Electronic Focus Groups
Case: Usability study of HSE’s web pages

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Structure of presentation

• What are electronic focus groups?
• Groupwork vs. individual work
• GSS-technology employed
• Advantages of electronic focus groups
• Disadvantages of electr. focus groups

• Demonstration by way of an example: Usability study of HSE’s web pages
Electronic / computer supported focus groups

- In a group interview every participant has a (laptop) computer
- Moderator (facilitator) conducts the session from his/her computer (screen is shown at the public screen)
  - Electronic discussions are shown both at own computers and at public screen
- Technique used: Group Support Systems (GSS), also called Electronic Meeting Systems
- The use of GSS is as easy as e-mail (to the participants)

An example of a "non-technological" GSS setting (Vanenburg Investments)
Groupwork vs. individual work

“When a group’s final decision is compared to the independent points of view that the members held before entering the group, the group’s effort is almost always an improvement over its average individual resource, and often it is better than even the best individual contribution”

Hall, 1971, "Lost on the Moon", Psychology Today

➢ Focus groups employ group discussions due to expected synergy effects

Group Support Systems (GSS)

• Development started already in 1980’s at the University of Arizona (Center for the Management of Information CMI)
• The development of the Internet and the pressures to cut down traveling costs have increased interest towards GSS
• Same time - Same place is most common mode, but distributed virtual sessions (either same time or different time) will gain popularity
• HSE has licenses for GroupSystems Meeting Room (20 users) and for Facilitate.com (web-based, unrestricted nr. of users)
Collaborative IS that support task-oriented collaboration

- e-mail
- teleconferencing (e.g. CU-SeeMe)
- videoconferencing (e.g. CU-SeeMe)
- dataconferencing (e.g. WebEx)
- web-based collaborative tools (e.g. Yahoo Groups)
- proprietary groupware tools (e.g. Lotus Notes, TeamWare)

➢ **Electronic Meeting Systems EMS / GSS**
  (e.g. GroupSystems, Facilitate.com, MeetingWorks, WebIQ)

Source:

Different levels of collaborative capability map to different types of technology

- **Collective capability** ("sprinter")
  - Applications: Word Processing, spreadsheets, graphics
- **Coordinative Capability** ("relay")
  - Applications: Unstructured information sharing, application sharing, video teleconferencing, workflow, structured team discussions, shared calendaring
- **Concerted Capability** ("crew")
  - Applications: GSS, EMS, CSCW systems

(Nunamaker, Romano and Briggs "Increasing Intellectual Bandwidth: Generating value from Intellectual Capital with IT", *Group Decision and Negotiation*, 2002)
Integrated framework of KMS and CIS - The Intellectual Bandwidth (IB) model
(Nunamaker et al., 2002)

The strength of GSS is built on..

- **Structured process** according to predefined agenda
- **Anonymity** (when wanted)
- **Simultaneous communication** via computers, also normal discussion allowed!
- Possibility to **vote** and discuss **realtime voting results** in a matter of minutes
- **Group memory**: reports / minutes of meeting can be automatically created

- **GSS’s goal is to increase the benefits (process gains) and decrease the problems (process losses) of group work**
Benefits of computer support

- Anonymity enables more genuine comments, also shy, "backbench" people dare to speak
- No need to wait for one's own turn to speak
- No one can dominate the discussion
- Decreases groupthinking, social conformity
- Ideas can be built faster on others' ideas
- More ideas and more innovative ideas at the same time frame
- More participants can attend in focus groups (e.g. 20) without complicating things
Benefits continued

- Ideas are evaluated on their own merit, and not based on who suggested them
- People can select on which topics to comment (on which they have more to say)
- Sorting the voting results using STD points topics that need further discussion (Crowbar)
- It is easy and fast to collect background and feedback information (also quantitative)
- Enables distributed/online focus group sessions to be conducted
- Structured agenda helps to conduct several focus group sessions in the same way
- Easier to manage group dynamics

Disadvantages of computer support

- Not everybody is willing to use computers (slow typists though often learn to comment compactly, which is good)
- Computer as a media is poorer as gestures and facial expressions are left out (from typed discussion)
- The participants are not always as satisfied with the process, which is less social than normal discussions
- Voting results can be used inappropriately (if looking at the mean only, when the ballots span the whole range used, e.g. Likert scale 1 to 7)
- Enables free-riding (with larger, anonymous groups)
- Investment to technology is relatively high
- Subject to technological breakdowns
Basic patterns of thinking

- Idea generation - ideation (divergence)
- Convergence of ideas (shared meaning / filtering)
- Organizing ideas (abstracting / placing)
- Evaluation of ideas (voting, argumenting)
- Building consensus
- Combinations of the above

- ThinkLets ("ingredients in good meeting recipes") may be used to create repeatable, predictable patterns of thinking among people making an effort toward a goal (e.g. Crowbar) (Briggs et al. 2003, Journal of MIS, "Collaboration Engineering with ThinkLets to Pursue Sustained Success with Group Support Systems")

Examples of usage at HSE

- HSE’s IT advisory board meetings (development of HSE’s information strategy)
- Full-day strategy development session of Oodi-Consortium (participants from 13 universities)
- Defining Stage-Gate criteria (in NPD) for an energy supplier
- Defining IT Governance criteria for an ITG research project
- Ideation and prioritization of projects (Electronic Commerce Institute of LTT Research)
- Designing collaboration processes for feedback-driven IS development (case WebOodi)
- Innovating mobile Presence services in B-to-C sector
- The effect of brand and image in web-page marketing communication to the choice of study place
- Development of teaching methods (how to make thesis seminars more efficient)

- Usability study of HSE web pages
Usability study of HSE's web pages
(Sunikka, M.Sc. thesis, 2004; Kontio et al. ISESE ’04 paper)

- Electronic focus group was used as pre-study for planning actual one-by-one usability tests
- 9 participants from faculty and staff (comparable pre-study was done to students via web survey)
- Duration 2 hours
- The case obeyed traditional focus group questioning concept, except that questions were presented one sub-area at a time (no need to wait for others to finish on some issue)
  - It is possible to understand focus groups as a method (and not a single technique). The session can then include brainstorming, SWOT-analyses, mind mapping, nominal group technique, scenario technique etc. (see e.g. Langford and McDonough, 2003, Focus groups: supporting effective product development).
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Piilotettu asteekolla 1-5, jossa 5 on korkein pisteämäärä

1. Paljon informaatiota
2. Helppo valmistaa
3. Ensisijaisen apumateriaalin
4. Tervetuloa virtuaalisesti
5. Tapaturmat
6. Hyvä virtuaalinen ilme, informatiivinen
7. Kasvion yleisöön pääsyn kaksidimen... (Jos tapahtuu, tarvitaan lisää teknisiä tietoja)
8. Järkkäinen henkilökohta
9. Kurssien tekninen edut (Jos käydään virtuala...)
10. Kasvion tekniset, virtuala... (Jos tapahtuu, tarvitaan lisää teknisiä tietoja)
11. Kurssien tekniset, virtuala... (Jos tapahtuu, tarvitaan lisää teknisiä tietoja)
1. Soveltujen GroupSystemsmin käytö mielestäni tilallaen fokusyrityshallintuksessa?

2. Kaipasitko eremmän ohjelma ja neuvoja?

3. Olko sinulla riittävästi aikaa vastata kysymyksiin?

4. Mitkä kysymykset tuntuivat sinusta hankalit?

5. Kuninka hyvin fokusuivimän tavoitteet saavutettiin mielestäsi?

6. Oivatko tulokset mielestäsi hyödyllisiä?

7. Kuninka tehokkaasti prosessi auttoi keskittymään olennaisiin asioihin?

8. Pystyitko GroupSystemsmin tarjoamaan sellaisia hyötyjä, joita ei saavutettu tällöin keskustelutilanteissa?

9. Käyttävätko GroupSystemsillä (toista vastauksaesittelijaa) uudessa aamutoimessa keskustelutilanteissa?

10. Suositteletko GroupSystemsmin käytöstä muille?

11. Vapaamuotoiset kommentit?
Analyzing the results

- Anonymous comments obtained were much more frank than colleagues’ comments from the usability tests conducted one-by-one
- Usability tests were able to produce more detailed analysis although the most severe problems were found already in the focus group discussions
- Compared to the 10-minute web survey, the focus group provided information on more detailed issues since there was more time

➢ The study recommends the combination of two or more methods in usability studies
Useful references


Reminder of N'Vivo training!

- For handling qualitative research projects / literature reviews etc.
- [www.qsrinternational.com](http://www.qsrinternational.com), demo version may be loaded (fully functional except saving)
- Mon–Tue 20. – 21. December 2004 (HSE Main Building, WMData Hall C331)
- Trainer: Prof. Henrik Gahmberg /Vaasa University
- Funded by GEBSI
- Enroll by Nov 1st to merja.makinen@hkkk.fi
### GroupSystems Tools

**Categorizer**
Used to collect a list of ideas, then categorize those ideas into logical groupings. The group can brainstorm on one single list, or enter ideas directly into the categories. Common uses include cause and effect analysis; organizing lists of tasks; and simple brainstorming.

**Vote**
Eight voting methods, including a customizable point scale, make the voting process flexible and powerful. Used to evaluate, make decisions, and build consensus.

**Group Outliner**
Used to generate and/or organize ideas into a familiar hierarchical structure. Outlines can be displayed in bulleted or numbered format. The leader can distribute the whole outline to participants, or allow them to work in subgroups. Common uses include action planning; group writing; and process design.

**Topic Commenter**
The leader enters a list of topics and asks participants to comment on those topics. Common uses include discussing strengths and weaknesses (SWOT analysis) and focus group research.

*Source: GroupSystems.com*

### GS Tools (2)

**Alternative Analysis**
Used to evaluate a list of alternatives based on multiple criteria. Sophisticated charting allows for in-depth analysis. Common uses include evaluating job candidates; assessing risks; rating vendor proposals; and evaluating options.

**Electronic Brainstorming**
Used for simultaneous and anonymous idea sharing on a specific question or issue. Common uses include team building; broad or focused brainstorming; and visioning or strategic planning sessions.

**Survey**
Used to build, distribute, and collect survey forms. Common uses include employee feedback surveys; 360 performance reviews; and customer surveys.

*Source: GroupSystems.com*