Sun and CTU cooperation

Usability testing

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Agenda

Sun Microsystems and CTU cooperation

- Benefits of cooperation from Sun perspective
- The story of lab

Usability study – general information

- What is it?
- Why?
- How?

Discussion

Context of cooperation

Why do we share know-how, resources etc.?

- HIE (UCSD, HCI...) relatively new in CR
- HCI recognized as a key factor for success in Sun
- xDesign tends to grow, but...

...dealing with lack of usability experts

- chance to educate usability experts and build a community
- chance to identify a recruit talents

Ways of cooperation

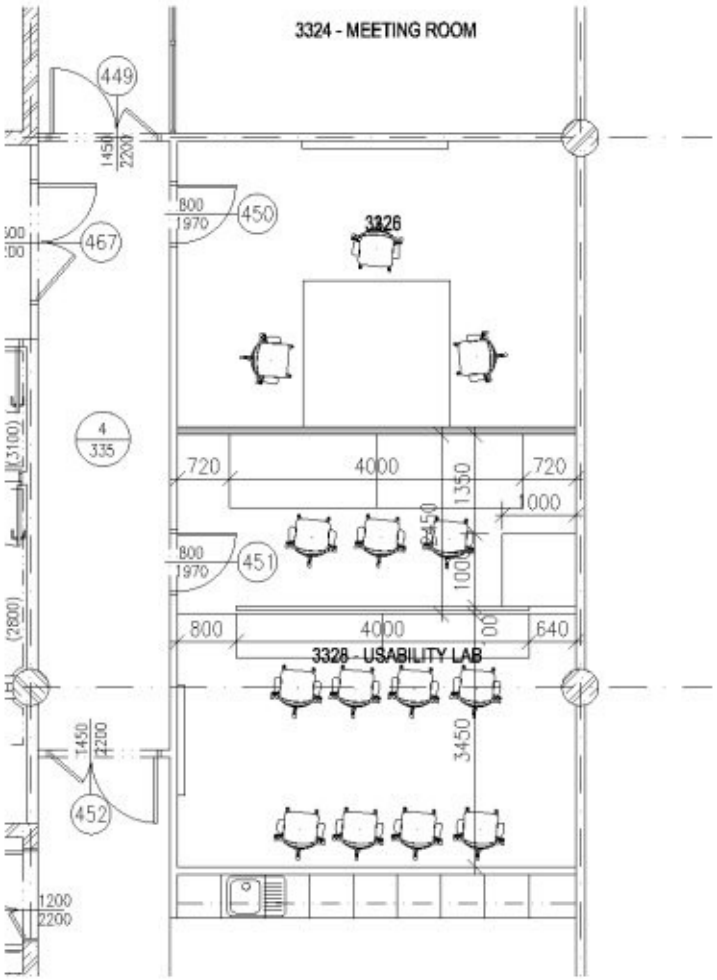
- common usability lab
- student projects
  - usability studies (NetBeans help system, SXDE)
  - a11y in NetBeans
  - Swing components skinning
- community support – SIGCHI, WUD

Usability lab

- 1st Usability lab in Central Europe
- built in 2004
  - university projects
  - students' education
  - Sun projects (about 20 studies of Sun tools, some reports available at http://ui.netbeans.org/usability/)
- currently using new lab at Sun Prague site

New lab

- one-way mirror
- advanced recording technology
- on site



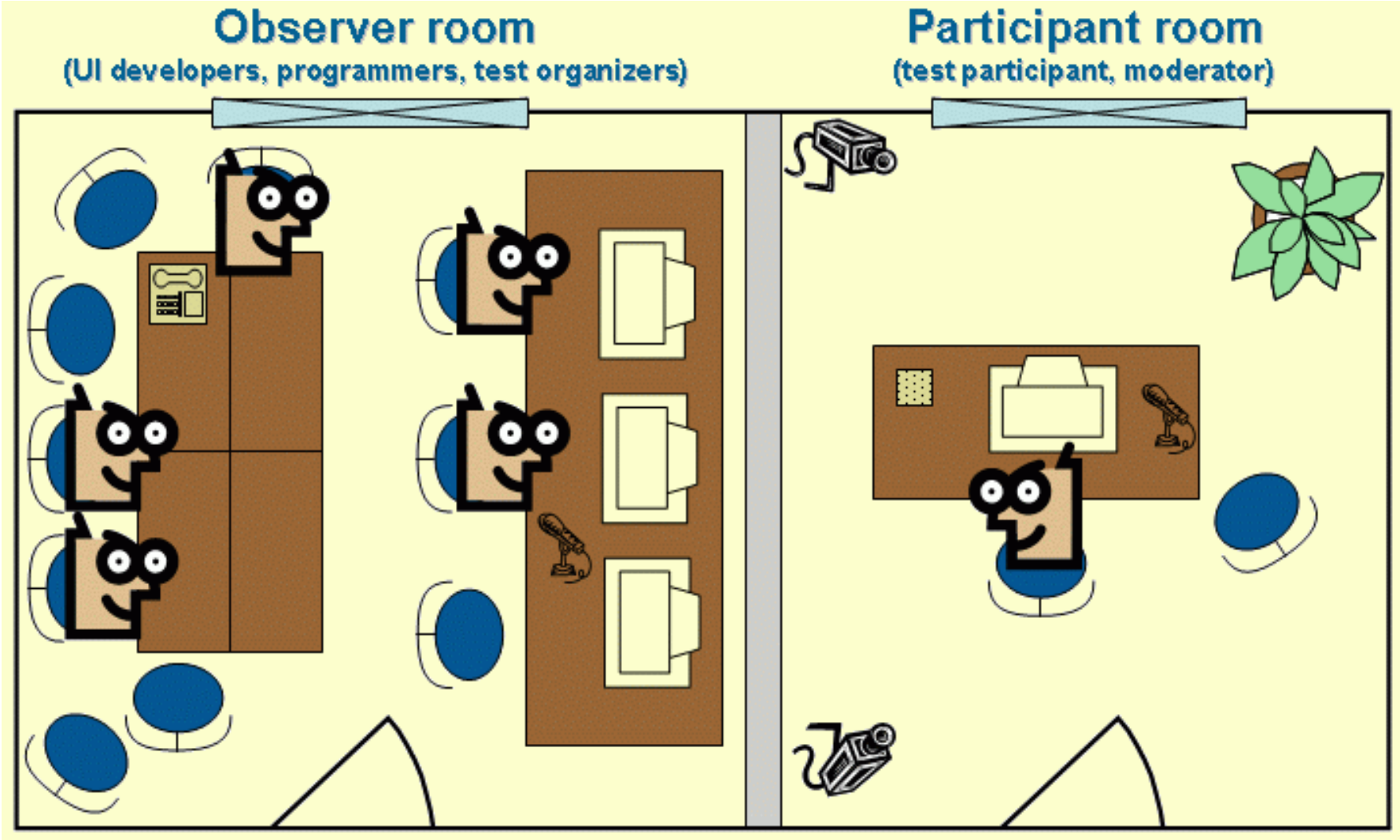
Usability study – a basic description

- Method of collecting user data
- Part of UCSD
- Identification of usability problems
- Not only in SW

Why to test usability?

- Our assumptions about how customers use the product X real usage of the product --> FRUSTRATION
- Chance to see real user performing tasks in her/his own way
- Makes discussions (production issues, int. design issues) easier
- Comparing two versions of product (even with competitor)
- Significantly reduces development and service costs!

How does it look like?



When to test? Whenever!

- In the beginning of PLC – prototypes
- Before release (alfa/beta versions)
  - Disaster check
- After release
  - Input for planning following versions

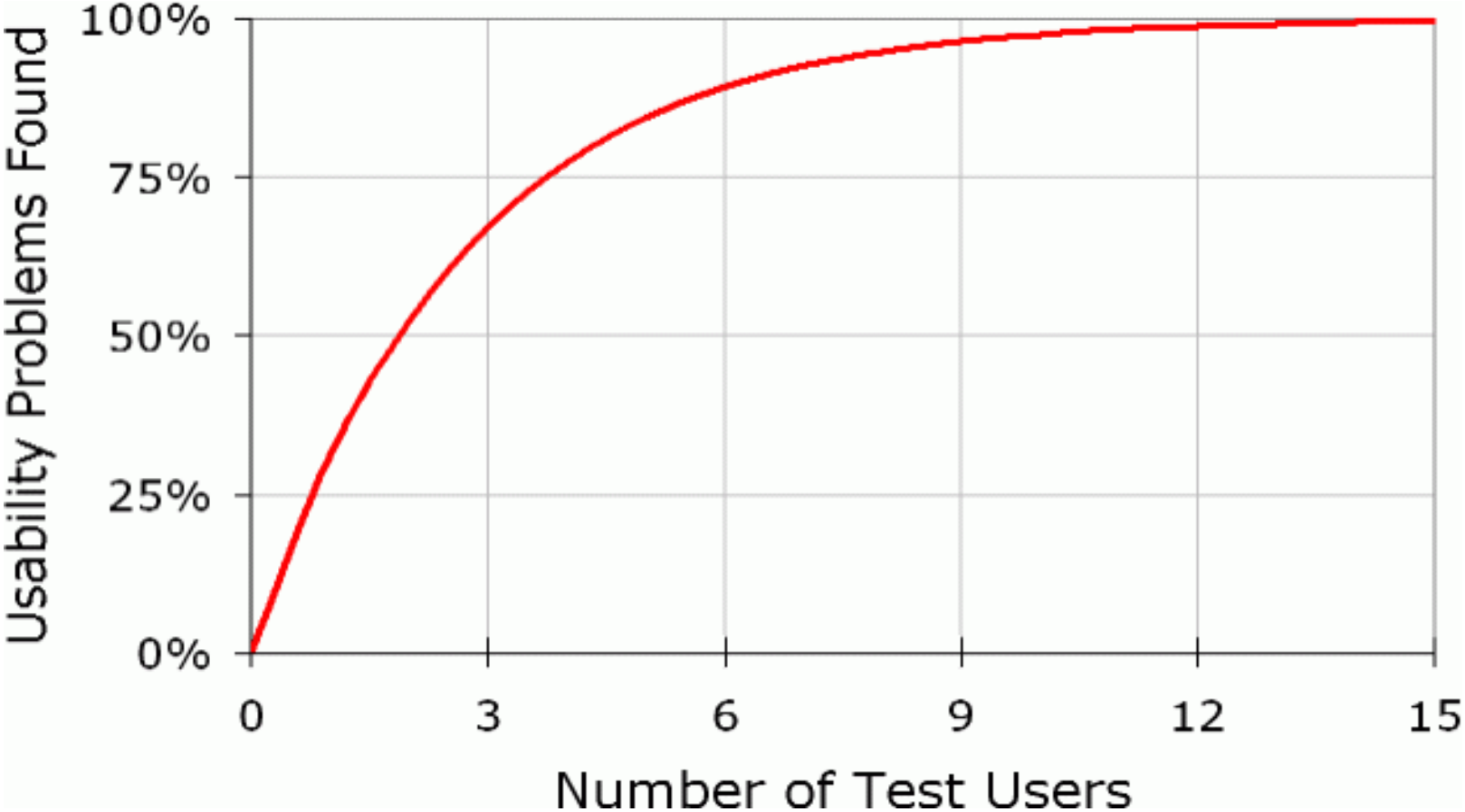
Advantages and Disadvantages

- Advantages
  - Provides information about real usage of the product
  - Effective
  - Relatively cheap
- Disadvantages
  - UI should be testable
  - It does not provide any solution of problems
  - Requires large input from development team

Qualitative vs. Quantitative approach

- Qualitative
  - 6 – 8 participants
  - Less time consuming, reveals 90% of problems
  - Common in commercial environment
- Quantitative
  - 20+ participants
  - Statistical evaluation - metrics
  - Government contracts, universities

How many participants to test?



How to run such a study?

What do we need for testing?

- Participants
- Observers
- Product
- Lab (recording equipment) – various levels of elaboration
- Complete preparation
- Patience

Participants

- Target audience
- Screener
- Recruiter
- Schedule
- Incentive

Instructions

- Explain a purpose of testing
- “Think aloud”
- We do not test the participant, but the product
- Describe test process

Tasks

- Imitate real usage of product
  - Based on real motivation (task focused)
  - Expressed in words of user
  - Do not describe in-between steps

Incorrect: Use property sheet to change...

Correct: Develop a web app, that provides...

Report

- Delivers findings
- Helps to incorporate findings into production process
- Structure
  - Goals
  - Setting (tasks, participants)
  - Results (recomendations)
  - Conclusion
- Screenshots

Hungry for more infomation?

- Alan Cooper: The Inmates Are Running Asylum
- Mike Kuniawsky: Observing The User Experience
- Jacob Nielsen: Usability Engineering

Discussion
Q&A

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