

Output from discussion group on: Participatory work design in organizations

Participatory Work Design

- “Work Design” is not the same as “Product Design”
 - Involves work, processes, technologies → work system
 - Designing something to a “slice” of the work is inadequate
 - Example: provisioning T1 lines for NYNEX
 - Wasn’t working – adding another system wouldn’t help
 - Work design ended up a success
- Participatory Work Design Principles
 - The ones doing the work design the work
 - Honor the work – what does it really take to get this done?
 - Anthropologist facilitating workers is better than either alone
 - Not gathering of info for expert designer, but workers are the designers (note difference in “participative” vs. “participation” design)

“T” Principles

“S” Principles

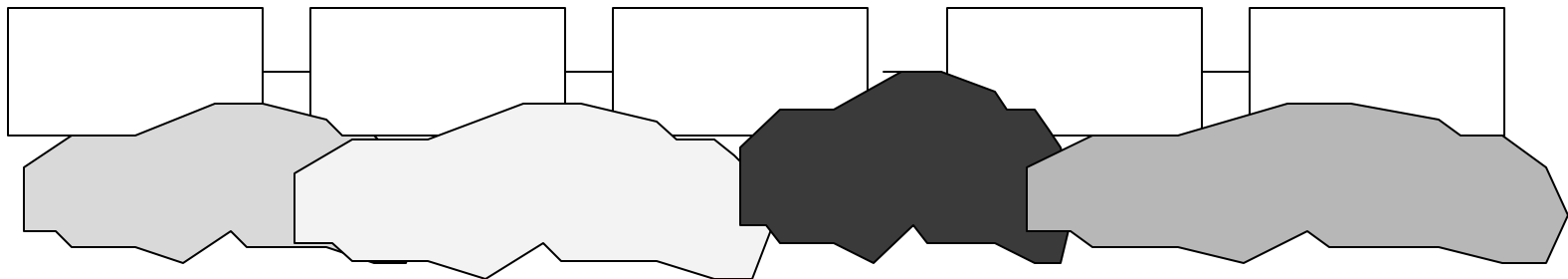
Failure to honor the work -----	ethnography
Failure to engage the workers -----	participative design
Focus on technology as the core of the solution -----	work systems design
Boundaries too tight -----	minimum critical specs
Focus on efficiency -----	focus on effectiveness
Over reliance on people to adapt-----	practice development, QWL

New Conflict between local hierarchy and global interactivity



Dimensions of Work

Processes <i>Explicit & Visible</i>	Practices <i>Tacit & Invisible</i>
Training	Learning
Tasks	Know-How
Organizational Structure	Informal Networks
Procedures & Techniques	Work Practices
Work Flow	Work Systems
Methods & Procedures	Rules of Thumb, Judgment
Teams	Communities



Topic Overview

- Paradigms: How do you get workers to step outside of their current view of the work?
 - Group interactions important for seeing bigger picture
- Facilitation
 - Not easy. Lots of conflict between vested interests. Sometimes participants think facilitator irrelevant.
- Job Elimination
 - Not a goal of the work, though sometimes people eliminate their own jobs and design themselves new jobs they need to be trained for.
- Frustration
 - Often designs are not implemented, or work designs are eventually discarded through “re-engineering”, standardization or other initiatives

Topic Overview

- Technology
 - There are some things it can do; some things it can't. Mgmt needs to be educated.
- Gender Issue
 - Businesses are male-dominant and don't want to have these sorts of "undirected" design projects
- Subdividing Work
 - Huge premises behind idea of dividing up work (as in outsourcing scenario of separating software design and implementation)
 - What is lost in the resulting Taylorized work design?
- Is Knowledge Work Different from Operational Work?
 - "Non-knowledge" work involves creative problem solving and lots of knowledge work

What is the research/business issue or problem?

- How can we create productive workplaces and technologies that support them in the global extensible enterprise?
- Particular Issues
 - Current business “wisdom” (e.g., outsourcing, cost control) does not produce good business outcomes
 - Even when highly productive work environments result, work needs to fit in with higher-level view of the work
 - High-quality participatory designs are not necessarily seen as valuable or relevant by senior management
 - People do not see work
 - They see processes and technology, but not actual work
 - E.g., maintenance and fights against entropy are seen as no value-add
 - There are explicit and implicit/tacit elements to work that don't get noticed
 - Innovative organizational designs within traditional organizations cause disharmony
 - Many large enterprises have not progressed past scientific management / Taylorism

What can we do to address the issue/problem?

- Participative Design
 - Knowledge Management
- Giving voice to work, coordination structures, communication structures (which are undervalued by the corporation)
- Adoption of work designs requires that senior management be involved in the design process
 - Their boundaries for acceptable solutions need to be elicited

What activities can we carry forward after the symposium?

- Try to design global work from a participatory perspective
- Make tools to make work visible and therefore valued
- Experiment, experiment, experiment....

Comparing approaches

Approach	Characteristics	Ethnographic Distinction
Market Research	High Level, Strategic <i>Focus is on the Market</i>	Uncovers customers needs on the ground
Human Factors	Usability Testing <i>Focus on how the human uses the machine</i>	Considers the context in which the human and machine are embedded
Focus Groups	Facilitated Sessions Off-site <i>Focus is on personal reports of needs</i>	Performed in the context where the work happens
Walk-in-my-shoes	Brief, On-site Snapshot <i>Focus on anecdotes</i>	A deep dive, spending time doing systematic data collection

Participants

- *Patricia Sachs (Social Solutions, anthropologist)*
- *Jim Euchner (Pitney Bowes, research labs)*
- Jordan Pollack (AI, Brandeis)
- Clark Quinn (OtterSurf Labs)
- Rebecca Radnor (anthropologist, recent PhD Northwestern Univ)
- Peter Charles (UC Berkeley, grad student, XML)
- Mary McCuiston (anthropology grad student, SJSU, Ricoh)
- Zann Gill (NASA Ames, cross-disciplinary teams)
- Rob Barrett (IBM Almaden Services Research)

Which gives “Voice Numbers versus Productivity?”

