**ICS 132: Organizational Information Systems**

**Analyzing Social Settings - I**

### Outline

- **Who am I?**
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- **Why are these two lectures important?**
  - project
  - test
- **What are we going to do?**
  - data collection (2/18)
    - interview questions
  - data analysis (2/20)
    - transcript analysis

### Where are we?

- IS success or failure not just technical matter
  - IS need to support organizational functions
  - IS need to “fit” with organizational work
- organizations are complex
  - many different aspects (simultaneously!)
  - different models and metaphors
  - different aspects of organizational work
- now, the focus is on finding out
  - how do we go about understanding organizations and the work that goes on in them?

### Ways of finding out

- industry analysis
- published corporate information
- organizational procedure manuals
- customer reports
- surveys and questionnaires
### ways of finding out

- industry analysis
- published corporate information
- organizational procedure manuals
- customer reports
- surveys and questionnaires
- *going and looking!*

### why is this important?

- Technology vs. Work
  - often not the technology
  - understanding what people do
- Complexity of work
- Ex: wireless pager adoption

### ethnography

- anthropology
  - well-established ways of going somewhere unfamiliar and uncovering what’s going on
- ethnography
  - “ethno” (of a people) + “graphy” (writing)
  - from what people do to what they experience
  - tradition of close and long-term observation

### qualitative studies

- quantitative
  - from “quantity”
  - measurement and statistics
    - how many times do things occur?
    - how quickly?
- qualitative
  - from “quality”
  - what sort of thing happens?
- when to use each?
  - quantitative valuable when you know what to ask
  - qualitative valuable to find out what the questions are
doing ethnography

• Why did the Loflands write this book?

• Why are we reading it?

• major issue is one of attitude
  – uncovering the “member’s point of view”

• a combination of
  – watching
  – participating
  – asking
  – listening

• why participate?
  – getting a better insight (and asking better questions)
  – fostering trust
  – levels of participation

gathering data

• it’s amazing what can observe by watching…
• you have to see it to believe it
  – what people tell you and what actually happens are two different things
  – what actually happens is often much more complex and surprising that you’d imagine

• basic techniques
  – participant observation
  – interviewing

focusing data

• remember why you’re there
  – don’t “go native”
  – whose agent are you in this setting?

• key tasks
  – finding the units, aspects and topics
  – creating a formal understanding
  – relating it to the topics at hand
    • generally, IS design and the relationship to work
analyzing data

- this is the payoff -- if you do it right
- here, analysis is synthetic
  - emerges from the interaction of the data and your efforts to focus it
  - an inevitable tension
    - staying faithful to the facts
    - abstracting key ideas
  - what’s the “value-added” from your analysis?

starting where you are

- a lot of this is aimed at budding sociologists
  - that’s not what we’re concerned with here
- more important -- understand where you are
  - what points of view do you bring?
  - technical biases
  - you may be uniquely positioned
    - getting to see a bigger picture than most
  - important to maintain distance

evaluating data sites

- again, this is slightly different for us
  - field sites are customers or assignments
- but, still some things to think about:
  - tensions in the organization
    - whose agent are you?
  - getting people to talk to you at all
    - how is that conditioned by their organizational role
  - where are you in the scheme of things?
    - the Martian and the Convert

evaluating data sites

- direct observation
  - goal is “the richest possible data”
    - what do we mean by “rich”, here?
  - participant observation
  - intensive interviewing
### getting in

- again, not usually a problem in the IS case
  - “access” is part of the contract
  - usually, you’re a “Known Investigator”
  - inside vs outside?
- but… getting in where?
  - getting “into” the organization?
  - getting “into” any particular group/task/process?

### getting along

- continuing access is important
  - you need these people, they’re your livelihood!
- acceptable incompetence
  - they will always know more about their work than you do
- threats
  - factions -- people take sides; which are you on?
  - trade-offs -- how “native” do you go?
  - closed doors and insider understandings
- knowing when to wrap up

### getting out

- you need to address this before you start
  - when will you know you’re done?
  - how do you extricate yourself smoothly?
    - especially complex when deploying prototypes
    - assuming responsibilities

### observation

- learning to look with an ethnographer’s eye
  - everything is potentially interesting
  - questions to keep in mind:
    - why was that done?
    - why was it done just then and by so-and-so?
      - what were the alternatives?
      - why were they not taken?
    - what set of expectations and needs do working arrangements reflect?
      - how did things come to be this way?
    - the answers to the questions come later
      - right now, you need to collect the evidence
logging data

- fieldnotes
  - notes, mental and jotted
  - memories, thoughts, vignettes, incidents, quotes
  - the importance of the setting
    • most work practice evolves in situ
    • the environment is tailored to the work
  - field notes are a continual site of activity
    • you need to write stuff down -- you will forget
    • writing them up quickly
    • re-reading and re-working
    • early analytic thoughts...

interviewing

- what's the role of the interview?
  - confirming hypotheses
  - generating hypotheses
  - getting a point of view
- interview guide
  - a way to pre-organize the information
  - keeping track
    • interviews generate huge amount of data
    • need to
      - log it
      - keep track of the conversation
      - direct the conversation

interviewing

- avoid leading questions
  - they impose your own view on the data
  - they cut off avenues of conversation
- follow up leads
  - don’t stick blindly to the interview guide
  - the idea is to learn something new
    • not simply what you expected!

Scenario

Cedar-Sinai hospital system attempted to implement a hospital-wide computerized physician order entry (CPOE) system. They spent millions of dollars on this system. Six mos. after it was introduced, it was shut down because of physician complaints that it was hard to use and compromised patient health.

- What type of questions would you ask physicians to find out about what they think about the system?
next time

- More on analyzing social settings
  - analysis and putting it all together
  - read chapter 7 of Lofland and Lofland