

This doc is an aggregation of the files from /note/comp3009/swtrends

Trends In Software Development

- Large organisations => Small companies
- Real Teams => Virtual teams
- Big hierarchy => telecommuters
- Protocols within organisations => Intranet and internet protocols

Economic Trends

- Specialised knowledge high price => ever more software less development cost
- Large expensive systems => Smaller cheaper systems
- Few users => Pervasive systems
- Technology driven => market driven

- Philippines – Bombay – U.S.A.
- Old cost models obsolescent
- Time & Materials (cost plus) => less common.
- Penalty clauses => more common.

- Software a specialised art school kids do it
- Large formal processes & infrastructure responsive to change
- Large maintenance task disposable
- Software cheaper to rewrite

- Develop processes for your own environment, reflecting business needs
- Do not accept SEI processes!

Organisations

- Smaller
- Flexible
- More virtual
- Supported by Cottage Industries specialised in eg.. GUI
- You have to integrate their products.

Software Architecture

- More open, flexible,
- Less concerned with optimisation.

People

- less need for coders,
- more need for architects,
- human communications needs are greater.

Reuse of architectures as well as code.

Reasons for Software project failure:

- Shortage of:
 - Resources
 - Time
 - People
 - Tools.
- A Mature process is not the saviour of s/w development.
 - We need a tailored process

Software Quality departments are a **VERY EXPENSIVE OVERHEAD**

- People must communicate
- Teams must work well

We are moving towards:

- Loose organic S/W organisations
- processes as a skeletal structure
- more reuse
- success not dependent on process maturity (Karolak)