I214 Diary studies

October 2, 2008
What is a diary study?

Participants collect data about events in-situ, *as they happen*

**Asynchronous feedback**
Researchers collect repeated responses to a set of standard questions

**Synchronous elicitation**
Participants record/capture media that are then used to prompt interview discussion

from Carter and Mankoff 2005

MIT student completing “information-seeking” diary study in a library, 2006

http://libstaff.mit.edu/webgroup/userneeds/index.html
Methods for collecting data

Survey-style forms
online or paper

Photographs / Video
digital or disposable film camera, mobile phone

Audio recording
handheld recorder, mobile phone

Aggregating data online
Blogs (text, audio, and video), Twitter, Jaiku, etc.

Sample Unstructured Diary Email Form

HotBot DIARY
Please return this diary entry on or before Thursday, June 30, 2005

Today’s date: ________________ The current time ____________________________

1. Approximately number of searches since your last diary entry: _____________.
2. Of those, the approximate number of searches using HotBot: _____________.
3. Please describe your experiences while searching with HotBot. Your description may include:
   • what you were searching for:
   • your search procedure:
   • whether you found it:
   • any difficulties (if you were able to find a solution, please describe how you solved it or
     unexpected incidents (describe what you had expected and what you got).

4. How well is HotBot working for you? _____________.
   (Please rate your experience from 1 to 5, where 1 means that it’s not working at all
   and 5 means that it’s working very well)

5. What is your opinion of HotBot as a service?

6. Has your opinion changed since the last diary entry? If so, how has it changed and what a
   specific experience that precipitated the change?

7. Other comments. Are there any other issues you’d like to tell us about or questions you’d like us
   to answer?

When you’ve completed this form, please email it to diary@adaptivepath.com. Thank you very much
for helping us make HotBot a better product.

If you have any questions or comments about this form please contact Mike Kuniavsky at
mikek@adaptivepath.com or (415) 229-3488.

Kuniavsky
### Types of diary studies

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<th>Type</th>
<th>Description</th>
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| **Unstructured**   | - participants report on everyday activities  
                      - *elicits general themes*                                                     |
| **Structured**     | - participants report on everyday activities  
                      - *answers more specific questions*                                             |
| **Usability test** | - participants complete specific tasks and report on results  
                      - *structured comparison of task performance*                                  |
| **Problem report** | - participants report on everyday activities  
                      - *identifies bugs/experience problems*                                        |
Probes

Cultural probes
associative, interpretively ambiguous, inspirational, subversive

And other types:
technology probes, urban probes, mobile probes, domestic probes, value probes...
... as packet of material artifacts
... as empirical data collection
... as participatory input into design
... as motivating sensibility

Gaver, Dunne, Pacenti, 1999
Coordinating the study

Keeping people on track
• give periodic reminders
• provide feedback about level of detail in response
• progressive incentives
• surprise incentives / little gifts

Adapting to changes
• start analyzing as soon as early results arrive
• periodic re-evaluation of diary format
Advantages of diary studies

1) Efficient use of your time
2) Facilitate broad geographic distribution
3) Support in-situ reporting over time
4) Can be a rich window into context of use
Disadvantages of diary studies

1) Can be tiresome for participants
2) Participants will require reminders
3) Can get very expensive for long durations
4) Amount of data can be overwhelming
Diary study packet components

(1) Introductory letter
   About the study: goals, motivation, and sponsorship
   General requirements for participants
   Compensation and warning of any potential harms
   Permission/consent letter
   Thanks and appreciation for their effort!

(2) Specific instructions

(3) Diary form / key incident form

(4) Recording device camera, camera phone, stickers
Analysis

Asynchronous feedback
Track temporal patterns in content

Synchronous elicitation
Combined with interview analysis

Image analysis
Looking for semantic patterns in visual data