Seminar 2: Data gathering — with a focus on interviews

Seminar Objectives

• Why data gathering?
• Its place in requirements analysis
• What interviews can offer
• Putting interviews in context
• A local example
• Other means of gathering data

Why data gathering?

A fundamental step within systems development

– that informs your analysis of a system’s requirements
Functional requirements analysis entails:

- Studying the system
- Determining the logically required tasks
- Determining the most appropriate design solution(s)
- Presenting tentative solutions to users

Something to ponder

'We cannot discover how users can work best with systems until the systems are built, yet we should build systems based on knowledge of users and how they work.'

'This is a user-centred design paradox.'

(Marchionini 1995: 75)

Studying the system

involves asking questions such as:
- How does the current system function?
- What kinds of reports are generated?
- Is the system manual or automated?
- What are the system’s boundaries?
Studying the system

Questions to ask, according to Blethyn & Parker (1990: 69), include:

– What is done?
– Where is it done?
– When is it done?
– Who does it?
– How is it done?

Determining the logically required tasks

Questions to ask, according to Blethyn & Parker (1990: 69), include:

– Why is it done? Is it a necessary task?
– Why is it done there?
– Why is it done then?
– Why that person?
– Why is it done that way?

Determining the most appropriate solution(s)

• How should a new or replacement system function?
• What data would be needed for it to operate smoothly?
• What kinds of reports would it need to generate?
• How would a new system alter employees’ jobs?
• What new or improved information services are needed to support the future organisational goals, objectives, strategies, and functions? (Hoffer et al.1999: 236)
Determining the most appropriate solution(s)

Questions to ask, according to Blethyn & Parker (1990: 69), include:

– What should be done? Can the task be altered or eliminated?
– Where should it be done?
– When should it be done?
– Who should do it?
– How should it be done?

What interviews can offer that is unique

– To discover ‘how the system really works’ we need ‘to interview the people who actually do the work’
– ‘The fact-finding interview, therefore, is the most important tool in the systems analyst’s inventory: none of the other tools available to him [sic] is effective without it.’

(Interviews and systems analysis

‘The personal interview is generally recognized as the most important and most used fact-finding technique ...

‘Unfortunately, many systems analysts are poor interviewers’

(Whitten & Bentley 1990: 632)
Preparing for the interview 1

• 'read background material'
• 'establish interview objectives'
• 'decide who to interview'
• 'prepare the interviewee'
• 'decide on question types and structure'

(Flynn 1998: 138)

Preparing for the interview 2

• Time
• Location
• Preparing the question
• Record of interview
• Thinking about follow up

How you phrase a question can matter

Closed question:  
‘Do you like your boss?’

Open question:  
‘Can you tell me about your relationship with your boss?’
During the interview

- ‘limit the time of the interview’
- ‘look for error and exception conditions’
- ‘probe for details’
- ‘take thorough notes’
- ‘identify and document unanswered items and open questions’

(Satzinger et al. 2004: 131)

Listening (and silences)

- Listening can be one of the most difficult skills to develop
- Be sensitive not only to what is said during an interview, but also to ‘implied or unstated information, or what is not said’

(Minichiello et al. 1990: 138)

- Silences (like small talk) can sometimes have their place

Nonverbal cues …

are an important part of the interview process, but can also be misread

eg anxiety
Putting interviews in context 1

James (1989: 137-9) suggests that there are a range of interviewees to be encountered, from those whose comments wander, to those who are reticent or even evasive.

What would you do as an interviewer in such situations?

Putting interviews in context 2

‘The problem with traditional requirements analysis is that detailed information about what the real users actually do and how they do it is often not collected. Consequently, designers often fulfil the requirements specified by management without taking account of the real needs of users.’

(Preece et al. 1993: 44)

What will you do to ensure that this problem is avoided?

A local example

• Watch the following video, and be prepared to discuss it ...
Next week

Other forms of data gathering:

Starting with document analysis

References