CSCW
New collaborative apps are changing CSCW

Our products | Our book | Company blog | Product blog

Work well.

Over 1 million people and businesses use our web-based applications to get things done the simple way.

We aim for the software sweet spot: Elegant, thoughtful products that do just what you need and nothing you don’t.

“One of the Net’s rising stars.”

TIME

Basecamp™
Project management and collaboration
Collaborate with your team and clients. Schedules, tasks, files, messages, and more.

Highrise™ —OUR NEWEST PRODUCT!
Track leads, clients, vendors, simple CRM
Keep track of who your business talks to, what was said, and what to do next.

Backpack™ —JUST UPDATED!
Information organizer and calendar
Gather your ideas, to-dos, notes, photos & files online. Set email and mobile reminders.

Campfire™
Real-time group chat
It’s like instant messaging, but optimized for groups. Especially great for remote teams.

Source: 37 Signals
37 Signals : Getting Real, a reminder

- Interface First
- Design the interface before you start programming
  - Too many apps start with a program-first mentality. That's a bad idea. Programming is the heaviest component of building an app, meaning it's the most expensive and hardest to change. Instead, start by designing first.
  - Design is relatively light. A paper sketch is cheap and easy to change. HTML designs are still relatively simple to modify (or throw out). That's not true of programming. Designing first keeps you flexible. Programming first fences you in and sets you up for additional costs.

Source: 37 Signals
What is CSCW?

- **CSCW** [is] a generic term, which combines the understanding of the way people work in groups with the enabling technologies of computer networking, and associated hardware, software, services and techniques.

- A.k.a. Groupware
Top 3 Drivers for changes in CSCW

Key Drivers

• The Network
• The Network!
• The Network!!
Why is CSCW design hard?

- Multiple users
- "Virtual" (not physical) presence
- The Network!!

- Virtual presence could be “Beyond Being There”
- Some distinguishing features of CSCW:
  - asynchronous communication
  - anonymous communication
  - automatically archive of communication

CSCW Matrix

Different time / different place

Communication + Coordination
- Wiki
- Blogs
- Workflow
- Version Control
- Shared participation over time
- Geographically world wide

Example: growth of different time / different place

Same time / different place

Remote interaction
- Video-Conferencing,
- Real-time groupware
- Messaging (Instant messaging, Email)
- Virtual worlds
- Multi-User editors
- Shared Screen (vnc)

- Multi-user participation
- Nonverbal cues
- Differing levels of fidelity (text, voice, avatar)

Example: recent enhancements in same time / different place

Skype 1.0

Different time / same place

Continuous task
- Team rooms
- Large displays

Example: ideas for different time / same place

Lean Manufacturing:
Visible System Metrics

Same time / same place

Face to face interaction

- Roomware
- Shared tables, wall displays
- Group Decision Support Systems (GDSS)
- Single display groupware

The original example: same time / same place

With “PowerPoint Slides”

Without “Slides”

Is PowerPoint in need of CSCW innovation?

Source: http://www.presentationzen.com/presentationzen/2006/03/index.html
Example: same time / same place

Challenges in Implementing CSCW

Table 1. Eight challenges for groupware developers

1. **Disparity in work and benefit.** Groupware applications often require additional work from individuals who do not perceive a direct benefit from the use of the application.

2. **Critical mass and Prisoner’s dilemma problems.** Groupware may not enlist the “critical mass” of users required to be useful, or can fail because it is never to any one individual’s advantage to use it.

3. **Disruption of social processes.** Groupware can lead to activity that violates social taboos, threatens existing political structures, or otherwise demotivates users crucial to its success.

4. **Exception handling.** Groupware may not accommodate the wide range of exception handling and improvisation that characterizes much group activity.

5. **Unobtrusive accessibility.** Features that support group processes are used relatively infrequently, requiring unobtrusive accessibility and integration with more heavily used features.

6. **Difficulty of evaluation.** The almost insurmountable obstacles to meaningful, generalizable analysis and evaluation of groupware prevent us from learning from experience.

7. **Failure of intuition.** Intuitions in product development environments are especially poor for multiuser applications, resulting in bad management decisions and an error-prone design process.

8. **The adoption process.** Groupware requires more careful implementation (introduction) in the workplace than product developers have confronted.

Implementing different time / different place systems

Model View Controller

Ruby on Rails

Eye to the future: iRoom same time / same place @ Stanford