

## Part I: Diffusion of Sustainability

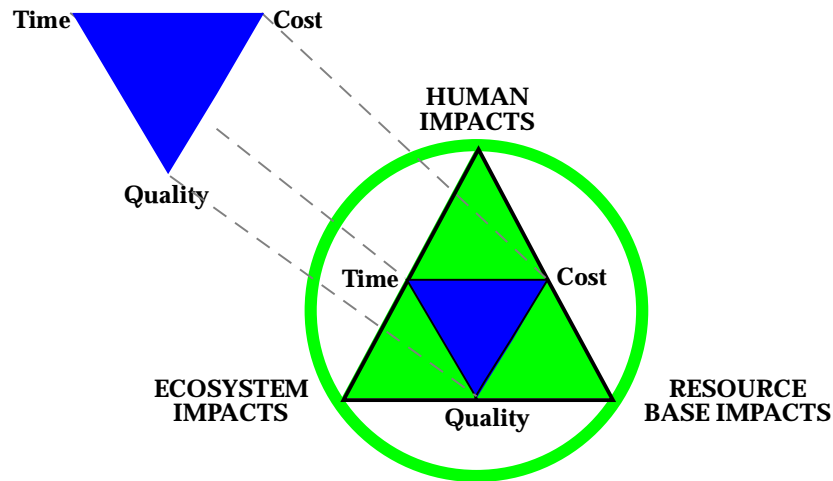
What tricks do you need to know in order to develop a plan that will work for your organization?

### Sustainability Adoption in Organizations

- Sustainability is treated as an innovation in most organizations choosing to adopt
- An *innovation* is an idea, practice, or object that is perceived as new by an individual or unit of adoption.

- Everett M. Rogers, *Diffusion of Innovations*

## Sustainability as Innovation



(Pearce 1999)

## Diffusion of Innovations

- What affects how rapidly an innovation is adopted?
  - Perceived attributes of innovations
  - Type of innovation decision
  - Communication channels
  - Nature of the social system (tipping points)
  - Extent of change agents' promotion efforts
  - Nature of the trigger

(Rogers 1995; Vanegas & Pearce 2000; Gladwell 2001)

## Characteristics of Innovations

- Relative advantage compared to the idea it supercedes
- Compatibility with existing values, past experiences, and needs of adopters
- Complexity in terms of difficulty of use and understanding
- Trialability on a limited basis
- Observability of the effects of the innovation

(Rogers 1995)

## Types of Innovation Decisions

- Optional - decision to adopt is made by an individual, independent of other individuals in the system
- Collective - decision to adopt is made by consensus of members of the system
- Authority - decision to adopt is made by individual(s) in the system who have the power to impose their authority over others

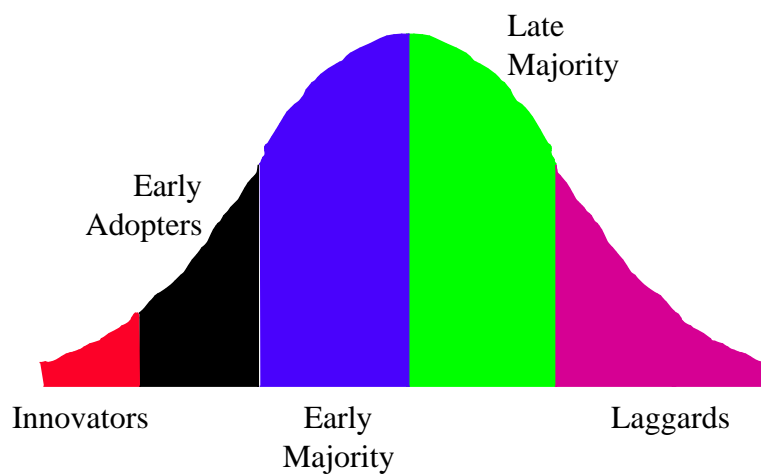
(Rogers 1995)

## Communication Channels

- Where does the message come from?
  - Experts, Colleagues, Media
- How does the message get conveyed?
  - Casually, Formally, Mass Media
- Perceived credibility
- Observability of results

(Rogers 1995)

## Characteristics of the Social System



(Rogers 1995)

## Who Initiates Change?

- Change agent - an individual who influences clients' innovation decisions in a direction deemed desirable by a change agency
- Change agents "...seek to create an environment which allows a closer match between their values and the overall external forces which control to some extent the ways in which they function."

(Rogers 1995; Jones Crabtree 2001)

## Change Agent Roles

- To develop a need for change
- To establish an information exchange
- To diagnose problems
- To create the intent to change
- To translate intent to action
- To stabilize adoption & prevent discontinuance
- To achieve a terminal relationship

(Rogers 1995)

## Factors in Change Agent Success

- Effort, particularly in contacting clients
- Client orientation (as opposed to change agency orientation)
- Compatibility of change with client needs
- Empathy with client
- Similarity to client

(Rogers 1995)

## Triggers of Organizational Change

		Proactive	Reactive	
<b>Internal</b>	<b>FLASH</b>	Change of: <ul style="list-style-type: none"> <li>• Values</li> <li>• Mission</li> <li>• Perceptions</li> </ul>	<b>CRASH</b>	Change of: <ul style="list-style-type: none"> <li>• Functional Requirements</li> <li>• Physical Integrity /Function</li> </ul>
	<b>SPLASH</b>	Change of: <ul style="list-style-type: none"> <li>• Market</li> <li>• Benchmarks</li> <li>• Competition</li> </ul>	<b>CLASH</b>	Change of: <ul style="list-style-type: none"> <li>• Codes</li> <li>• Regulations</li> <li>• Standards</li> </ul>
<b>External</b>				

(Pearce 1998; Vanegas & Pearce 2000)

## Is sustainability right for you?

- How well do you match up in terms of:
  - Attributes of sustainability?
  - Attributes of sustainers?
  - Attributes of sustainable organizations?

## Attributes of Sustainability

- Expanded scope of consideration (temporal, factoral, and spatial)
- Recognition and exploitation of systems effects
- Value placed on natural and human capital as well as economic capital
- Precautionary approach to potential failure
- Recognized dependence on context
- All benefits are counted in decision making

(Hawken et al. 1999; Clayton & Radcliffe 1996; Pearce 1999)

## Attributes of Sustainers

- Renunciation, a.k.a. delay of gratification
- Adequate knowledge, with understanding that existing knowledge is probably imperfect
- Sensitive attitudes that seek alignment between core values and knowledge, and reject actions incongruent to core beliefs

(Doob 1995)

## Attributes of Sustainers

- Controllability, i.e., belief that it is possible for individuals to affect change
- Patterning/integration that recognizes the interrelationships among system elements and accounts for systems effects

(Doob 1995)

## Attributes of Sustainable Organizations

- Clock building, not time telling
- Profit as a means, not an end
- Well-defined, unchanging core ideology
- Constant change to achieve core mission
- Big, Hairy, Audacious Goals (BHAG)
- Strong, enveloping cultures
- Encourage trial and error

(Collins & Porras 1997)

## Organizational Ability to Change

- Leader's/Members' attitude toward change
- Centralization of decision authority (+/-)
- Complexity of organization members (+/-)
- Formalization of rules and procedures (+/-)
- Interconnectedness of members
- Organizational slack
- System openness
- Presence of champion/change agent

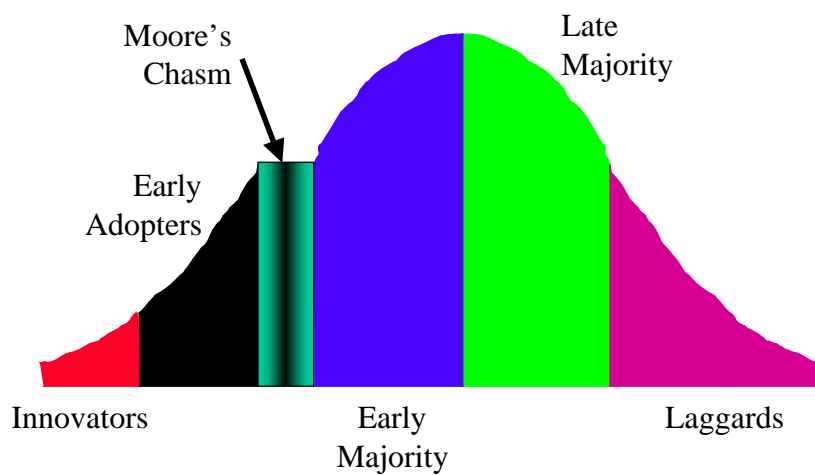
(Rogers 1995)

# Sustainability Adoption in Organizations

- Other relevant tidbits:
  - Different adopter categories need different kinds of convincing
  - Key strategies:
    - Help adopters envision relative advantage
    - Stimulate social networks and communication of lessons learned/success stories
    - Reduce risk via trialability (pilot testing)

(Rogers 1995; Moore 1999)

Different adopter categories need different kinds of convincing...



(Rogers 1995; Moore 1999)

## Diffusion of sustainability

- What does all this mean for you, the change agent, trying to diffuse sustainability to your company?
- Let's revisit the attributes of innovations that affect how well they're adopted...

## Diffusing Sustainability

- Relative advantage compared to the idea it supercedes:
  - How is *advantage* defined in the A/E/C industry?
  - How is it defined at your installation? For your organization?
  - Concepts include:
    - Helping adopters envision relative advantages for *them*
    - Decisions based on life cycle, full impact data
    - Recognition of nontraditional costs/benefits

## Diffusing Sustainability

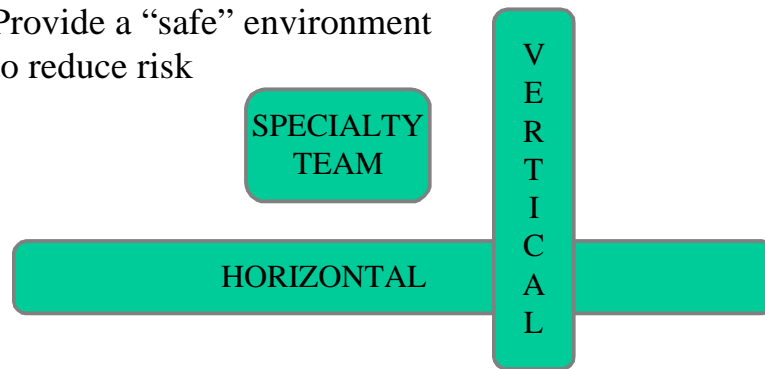
- Compatibility with existing values, past experiences, and needs of adopters
  - Who are the parties that must adopt sustainability in order to achieve sustainable projects?
  - Concepts include:
    - Client education and internal/external motivation
    - Staff internalization of sustainable concepts
    - Command buy-in

## Diffusing Sustainability

- Complexity in terms of difficulty of use and understanding
  - Sustainability can easily be mistaken for being more complex than it actually is
  - One of the challenges of implementation is to internalize an approach that fits the organization
  - Concepts include:
    - Stimulating social networks and communication of lessons learned/success stories

## Diffusing Sustainability

- Trialability on a limited basis
  - Many approaches exist to “test drive” sustainability
  - Provide a “safe” environment to reduce risk



## Diffusing Sustainability

- Observability of the effects of the innovation
  - Lowest hanging, ripe fruits first
  - Sometimes fruit has already fallen into your basket
  - From an owner standpoint, sometimes transparency is a better option...

