Symbolic Interactionism and the Cell Information Board

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Agenda

• Motivation
• Signs, Symbols and Symbolic Interactionism
• Dialogical Action Research
• AR Study Site: APC by Schneider  Electric
• Observations
• Summary
**Motivation: Innovation study**

Claudio Ciborra in “The Labyrinths of Information: Challenging the Wisdom of Systems” argues that the position of information and communications technology (ICT) in organizations requires a shift from the present focus on the “scientific paradigm” to an “alternative centre of gravity: human existence in everyday life”.

This paper is the story of an alternative centre of gravity.
Information Systems

• An information system is a system which assembles, stores, processes and delivers information relevant to an organisation (or to society), in such a way that the information is accessible and useful to those who wish to use it, including managers, staff, clients and citizens. An information system is a human activity (social) system which may or may not involve the use of computer systems. [Buckingham et al. (1987)]

• An information system is an arrangement of components that interact to support the operations, management, and decision-making information needs of an organisation. [Whitten, Bentley and Ho (1986)]

A Cell
Signs, Symbols and Symbolic Interactionism

Semiotics after de Saussure (Chandler p. 14)

- Human beings act toward things on the basis of the meanings that the things have for them.
- The meaning of such things is derived from, or arises out of, the social interaction that one has with one’s fellows.
- These meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters.
**Dialogical Action Research**

- **Action:** address real-life problems
- **Research:** contribute to theoretical knowledge

- **Dialogical AR:** Mårtensson & Lee (MISQ 2004)
  - “reflective one-to-one dialogues”: practitioner & researcher
  - “reflect on, learn from, and remedy managerial problems in the organization”
  - ongoing dialogue is an interface between *theoria* and *praxis*

**dAR topology**

Case Study – APC Ireland (now APC by Schneider Electric)

- APC Ireland
- Acquisition by Schneider Electric
- Supply Chain Challenges
- Innovation key corporate objective
- Time of Major Transition

Research Approach:

- **Researcher- temporary company employee**
  - In addition to the real day job!
  - No commercial relationship
- **Pilot Study ~ 22 interviewees, 50 hours**
- **Action Research project**
  - Meetings every two weeks *removed* from day to day work
  - 22 hours of recorded interactions ~ approx. 60,000 words
- **41 Days on site**
Observations:

• Cell Information Board: Real-time IS
• Short Interval Management (SIM)

“The SIM process gives visibility to everyone on the floor; it drives closing things off; it encourages people to come forward with their suggestions. Those are things that make the difference”, Practitioner

A conceptualization of an information system as a sign-action system
Observations:
“SIM was instrumental in the plant receiving a National Award for Health and Safety”.

SI perspective: The joint action of a group undergoes a process of formation and is a result of the interlinking of separate acts.

“SIM drove an organisation change from the bottom-up.”

SI perspective: the people acted based on a collective meaning.

“The SIM process gives visibility to everyone on the floor; it encourages people to come forward with suggestions.”

SI perspective: The human person must construct and guide his or her action.

Observations:
“SIM is based on standard Lean processes but has been adapted for the Schneider production system.”

SI perspective: The empirical world is the central point of concern.

“SIM process is providing a mechanism to harness process innovation. The SIM process allows for natural creativity.

SI perspective: A network does not function automatically but from acts of people.

The amount of suggestions being captured by the SIM process was significant.

SI perspective: the operators reacted to the symbolic nature of the SIM process sheet
Summary

• Innovation Study
• Engaging a Practitioner
• *Theoria* meets *Praxis*
• Creating Space
• Return to original definitions of IS
• Orlikowski and Iacono (2006) “a diversity of perspectives, methods and theories”
• IS as a sign-action system

Thanks

• Reviewers
• APC by Schneider Electric staff
• Colleagues
• Questions?