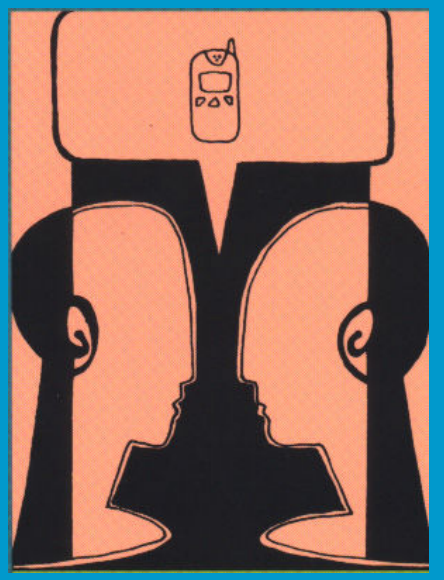
MKT project 1 & Mens-Machine-Interactie

slides chapter 13 Dix et al.
Socio-organizational issues and stakeholder requirements



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socio-organizational issues and stakeholder requirements

- Organizational issues affect acceptance
  - conflict & power, who benefits, encouraging use
- Stakeholders
  - identify their requirements in organizational context
- Socio-technical models
  - human and technical requirements
- Soft systems methodology
  - broader view of human and organizational issues
- Participatory design
  - includes the user directly in the design process
- Ethnographic methods
  - study users in context, unbiased perspective

Organisational issues

Organisational factors can make or break a system

Studying the work group is not sufficient

- **any system is used within a wider context**
- **and the crucial people need not be direct users**

***Before* installing a new system must understand:**

- **who benefits**
- **who puts in effort**
- **the balance of power in the organisation**

… and how it will be affected

Even when a system is successful

… it may be difficult to measure that success

Conflict and power

CSCW $\stackrel{?}{=}$ computer supported *cooperative* work

- people and groups have conflicting goals
- systems assuming cooperation will fail!

e.g. computerise stock control

stockman looses control of information

$\Rightarrow$ subverts the system

identify stakeholders – not just the users

Organisational structures

- Groupware affects organisational structures
  - communication structures reflect line management
  - email – cross-organisational communication

Disenfranchises lower management
⇒ disaffected staff and 'sabotage'

Technology *can* be used to change management style and power structures
  - but need to know that is what we are doing
  - and more often an accident !

Benefits for all?

Disproportionate effort

who puts in the effort ≠ who gets the benefit

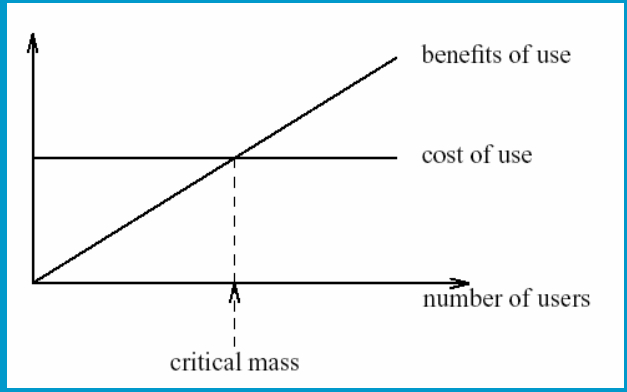
Example: shared diary:

- **effort: secretaries and subordinates, enter data**
- **benefit: manager easy to arrange meetings**
- **result: falls into disuse**

Solutions:

- **coerce use !**
- **design in symmetry**

Critical mass



Early telephone system:

- few subscribers – no one to ring
- lots of subscribers – never stops ringing!

Electronic communications similar:

- benefit $\propto$ number of subscribers
- early users have negative cost/benefit
- need critical mass to give net benefits

How to get started?

- look for cliques to form core user base
- design to benefit an initial small user base

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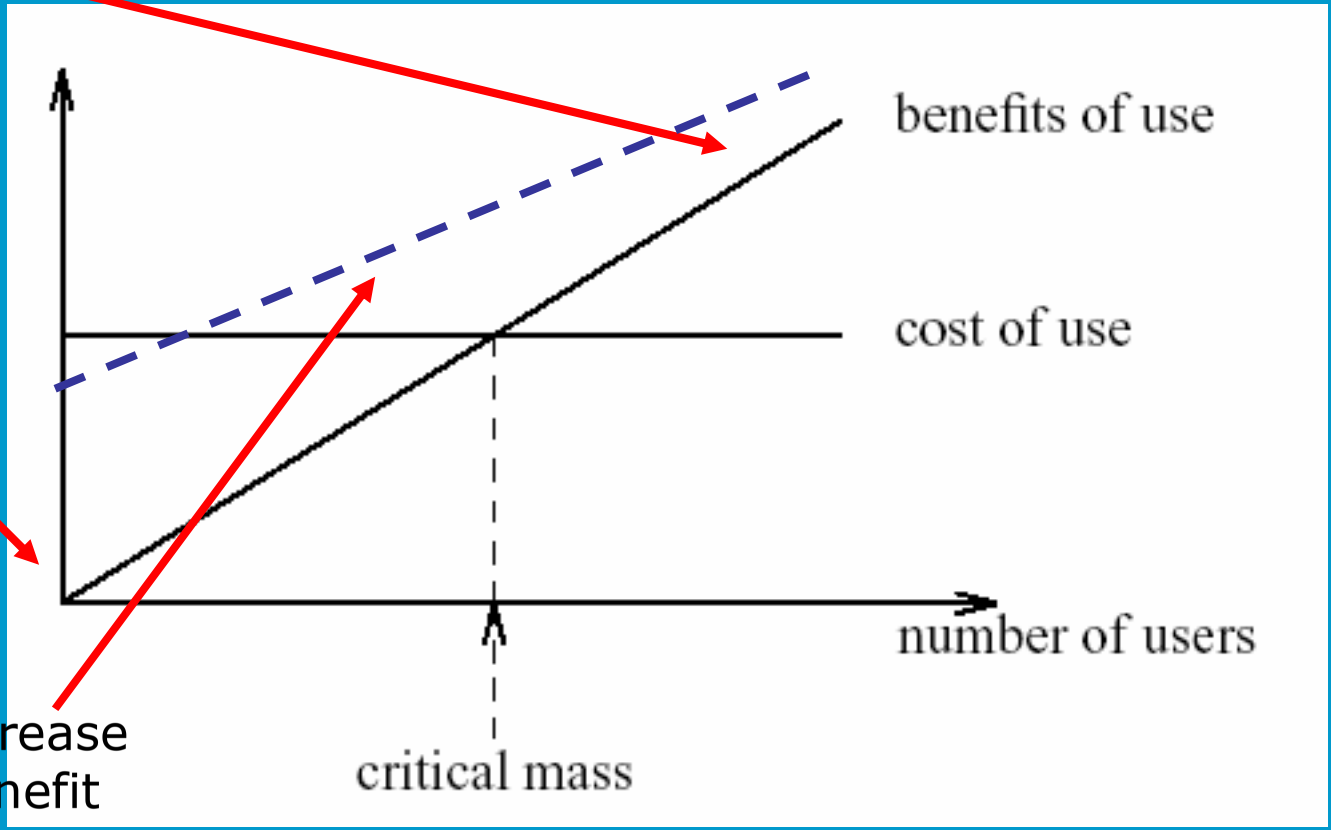
Critical mass

strong benefit when lots of users

.. but little benefit for early users

solution – increase zero point benefit



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capturing requirements

- need to identify requirements within context of use
- need to take account of
  - stakeholders
  - work groups and practices
  - organisational context
- many approaches including
  - socio-technical modelling
  - soft system modelling
  - participatory design
  - contextual inquiry

who are the stakeholders?

- system will have many stakeholders with potentially conflicting interests
- stakeholder is anyone effected by success or failure of system
  - primary - actually use system
  - secondary - receive output or provide input
  - tertiary - no direct involvement but effected by success or failure
  - facilitating - involved in development or deployment of system

who are the stakeholders?

Example: Classifying stakeholders – an airline booking system

An international airline is considering introducing a new booking system for use by associated travel agents to sell flights directly to the public.

Primary stakeholders: travel agency staff, airline booking staff

Secondary stakeholders: customers, airline management

Tertiary stakeholders: competitors, civil aviation authorities, customers' travelling companions, airline shareholders

Facilitating stakeholders: design team, IT department staff

who are the stakeholders?

- designers need to meet as many stakeholder needs as possible
  - usually in conflict so have to prioritise
  - often priority decreases as move down categories e.g. primary most important
  - not always e.g. life support machine

Participatory design

In participatory design:
workers enter into design context

In ethnography (as used for design):
designer enters into work context

Both make workers feel valued in design

… encourage workers to 'own' the products

Ethnography

very influential in CSCW

a form of anthropological study with special focus on social relationships

does *not* enter actively into situation

seeks to understand social culture

unbiased and open ended