Today's lecture

- Identifying user needs
- Information needs
- Information seeking behaviour

Identifying user needs

- Who decides?
- Establishing context
Who decides?

‘there are few presumptions in human relations more dangerous than the idea that one knows what another human being needs better than they do themselves’

(Michael Ignatieff, in Case 2002: 67)

Do users know best?

Users often deploy technology and systems in idiosyncratic ways that nonetheless ‘work’ for them

As Twidale & Nichols’ (1998: 182) research on library OPAC systems illustrates, ‘people manage to use single user systems collaboratively in ways not envisaged by their developers’.

Information seeking

• Another way to describe users of information systems is as information seekers
• Our information needs are inseparable from our
  – goals
  – purposes
  – objectives
Information needs are ongoing

- The need for information arises every day of our lives:
  - e.g. what will the weather be today?
- Answering one query for information may often lead us to another query

Information needs arise for us both

- as individuals and
- as members of collectivities:
  - as students
  - as employees
  - within circles of friends

Establishing context

- Like the information they seek, users’ needs depend on context
- Factors that can make a difference include:
  - currency (and timeliness)
  - accuracy
  - authority
  - accessibility
  - stability (McInerney 2000)
Currency (and timeliness)

- Some information is needed in a hurry, other times we can wait
- Some information we seek has to be ‘up-to-date’, other times not

Accuracy

- The degree of accuracy required can also vary
  - e.g. the distance between two points
- But we still need information to be sufficiently accurate for our purposes

Authority

- Does the source of our information matter?
  - The Web presents whole new questions about quality criteria that do not yet have established answers or standard practices. Plenty of information is there, but what is the integrity of an online document? (McInerney 2000)
Accessibility

The relative ease with which we can access a relevant document — and the information that it contains — can be an important factor in our ability to use it.

Stability

• 'How can one say whether a very fine [web] site today will still be there tomorrow?' (McInerney 2000)

• But does the stability of a source necessarily matter to information seekers?

User behaviour

Case (2002: 68-71) has pointed to three common explanations as to why we need information:

– Seeking answers
– Reducing uncertainty
– Making sense
Buckland’s thoughts on searching

‘We are all enormously ignorant in the sense that there is a great deal that we do not know … ignorance becomes important only to the extent to which it becomes distressing or harmful. We use the term distressing to denote occasions when an individual is not only conscious of ignorance but also feels a desire to acquire knowledge in order to reduce the ignorance and, thereby, the distress’ (1991: 86, 87).

Seeking answers

Taylor (1968) argues that information needs follow this path:

- visceral need
- conscious need
- formalised need
- compromised need

Taylor - visceral need

The process begins with us sensing that we have a need, while not yet being able to express it.
Taylor - conscious need

We become aware, within our own mind, what our information need may be

Taylor - formalised need

Upon reflection, we are able to formulate that question explicitly to others

Taylor - compromised need

In many cases, we need to re-formulate our question so that the information system we use can understand it
Reducing uncertainty

Nicholas Belkin (Case 2002) locates the starting point in what he calls ‘an anomalous state of knowledge’ (ASK)

In seeking to address this, we either
– seek information  OR  give up

Making sense

Brenda Dervin suggests that seeking information is inseparable from finding meaning around us:

‘The individual in her time and place, needs to make sense … She needs to inform herself constantly. Her head is filled with questions. These questions can be seen as her information needs’

(quoted in Case 2002: 70)

Another way of thinking about the problem

Learning

Information Retrieval  Information Seeking

Browsing Strategy

Analytical Strategy

(based on Marchionini 1995: 9)
Types of searches

Large and associates (2001: 35) argue that there are three common kinds of searches:

– Known item searches
– Specific item searches
– Subject searches

Known item searches eg
‘Where is that website I saw last week?’

Specific item searches eg
‘When did Kurt Cobain die?’

Subject searches eg
‘I want to know more about dinosaurs’

A related matter: recall and precision

When we do find information, we still need to ask:

– Are there other relevant materials still to be found? (recall)
– How much of what I’ve found so far is of value (as opposed to junk)? (precision)
Further reading

A. Large et al. (2001) Information Seeking in the Online Age. Munich: K G Saur.