### Organisational cultures (6.1)



#### Information systems

Flexibility



#### Organisational cultures and Structures



### (De)centralisation (6.2)

- High communication costs
  - Decisions made by relatively independent local units
- Medium communication costs
  - Managers collect information in the centre
- Low communication costs

Time

- Information can move both ways



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#### Power (6.5)Bases Coercive Authority to instruct and threat with sanctions IS increasing power base, Support Reward Use financial resources to reward others Administrative expertise - Create organisational regulations IS decreasing power base \* Resistance which bolster influence Technical expertise Being aware of technological trends and opportunities Referent - Convincing others that suggestions are consistent with accepted values and cultures Making previously secret The flowering information available. Which of feudalism.

power base is affected?

(Boddy et al, 2005, p 164)

### IS management policies (7.1)

- Monarchy
  - Top level management define information categories and reporting structures
- Technocratic utopianism
  - Modelling of all information, relying on emerging technologies
- Federalism
  - Negotiations and consensus of the key information elements and reporting structures.
- Feudalism
  - Information managed by individual business units
- · Anarchy
  - Absence of overall information policy, leaving individuals and user departments to manage their own information

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## Outsourcing (7.2)

Questions for those considering outsourcing

- 1. Are the systems being outsourced truly not strategic?
- 2. Are we certain that our IS requirements will not change?
- 3. Even if a system is a commodity, can it be broken off?
- 4. Could the IT department provide this more efficiently than an outside provider?
- 5. Do we have the knowledge to outsource an unfamiliar or emerging technology?
- 6. What pitfalls should we expect when negotiating the contract?
- 7. Can we design a contract that minimises the risks and maximises the control and flexibility?
- 8. What in-house staff do we need to negotiate strong contracts?
- 9. What in-house staff do we need to ensure that get the most out of our contracts?
- 10. What in-house staff do we need to enable us to exploit change?

What are the challenges for the application service provider (ASP)?

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**Relate Enterprise Resource Planning (ERP)** systems to

- •Organisational culture
- •Power
- •IS management policies
- •Outsourcing

## Management, users and IT staff

| Managers  | Users  | IS staff   |  |
|---|--|--|--|
| No clear business plan                          | No clear expression of<br>needs and expectations<br>of IS    | Inability to match<br>information systems to<br>business needs |  |
| Inability to spot strategic uses of IS          | Focus only on<br>operational support, no<br>strategic vision | Preoccupation with the technicalities of IS                    |  |
| Failure to communicate requirements to IS staff | Lack of appreciation of technical complexities               | Lack of understanding of<br>business environment               |  |
| Lack of appreciation of technical complexities  | No contribution to planning and policy of IS                 | Failure to market<br>business successes of<br>IS               |  |
| Insistence on cost justifying all investments   |  |  |  |

#### Participation

- User Participation and Democracy: A Discussion of Scandinavian Research on System Development
  - Bjerknes and Bratteteig
    - Scand J Inf Sys, 1995, 7 (1) 73-98
- · Reasons for user participation
  - Improving the knowledge upon which the systems are built
  - Enabling people to develop realistic expectations and reducing resistance to change
  - Increasing workplace democracy by giving the members of the organisation the right to participate in decisions that are likely to affect their work

#### Trade union research in Scandinavia

- Cooperation employers' federation and trade union action research (1965-70)
  - Increased involvement by workers in industrial management
    - $\rightarrow$  Improve productivity
    - $\rightarrow$  Introduce democracy also in industry
- Trade union action research (1970-80)

#### – Basic assumption

When not reflecting on their roles, systems developers and also researchers support those in power

#### Aims

- · Empower workers with respect to systems for work scheduling and control
- · Avoid deskilling of work
- · Develop knowledge within the union

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# Developing alternative technologies in the lab (1980-85)

- Development methods
  - Requirements specifications and models were too abstract
  - Prototyping
    - design-by-doing
    - Unnecessary to explicate work processes
- Computerized tools
  - Means of forming raw material into more refined products
  - Materialisation of accumulated knowledge about work process
  - Computer systems tools for skilled workers
- Strengthening trade union power through knowledge about work
  - Tools requiring specific skills for use
  - A collective that controls the production of professional knowledge and tools
    Power

#### Design by doing – graphical workers



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#### ... and in the workplace (1985-90)

- Mutual learning
  - Users and developers need knowledge about each other
  - During work and during seminars
- Development methods
  - Concrte models were useful
- Computer applications
  - The value of computer systems is demonstrated through their use
- Design for collaborative work needs to depart from studies of actual work, not lab experiments
- Strengthening professional power through
  - Computer systems fitted for practice of a particular profession



#### Work sheet for nurses

| 507-2 -43<br><name>, Hans<br/>Diag: AMI-F<br/>Hosp.hist: Arr. 24.1. Earlier post-<br/>traumatical epilepsy, uses fenemal.<br/>Still bothered with some pain. Out</name>  | 508 -19<br><name>, Kjell<br/>Diag: Arr. 25/1 dyspnoe<br/>Hosp.hist: AMI and insuff. earlier.<br/>Now acute dyspnoe.Improved cond<br/>from morphin ogdiural. Foleycat.</name> | 510 -27<br><name>, Gunnar<br/>Diag: Arr. 25/1 AMI stop<br/>Hosp.hist: Hypertension earlier. To<br/>day br.pain. Pulse and resp.less in<br/>doctor's office. H.massage couple</name> | 512-1 -24<br><name>, Thorbjørn<br/>Diag: Arr. 22.01. AMI-L small<br/>Hosp.hist: Been trough uncomplicates<br/>small AMI now. Proved leukemi late<br/>Iy. ST-swel V2-V3. Proved Cronica</name> |
|--|--|---|---|
| of bed. Tries to stop smoking.   | Started on capoten.  | of min. Rubbing. Insuff. Tachycard  | lýmfatical leukemi. 3 days.<br>IV:  |
| Inv:   | Inv: 27/1: 3dayspr. Ecg  | Inv: 27/1: 3dayspr. Ecg, stix   | Inv:  |
| 507-1 -10<br><name>, Albert<br/>Diag; AMI-N<br/>Hosp.hist: Arr. 24.1. Earlier asthma<br/>bronciale. Felt br.pain since 21.1.<br/>Still br.p. arriving ward. ECG:AMI<br/>N. Now bothered with insp.pain.<br/>To be acrivated</name> | WORK TEAM  | WORK TASKS  | 512-2 -21<br>, Torhild<br>Diag: Arr. 26/1 88. AMI? H.insuff?<br>Hosp.hist: AMI 77 and 81. Increasing<br>AP since Nov.87. Insuff. lately.<br>ACT: Br.pain since 5pm. Dyspnoe.                  |
| IV:  |  |   | IV: Nitrodr.  |
| Inv:   |  |   | Inv: 27/1: 2d. ECG.stix   |
|  | I  |   | I15   |

Conflict and harmony perspectives in IS research

- Harmony
  - Socio-technical
  - Employers and employees have common interests in developing useful computer systems
  - Researchers should balance the interests
- Conflict
  - Collective resource approach
  - Inherent conflict between employers and employees, and employers have superior power
  - Researchers should act in the interest of the underpriviledged



Which choices do developers have?