IV. Problems with Information System Projects

Different perspectives on IS problems
User’s perspective
Client’s perspective
Developer’s perspective
Stakeholder analysis
Ethical and professional responsibility
ACM/IEEE code of ethics

Perspectives on Problems

- Consequences of failure are severe: over $81B in the USA alone (1995.)
- Problems range from cancelling a project altogether (no system!), to delivering a system that supports only some of the requirements and/or is never actually used.
- What can go wrong?
  - End user perspective
  - Client perspective
  - Developer perspective

End User’s Perspective

- No system: What system? I haven’t seen a new system...
- Unsuitable: It might work, but it’s dreadful to use...
- No engine under the hood: It’s very pretty – but does it do anything useful?

Client’s Perspective

- Too expensive: If I’d known the real price, I’d never have agreed...
- Typical project is one year late and 100% over-budget!
- Too late: It’s no use delivering it now – we needed it last December! (e.g., Y2K)
- Bad press: OK, so it works – but the installation was such a mess that my staff will never trust it.
- Change of mind: I didn’t want it in the first place...
- Change of requirements: Everything’s changed now – we need a completely different system...

Developer’s Perspective

- Wrong requirements: We built what they said they wanted...
- Unsufficient resources: There wasn’t enough time to do it any better...
- Incomplete requirements: How can I fix it? I don’t know how it’s supposed to work
- Impossible requirements: We said it was impossible, but no-one listened...
- Blame the others: The system’s fine – the users are the problem

Why Do Things Go Wrong?

Type of failure | Reason for failure | Comment
--- | --- | ---
Quality problems | The wrong problem is achieved | System is not used
Productivity problems | Software switches the manager | Lower level switches when the manager

Courses of Defective Software Subsumed from PMI (1994).
Stakeholder Analysis

- The person who has the problem is not necessarily the developer of
  systems, its user or its client.
- **Stakeholder analysis** determines impact that a new information
  system on different groups, e.g., stakeholders for a new bank IS
  located in a supermarket.

Professional and Ethical Responsibility

- System analysis and design involves wider responsibilities than
  simply the application of technical skills.
- Analysts and designers must behave in an honest and ethically
  responsible way if they are to be respected as professionals.
- Ethical behaviour is more than simply upholding the law.

Issues of Professional Responsibility

- **Confidentiality** -- Analysts and designers should normally
  respect the confidentiality of their employers or clients
  irrespective of whether or not a formal confidentiality agreement
  has been signed.
- **Competence** -- Analysts and designers should not misrepresent
  their level of competence; they should not knowingly accept work
  which is demands skills that go beyond their competence.
- **Intellectual property rights** -- Analysts and designers should be
  aware of local laws governing the use of intellectual property such
  as patents, copyright, etc. They should be careful to ensure that
  the intellectual property of employers and clients is protected.
- **Computer misuse** -- Analysts and designers should not use their
  technical skills to misuse other people’s computers; computer
  misuse ranges from relatively trivial (game playing on an
  employer’s machine, say) to extremely serious (dissemination of
  viruses).

ACM/IEEE Code of Ethics

- The professional societies in the North America have cooperated
  to produce a code of ethical practice.
- Members of these organisations sign up to the code of practice
  when they join.
- The code contains eight principles related to the behaviour of and
  decisions made by professionals, including practitioners,
  educators, managers, supervisors and policy makers, as well as
  trainees and students of the profession.

Hidden Costs of Poor Design

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