ICS 132: Organizational Information Systems
Paul Dourish
Winter 2002
UCI Information & Computer Science

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
  – Steve Abrams sabrams@ics.uci.edu
  – office hours: to be determined

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
  – no meeting next Tuesday (Jan 14)
  – midterm will be Feb 6 (probably)
  – final will be during last teaching week

grading

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

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/ics132w03
  – look there for schedule and for copies of slides
topic

- organizational information systems
  - how do organizations work?
  - how do information systems support organizations?
  - techniques for understanding organizations
  - designing and deploying organizational IS
- focus on requirements
  - what they are
  - why they’re hard to uncover
  - what to do with them once you’ve got ’em
- what is an organizational information system?

why study organizations?

- because we so often get it wrong!
  - technology matters, but when people are involved, people always matter more

- most information systems are used:
  - in organizations
  - for organizations
  - between organizations
- need to understand the organization
  - so that we can understand what systems should do
  - so that we can understand how systems will be used
  - so that we can understand how people work
  - so that we can make systems more successful

why study organizations?

- because we so often get it wrong!
  - technology matters, but when people are involved, people always matter more
  - things that never work:
    - forcing a system down people’s throats
    - telling users that you know better than they do
    - complaining that it isn’t your fault the system failed
- not just about understanding the user’s work
  - need to understand the user’s point of view

what is an organization?

- examples
  - IBM, Apache Foundation, UCI, the Mafia

- what do these have in common?
- in what ways do they differ?
what is an organization?

• examples
  – IBM, Apache Foundation, UCI, the Mafia
  – what do these have in common?
  – in what ways do they differ?

• definition
  – organizations are arrangements of people and processes that achieve collective action

organizational conundrums

• how do organizations achieve their goals?
  – organizations don’t do things; people do
  – why do people do what organizations want?
  – why do organizations do what people want?

• how do organizations learn and survive?
  – organizations last longer than their members
  – is IBM really the same organization now as in 1930?

organizations and information

• organizations depend on information
  – information about their own processes
    – how quickly can we build a widget?
    – how much does it cost us to make one?
    – are our costs increasing or decreasing?
  – information about clients and customers
    – what sorts of widgets do people want?
    – when do they buy them?
  – information about what’s going on
    – when will the new widget line be ready?
    – who is responsible for managing the process?

organizations and IS

• information systems
  – collect information
  – transmit information
  – store information
  – retrieve information
  – process information
  – display information

  • but...
    – who decides what information should be collected?
    – to whom is the information transmitted & displayed?
    – what can organizations do once they have it?

how to succeed in 132

• do the reading
  – especially, pay attention to the case studies

• look for examples around you; apply concepts
  – places you’ve worked
  – organizations you deal with (e.g. as a customer)
  – in the newspapers

• ask questions
how to succeed in 132

• learn (and apply) some basic principles
  – organizations are radically diverse
    • externally
    • internally
  – technology and organisations co-evolve
  – organisations use technology strategically

example

• the impact of a highly significant technology...
  – the later part of a century saw the widespread adoption of a technology that:
    • allowed organizations to store and retrieve information that was lost to them before
    • enabled the calculation of trends and patterns
    • required radical transformations in how people work
    • allowed organisations to operate across distances and distribute themselves across multiple sites

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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?

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

questions to ask

• what are the impacts?
  – what role does information play?
  – how will that role be affected by new technologies?
    • information can become more detailed and easier to process
  – how might that transform the organisation?
    • example: outsourcing internal services; Dell

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

questions to ask

• where does control reside?
  – information systems both constrain and enable
    • structuring the system in any given way opens up some
      opportunities but closes down others
  – what new opportunities does a system open up?
• whose purposes are served?
  – different information is valuable to different people
  – information comes with points of view
    • hence, so do systems... c.f. Conway's Law

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