1. Information systems in organisations

It's common in our field to focus upon the formal information systems within organisations, e.g.

- Record-keeping systems that manage information products and by-products
- Official communication channels, such as management bulletins

But these are always only part of the story ...
1. Information systems in organisations

Brown and Starkey (1994: 810) suggest that organisations possess ‘five major elements of communication and information’:

– The management information system
– Ad hoc communications
– Informal communications
– The information medium
– The degree of information consciousness

1. The management information system

‘a formal method of making available to management the accurate and timely information necessary to facilitate the decision making process and enable the organization’s planning, control and operational functions to be carried out effectively’

(Stoner, quoted in Brown & Starkey 1994: 810)

1. Ad hoc communications

‘all those operational communications that do not take place within the context of the formally specified channels of the MIS’

(Brown & Starkey 1994: 810)
1. Informal communications

‘grapevine communication which may be loosely work-related but does not involve required operational information’

(ibid)

1. The information medium

Brown and Starkey argue that organisations tend to privilege either

– oral

– written

channels of communication

1. The degree of information consciousness

The level of an organisation’s sophistication in handling information.

It includes:

– The importance given to information as a resource

– The ‘kinds of information and communication systems that have been implemented to retrieve, manipulate and transmit information’

(ibid)
1. Information and organisational culture

For writers such as these, information systems can only be understood by taking into account the culture in which they are immersed:

‘an organizational culture is the way things are done - especially when no one is looking’

(Umiker 1999: 22)

1. Culture and power in organisations

We’ll discuss organisational culture(s) at greater length in the next lecture.

For now, it’s worth thinking about some of the arguments developed by Geoff Walsham (1993: 48), who suggests that we can read organisations as both cultures and political systems.

1. Organisations as political systems

- ‘loose networks of people with divergent interests’
- ‘power is intrinsic to all human activity’
- domination ‘is never total’, power’s use has ‘subtle, local properties’

(Walsham 1993: 47)
1. What has all this got to do with information management, huh?

‘Information systems are implicated in major changes in work and work roles, on issues such as the centralization or decentralization of control, and on aspects such as surveillance and individual freedom of action.’

(Walsham 1993: 40)

1. What has all this got to do with information management, huh?

‘Divergent interests and perspectives are normally present in such contexts, and thus information systems are arguably one of the key areas for political action in contemporary organizations.’

(Walsham 1993: 40)

1. Power is a slippery term

Two different meanings are often conflated:

− power to do something
− power over someone
2. What the informant said to Franz Boas in 1920

Long ago her mother had to sing this song and so she had to grind along with it. The corn people have a song too. It is very good I refuse to tell it.

http://www.wellpinit.wednet.edu/spo-poetry/poem00.php

2. The place of individual knowledge

Remember Michael Buckland’s notion of information as knowledge?

If Brown and Starkey are right, then much of the information associated with organisations takes the form of knowledge:

> outside formal IS structures (eg documents)
> yet still immersed in an organisation’s culture and sub-cultures

2. The place of individual knowledge

Who has the right to claim that knowledge?

One way to view the history of many modern organisations is precisely as a tug of war over this question ...
2. The place of individual knowledge

Who has the right to claim that knowledge?
For example, who owns the intellectual property of something discovered on work time?

2. The effort bargain

Most of us find work in the employment of an organisation, for a wage or salary.

2. You can lead ...
2. ... a horse to water

What we are meant to do during work hours is largely at the discretion of the organisation.

How much work we actually do is the organisation’s responsibility.

2. But ...

Therefore some of the most important information that circulates in an organisation concerns:
- management efforts to ensure that employees fulfil their side of the effort bargain
- employee efforts to ensure what they consider to be an acceptable degree of effort

2. The effort bargain

- is one area where culture and politics clearly converge
- has important implications for how information and knowledge are deployed within organisations based on employment by wage or salary.
2. Is all organised human activity like this?

Can you think of any exceptions?
Everyone knows about peer-to-peer file sharing, but what about peer-to-peer production?

2. Information and control

Brown and Starkey mention three aspects of a management information system in existing organisations:
– Planning functions
– Operational functions
– Control functions

Without the third, neither of the others may occur.

3. Remember this?

‘In part, organisations are designed to encourage ignorance …’
3. The rest of the quote...

‘... through specialisation and rigid segmentation of effort. So there is a constant dilemma for organisations: the imperative (in part stemming from efficiency needs) to limit the availability of information, and the recognition that structural designs are flawed and circumstances change, requiring individuals to seek information normally unavailable to them’.

(Johnson 1996: 1)

3. Some case studies

• The place of trust
• The deployment of new technology

3. The place of trust

For Brown and Starkey (1994: 822), the predominance of oral information channels in one organisation they studied was symptomatic of

– ‘reasonably high levels of trust’ between different management groups.
3. The place of trust

At the same time, management there – 'communicated downwards only the most essential information necessary for employees to perform their duties'

(Brown and Starkey 1994: 823)

<table>
<thead>
<tr>
<th>3. The place of trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen and Wilson (2003) recount the story of British university staff who mistrusted a Vice-Chancellor intent upon 'modernising' local information systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. The place of trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff sabotaged the new record-keeping system</td>
</tr>
<tr>
<td>– ‘passively, by stopping using it’</td>
</tr>
<tr>
<td>and/or</td>
</tr>
<tr>
<td>– ‘actively, by inputting inaccurate information’</td>
</tr>
</tbody>
</table>
3. The deployment of new technology

Hayes and Walsham (2000) have documented the changes wrought upon an organisation’s information flows — and thus, they argue, upon its internal power relations — with the introduction of Lotus Notes.

3. The deployment of new technology

‘The MLM [medical liaison manager] database was really well used but has petersed out now. This happened soon after our boss, the medical director, asked if he could be included in it because he had heard how successful it was. No one felt that they could comfortably share views in the knowledge that he was reviewing the database’

(Hayes & Walsham 2000: 79)

4. Further reading