

# ICS 132: Organizational Information Systems

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UCI Information & Computer Science

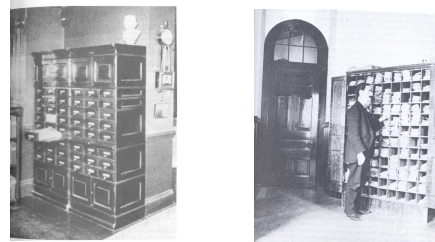
## the information revolution

- we're in the information revolution!
  - really?
  - one of many
    - invention of writing
    - invention of moveable type printing
    - etc...
- for example
  - technology that revolutionized organizational information practices in late 19th century?

## example: vertical filing



## example: vertical filing



## example: vertical filing

- lessons
  - organizations depend on processing information
  - information transforms organizations
    - what they can do
    - how they can do it
  - “technology” isn't always “hi-tech”
  - small changes can have massive repercussions

## organizations and information

- why do organizations need information?
  - to *reduce uncertainty*
  - about the past
    - what has been the effect of what we've been doing?
  - about the present
    - how are we doing? what are we doing? what are our customers doing? our competitors?
  - about the future?
    - can we anticipate trends?
    - can we predict the outcomes of our actions?
    - can we select amongst outcomes?

## what are organizations?

- companies?
- collections of people?
- formal entities?
- “arrangements of people and processes that achieve collective action”
  - *arrangements*
  - *people, processes*
  - *achieve*
  - *collective action*

## who studies organizations?

- systems analysts & consultants
  - systems need to be tailored to contexts of use
    - organizational contexts are often the most significant
  - most technical problems have an organizational component
  - many “technical” problem are entirely organizational
- if they’re smart, all system developers
  - if your system will be used by an organization, shouldn’t you know how to study it?

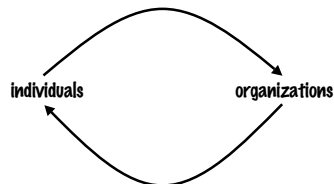
## why study organizations?

- the ICS 132 guarantee of usefulness
- most technologies in organizational settings
  - how will your development effort affect organization?
  - how will organizational needs influence you?
  - justifying, planning, managing and executing your project

## how to study organizations?

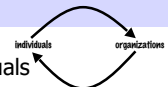
- background and theory
  - how do organizations work? what do they do?
- case studies
  - examples show us how these work in practice
  - opportunities to learn how to look at problems
    - no formulas or absolutes – this is about looking at problems through the right kinds of lenses
- qualitative techniques – going and looking
  - quantitative techniques are about *numbers* of things
  - qualitative techniques are about *kinds* of things
  - so when do we use each one?

## the first dualism

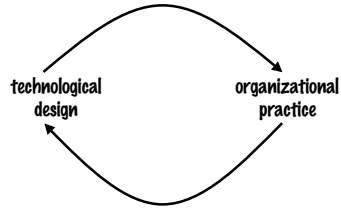


## the first dualism

- organizations act through individuals
  - how? and why?
- a mutual relationship
  - individuals achieve their goals through organizations
  - organizations achieve their goals through individuals
- questions
  - how do a set of individuals constitute an organization?
  - how are individual actions coordinated?

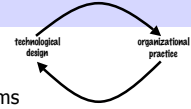


## the second dualism



## the second dualism

- another mutual relationship
  - organization act depends on forms of information and technology available
  - technology is designed in content of organizational needs
- not just individual organizations
  - collections of them & forms of relationship
- mutual evolution over time



## administrivia

- class times
  - lectures: Tu, Th 2:00-3:30, ICS 174
  - discussion: Tu *OR* Th 5:00-6:00, PSCB 140
- add/drop dates
  - drop deadline is *January 18*
  - class is very impacted, so this will be enforced
- this course is...
  - intermediate between ICS 131 and 135
  - the classes with a satisfaction guarantee!

## personnel

- instructor
  - Paul Dourish <jpd@ics.uci.edu>
  - office ICS2 206
  - office hours: by appointment (email)
    - I'm generally available if my office door is open
- teaching assistant
  - Kirril Petrov <kpetrov@ics.uci.edu>
  - office hours: to be determined

## grading

- breakdown
  - 20% homework
  - 25% project
  - 25% midterm
  - 30% final
  - ... but you *must* do everything!

## policies

- academic honesty
  - simple: zero tolerance
- spelling
  - "organization" and "organisation" are both fine ☺
    - I'm not going to be so careful about "z" in future
- some timing details
  - midterm will be Feb 17 (*probably*)
  - final will be during last teaching week

## texts and resources

- no primary text this year
  - readings, handouts, and lecture slides
- Lofland and Lofland
  - field work and qualitative methods
- class web page
  - <http://www.ics.uci.edu/~jpd/classes/ics132w04>
  - look there for schedule and for copies of slides

## what will we do?

- learn about organizations
  - what they do
  - how they work
- learn about information systems
  - how they support organizational work
- learn about requirements gathering
  - how do we find out what's going on?
- project
  - a chance to practice

## what will we do?

- metaphors for organizations
- aspects of organizations & information systems
  - e.g. business processes
  - e.g. information management
- carrying out qualitative investigations
- further topics
  - e.g. security
  - e.g. knowledge management

## next time...

- metaphors for organizations
  - three ways to think of organizations
  - what they tell us about organizations and information
  - come armed with some examples...
- but first...
  - a survey, not a test