



# The **Fastest Returns** From Lean Manufacturing

# The Costs:

- Outside Initial Training & Leadership
- Time commitment of Management, Staff, Teams
- Materials for POUS, FIFO's, Signs, Labels, Floor Marking, Signals
- Layout Changes

# The Pay-Backs

- Product cost savings through waste reduction
- Quality improvements through batch reduction
- Delivery improvements through reduced lead time
- Productivity improvements through waste elimination

# One At A Time: COST

- The "75/220 Rule"

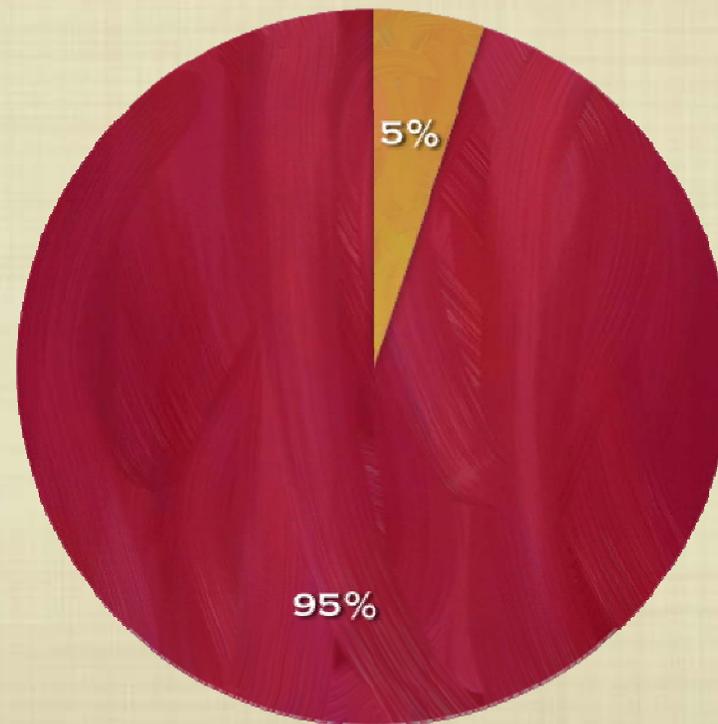
Reduce Lead Time by 75%, and you will see a corresponding doubling of Productivity AND a 20% cost reduction.

- Rick Harris

# Why This Is True

- Everything done by anyone in your business either adds value, or it doesn't (it's waste)

Your  
Lead  
Time:



● VALUE-ADDING ● WASTE

# Waste & Value

- Value-Adding activities improve Cost, Quality (design, materials, workmanship), and/or Delivery. Your customers love this stuff!
- Waste activities consume time & money, but cannot be sold. Your customers do not care about these things.

# Transportation Waste



# Inventory Waste



# Quality Improvements

- One of the benefits of flow improvements and batch reduction is that errors arrive at the next step more quickly in smaller numbers. they are immediately obvious!!

wer Products to REWOF

# Delivery Improvements

- When waste is reduced, lead time comes down.
- Many Lean companies can reduce or eliminate stock items, instead making them to order
- Reduced lead time also reduces Work-In-Process Inventory

# Timeout!!

## WIP Reduction

- WIP that's not there doesn't have to be protected, reworked, moved, stored, tracked, housed, or exposed to obsolescence.
- This **freed up storage space** for other uses, and freed up people for value-adding work

# Productivity Improvements

- Waste elimination frees up your people to get more sellable things done without working harder

“Quickie” Lean Waste Elimination Tools:

5S (Clean-up & visual organization)

POUS (Point-of-use storage)

Layout

## 5S (Sort, Set in order, Shine,...)

- BY ITSELF reduces setups (another lean tool with many other aspects) by about 50%
- SETUPS ADD ZERO VALUE
- Organizes teams around very beneficial projects. Attitudes improve.
- Reduces search times - everything needed has a place that's visual
- Gives management a great culture-changing tool

# Searches:



# Studies tell us...

- If you're not organized (5S'd), you spend 10-30% of your day looking for stuff
- 50% search-time reductions are COMMON with good 5S

That's up to  
an hour a day per person

# She knows, but do you?



# POUS:

- Point-of-use storage puts needed materials, supplies, parts, tools, etc., where they are used
- Must be in small quantities or they get in the way (a “waste swap”)
- Shipping costs may go up, but like WIP, if it’s not there it doesn’t have to be protected, reworked, moved, stored, tracked, housed, or exposed to obsolescence.

# POUS:



# Team layouts:

- Give teams the authority and responsibility to change and improve their own layouts of their workstations and cells
- Who knows the work better?
- Layout around products, not processes or functions
- Low-transportation, Low-motion layouts save time and money every day

# Team Layouts:



# Lean Is:

- ALWAYS applied through TEAMS
- ALWAYS Continuously Improved
- ALWAYS Measured

# These Tools Do Show Fast Results!!

- Stop there, and you will see WAY less than 5% of the possible benefits, even though they are significant and cost-effective
- You will also shortly **Detonate a BOMB** in your workforce. Don't let 'em see over into the promised land, then turn 'em back!!!

# What if we carry this LEAN CONVERSION out?

- You may expect these results\*:
  - Lead Time Reduction of 95%
  - Productivity increase of 50%
  - WIP reduction of 90%
  - Quality Improvement of 90%
  - Better space utilization by 75%

Also: engaged employees, partner vendors

\*NIST survey averages

**Better  
GET  
STARTED!!**



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