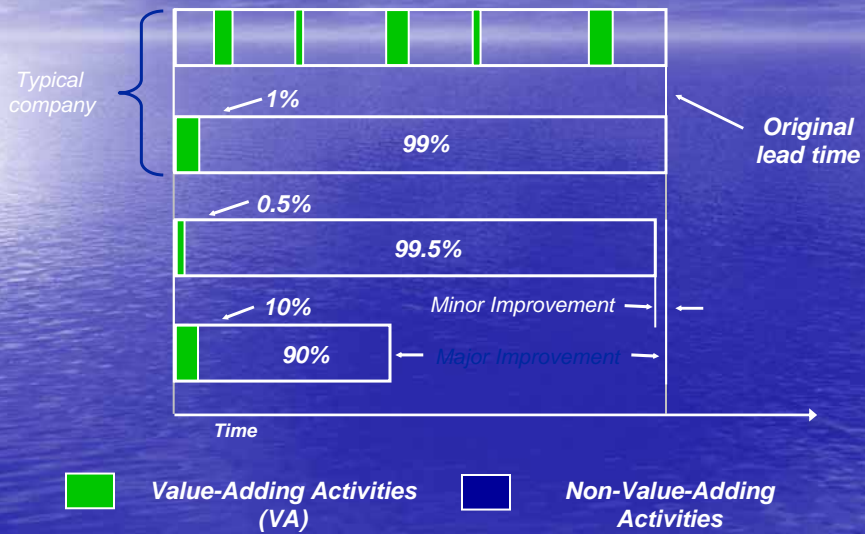
Time-based competitor
& expert LEAN practitioner

Taking out the time ← → Waste elimination

Value-Adding vs. Non-Value-Adding Activities

- **Value-Adding Activities are**
those activities which directly transform raw material or information to meet customer requirements
- **Non-Value-Adding Activities are**
those activities which consume time, resources or space, but do not directly contribute to the value of the product

Manufacturing Lead Time



Seven Types of Wastes



Common Causes of Waste

- *Layout (distance)*
- *Long set-up time*
- *Large batch sizes*
- *Incapable processes*
- *Poor maintenance*
- *Inconsistent work methods*
- *Lack of training*
- *Lack of adherence*
- *Inconsistent performance measures*
- *Ineffective production planning*
- *Lack of workplace organization*
- *Unclear quality requirements*

Value Engineering

Value Engineering is defined as a systematic method to improve the "value" of goods and services by examining the process. Value, as defined, is the ratio of function/process to cost. Value can be increased by improving the process or reducing the cost.

Value Engineering Approach

- Determine "Low-hanging-fruit" opportunities:
 - Frames/cushioning/fab/leather/fiber/other materials
- Select a CHAMPION???
- **SET GOALS!!!**
- Develop Action Plan
 - Notify and meet with all vendors
 - Special instructions as to **What, Why, and WIIFM. (What's in it for me)**
 - Request a meeting with them bringing in **ALL** products.
 - Suggest true Vendor Partnership..... LATER
- Select products based on Quality, Cost, and Delivery.
 - Build samples for sales/marketing approval

- **MEASURE! MEASURE! MEASURE!!**

VALUE ENGINEERING RESULTS (Bradington-Young)

- Fiber savings-----\$19,254
- Frame savings (CNC)---\$302,549, (39.1%)
- Leather savings-----\$129,157
- Tub chair savings-----\$464
- Other, (EXPLAIN)-----\$468,862

TOTAL SAVINGS----- \$920,286!!

Wrap up

1. Become LEAN in plants and offices!!!!
2. Learn to be Waste Detectives!!!
 1. Determine value-added & non-value added.
3. Teach staff to be waste detectives
4. GOAL SETTING NECESSARY!! (Waste reduction & Value Engineering).
5. Follow through! REMEMBER: Sustained efforts pay off!
6. Have monthly meetings to track successes! (Graphs)

Questions???
(Handouts)

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