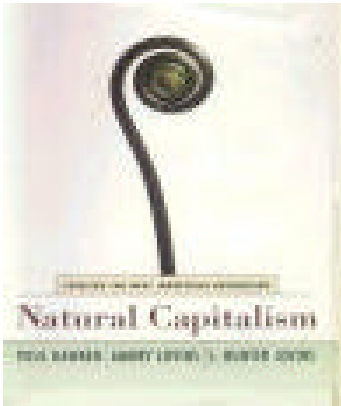


Internal Programs that Inspire, Promote and Reward Innovation



Natural Capitalism can be used for



Applied
Sustainable
Development

Why Sustainability?

- They made me do it
- The product X, used for generations, is now banned
- It seems like a good business strategy
- Our competitor is doing it
- Is there any other way to conduct a business with what we now know?

Top Line Versus Bottom Line?

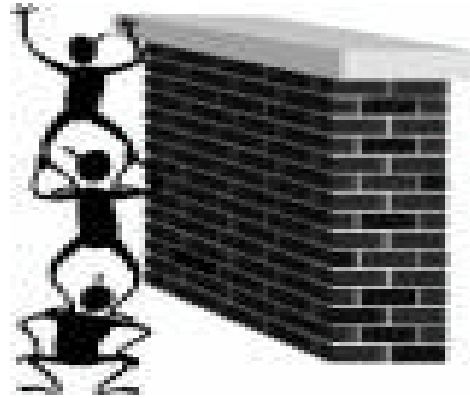


Operationalization Milestones



- Awakening
 - Vision
 - Road Map
- Transformation & Innovation
 - Implementation
- Measurement & Monitoring
- Exploration & Celebration
 - Begin Again

Barriers?



A photograph of a sunset over a beach. The sun is low on the horizon, casting a bright, golden glow across the sky and reflecting on the water. The beach is visible in the foreground, with gentle waves lapping at the shore. The overall mood is peaceful and serene.

In The Beginning ...

Awakening

Company Specific Vision



- Consider the culture
- Consider what is already changing...
- You can always use what is already out there!

Road Map



- What is *first*?
- What are the objectives?
 - *Who* will be involved?
- How will you communicate?
- *What* will be communicated?
 - What is the project plan?
- What *resources* will be needed?

Pilot, Target & Have Successes...



Where to Start?

Transformation & Innovation *(Education)*



Natural Capitalism Innovation Workshop

LEARN

- Module 1 - Getting to Know the Team.
- Module 2 - Getting to Know the Project. (Facility tour)
- Module 3 - Introduction to Natural Capitalism



THINK

- Module 4 - Digestion (Catalysts and Inhibitors)
- Module 5 - Opportunity Brainstorm (Breakout)
- Module 6 - Opportunity Cross-Linking/Whole-Systems Design
- Module 7 - Solutions Brainstorm (Breakout)
- Module 8 - Solutions Cross-Linking

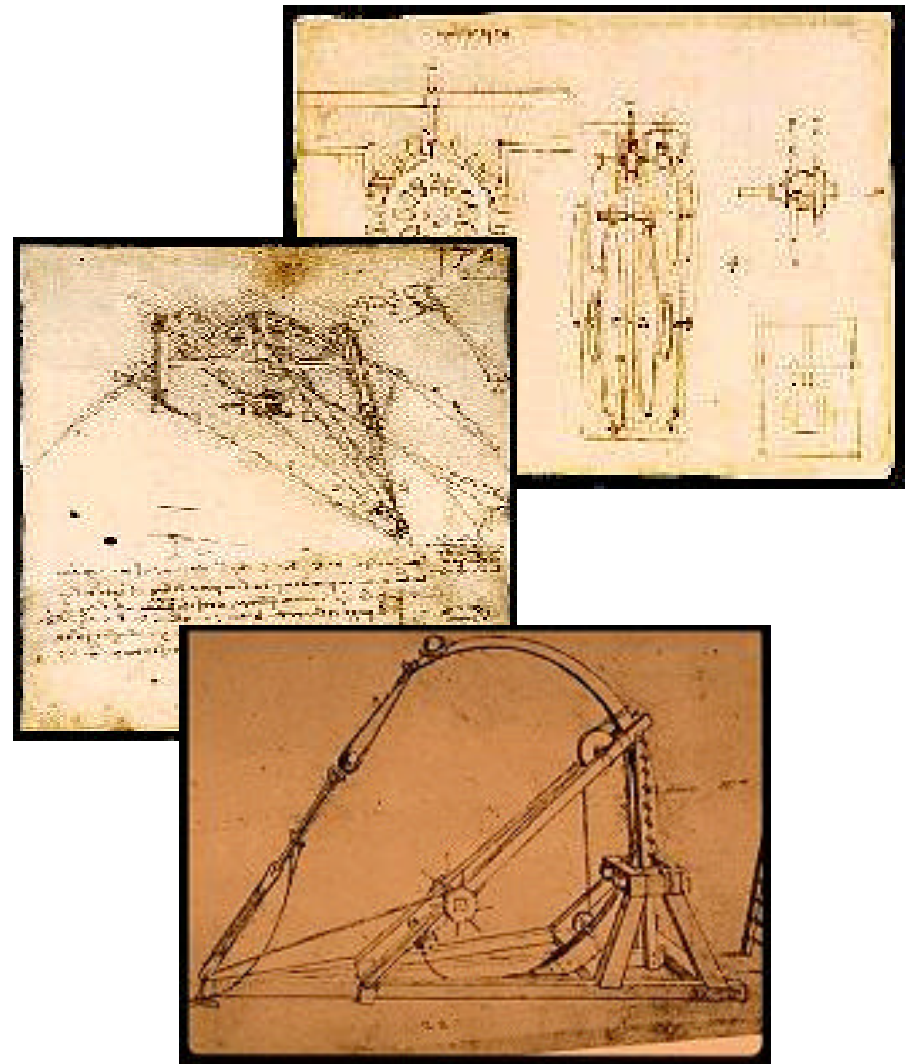
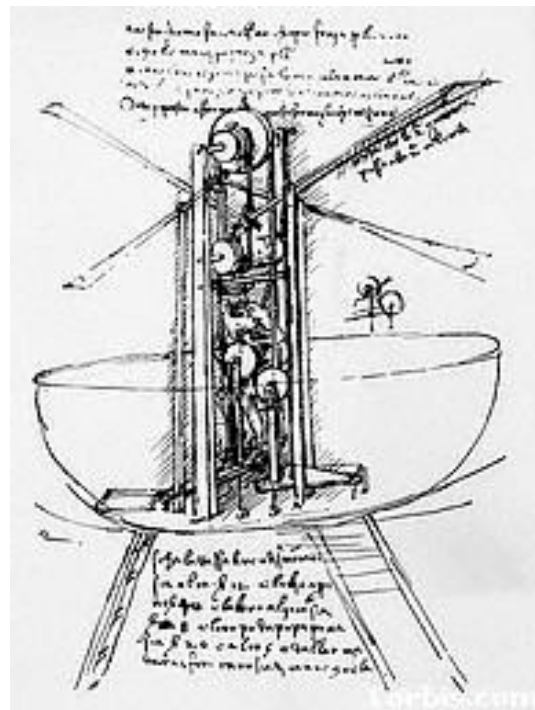


DO

- Module 9 - Solutions Presentations
- Module 10 - Tunneling Through the Cost Barrier
- Module 11 - Business Case Presentations
- Module 12 - Action Plan
- Module 13 - Next Steps

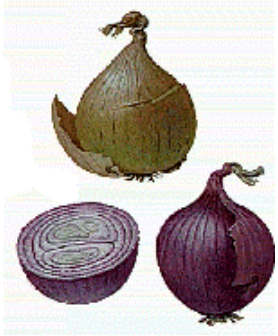
Date	Time	Title
Evening	19:00	Dinner
Day 1	8:00-8:30	Module 1 - Getting to Know the Team
	8:30-12:00	Module 2 - Getting to Know the Project
	12:00-13:30	Lunch
	13:30-14:15	Module 2 - Getting to Know the Project (Agenda)
	14:15-15:45	Module 3 - Introduction to Natural Capitalism
	15:45-16:00	Break
	16:00-18:00	Module 4 - Digestion (Catalysts and Inhibitors)
	18:00-18:15	Recap
	19:00	Dinner
Day 2	8:00-8:15	Intro and Review (shower epiphanies)
	8:15-11:00	Module 5 - Opportunity Brainstorm (Breakout)
	11:00-11:15	Break
	11:15-12:00	Module 6 - Opportunity Cross-Linking/Whole Systems Design
	12:00-13:30	Lunch
	13:30-14:30	Module 6 - Opportunity Cross-Linking/Whole Systems Design
	14:30-14:45	Break
	14:45-16:15	Module 7 - Solutions Brainstorm (Breakout)
	16:15-16:30	Break
	16:30-17:45	Module 8 - Solutions Cross-Linking
	17:45-18:45	Module 9 - Solutions Presentations
	19:00	Dinner
Day 3	10:00-10:30	Intro and Review (shower epiphanies)
	10:30-12:00	Module 10 - Tunneling Through the Cost Barrier (Presentation)
	12:00-13:30	Lunch
	13:30-14:30	Module 10 - Tunneling Through the Cost Barrier (Exercise)
	14:30-14:45	Break
	14:45-17:00	Module 11 - Business Case Presentations
	19:00	Dinner
Day 4	9:00-9:30	Intro and Review (shower epiphanies)
	9:30-12:00	Module 12 - Action Planning
	12:00-13:30	Lunch
	13:30-16:30	Module 13 - Next Steps
	16:30-17:00	Transformation Workshop Evaluation

Transformation



Releasing internal wisdom.....

Inquisitive Thinking...





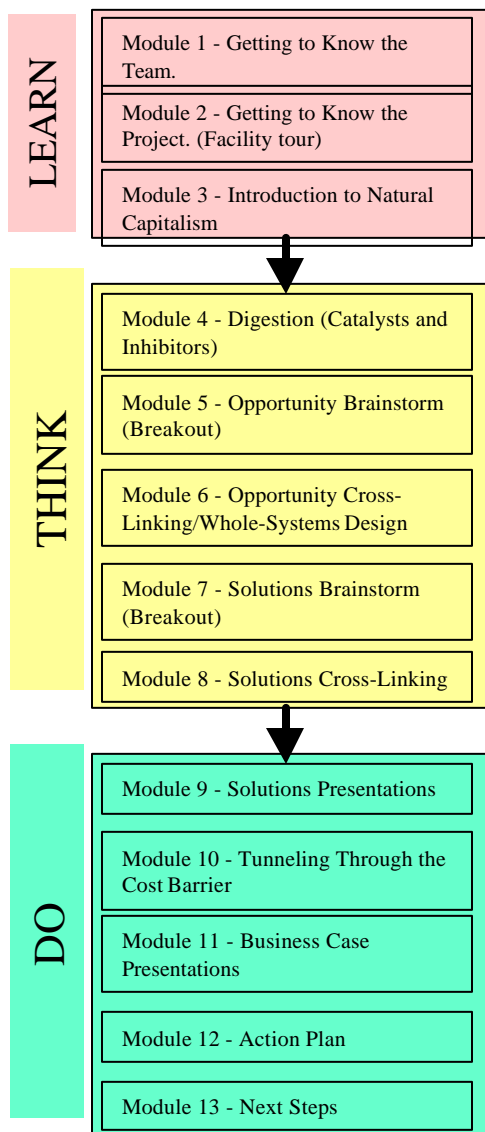
Natural Capitalism | Innovation Lab

LEARN THINK DO

Shell Fredericia oil refinery
Rocky Mountain Institute
June, 2001



Innovation Workshop Results by phase...



- Taught sustainable development concepts
- Enabled participants to think differently
- Identified organizational barriers to SD
- Communicated SD Solutions - new and existing
- Focused SD solutions on eco-efficiency topics
- Captured whole-system thinking and opportunities
- Proposed solutions to organizational barriers
- Identified new and “game-changing” solutions
- Identified process to integrate SD into operations
- Presented business cases for Severely Practical SD
- Initiated implementation of no cost activities
- Created project plans

Implementation



- *Go Hunting*
 - *Map, Map*
 - *No Muda*
- *Think Lean*
 - *Be Green*

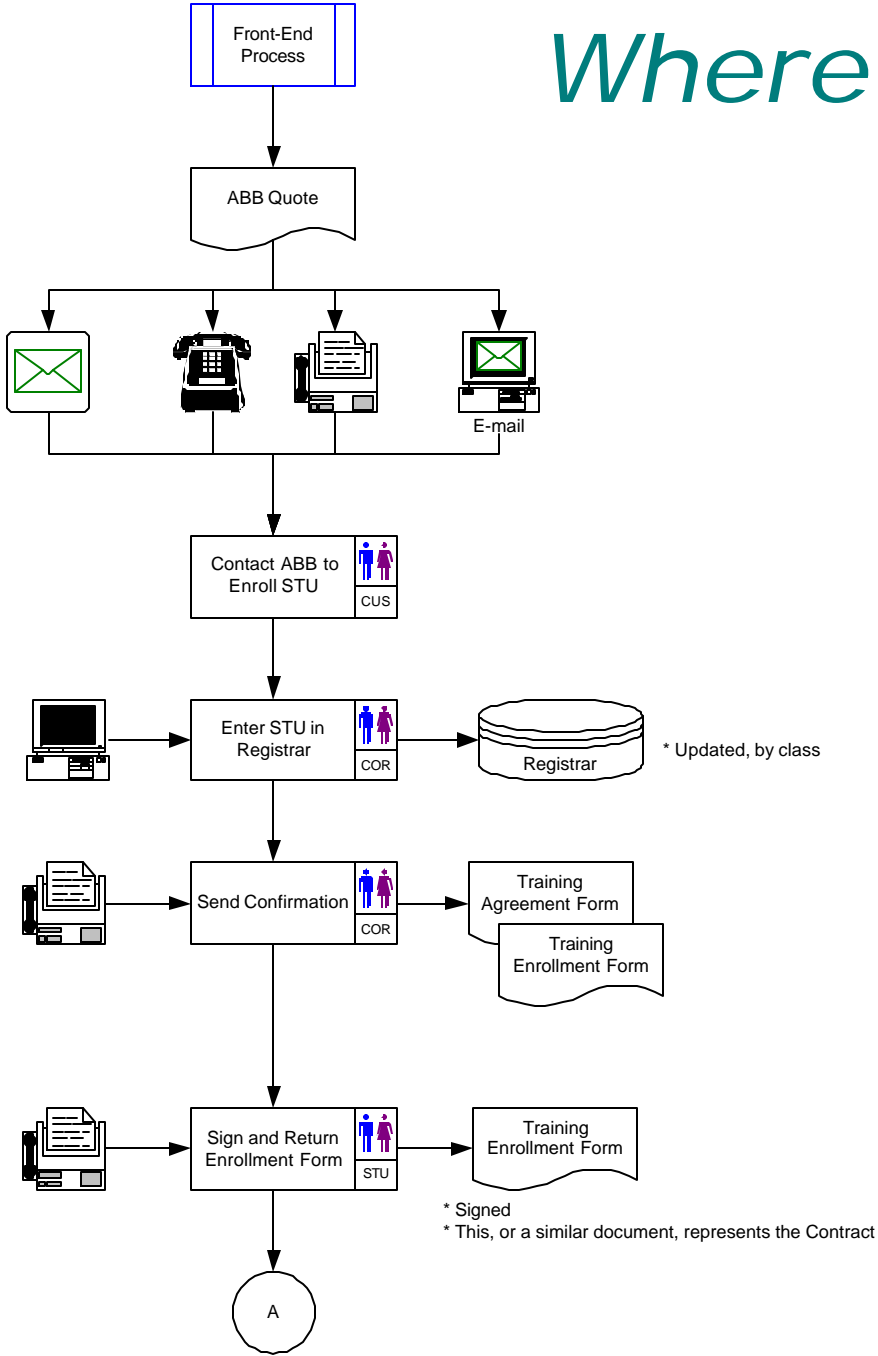
Principle #1



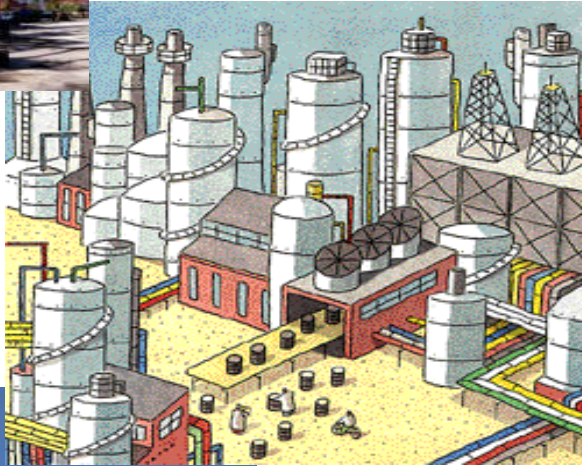
Increase the productivity
of Natural Resources

Do More With Less

Where is the waste?



Three Areas of Focus

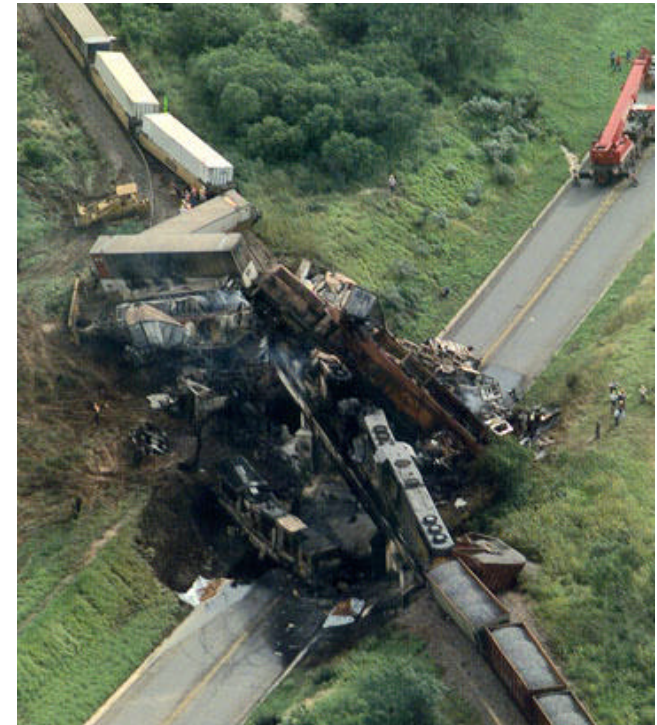
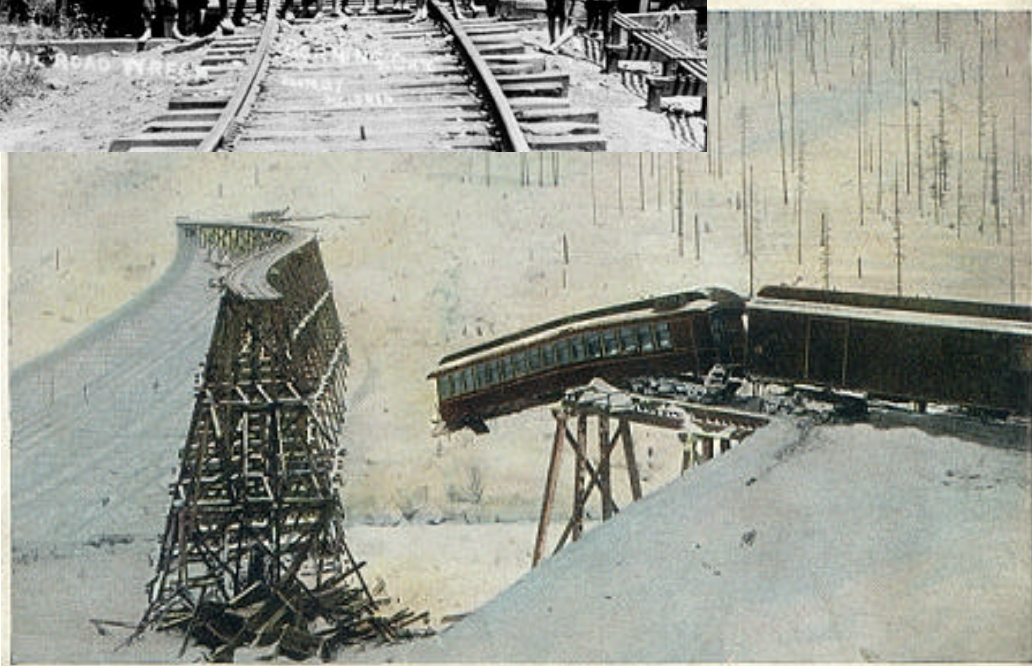


- Non-value
in Inputs
- Non-value
in Process
- Value
in Waste Stream

*Where do we go hunting,
where do we dig?*



What is broken?



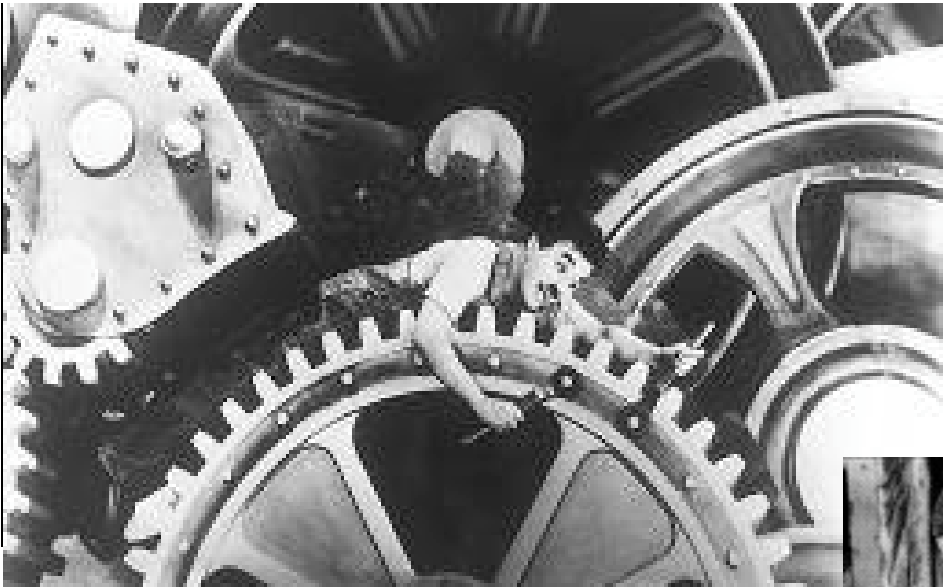
Where are the energy pigs?



Look for bottlenecks and inventory



***Look for noise, dirt, accumulation
and erosion***



What is going up the stack and why?



***What is going
down the drain?***



Principle #2

P

Biomimicry

What would
Nature do here?

Nature as Mentor

Design that adopts the experience of life,
refined by 3.8 billion years
of rigorous testing

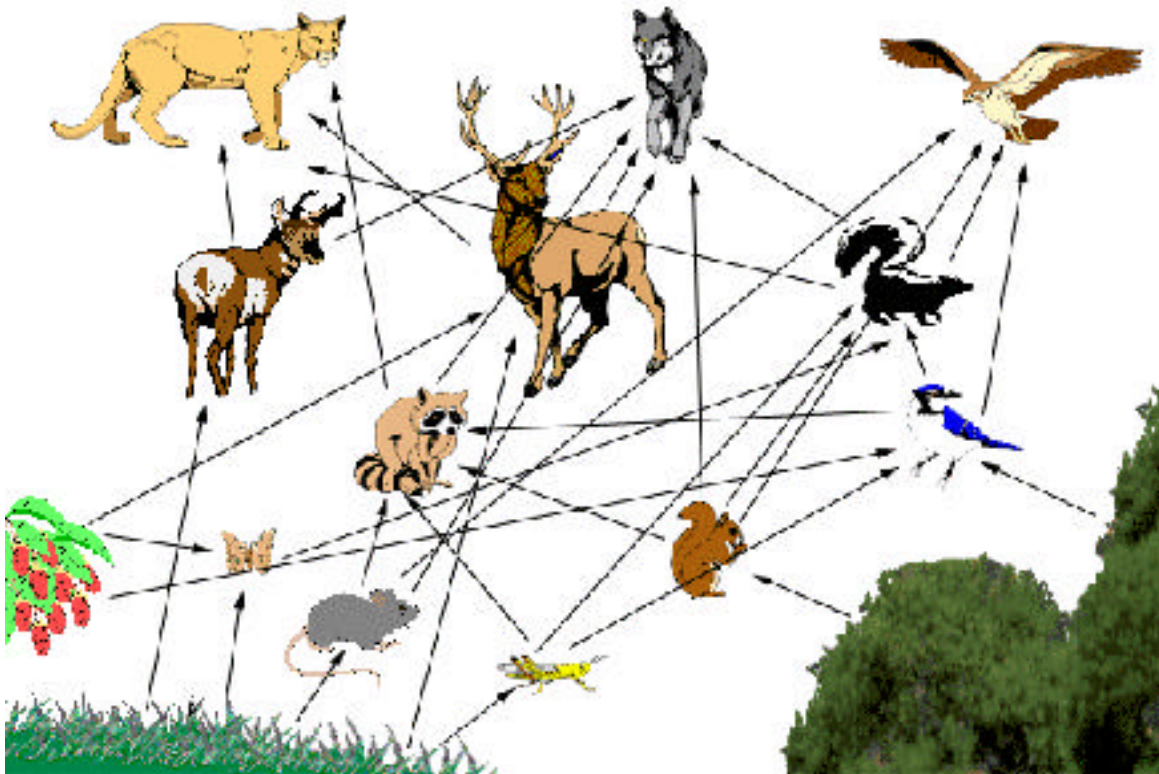
All products that didn't work
were recalled by
the Manufacturer

Whole-Systems Thinking



***In the design and
engineering reviews,
plant layout,
budgets
and even performance reviews***

Consider the supply chain and the value chain



As a food chain...

Principle #3

P

Solutions-Based
Production / Service

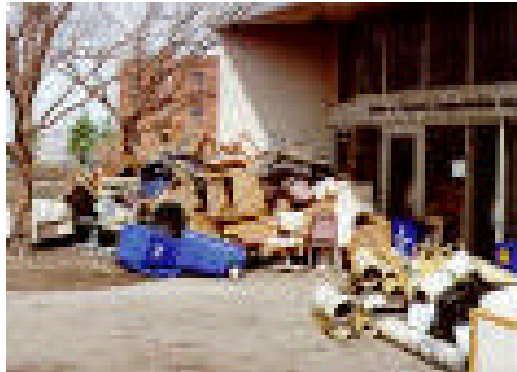
What problems are customers
trying to solve?

Change in the Business Model



***The provider and customer both make
money in the same way.***

Change in business model



... from purchase to service.

Principle #4



Re-Invest in
Natural and Human
Capital

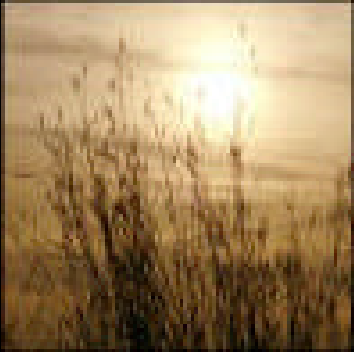
Protect, enhance, restore
and let nature renew

- *Is there a Champion?*
- *Is the vision articulated?*



- *Are teams empowered to follow through?*
- *Does the measurement system support SD?*
 - *Are their traditional barriers remaining?*
- *Has SD been integrated in the Supply Chain?*
 - *Is the organization forming eco-innovators?*

Explore & Celebrate



**“The magic of a place
will save the place ...
take people to that place.”**

– Carl Pope

Executive Director
Sierra Club

What if Sustainability were defined as.....

Leaving no footprints for future generations?

