The struggle to assert the fundamental right and necessity for humans to prioritize environmental & human health and wellbeing is necessarily unfolding in the corridors, offices and board rooms of our organizations.

For this socioeconomic revolution we need an army of change agents working individual to individual to awaken, empower and protect.
An organization is a kind of human made technology.

“Technology is the making, usage, and knowledge of tools, machines, techniques, crafts, **systems or methods of organization** in order to solve a problem or perform a specific function.” Wikipedia

There are a variety of legal types of organizations, including: corporations, governments, non-governmental organizations, international organizations, armed forces, charities, not-for-profit corporations, partnerships, cooperatives, and universities.

Leith Sharp 2011
What Makes An Organization?

- Vision, Mission
- Executive Leadership Style
- Management Structure: Chain of Command
- Decision Making Processes
- Governance Mechanisms
- Strategy and Goals
- Finance and Accounting Systems and Processes
- Policies, regulations, rules, guidelines and protocols
- Accountability and Incentive Mechanisms
- Information Systems
- Communication Systems
- Organizational Culture, Image and Values
- Human Resources: Capacities, performance & promotions
- Politics, Alliances
- Organizational mood/atmosphere

Leith Sharp 2011
We need a Sustainable Relationship with the Earth’s Life Support Systems To Be Integrated Into the Life of Our Organizations.

Earth Systems
- Ecosystems and Species
  - Extinction & toxicity
- Climate systems
  - Disturbance
- Atmospheric systems
  - Ozone depletion, pollution
- Oceanic systems
  - Disturbance to sea levels, temperatures and currents, sea life depletion
- Geological and Soil systems
  - Desertification, land pollution, mineral & resource depletion, depletion of soil quality, toxicity
- Hydrological systems
  - Water pollution & scarcity
- Nutrient systems
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Organizational Systems
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Leith Sharp 2011
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Infrastructure Systems

- Energy supply & distribution
- Material supply & disposal
- Food Supply
- Water supply & disposal
- Building construction
- Building operations
- Transportation
- Landscaping
- IT

Organizational Systems

- INTERNAL:
  - Leadership
  - Culture
  - Finance & Accounting
  - Management Structures
  - Policy Instruments
  - Information Systems
  - Procurement systems
  - Decision Making Processes
  - Human resources
  - Planning Processes

- EXTERNAL:
  - Community
  - Government/Regulatory
  - Market/Employers
  - Utilities
  - Higher Ed. Associations
  - Media

Individual System

- Personality
- Status
- Relationships/Alliances
- Values/Attitudes
- Life Experience
- Social Connections
- Spirituality/meaning
- Family/Culture/Community
- Education/Occupation
- Skills/Abilities

Leith Sharp 2011
Most people believe that humans are innately averse to change.

This is not true.

A more accurate assessment is that people have an aversion to instability and risk and they assume that change equals instability and risk.

People are actually invigorated by change when it occurs with adequate stability and low risk.

Leith Sharp 2011
What are the **Common Causes of the Risk and Instability** that Accompanies Change in Our Organizations?

1. Too much dependence on organizational rationality (a good idea isn’t enough)
2. Too much dependence on top down leadership & linear management processes
3. A lack of understanding of how our organizations actually work
4. A lack of learning by doing (not enough piloting of new practices)
5. A lack of trust based relationships with the resilience to adapt and be flexible
6. A lack of continuous learning (attuned to how adults like to learn)
7. An inability to manage interdependence (fragmentation, specialization, silos)
8. An inability of most individuals to cope with the tension of holding a vision in the face of the day to day inertia
9. A lack of change management expertise

Leith Sharp 2011
Organizations are severely limited in their capacity to behave rationally due to inherent characteristics such as:

- complexity,
- limited capacities to calculate all parameters,
- the tendency towards ‘satisficing’,
- fragmentation of problem and solution elements,
- limited organizational repertoires,
- shifting coalitions,
- shortages of time and attention,
- quasi resolutions to conflict and
- uncertainty avoidance.

(Simon and March 1986)

Said another way, institutions like universities are generally ‘plagued with goal ambiguity and conflict, with poorly understood problems that wander in and out of the system, with a variable environment and decision-makers with other things on their minds’.


Our organizations are limited in their capacity for rationality but they do still have patterns, incentives and habits that can be understood. However, often these are unconscious to the organization and its members. Trying to change an organization is how you get to know how it really works.
Interdependence Case Study: Changing Light bulbs at Harvard

Simple Lighting Retrofit Project

Full Process = 3 months of constant facilitation by change managers

TECHNOLOGY + ATTENTION + FUNDING + TIME + COMMUNICATION/NEGOTIATION, + APPROVALS + AESTHETICS + POLITICS + TRAINING + PROJECT MANAGEMENT

Green Campus Loan Fund

My staff

Vendor

Sales Rep Technician

Univ. Ops

Maintenance crew

School

Fin Mgr (capital budget)

Fin Mgr (operating budget)

Facility Director

Building Manager (Superintendent)

House Master

House occupants (students)

REP coordinator (student)

Leith Sharp 2011
Engage Executive Leaders to Formalize Commitment

Rate of Growth re: Number of Green Building Projects on Harvard Campus

Extensive Change Management Process Used to Foster Organizational Conditions Necessary for Wide Scale Engagement, Innovation, Learning, Leadership and Commitment

Leith Sharp 2011
To Reduce Risk and Instability: We Need to Embrace the Intrinsic Interdependencies that the Exist in Our Organization

**Interdependence** between:

- Professional, departments, groups & organizations
- Capital, Finance & Accounting
- Leadership
- Technology, products & Services
- Information
- Capacity Building/Education
- Values and Culture
- Policy
- and more…. 

Leith Sharp 2011
For change to be deliberately fostered in complex systems, it is about putting in place a constellation of conditions that enable thresholds to be reached which in turn allow for systemic shifts to occur.

The APT framework is about understanding the accumulation of conditions and the resulting thresholds that emerge….which in turn allow for new stages of change to be realized.

The change maker is has to undertake the work of setting up conditions……building them one upon the other.
## Earth Systems
- Knowledge of ecological conditions of the planet
- Knowledge of good sources of current trends and science
- Capacity to explain environmental facts, systems, impacts and links to day to day practices
- Ability to explain in terms that are understandable to a variety of audiences
- Knowledge of local environmental context

## Infrastructure Systems
- Understanding best practices, market research – market innovations
- Having enough of a technical, operational and facilities vocabulary to ask the right questions, be taken seriously
- Getting a seat at the operations table
- Understanding what facilities/operations staff do, how they do it, why they do it
- Picking the right focus for infrastructure projects..creating some early victories
- Cost benefit analysis, the business case
- Sales and communications
- Experimentation/piloting
- Project management
- Peer to peer
- Benchmarking
- Acknowledging what people have done already and defusing tendency of feeling that we are trying to tell them how to do their job. Celebrating, giving credit
- Elevating facilities staff, giving a platform
- Post implementation evaluation and continuous improvement

## Organizational Systems
- Finding early champions, and determining who to focus your relationship building on (and who to leave until later)
- Understanding org charts, informal power, who the listens to who, where are the alliances – learning to conduct the voices. Identify the influential people and build alliances.
- Learn about the cultures (student, admin, faculty, others)
- Understand decision making processes, planning cycles, financial approval processes and cycles
- Strategic planning, master planning and campus sustainability planning processes
- Getting symbolic leadership signal of support and evolving that to fully engaged executive leadership
- Building and improving sustainability governance structures
- Sustainability goals, tracking, metrics, evaluation
- Meeting planning/ management/facilitation
- Understand finance & accounting systems, the business case
- Use existing communication mechanisms (publications, email, websites) and build more as needed
- Increasing access to executive decision makers, Understanding the emerging executive leadership roles/demands/needs
- Know your policy and regulatory environment and leveraging this to your advantage
- Deepening understanding of leverage points via ongoing organizational & systems analysis, relationship/power mapping
- Social marketing and behavior change programs.
- Learning a inventory of techniques for getting the middle majority to give attention and become engaged

## Individual System
- Core relationship building skills (building trust and mutual understanding, conflict mediation, having difficult conversations)
- Active listening skills
- Capacity to foster high group intelligence in..facilitation skills, social technologies etc
- Capacity for lots of mutual empathetic connection
- Sustaining good will, trust no matter what
- Learn how to maintain respect and grace in the face of difference, resistance
- Understanding personalities
- Authentic presence
- Appreciation and acknowledgement
- Acknowledging our own biases/traits/strengths and weaknesses
- Knowing thyself, manage thyself and continuously learn!
- Adapting your language, emphasis and style to different types of people

---

Leith Sharp 2011
Leadership has been described as the “process of social influence in which one person can enlist the aid and support of others in the accomplishment of a common task” Chemers M. (1997) *An integrative theory of leadership*.

**Leadership Versus Change Agency:**
Leadership attributes achievement to a particular individual. Change agency separates the attribution of the source/catalyst or choreographer of the change from the change itself. …this frees the change agent up to pursue a variety of styles & strategies:
- Conducting the voices
- Linking between
- Energizing action by listening, encouraging and empathizing
- Group facilitation that expands group intelligence
- Creation of forums and situations for others to lead
- Providing incentives: Recognition, rewards
- Identifying whatever capacity or function is missing and filling it.

There is no end to what you can accomplish if you don’t mind who gets the credit… 
Leith Sharp 2011
Executive Leadership
Principles, Sign
Declarations,
Mission Statements

Setting Goals, Integrating into
Strategic Planning Processes.
Some funding support

Awakening

Principles, Sign
Declarations,
Mission Statements

Use sustainability as an organizing principle and lens for
executive decision-making and institutional reform
Continuous improvement in sustainability as established
organizational expectation.

Pioneering

Integrate into
Organizational
Identity. Formalize
responsibilities across
executive teams,
faculty and staff

Transformation

Leith Sharp 2011
A global survey of 1500 corporate executives and managers about their perspective on the intersections of sustainability and business strategy.

...the more people know about sustainability, the more thoughtfully they evaluate it and the more opportunity they see in it – the more experienced the business leader was with sustainability the more effective they were in finding a financial benefit....(immediate or incremental)

.....Companies will need to develop new capabilities and characteristics, including the ability to operate on a system-wide basis and collaborate across internal and external boundaries; a culture that rewards and encourages long-term thinking; capabilities in the areas of activity measurement, process redesign, and financial modeling and reporting; and skills in engaging and communicating with external stakeholders.
Governance

AND ON THE SEVENTH DAY...

...GOD RESTED.

...DOESN'T YOUR COMPUTER DESERVE A BREAK TOO?

POWER OFF, RELIGIOUSLY.
Governance

…the use of institutions, structures of authority and even collaboration to allocate resources and coordinate or control activity in society or the economy.

Governance relates to decisions that define expectations, grant power, or verify performance. It consists either of a separate process or of a specific part of management or leadership processes. Sometimes people set up a government to administer these processes and systems.

In the case of a business or of a non-profit organization, governance relates to consistent management, cohesive policies, processes and decision-rights for a given area of responsibility.
Awakening is where you learn more about what makes a poor performing sustainability governance structure

- Random selection of participants without considering ultimate roles and responsibilities
- No clear link to CEO/President
- No effective support and integration with sustainability professional
- Drifting and unclear mission/goal/agenda
- No work done between meetings
- Repeated discussions, ongoing polarized positions
- Powerful participants overshadowing other talented participants and dominating the direction at the expense of the best outcome.
- Irregular participation
- No or low tolerance for tension, conflict and differing opinions
- Poor facilitation

Leith Sharp 2011
Through Pioneering you can build good sustainability governance structures, piece by piece.

- A clear mission or goal that is continuously refined
- A formal link to the CEO/President to provide legitimacy, importance and participation
- The formal inclusion of key stakeholders with enough practical knowhow
- Agile forums for idea development, information gathering, discussion and refinement
- Mechanisms for addressing political needs without compromising best possible outcomes (mechanisms for giving the powerful their voice without losing the valuable contributions of the less powerful)
- Effective support for and inclusion of the sustainability professional charged with coordinating the organization’s overall efforts
- Distribution of responsibilities and ownership to relevant organizational managers/staff with strong overall coordination
- Well facilitated discussions that can withstand a necessary level of tension and conflict in order to allow for the best resolutions

Leith Sharp 2011
Conventional Governance Structures Are Designed for Top Down Leadership. Transformation is when you change the underlying power and decision-making dynamics of the governances structures.

Top Level Leadership

Middle Management

Grass Roots

AUTHORITY
- Legitimacy
- Priority
- Mood/culture
- Goals

MANAGEMENT/INTEGRATION
- Reforming organizational process/systems
- Green building standards
- Green purchasing contracts
- Green training programs

CONFIDENCE & CAPACITY
- Evidence
- Confidence
- Business base for green projects

Leith Sharp 2011
At the Transformation Stage, Sustainability Governance Mechanisms are Designed to Leverage the Leadership System

Grass Roots
Students, teachers, building managers, custodial staff, kitchen staff etc

Top Level Leadership

Middle Management
Change Management

CONFIDENCE & CAPACITY
• Evidence
• Confidence
• Business base re: green projects

AUTHORITY
• Legitimacy
• Priority
• Mood/culture
• Goals

MANAGEMENT/INTEGRATION
• Reforming organizational process/systems
• Green building standards
• Green purchasing contracts
• Green training programs

Leith Sharp 2011
At the Transformation Stage, Sustainability Governance Mechanisms are Designed to Leverage the Leadership System

Direction/Integration

Systemic Reform and Continuous Improvement

Momentum: Pilot Projects/Case studies

Towards Sustainability
Collaborative governance is a process and a form of governance in which participants (parties, agencies, stakeholders) representing different interests are collectively empowered to make a policy decision or make recommendations to a final decision-maker who will not substantially change consensus recommendations from the group.
I found a way to save a million dollars by spending only $10,000.

The $10,000 would come out of my budget but the savings would go into someone else’s budget. It’s not feasible.

Our stockholders might disagree. That’s why they aren’t invited to meetings.

Source: www.dilbert.com
Awakening is Often About Convincing People of the Business Case

There are a Large Range of Cost Effective, Environmentally Preferred Products Available

<table>
<thead>
<tr>
<th>Product</th>
<th>Savings/Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bin Liners – recycled content</td>
<td>40% saving</td>
</tr>
<tr>
<td>Refrigerators – energy efficient</td>
<td>Up to 20% savings on front cost plus enormous operating cost savings</td>
</tr>
<tr>
<td>Dish Washers – water and energy efficient</td>
<td>No up front cost, save $20 per year on electricity, $3-7 per year in reduced water and sewage costs per machine</td>
</tr>
<tr>
<td>Ceiling Tile – recycled content</td>
<td>Save $0.36-$2.75/square foot</td>
</tr>
<tr>
<td>Zero VOC Paints</td>
<td>$1.76 savings per gallon</td>
</tr>
<tr>
<td>Recycled content paper towels, bath tissues and hard roll towels</td>
<td>No price increase</td>
</tr>
<tr>
<td>Lighting - Labor savings and operating savings of 3-5% of electric bill</td>
<td>Labor savings and operating savings of 3-5% of electric bill</td>
</tr>
<tr>
<td>Non Vinyl Flooring</td>
<td>Stratica prices 10% savings on vinyl composite tile</td>
</tr>
</tbody>
</table>

Leith Sharp 2011
Our Goal: Encourage researchers to close the fume hood sash to reduce energy waste.

Investment in Social Marketing: Less than $20,000 per year

Total: Saving $188,000 per year energy costs
Project Snapshot

Description: Replacement of water pumps and installation of Variable Speed Drives in the three towers of Peabody Terrace

Finances
• Total Project Cost: $82,974
• NStar Rebate: $44,261

Annual Savings: $14,586
• Payback: 3.03 years

Environmental Impact Reduction
• 199,342 lbs CO₂

Lessons Learned
• Itemize costs and savings of each proposed measure.
• Always look for a rebate, even if a contractor does not believe one is available.
Texas A&M University Commissioning Study Results

- Survey of over 50 buildings
- Continuous Commissioning adds 15-45% savings over normally commissioned buildings
Green Campus Loan Fund:

$12 million interest-free capital for conservation projects

Existing Buildings
- Full capital cost covered
- 5 year payback maximum
- Simple payback used

New Construction
- Cost delta funded
- 10 year payback maximum
- Lifecycle costing used

$14.5+ million lent since 2001

180+ projects

27+% average return on investment

In Pioneering: New budgets are allocated, finance & accounting tools implemented To Embrace Good Business Practice

Leith Sharp 2011
Common Practices:

1. No capital budget consideration of operating costs implications and opportunities
2. No efficiency funding in annual maintenance/operating budgets
3. No way to return savings to the people that achieve them
4. Reduced annual operating budgets when energy costs reduced
5. No funding for piloting and testing new practices

Transformation is when the deeper barriers are revealed and are addressed

Leith Sharp 2011
Life Cycle Costing

A method of project evaluation in which all costs arising from owning, operating, maintaining and ultimately disposing of a project over an agreed period are accounted for and converted into today’s dollars.

In short, life cycle costing allows for the consideration of medium and long term cost implications of today’s decisions.

When can it be used?
► New Construction
► Major Renovations
► Capital Projects
► Routine Replacements or Upgrades
► Day to day purchases that incur any ongoing costs
Transformation results from an accumulation of the right conditions and allows for deeper change to occur.

A finance and accounting context that would energize green economic growth.....

✓ Provide champions with **timely access to funds** for good paybacks
✓ Allow for **savings to be captured and reinvested**
✓ **Share savings with the people** making it possible
✓ Provide **seed funds for pilot projects**
✓ **Consider the costs over the life of the project** not just first cost
✓ **Savings exist within whole systems** not just the parts
Senior Leadership will need to play a central role in reforming key institutional systems across the organization.
Decision Making Processes
Executive Decision-making Processes: Mission & vision, priorities, investment, growth, culture/values/identity

Planning Processes: Strategic plans, master plans, fund raising campaigns, building design process

Annual Operating Cycles: Annual budget approvals, performance reviews, annual goals & reporting

Day to Day Operational Decisions: Occur within established parameters of funds/staffing/expertise

Individual Decisions-making/Modeling
Not understanding what the decision making process is

Not understanding who the stakeholders are & what they need

Not understanding the power dynamics (who should do the talking, who should be out in front and when)

Mixed messages about what information & what evidence matters

Being asked to provide evidence and information that is too time consuming, difficult or costly to obtain without first having formal permission

Disconnections between different individuals, groups, departments, specialties, systems or management tiers.
The Piloting Process

- Data/Evidence: Cost/benefit, resources, trends, proof of concept
- Stories
- Peer testimonials
- Competition, fear of being left behind, reputation
- Engages others to help determine the decision making process
- Gets you a seat at the table
We don’t even know where to start or what green building means!

LEED is a point chase, diverts money from achieving real action.

LEED OK but the certification is too difficult and costly.

LEED helps us manage our projects better and we can do this with the streamlined approach. LEED Gold is too expensive.

LEED Gold is happening in most projects. If we commit and apply what we have learned, it just happens.
Pioneering is where discover decision-making processes and the deeper barriers awaiting reform.
Executive Decision-making Processes: Mission & vision, priorities, investment, growth, culture/values/identity

Planning Processes: Strategic plans, master plans, fund raising campaigns, building design process

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Individual Decisions-making/Modeling

Expand how much you understand these processes in your organization

Expand where you have a seat at the table

Find ways to foster more flow, translation and continuous sustainability improvement between these levels and types of decision-making

Start to understand what must happen to address the core challenge of breaking through silos, adopting integrated design process, thinking beyond front cost, valuing sustainability capital (reputation, recruitment, community relations, alumni/donor interest, staff retention/productivity etc)

In Pioneering you……..

Leith Sharp 2011
Transformation is Where You Change the Decision-making Process Itself.

Owner

Designer

Contractor

Supplier

Traditional Design Process

Transformation is Where You Change the Decision-making Process Itself.
Understand the Team

Project Team

Owner

Supplier

Integrated Design Process

Designer

Contractor
Department: Arnold Arboretum
Building Type: Labs and Offices
Size: 45,000 square feet

Lab Integrated Design and Life Cycle Costing Case Study: Weld Hill Ventilation Rates

Switching from 10 Air Changes per Hour (ACH) to 6 ACH results in energy savings of approximately $22,000 per year.

Air Handling Units (AHU) can also be downsized producing savings = $50,000.
Since peak loads are reduced, we save in well field and Heat Pump sizing which nets a savings of $80,000.

Switch from 10 to 6 ACH saves $130,000 first cost, $22,000 annually.
Office Supply Savings

- 100% Recycled Office Paper
- Remanufactured Printer Cartridges

10% Cost Savings
Cost Neutral Climate Neutral Building Case Study

(Leverette Towers Financial Summary for Climate Neutrality)

(Further information can be provided by Debra Shepard (dshepard@eheinc.com)

Leverette Towers Investment Summary

<table>
<thead>
<tr>
<th>Component</th>
<th>% of Portfolio</th>
<th>Investment Period</th>
<th>MTCDE/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Conservation Measures</td>
<td>17%</td>
<td>2007-2009</td>
<td>255</td>
</tr>
<tr>
<td>Renewable Energy Technology (onsite)</td>
<td>3%</td>
<td>2007-2009</td>
<td>49</td>
</tr>
<tr>
<td>Fuel Switch</td>
<td>22%</td>
<td>2012-2020</td>
<td>345</td>
</tr>
<tr>
<td>Offsets</td>
<td>58%</td>
<td>2012-2020</td>
<td>888</td>
</tr>
<tr>
<td>Behavior Program</td>
<td>((2%))</td>
<td>2007-2020</td>
<td>((33))</td>
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<table>
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<th>Financial Category</th>
<th>Net present value through 2020</th>
</tr>
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<tbody>
<tr>
<td>Investments (ECM, RET, Fuel Switch, Behavior)</td>
<td>($1,068,958)</td>
</tr>
<tr>
<td>Savings (ECM, RET, and Behavior)</td>
<td>$1,142,947</td>
</tr>
<tr>
<td>Carbon Offset Purchases</td>
<td>($68,268)</td>
</tr>
<tr>
<td>TOTAL PROGRAM Net Present Value</td>
<td>$5,721</td>
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Individual System
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- Life Experience
- Social Connections
- Spirituality/meaning
- Family/Culture/Community
- Education/Occupation
- Skills/Abilities
The findings of many studies suggest that the conscious self “plays a causal role only 5% of the time.” There is an active effort on behalf of the mind to make what is conscious unconscious as quickly as possible.

While conscious choice and guidance are needed to perform new tasks, after some repetition, conscious choice quickly drops out and unconscious habit takes over, freeing up precious reserves of conscious awareness.

“This study and many others now emerging have made one thing clear: The human brain is a social organ.”

“Its physiological and neurological reactions are directly and profoundly shaped by social interaction.”

Indeed, as Lieberman puts it, “Most processes operating in the background when your brain is at rest are involved in thinking about other people and yourself.”

Source: Managing with the Brain in Mind. By David Rock
“Although a job is often regarded as a purely economic transaction, in which people exchange their labor for financial compensation, the brain experiences the workplace first and foremost as a social system”.

Source: Managing with the Brain in Mind. By David Rock
people who feel betrayed or unrecognized at work — for example, when they are reprimanded, given an assignment that seems unworthy, or told to take a pay cut — experience it as a neural impulse, as powerful and painful as a blow to the head.

Source: Managing with the Brain in Mind. By David Rock
We Can Significantly Improve Engagement of Individuals By Addressing Social Needs

Five particular qualities enable employees and executives alike to minimize the threat response and instead enable the reward response. These five social qualities are:

1. Status
2. Certainty
3. Autonomy
4. Relatedness
5. Fairness

Source: Managing with the Brain in Mind. By David Rock
Why bother to understand the internal process of achieving individual change?

1. Because this is the primary domain in which change is negotiated

2. Bob Kegan and Lisa Lahey (Harvard School of Education) believe:

It may be nearly impossible for us to bring about any important change in a system or organization without changing ourselves (at least somewhat).
<table>
<thead>
<tr>
<th>1 Commitment</th>
<th>2 What I’m Doing or Not Doing That Prevents My Commitment From Being Fully Realized</th>
<th>3 Competing Commitment</th>
<th>4 Big assumption</th>
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<tbody>
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<tbody>
<tr>
<td>I am committed to the value or importance of…</td>
<td>Acting personally, but not speaking up, nagging</td>
<td>I may also be committed to… Not being perceived as a self-righteous crusader</td>
<td>I assume that if… I will be socially ostracized, alone and sad</td>
<td></td>
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</tr>
<tr>
<td>Complaint: Horrible environmental habits at the Harvest Co-op (where she works)</td>
<td>Commitment: Educating people on easy forms of conservation</td>
<td></td>
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</tr>
<tr>
<td>MODEST TEST?</td>
<td></td>
<td></td>
<td>Already making small suggestions around the workplace</td>
<td></td>
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</tr>
<tr>
<td>1</td>
<td>Commitment</td>
<td>2</td>
<td>What I’m Doing or Not Doing That Prevents My Commitment From Being Fully Realized</td>
<td>3</td>
<td>Competing Commitment</td>
<td>4</td>
<td>Big Assumption</td>
</tr>
<tr>
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</tr>
<tr>
<td>I am committed to the value or importance of…</td>
<td>I may also be committed to…</td>
<td>I assume that if…</td>
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<tr>
<td>I don’t recycle computer equipment or potentially hazardous/toxic materials</td>
<td>Not actively seeking recycling opportunities, instead throwing them away</td>
<td>Putting immediate gratification ahead of society – throwing things away so I don’t have to think about it</td>
<td>Spend a lot of time and effort into the recycling effort, and there wouldn’t be any answers out there – a waste of time and a disappointment</td>
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<tr>
<td>Want to do this</td>
<td></td>
<td></td>
<td>Test: to go out and see what I can discover, might make me realize that it is really worth it to prevent all of the horrible things that might happen if I don’t try to recycle these things</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>What I’m Doing or Not Doing That Prevents My Commitment From Being Fully Realized</td>
<td>Competing Commitment</td>
<td>Big Assumption</td>
<td></td>
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</tr>
<tr>
<td>I am committed to the value or importance of…</td>
<td>Hanging out, doing my schoolwork</td>
<td>I may also be committed to… Working in a fun way with others</td>
<td>I assume that if… If I do this it will be time-consuming and not fun….others will not have fun too</td>
<td></td>
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</tr>
<tr>
<td>Food in the dining halls is really gross! Not sustainably produced, disposed of</td>
<td>Committed to having the food be good, having students be involved</td>
<td>Test: Make a proposal to a dining hall to explore local apple orchards</td>
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</tr>
</tbody>
</table>
Immunity to change often results from the interaction of underlying contradictions and hidden, internalized social fears that act to keep us disengaged.

An important step in the process of transformation is to be able to make conscious our unconscious commitments, contradictions and social fears.

This can be uncomfortable and anxiety producing, however it is essential to bring to light our unconscious fears (social risk etc).

By making our internal contradictions and social concerns conscious we make it possible for our mind to look upon its own meaning structure instead of being held captive by it.

This is the powerful work of internal and social change.
What are the **Common Causes of the Risk and Instability that Accompanies Change in Our Organizations?**

1. Too much dependence on organizational rationality (a good idea isn’t enough)
2. Too much dependence on top down leadership & linear management processes
3. A lack of understanding of how our organizations actually work
4. A lack of learning by doing (not enough piloting of new practices)
5. A lack of trust based relationships with the resilience to adapt and be flexible
6. A lack of continuous learning (attuned to how adults like to learn)
7. An inability to manage interdependence (fragmentation, specialization, silos)
8. An inability of most individuals to cope with the tension of holding a vision in the face of the day to day inertia
9. A lack of change management expertise
10. Low levels of accounting for our rich social underworld

Produced by Leith Sharp
To Reduce Risk and Instability: Build relationships and trust because this is the Fuel of Transformation.

Three Types of Relationship Models in Organizations:

- Transaction
- Authority

Managing with the Brain in Mind
By David Rock

Five particular qualities enable employees and executives alike to minimize the threat response and instead enable the reward response. These five social qualities are:

1. Status
2. Certainty
3. Autonomy
4. Relatedness
5. Fairness

- We must adopt a personal style of interacting with others that will preserve or bolster the status of others and that is collaborative.
- We must address the need for certainty
- We must create decision-making processes and design our strategies and programs in ways that allow for autonomy and that attend to fairness.
In large organizations most daily operations have become a habit, no longer done with awareness, no longer examined for the true costs/benefit.

This is why READY, FIRE, AIM can be the right sequence in the early stages of catalyzing change.

Produced by Leith Sharp
To **Reduce Risk and Instability**: Engage in small scale pilot projects (Ready, Fire, Aim), creating a safe, temporary and small scale process for people to test the social and organizational risks/rewards.
The findings of many studies suggest that the conscious self “plays a causal role only 5% of the time.” There is an active effort on behalf of the mind to make what is conscious unconscious as quickly as possible.

While conscious choice and guidance are needed to perform new tasks, after some repetition, conscious choice quickly drops out and unconscious habit takes over, freeing up precious reserves of conscious awareness.


**Implications for Fostering Organizational Change for Sustainability**

- Most of what we do in our organizations is driven by established organizational systems and individual habit.
- It takes conscious focus to change current practice and to innovate.
- Conscious mental reserves are limited and are in constant demand.
- Once a new practice/process is successfully implemented it must be absorbed into the unconscious relatively quickly. We need to design our processes and programs to make this as easy as possible.
Community Based Social Marketing - Tools of Behavior Change

Use Prompts

• Reminder to trigger behavior
• Not intended to change attitudes

TIPS:

• Close to the point of action
• Eye catching & noticeable
• Clear instructions
Community Based Social Marketing - Tools of Behavior Change

Make it Convenient

• Address any physical barriers
The desire to change is thought to be largely motivated by the intrinsic desire to communicate with others and to have the acceptance of others. (Feldman, 1994. p13)

Feldman states that “The facilitating effect of social interaction has been confirmed by recent research on moral judgement and conservation.”


Implications for Creating a Learning Organization
- The best way to engage, motivate, support and educate people to change their behaviors, choices and work practices is through peer to peer or guided social interaction.
**Residential Green Living Programs:** 9000+ Harvard residents. 13+% electricity reduction, 30+% recycling increase. Over $300,000 p.a savings

**Lab User Engagement:** Fume hood competitions have generated over $400,000 in annual energy savings

**Green Skillet Competition:** 500 staff. The winning kitchen reduced electricity use by 23%

**Peer to Peer Training Programs:** Staff training each other to save energy through better building management
Use Social Norms

• We want to be seen “doing the right thing”
• Strong social pressures to conform
• We are “hard-wired” to imitate social norms

TIPS

• Visible to the community
• Personal, community-oriented
• Encourage positive behavior
Creating roadmaps, forums and processes for Individual Leadership and Peer Engagement

......democratizing change making
Get Commitment

• We want to be seen as consistent
• Alters self-perception
• Small action leads to large action

TIPS:
• written
• make it public
• actively involve people
• group commitments
Welcome to our Green Office.

This certificate has been awarded to

Department Name

in recognition of becoming a certified Leaf N Green Office at Harvard University.

Coordinating Name of Program

Date

Director, Office for Sustainability

Date
“When it comes to intelligence, the whole can indeed be greater than the sum of its parts. A new study co-authored by MIT, Carnegie Mellon University, and Union College researchers documents the existence of collective intelligence among groups of people who cooperate well, showing that such intelligence extends beyond the cognitive abilities of the groups’ individual members.

They discovered that groups featuring the right kind of internal dynamics perform well on a wide range of assignments, a finding with potential applications for businesses & other organizations.”
Three key factors that enhance group intelligence:

1. Groups whose members had higher levels of "social sensitivity" were more collectively intelligent. “Social sensitivity has to do with how well group members perceive each other's emotions,” says Christopher Chabris, a co-author and assistant professor of psychology at Union College in New York.

2. In groups where one person dominated, the group was less collectively intelligent than in groups where the conversational turns were more evenly distributed," adds Woolley.

3. And teams containing more women demonstrated greater social sensitivity and in turn greater collective intelligence compared to teams containing fewer women.