## Welcome

to

### "LEAN DELIVERS"

...building a model of increasing value

A hosted, collaborative thinking event with

Alden B. Davis

23 May 2002

#### Workshop Objectives

1. Participants will be able to describe how a lean philosophy manifests itself in various organizational processes (captured in "standards of excellence").

2. Participants will be able to describe how the pursuit of these standards directly impacts the value of a business.

#### A United Technologies Corporation









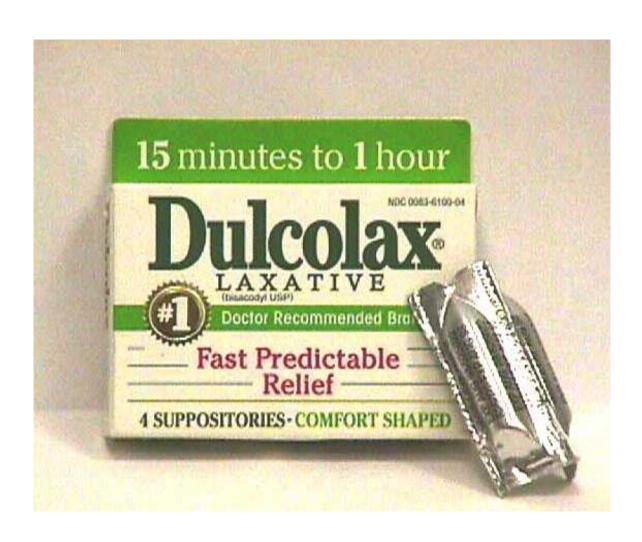








## Corporate Plumber



**Organizational Enema** 



#### **Introductions**

- Name
- Company
- Role
- Years in Industry
- Favorite food

#### **Opening Questionaire**

1.	Most of our workforce can personally connect their daily work and associated expenses to an Income Sheet and Balance Statement.	T	F
2.	Our financial people understand the impact of "lean" so well that they are tough negotiators when setting budget expectations for our lean projects.	T	F
3.	Our organization shares a common understanding of the word "value."	T	F
4.	Lean-leaders have personal vision/understanding of value creation.	T	F
5.	"Value" is realized when a lean project has been completed.	T	F
6.	Pursuing lean projects make business sense because they are the right thing to do.	T	F
7.	Shared understanding of the business and its finances increases peoples' ability to "do."	Т	F

#### Workshop Purpose

To demystify the financial world of CFOs and expose the mental model of CEOs

In a way that improves the effectiveness of our leadership

So that we increase the purposefulness of all improvement activity.

#### Our Choice

- Poor standards deliver <u>Ugly</u> results/rewards
- Good standards deliver <u>Poor</u> results/rewards
- Excellent standards deliver <u>Good</u> results/rewards
- Outstanding standards <u>Take</u> all the rewards



#### Success Looks Like...

Given The ValueTree, Lean concepts and our Lean Philosophy audit sheet

Stand in front of the group and deliver a leadership statement

In a way that puts lean concepts within the context of a lean philosophy & directly links them to ROIC through The ValueTree.

#### Workshop Outline

Linking to Value **Affirmations** Value Tree Tutorial **Distill Principles Presentations Upgrade Standards Meet the Greats Philosophy** 

#### Meet the Greats

- Walter Shewhart (1891-1967): Use information (SPC) to control processes and create profitable situations for both businesses and consumers.
- Shigeo Shingo (1909-1990): Transcend SPC and stop the process when defects occur; good engineering can design out defects. Credited with Poka-Yoke, SMED, Zero Quality Control.
- Kaoru Ishikawa: Created fishbone charts to allow bottomsup approach to root-cause analysis. Believed in companywide quality control throughout a products total life cycle.
- Ed Deming: 14 Points, a management guideline. Believes that management controls 85% of what makes a worker successful. Expounded Shewhart's PDS(study)A cycle.

#### More Greats

- Genichi Taguchi: Equated quality with cost (and lost revenue). Devised set of tools to identify and prioritize "noise" in the work process.
- Joe Juran: Believed that people were key to quality; shaped Total Quality Management philosophy. Key tenets included management involvement, Pareto, training, project approach. Defined quality as "fitness for use".
- Philip Crosby: Simplified the language and concepts for a broader audience. "Quality if Free", Zero defects, conformance to requirements and prevention are the mantras.
- Jack Stack: Inspired "open book management" as a way of sharing power. Give people as much financial information as possible so they can think and act like owners. You get the highest performance by appealing to the highest thinking.

#### Philosophy

**Principles (guidelines for decisions)** 

**Principles** 

**Principles** 

**Principles** 

**Philosophy** 

**Principles** 

**Principles** 

Standards of Excellence (manifestations)

Standards of Excellence

Standards of Excellence

Standards of Excellence

Standards of Excellence

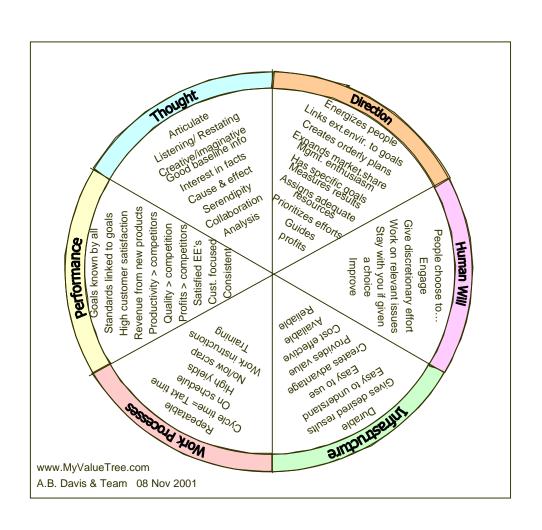
# Group Work: How would I recognize Lean if I bumped into it?

Task: Upgrade the "audit list" for assigned topic

With the people around your table...

- Introduce yourself
- Open the envelope and read your work assignment
- Upgrade your list
- Post on our Wall of Fame
- Summarize standards into a principle by filling in the blanks..."To \_(non-negotiable)\_ in a way that \_(freedom given)\_."
- Be prepared to present

#### Lean Audit Wheel

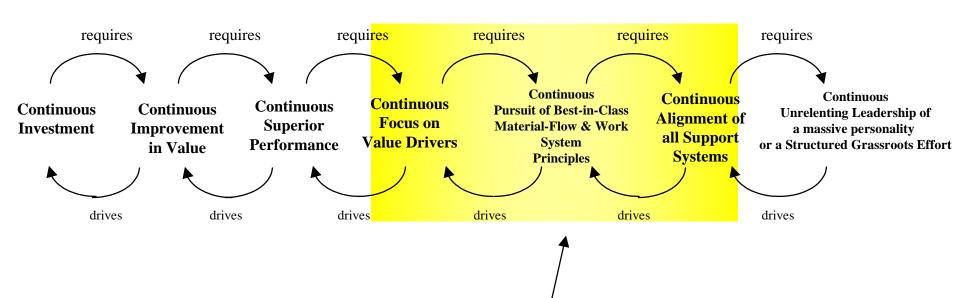


# \$\text{shifting} \text{Performance} \text{Using the \$Value Tree}

#### What is the Value Tree?

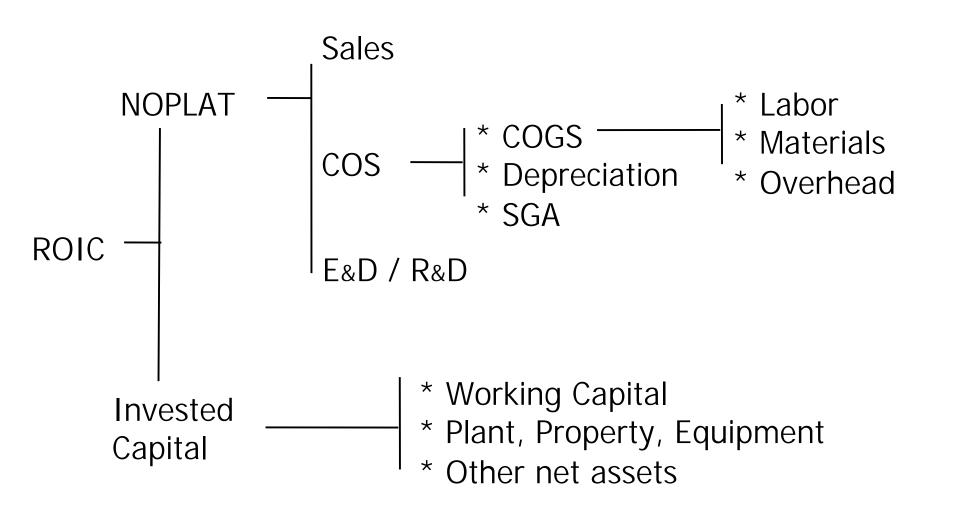
- Financial model of the business on one page
  - Visually oriented
  - Interactive
  - Easily understood by people
- Financial tool for developing business context
  - Interrelationships of various dollar flows
  - Drivers of business decisions
- Financial "range-finder"
  - Target identification
  - Target selection
- Financial-world de-mystifier
- Financial guidepost helping answer the essence question..." Is the institution increasing its value (how much its worth) or destroying its value?"

#### Context within which the Value Tree Fits



Area of concentration

#### The Value Tree Exercise



#### **Guiding Beliefs of the Value Tree**

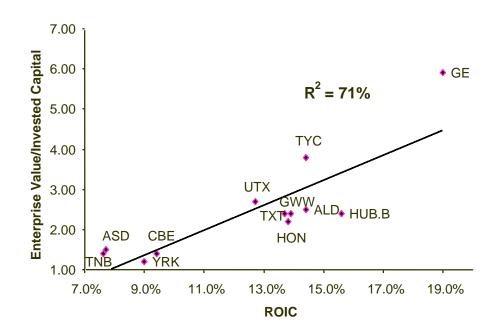
- Long-run institutional health = long-term value creation.
- The majority of the value of most institutions, at any time, is the cash flow derived from existing assets.
- The most significant value creator is superior performance in existing operations
- Value creation is not exclusive to manufacturing organizations.
- Discounted cash flow (NOPLAT-Invested Capital) not EPS is the most comprehensive valuation tool consistent with long-term value creation.
- Value is created by investing capital at returns > the cost of capital.
- Equity holders require all information of all revenues and all claimants to make good decisions.

#### **Key Premise**

## A direct correlation exists between ROIC and the value (worth) of a company

#### **Electrical Equipment Regression Analysis**

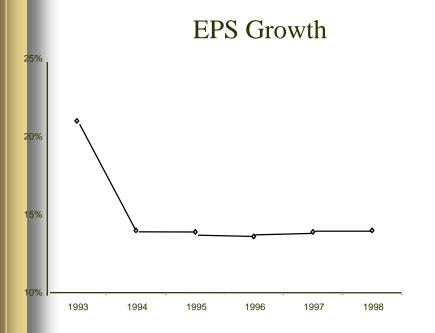
1998 Enterprise Value/Invested Capital vs. ROIC

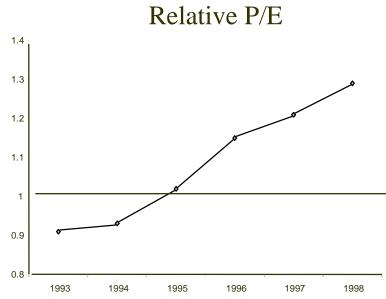


TNB	Thomas & Betts Corp
ASD	American Standard Company Inc
YRK	York International Corp
CBE	Cooper Industries Inc
TXT	Textron Inc
HON	Honeywell Inc
GWW	Grainger WW Inc
ALD	AlliedSignal Inc
HUBb	Hubbell Inc
TYC	Tyco International Ltd
GE	General Electric Co
UTX	United Technologies Corp

#### What determines a firm's worth?

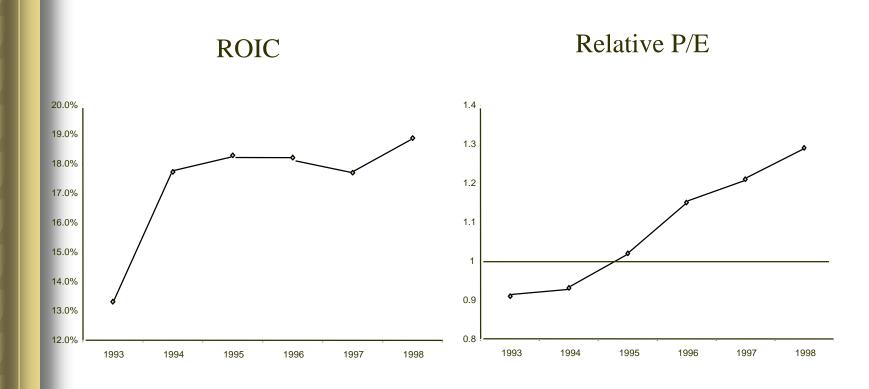
For G.E., EPS does not appear to be the driver for the priceearnings multiple.





#### What determines a firm's worth?

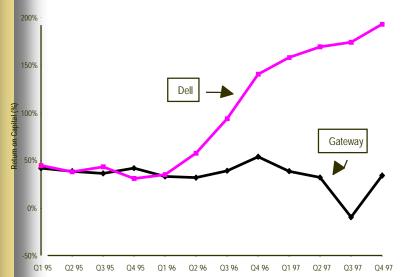
General Electric's P/E seems to be better characterized by a strong return-on-invested-capital number.



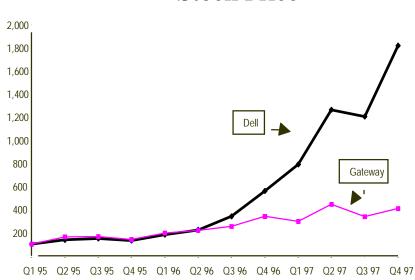
#### What determines a firm's worth?

The same relationship seems to exist at Dell and Gateway; strong ROIC, strong stock price.



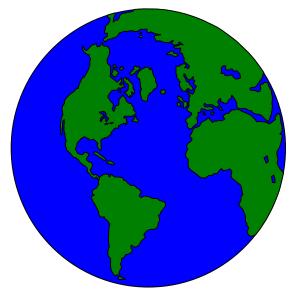


#### Stock Price





# Ind Class Lean Concepts



#### Improvements Possible

Key results to be expected with a soundly implemented and well maintained "kaizen."

#### Immediately:

•	20%	_	30%

- 30% 40%
- 30% 50%
- 10% 20%
- 50% 60%
- 10% 20%
- · 70% 90% 2

Productivity improvement

Increased equipment uptime

Reduction in space run

Reduction in Nurviased costs

Improvedent in product quality

Reduction in WrkComp Accrual

Reduction in WIP inventory

# The Value Tree for Targeted Insight

**Sales /Marketing:** Quality of sales \$; preparing for improvements

**Fin.Analyst:** Budgeting improvements **Ops/Shop:** Knowing the big "whys" Sales \* Labor **NOPLAT HR/IR:** Enablers of change \* Materials \* COGS **Procurement:** Supply chain mgmt COS \* Depreciation \* Overhead \* SGA **EHS/Med:** Waste chain mgmt. ROIC E&D **Quality:** More than SR<sup>2</sup> \* Working Capital Facil./Maint: TPM & Utilization Invested \* Plant, Property, Equipment Capital **Engineering:** Defining infrastructure \* Other net assets **Senior Mgmt:** Targeting & implications

**Financial Planning:** Detailing long-term performance

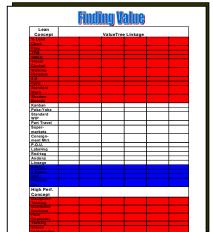
**Order-to-Cash:** Optimizing an enterprise flow

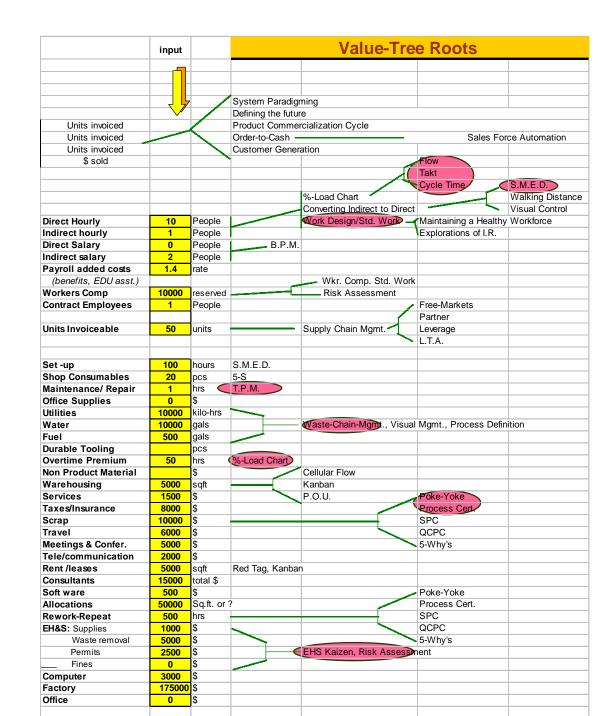
#### Working "the Tree"

- 1. This is a Small group exercise. The objective is to identify "how" and "where" a serious pursuit of lean concepts will deliver value.
- 2. Review the lean concepts for shared understanding.
- 3. Pick a concept, discuss what gets saved when the concept is implemented.

4. Find each "budget line" which would be impacted and list it on the "Finding Value" sheet.

5. Red boxes = 10 White boxes = 5 Blue boxes = 1





# Grand Finale Leadership

#### Exercise

- Pick a concept from the "Finding Value" sheet which is linked to the ValueTree.
- Prepare to complete the following statement:

 "We are pursuing \_\_\_\_\_ (tool) \_\_\_\_\_ because it addresses our Lean Philosophy of \_\_(ref. the Lean Wheel) \_\_\_ and it contributes to improvements in our ROIC

by\_\_\_\_\_."

	find	ng V		
Lean				
Concept		ValueTre	e Linkage	
% Load Chart				
Flow				
TPM				
SMED				
Visual				
Control Walking				
Walking Distance				
5-S				
Cells				
Standard Work				
Shadow				
Boards				
Kanban				
Poka-Yoke				
Standard WIP				
Part Travel				
Super- markets				
Consign- ment Mtrl.				
P.O.U.				
Labeling				
Red-tag				
Andons				
Lineage				
High Perf.				
Concept				
Thinking				
Distributed				
Decisions				
Fluid Employees				
Teaming				
Shared				
Understanding				

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# 

#### **Business Direction**

#### Lean Standard of Excellence Business Direction

- Crisp and to the point
- No surplus words

#### Thought

#### Lean Standard of Excellence Organizational Thinking

- Purposeful
- Systematic
- \_
- \_
- \_
- \_
- \_
- \_
- \_
- \_
- \_

#### Organizational Performance

Lean Standard of Excellence Organizational Performance

-	Consistent
-	
-	
_	
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_	
_	
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-	

#### **Human Will**

#### Lean Standard of Excellence Human Will (making choices)

_	Understanding customer requirements drives my choices
_	
_	
_	
_	
_	
_	
_	

#### Work Processes

#### Lean Standard of Excellence Work Processes

_	Work done right the first time
_	
_	
_	
_	

#### Infrastructure

## Lean Standard of Excellence Infrastructure

(buildings, equipment, systems, procedures, etc.)

Equipment is operational when needed