

ESD.84 Doctoral Seminar – Session 12 Notes
Guests Presenting: Robert Thomas

Session Overview:

- Welcome and Overview and Introductions (5-7 min.)
- Initial Identification of Questions from Readings (7-10 min.)
- Leading Systems Change: Guest Presentation by Robert Thomas (20-30 min.)
- Additional Dialogue on Systems Change: Joel Cutcher-Gershenfeld and Chris Magee (10-15 min.)
- Discussion (10-15 min.)
- Break (10 min.)
- A Critical Assessment of Socio-Technical Systems Design Principles – Presentation by Heidi Davidz (10-15 min.)
- Discussion (5-7 min.)
- Re-Engineering versus Kaizen: Competing or Complementary Change Strategies? – Presentation by Chris Musso (10-15 min.)
- Kaizen versus Re-Engineering – Class Debate (20-30 min.)
- Robert Thomas, *What Machines Can't Do* – Book Review by Heidi Davidz (5-7 min.)
- Next Steps (10-15 min.)

Discussion Questions:

- When you want to measure what is learned in organizations – how do you understand the implications of differing rates of change across technical, social, and other dimensions?
- How to deal with deterioration in advance of improvement – a common dynamic with change initiatives?
- How do you operationalize strategies and approaches to systems change?
- How to manage leadership transitions in the context of change initiatives?
- What about shareholders as a stakeholder group for training initiatives? On a broader level – what are the incentives for executives in a large organization around learning initiatives?
- If current management practice is inadequate for the future challenges and there are new innovations in how to lead change – do the same principles apply to service operations?
- What about the problems with diffusion from pilot initiatives?
- In a technical organization is there an inflection point where change is more along social and political dimensions rather than technical dimensions – a point in the life-cycle of a firm where this is more true?
- How to assess the quality or value or return on training?
- Concern with reductionism around concepts of leadership – is it feasible or desirable for everyone to have a specific job – especially in the context of complex, interdependent systems. How can you design a process and a management control system to discover all problems? Does this require a new type of knowledge worker?

Leading Systems Change: Guest Presentation by Robert Thomas

- Left MIT to join Arthur D. Little where I became increasingly involved in organizational change initiatives in the auto, energy and other sectors
 - In a petroleum intervention – the crucible experience when beyond theory frameworks and into intensive implementation
- Then joined Accenture to focus on broader issues of leadership and other domains of forward thinking for the organization
- The most profound issue that we confronted was the gulf between the extraordinary energy generated around planning for change and the huge deterioration of energy associated with implementation (and even active resistance)
 - Developed concept of moving implementation forward in time to be more integrated in the design
 - People don't resist change – the resist “being changed” by others
- Most individuals and groups in organizations have visions of how things should be – sometimes crude and sometimes very sophisticated – but more than just narrow self interest
- A conceptual model for what is most typical:

Design	→	Implementation
Exciting visioning		Existing organization Memory
- The challenge of bringing the implementation, memory, existing organization up into the design process – including a truly shared vision
- Key factors to consider
 1. Speed of implementation
 2. Conformity in vision around both process and end state
 3. Commitment
- BPR – Business Process Re-engineering – has a clear vision of the end state, while Accenture has a clear vision of the process
- Trade-offs:
 - Speed vs Commitment, for example
- Relative ranking of the three key factors pointing to four alternative models:
 - A. High speed, High conformity, High commitment (where GE has ended up after “B”)
 - B. High speed, High conformity, Low commitment (just compliance) – burning platform (where GE started)
 - C. High speed, Low consensus on conformity, High commitment – common in professionally dominated organizations where can engage people in a shared design process
 - D. Low speed, High conformity, High commitment – a long horizon such as the Chinese revolution
- Creative tension between future vision and current reality – in the Fifth Discipline and other sources
- What are the drivers?
 - Role of a threat in unfreezing relations – push
 - Role of attraction of a change that is compelling – pull
- Common dynamic with new leaders:
 - 6 months of learning
 - 6 months of building a common vision, allies as change leaders, etc. -- mobilization
 - 6 months of looking ahead to the next assignment

- Conclusion of people who are not leaving is that waiting 12-18 months is all it takes to maintain the status quo and avoid complications
- Effective leaders are remarkably good at a few core things:
 - Good listening, intrinsic interest in others, and good questions that unlock thinking
 - Good storytelling – that connects with people
 - Good at making things transparent – helping you to see how things work and ensnaring others in that operation – utilizing the organization’s memory for constructive purposes
- Book on Geeks and Geezers – leaders under the age of 35 and leaders over the age of 70 – growing up in analog versus digital eras
- When to utilize a control model and when to step back?
 - John Kotter’s analysis around when to be a leader and when to be a manager? Focus on knowing which situation you are in – when to drive out uncertainty and when to embrace it?
- A deep embedded assumption that longevity is good – the longer something is around the better it is – underlies much action – which leads us away from models of organizations and initiatives that have short life-cycles
 - Consider a population demography perspective – looking across all 40 million businesses in the US – not just the Fortune 500
- See Jay Galbraith or see Larry Griner for a look at ossifying factors in organization – a function of size and time
 - Larger dynamics across organizational change
 - Identifiable practice domains within this context – such as the concept of process improvement

A Critical Assessment of Socio-Technical Systems Design Principles – Presentation by Heidi Davidz

Social Systems

- Structure & Sub-Systems
- Social Interaction Processes
- Capability & Motivation

Technical Systems

- Machines (Equipment & New Technology)
- Methods (Processes)
- Materials (Components & Supply Chain)

- Not all social systems are socio-technical, but are most technical systems socio-technical?
- Levels of work systems:
 - Primary work systems
 - Systems which carry out the set of activities involved in a bounded subsystem
 - Line department or service unit
 - Recognized purpose which unifies people & activities
 - Whole organizations systems
 - At one end, plants or self-standing workplaces
 - At other end, entire corporations or public agencies
 - Macrosocial systems
 - Systems in communities and industrial sectors and institutions operating at the overall level of a society
- Agreed: social and technical systems are interdependent
 - Many examples articulating interdependence
 - Interdependence of social and political systems on the implementation of production technology (Thomas, 1994)
 - Connections between growth of technology, science-based universities and public policies (Nelson, 2000)
 - Relationship between the federal R&D enterprise and the technology produced (Lambright, 1978)
 - The challenge goes beyond this

Discussion:

- Can you separate out the technical and the social?
- The two are inter-woven in practice
- We still have to use word in certain ways in our current state world
- Organizations have built up groups of specialists – the concept of socio-technical systems is helpful in breaking through these concepts
- What is knowledge – and the role in networks – what are the different ways we use this term? Too often it is a bit of social knowledge for the technical or a bit of technical for the social – knowledge has different value for different people
- What are different types of learning and knowledge – framework from “Valuable Disconnects” (forthcoming book by Joel Cutcher-Gershenfeld and Kevin Ford):

	Fragmented	Interdependent	Opposed
Routine	Incremental Learning	Continuous Learning	Entrenched Learning
Adaptive	Experimental Learning	Synergistic Learning	Revolutionary Learning

- Story in camera design – not one separate expert, but a group that stays together with its own resident shared knowledge

Robert Thomas, *What Machines Can't Do* – Book Review by Heidi Davidz

- Key insights into why technologies are chosen and how this takes place – revealing complex organizational dynamics

Book Review (from later session) Jay Galbraith on *Organizational Design* – Book Review by Jeroen Struben

- There is no one best model for organizations – all are flawed in some way – towards a contingency approach
- A key challenge in dealing with uncertainty, structure, strategy
- Issue of information overload, lateral relations, reward and reinforcement systems, matrix management
- A thorough, incremental construction of the argument to point to four dominant organization modes – unique views in this era
- Not sufficient treatment of politics and other “messy” aspects of organizations, as well as not enough on systems

Re-Engineering versus Kaizen: Competing or Complementary Change Strategies? – Presentation by Chris Musso

- Attributes of business process re-engineering -- sporadic
 - Example of Dell business strategy – using re-engineering to commoditize the products
 - Issues of high failure rate and little patience for long-term results
- Continuous improvement – sustained, incremental, with potential for transformation in the long-run
 - Ability to fine tune and achieve near perfect quality
 - Example of Porsche 911 design – incremental adjustments but a complete transformation
 - Example of Intel – with the copy exactly approach

Kaizen versus Re-Engineering – Class Debate

Opening – Pro Re-engineering

- Continuous improvement can't produce a rapid transformation
- Re-engineering will deliver the results – look at GE

Opening – Pro Kaizen

- Even GE has turned to kaizen
- Kaizen is more agile and robust in the long run – it will generate buy-in
- The tools of kaizen are better developed

Rebuttal – Pro Re-engineering

- The new economy doesn't allow the time for kaizen
- BPR has plenty of specific tools
- Contrast between a perfect record player versus moving on to CD technology

Rebuttal – Pro Kaizen

- Kaizen gives you the knowledge base to make informed transformation
- BPR is destined to only deal with the low-hanging fruit – that which is visible through sporadic application