Group think

How can you use these tools?
Agenda

- Requirements Definition
- Focus Groups
- Wants/Needs Analysis
- Other Data Collection Methods
Requirements Definition

- Remember...
- Define the detailed requirements for the system you are developing
- Single vs. Group data collection
- Brainstorming
- Prioritizing
Data Gathering Techniques

1. Observation of Current Tasks
2. Interviews & Contextual Inquiry
3. Ethnography
4. Surveys & Questionnaires
5. **Focus Groups & Expert Debriefing**
6. Competitive Product Review
7. Documentation mining
8. Data logging
5. Focus Groups

- Structured Interview with groups of individuals
- Focus on preferences and views, not performance
- Relatively low cost, quick way to learn a lot
- Audio or video record, with permission
Focus Group Issues

- Have questions in advance
  - Can be needs, wants, critiques, anything
- Moderator’s role is critical
- Manage conversation
- Audio, video, scribe(s)
- Digest and summarize
5B. Wants/Needs Analysis

- Focus groups, followed by prioritization
  - 5-12 participants
  - Moderator
  - Scribe
  - Large writing surfaces
  - Booklets (one per participant)
W&N Analysis: Procedure

- Warmup

- “Moderated group brainstorming”
  - Ideas from participants
  - Moderator rephrases wants and needs
  - Scribe only documents moderator’s words
  - Number each idea

- Prioritization
  - Each participant lists top 5 wants/needs, rewriting the need, and adding comments and/or suggestions (one per page, in booklet)

- Collate, count, document ideas
Discussion of Groups

Can you use these in your project?

- Pros?
- Cons?
- Issues?
6. Competitive Products

- Looking for both good and bad ideas
- Why are they successful or unsuccessful?
- What does successful really mean?
  - (Note: Successful does not equal usable)

Note: Don’t search for patents in brainstorming or design phase
7. Document Mining

- Documentation
  - Often contains description of how the (current) tasks *should* be done
  - Standards docs
  - Manuals
  - Histories
  - Best Practices
8. Data Logging

Automatically tracking how the task is being done:

- Keystroke/mouse clicks
- Timers
- Logs of transactions
- Physical location/movement trackers
  - Eye trackers
  - Physiological sensors
  - Cell phones
  - Aware Home
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Implications for Design!!??

- Once you understand the context, users, and task, use that to trim down the design space.
- Constraints are your friend, and...
- Data lead to constraints.
Upcoming

- Predictive Evaluation
- Interpretive Evaluation
- User Modeling
  - Physical models
  - Cognitive models