

# The Pulp & Paper Industry



## *Transform To Survive & Dominate*

*Value Resolution Group – Dan Cenatempo*

*Center for Paper Business and Industry Studies (CPBIS) – Dr. Jacquelyn McNutt*

# Overview

- Enterprise Transformation . . .
  - ✓ The Context
  - ✓ Grasping The Potential Value – The Rationale
  - ✓ Key Elements
  - ✓ Illustrations
  - ✓ Framework
- Recap and Final Thoughts

# **Enterprise Transformation**

## **– The Context –**

# Enterprise Transformation – *The Context*

- Enterprise Transformation *seems to be essential* if firms in this troubled industry sector *are to survive and dominate*
- But – typical Pulp and Paper companies have followed *a rather time honored & traditional approach* to enterprise management . . .
  - ✓ *That most often does not include the structures and initiatives for consistent organizational change and management aimed at a persistent and ongoing process of Enterprise Transformation*
- As a result, in part, industry performance . . .
  - ✓ *Has struggled greatly,*
  - ✓ *Investment has spiraled downward, and*
  - ✓ *Competitiveness has eroded in the global market place*

# Enterprise Transformation – *The Context*

- However, individual suppliers and paper companies can leverage a sincere effort toward Enterprise Transformation to *begin to dominate, outperform and create value*
- *To understand how to embrace Enterprise Transformation as a real organizational working construct, we need to*
  - ✓ *First grasp the value of enterprise transformation, then*
  - ✓ *Better understand what it is,*
  - ✓ *What is needed inside our firms to allow them to establish and pursue it, and*
  - ✓ *What are the key components of success or failure in seeking a pathway driven by true Enterprise Transformation concepts, actions and outcomes . . .*

# **Enterprise Transformation**

## **– Grasping the Potential Value –**

# An Example – *IBM's Transformation Results*

## Business Process Re-engineering Results:

*Hardware development time*

**67% Faster**

*On-time delivery*

**95%**

*Rate of "maverick" buying*

**From 45% to less than 0.5%**

*Customer satisfaction*

**+ 5.5 points**

## Infrastructure Simplified:

	1992	2002
<i>CIOs</i>	<b>128</b>	<b>1</b>
<i>Data Centers</i>	<b>235</b>	<b>18</b>
<i>Key Applications</i>	<b>145</b>	<b>55</b>
<i>Networks</i>	<b>31</b>	<b>1</b>

# More – *IBM Transformation Results*

## HR Operations Simplified:

	1992	2004
<i>HR Operation Centers</i>	<b>38</b>	<b>1</b>
<i>Key Applications</i>	<b>168</b>	<b>71</b>
<i>HR Data Centers</i>	<b>21</b>	<b>1</b>
<i>HR U.S. Headcount</i>	<b>3,650</b>	<b>1,438</b>
<i>WW Ratio of HR/Employees</i>	<b>1:59</b>	<b>1:109</b>

***Human Resources delivering more with less through better efficiency***



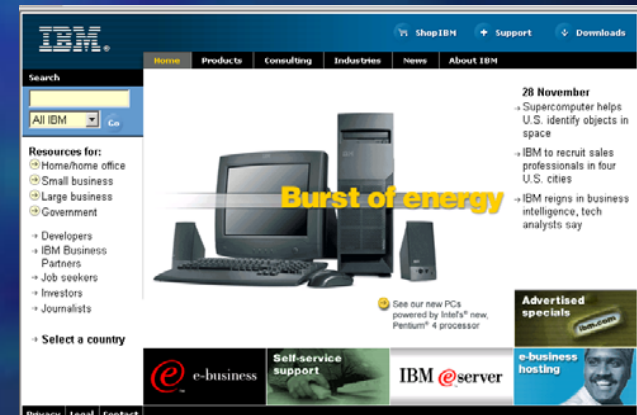
# More – IBM Transformation Results

## Operations Improved:

	<u>FY1998</u>	<u>2002</u>
<u>e-commerce</u>	<b>\$3B</b>	<b>+\$27B</b>
<u>e-procurement</u>	<b>\$7B</b>	<b>+\$40B</b>
<u>Support transactions</u>	<b>14M</b>	<b>+120M</b>
<u>Distributed learning</u>	<b>15%</b>	<b>+40%</b>

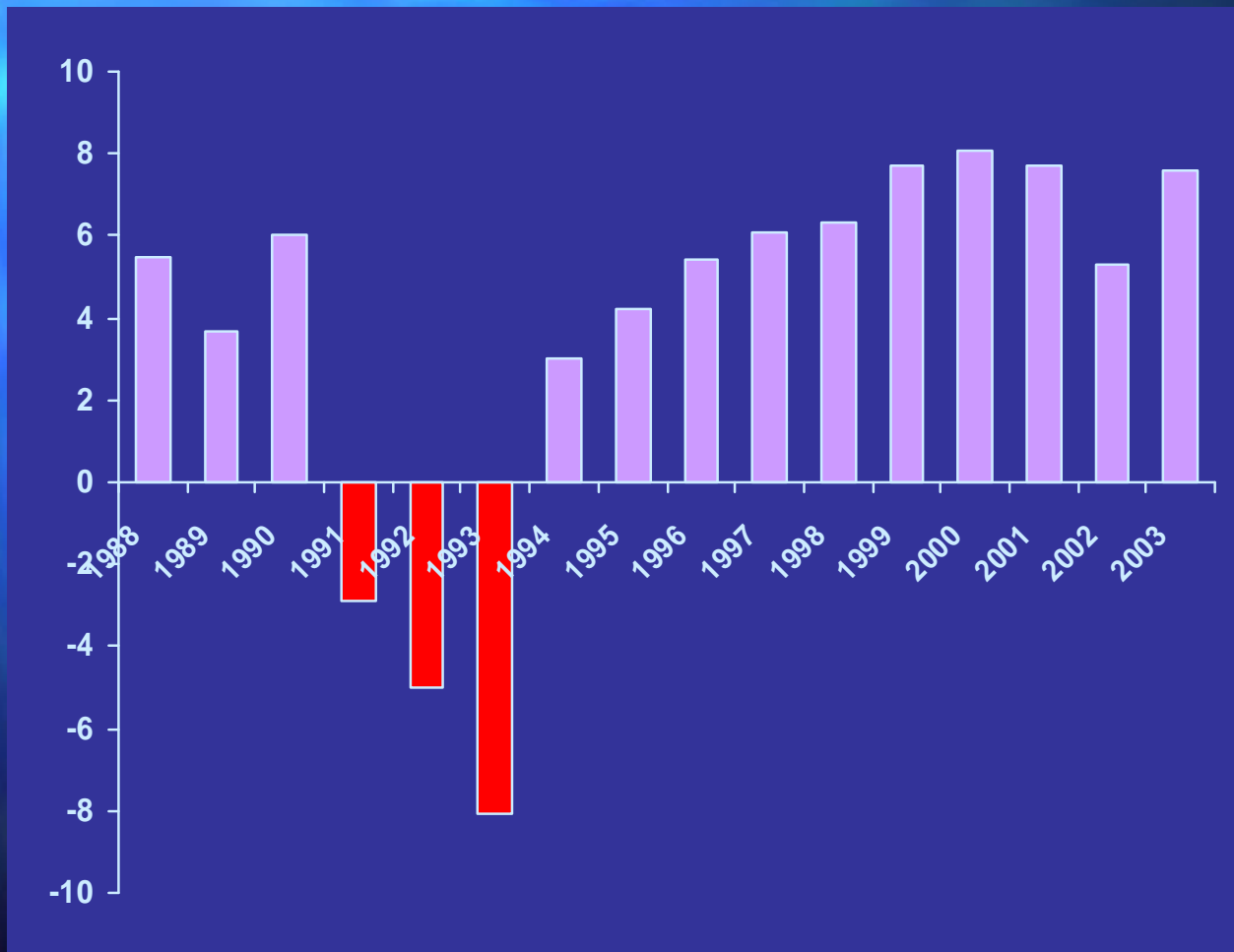
**IBM Transformation  
Business savings:**

**More than \$6.2B**



# More – *IBM Transformation Results*

IBM Net Income: 1988-2003 (\$billions)



# Plug Power – *External Indicators Of Enterprise Transformation Progress*

- All public milestones achieved – *5 consecutive years*
- Since 12/31/01 Market Cap Growth *has outpaced all competitors*
- Market indicator of *enterprise value/revenue multiple* has moved from significantly trailing the lead competitor in '01, to becoming the current industry leader, 33% higher than the next highest multiple in the competitive group
- Recognized industry leadership – *validated by sustained new investment in Plug Power . . .*

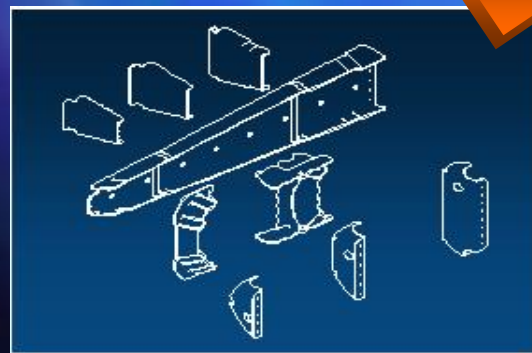
# Lockheed Martin – “Lay the Keel” for *Supply Chain Integration*

**Example**

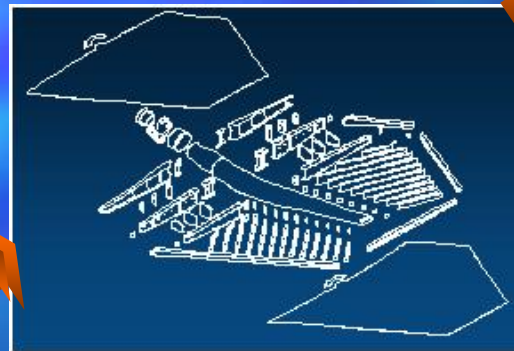
**Future State**

**Transition**

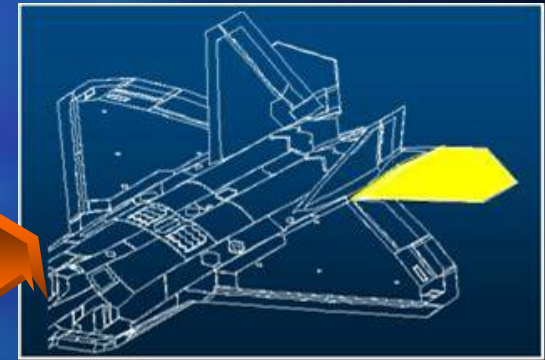
**Past**



- 12,000 Suppliers
- Piece Parts



- 5,000 Suppliers
- Kits



- 1,000 Suppliers
- Integrated Assembly

# Enterprise Transformation

## – Key Elements –

# Enterprise Transformation – *Key Elements*

- Definition of Enterprise Transformation
- Enterprise Transformation Drivers
  - ✓ *Value Deficiencies Drive Transformation*
  - ✓ *Work Processes Enable Transformation*
  - ✓ *Allocation of Attention & Resources*
  - ✓ *Management Decision Making*
  - ✓ *Social Networks*

# Enterprise Transformation – *Definition*

- Enterprise Transformation is driven by –
  - ✓ Experienced and/or anticipated *value deficiencies* that result in significantly redesigned and/or new *work processes* . . .
  - ✓ As determined by management's *decision making* abilities, limitations, and inclinations . . .
  - ✓ All in the context of the *social networks* of management in particular, and the enterprise in general . . .

## Value Deficiencies – Drive *Transformation*

- Experienced or expected downside losses of value, e.g., *declining enterprise revenues and/or profits*
- Experienced or expected failures to meet projected or promised upside gains of value, e.g., *failures to achieve anticipated enterprise growth*
- Desires to achieve new levels of value, e.g., *via exploitation of market and/or technological opportunities*



# Work Processes – Enable *Transformation*

- Improve how work is currently performed, e.g., *reduce variability*
- Perform current work differently, e.g., *web-enable customer service*
- Perform different work, e.g., *outsource manufacturing and focus on service*

## Allocation of Attention & Resources – *Key to Transformation*

- Anticipate and adapt to changes of external variables, i.e., *control the enterprise relative to the “road ahead” rather than the “road behind”*
- *Cultivate and allocate resources so as to yield future enterprise states* with high projected value with acceptable uncertainties and risks

# Management Decision Making – *Essential for Transformation*

## ■ Phenomena

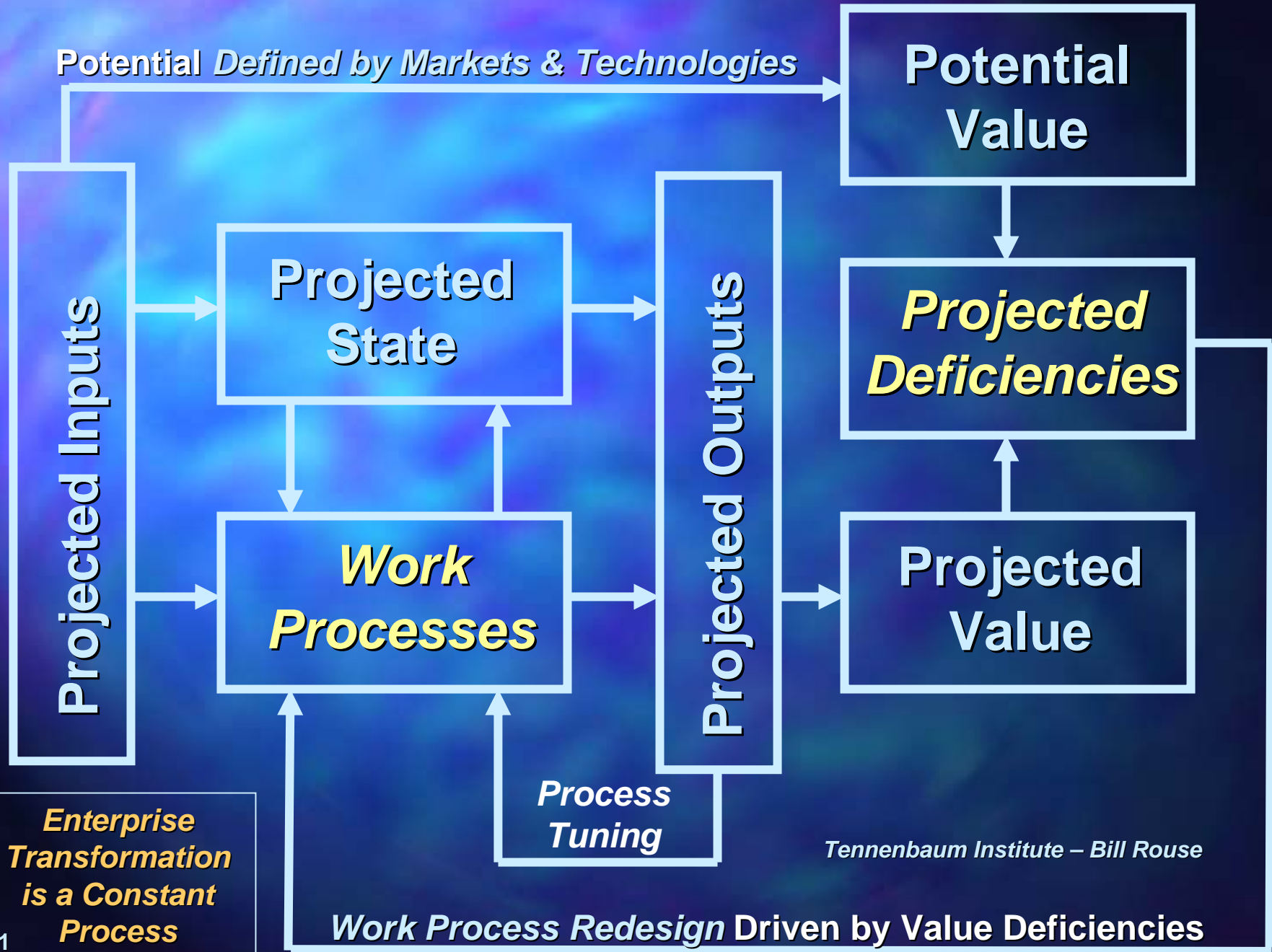
- ✓ Folklore and fact of managers' jobs (Mintzberg)
- ✓ *Optimizing vs. Satisficing* (Simon)
- ✓ *Organizational Delusions* (Rouse)
- ✓ *Role of Intuition* (Klein)

## ■ Frameworks

- ✓ *How managers address change*, ranging from tuning, to adaptation, to reorientation, to re-creation (Nadler & Tushman)
- ✓ *Managers' modes of control*, ranging from scrambled, to opportunistic, to tactical, to strategic (Hollnagel)

# Social Networks – *Essential for Transformation*

- **Strong vs. Weak Networks (Burt, Granovetter)**
  - ✓ **Strongly connected networks result in *rapid and efficient information and knowledge sharing among members***
  - ✓ **Weakly connected networks *have “holes”* – in many cases between strongly connected subnetworks**
- **Implications for Transformation**
  - ✓ **Weakly connected networks are *often better sources of new information and novel ideas* – but . . .**
  - ✓ **Strongly connected networks are *better at implementing change* once sense has been made of them**



Potential *Defined by Markets & Technologies*

**Potential Value**

**Projected State**

***Projected Deficiencies***

***Work Processes***

**Projected Value**

**Projected Outputs**

**Process Tuning**

***Enterprise Transformation is a Constant Process***

*Tennenbaum Institute – Bill Rouse*

***Work Process Redesign Driven by Value Deficiencies***

# **Enterprise Transformation**

## **– Illustrations –**

# Illustrations of Transformation

**For Value Deficiencies**  
*That Drive Transformation*

**For Work Processes**  
*That Enable Transformation*

# Value Deficiencies Illustrations – *That Drive Enterprise Transformation*

Value Opportunities – The lure of greater success via market and/or technology opportunities

Value Threats – The danger of anticipated failure due to market and/or technology threats

Value Competition – Other players' transformation *initiatives prompt recognition transformation necessary* for continued success

Value Crisis – Steadily declining market performance, cash flow problems, etc. *prompt recognition transformation necessary to survive*



# Work Processes Illustrations – *That Enable Enterprise Transformation*

*Markets Targeted* – Pursuing global markets such as emerging markets, or pursuing vertical markets such as aerospace and defense

*Market Channels Used* – Adding web-based sales of products and services such as automobiles, consumer electronics, and computers

*Value Proposition* – Moving from selling unbundled products and services to providing integrated solutions for information technology management

# Work Processes Illustrations – *That Enable Enterprise Transformation*

Offerings Provided – Changing the products and services provided – *perhaps by private labeling of outsourced products and focusing on support services*

Supply Chain Restructuring – Simplifying supply chains, *negotiating just-in-time relationships, developing collaborative information systems*

Outsourcing – Contracting out manufacturing and/or maintenance, *information technology support; etc.*

Offshoring – *Employing low-wage, high-skill labor from other countries*

# Work Processes Illustrations – *That Enable Enterprise Transformation*

Process Standardization – Enterprise-wide standardization of processes for product and process development, R&D, finance, personnel, etc.

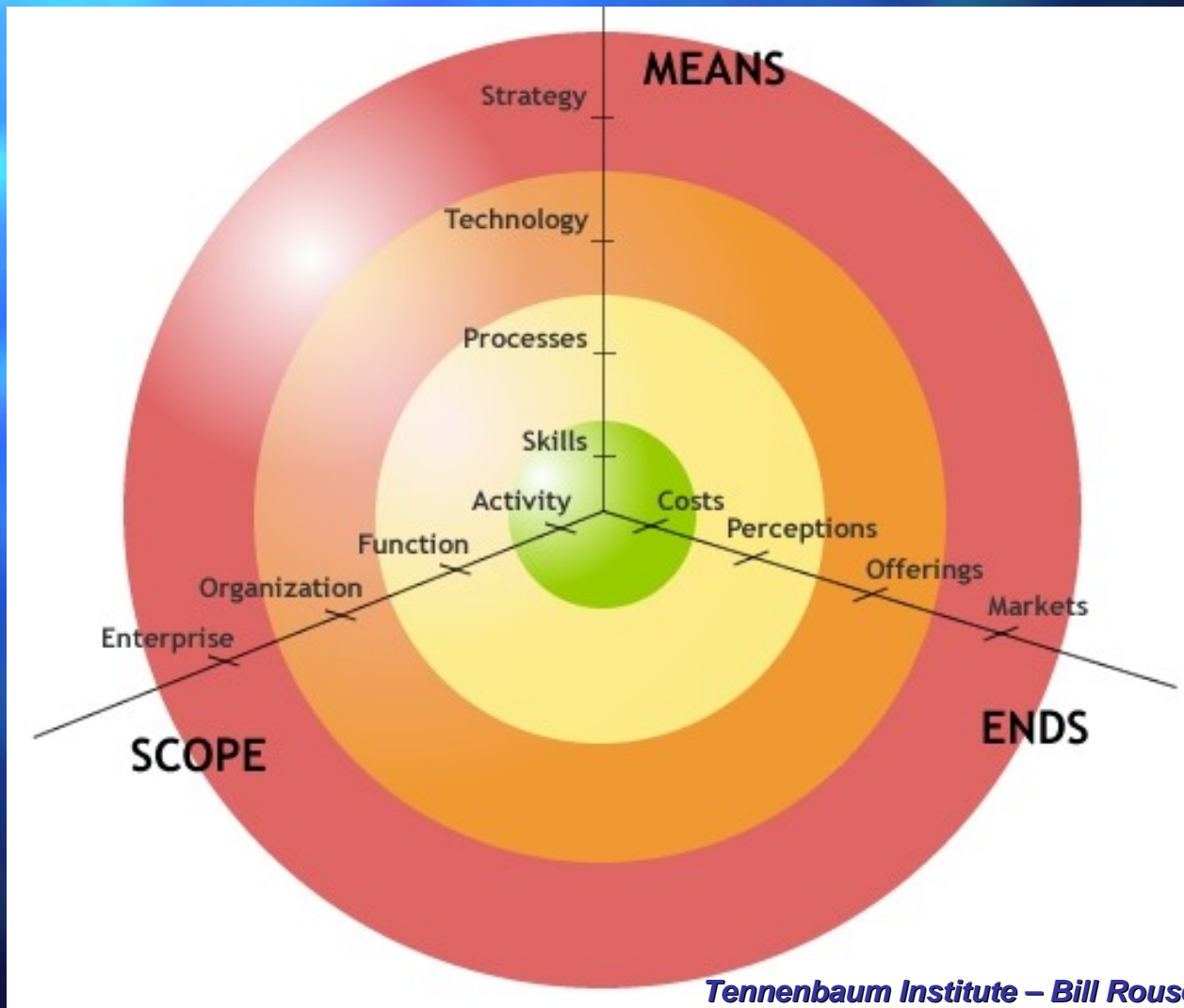
Process Reengineering – Identification, design, and deployment of value-driven processes; identification and elimination of non-value creating activities

Web Enabled Processes – Online, self-support systems for customer relationship management, inventory management, etc.

# Enterprise Transformation – The Framework –

# Transformation Framework

– *Focus on – Ends – Means – Scope –*



# Recap & Final Thoughts

*Transform to dominate or die . . .*

Sic – Michael Oliff

*Change is an essential ingredient to survival –  
Enterprise Transformation is the essential  
context for sustained organizational change to  
survive & dominate . . . or die*

# Recap & Final Thoughts

**Thank You! -- Copies Available At**

**[www.valueresolution.com](http://www.valueresolution.com) -- And -- [www.cpbis@gatech.edu](mailto:www.cpbis@gatech.edu)**

**Contact Information**

**Dan Cenatempo**

**President -- Value Resolution Group, Inc.**

**770-522-8972 -- [dan@valueresolution.com](mailto:dan@valueresolution.com)**

**Jacquelyn McNutt**

**Executive Director – Center for Paper Business & Industry Studies**

**404-894-5733 – [jacquelyn.mcnutt@cpbis.gatech.edu](mailto:jacquelyn.mcnutt@cpbis.gatech.edu)**