Chapter 4
Knowledge management – the organisational dimension

Introduction

In this chapter, we will look at the impact of knowledge management upon organisational culture and 'ways of doing things'. We will also consider the new organisational forms that are emerging in response to the development of the knowledge economy, the essential aspects of knowledge audits and knowledge transfer in a merger situation.

The cultural challenge of effective knowledge management

Brian Arthur (1) suggests that the world of knowledge based business involves continuously redefining an organisation's 'way of doing things', that is, its culture, including a continuous redefinition of organisational aims and objectives.

This need for change is being seen in organisations affected by knowledge management and the knowledge economy. Even in those areas traditionally slow to change, such as the Civil Service, cultural shifts have been, and continue, to take place. An example is in the 'Modernising Government' proposals (2). These proposals are part of a series of Government initiatives in response to new technology and the impact on how Government 'does business' in the knowledge economy. The paper speaks of the need to introduce peer review of central Government Departments and to run joint training for Ministers and civil servants. Those familiar with Central Government will understand the culture change involved in having different departments conduct peer reviews. They will also recognise the cultural change implicit in joint training for Ministers, who are politicians, and paid civil servants.

Organisational structures

These changes in the approach of Government reflect one of the cultural imperatives arising from the importance of knowledge management. For Government it is expressed in the sound bite, 'joined-up' Government. This is the idea that the delivery of Government services and policies should be seamless. It should not appear as if many different bodies and agencies, that do not communicate with each other, are involved. For the consumer or citizen it should be like dealing with one organisation.

For organisations, it is about integrated and collaborative working, pooling knowledge and information within the organisation. It is about the 'joined-up business'. It is not about organisations being divided into discrete departments and separate 'empires'. It is a telling aspect of this influence of new technology that in one organisation, following the introduction of improved electronic communications to its 'outstations', a manager working in an office remote from the corporate headquarters commented that:

> *'We used to feel like a separate organisation, not part of the mainstream. Now we are in the loop.'*

Achieving this 'joined-up' working is not just about technology, although the technology is a facilitator. It requires doing things differently and removing blocks to 'joined-up' working. A common block is the hierarchical and departmental structure of traditional organisations – divided around functions, specialisms and tasks.

These divisions tend to become enshrined in the language and culture of the organisation. It is interesting that in one organisation, a reorganisation led to the abolition of the description 'Divisions' for the separate collections of functions reporting to a Director. It was felt to embody the wrong values. It was replaced with the phrase 'Group', each Director heading a 'Group' rather than a 'Division' of the organisation. A simple change, but language is an important communicator of culture.

Margaret Ryan (3) stated in her study on linking organisational knowledge to decision making:

> *'Organisational structures draw boundaries around the activities of individuals and groups and help to specify and develop relationships between them. It can also be suggested that they regulate what expertise is available, in which arenas, and with how much influence on decision outcomes.'*

Knowledge management requires reducing or removing boundaries and opening up the possibility of new and different relationships between different professions and different specialisms. It requires multi-disciplinary working, collaboration, sharing of ideas and experiences. It requires disparate viewpoints to be brought to bear on problems and issues. The technology facilitates this, as we have seen in Chapter 2. The structure of the organisation needs to reflect a similar approach. This means a loosening of hierarchies, a relaxation of areas of demarcation and a lessening of centralised and controlling management. The flexibility needed by effective use of an organisation's knowledge resources requires flexibility for structures as well as people. As a CEO we spoke to for this Report said:

> *'It's no longer acceptable, or effective, to have people working in the old traditional watertight compartments. We have to recognise, and facilitate the flow of information within the organisation, the sharing of knowledge and experiences.'*

That particular organisation had been through a process of reducing the numbers of management layers, increasing the use of multi-disciplinary project groups to deliver the corporate agenda and redefining the management role into one encompassing the roles of trainer and coach. The organisation's structure had been redesigned around principles such as flexibility and devolving decision taking to the lowest possible level.

Typically, knowledge environments will flourish in flatter, less hierarchical and less bureaucratic structures. Although, there is an important caveat that flatter structures do not necessarily mean less well-resourced structures. There is some evidence emerging that the de-layering exercises of the 90's have reduced resources to the extent that information and work overload are occurring. Also, that 'initiative' exhaustion and reduced career opportunities are adversely affecting motivation. This does not facilitate knowledge management.

Knowledge management also tends to flourish where the expertise and experience, the know-how, in one part of the business is accessible to other parts of the business. Where there is regular interaction, whether in physical or virtual reality, between different areas of specialism and different types of expertise and where decision making is open to influence from outside a small core of 'senior managers' and policy specialists.

Culture

In earlier chapters, we have looked at the technology and people issues in knowledge management. This reflects the view that it is the interaction between these two dimensions that results in an effective knowledge based organisation. However, the context in which these two aspects interact is the organisational culture. Without a culture that is conducive to knowledge management, the potential to effectively harness the organisation's knowledge resources will be lost. It is the 'cultural environment' of the organisation that will determine whether the investment in technology and information will be matched by an equal investment from individual knowledge workers, in using it to greatest effect for the benefit of the organisation. Similarly, it is the cultural differences between organisations that make the transposition of solutions from one organisation to another so difficult. One manager we spoke to saw the distinct culture as producing the real competitive advantage. Their reasoning was that it couldn't be duplicated. They did not see the competitive advantage lying in better processes and procedure as, because of benchmarking, these tend to be replicated elsewhere.

One of the most prominent 'cultural' features that is apparent in organisations that are 'good at' knowledge management is the willingness of people to share information. This is often inhibited in organisations that foster an excessively competitive internal environment or that are particularly 'political' in internal relationships. If, in an organisation, people were not keen to share information, this would suggest a cultural issue rather than a problem with the individuals. For example, organisations where 'presentation' and self marketing are more likely to bring rewards than collaborative working and sharing, it is unlikely that effective knowledge management will take root. Similarly, if control of resources and empire building are seen as the sources of power and influence, then the necessary multi-disciplinary approaches and cross boundary sharing of ideas and knowledge will be inhibited.

Whilst a common starting point for knowledge management is a knowledge audit, a better starting point is likely to be an analysis of the current culture, identifying those aspects which will promote knowledge management and those aspects that will hinder it. This will also show the level of change and the commitment necessary from senior management, if knowledge management is to become part of the fabric of the organisation rather than just 'one more initiative'.

In considering the question of what type of culture is most conducive to effective knowledge management, a good starting point is to ask what makes individuals good at acquiring, using and sharing information and knowledge? Typical answers to this question that we have come across in a range of organisations include:

- Is a good listener and equally willing to contribute to discussions and share ideas

- Is able to build constructive relationships with others

- Is not always seeking the credit and never tries to take it from others

- Knows how to find out information and knowledge from a range of sources

- Is able to separate out relevant from irrelevant information

- Can make connections between different, apparently unrelated, information

- Is able to organise information and ideas into a logical format

- Can produce new and creative ideas and look at things from different perspectives

- Is committed to continuous learning and personal development and always looks for learning opportunities in new experiences.

From these answers, we can begin to describe the type of culture in which these attributes will be nurtured and supported. Such a culture is likely to be one that values (and demonstrates in tangible forms that it values):

- Individuals and individual viewpoints – this includes listening to dissident views (i.e. contrary to current thinking within the organisation)

- Collaborative working and sharing of ideas and information

- Building relationships – internally and externally (networking)

- Trust

- Sound underlying systems and procedures

- Creativity and innovation

- Training and development.

Whilst many 'mission statements' will refer to these things as being valued, whether or not they are actually valued, will often be a question of what behaviour the reward strategy reinforces and what behaviour is penalised (whether overtly or covertly).

The difficulty of living some of these values in an organisational context should not be under-estimated. For example, in organisations, whether something is taken to be true or not often depends upon how consistent it is with other things that are accepted as being true. This is a 'coherence' test (does the statement fit in with the other statements we believe). Dissident voices in an organisation are, by definition, often expressing views that do not fit in with current thinking and what is generally accepted in the organisation to be true. This makes it difficult for them to be heard, to be valued and to be acted upon. Similarly, the autocratic CEO that surrounds themselves with 'yes' people is unlikely to accept a negative criticism as true on the perfectly reasonable grounds that it does not fit in with what most of the people around them are saying. To see beyond this is a challenge for every senior manager in an organisation.

Finding out whether a culture will be conducive to effective knowledge management means looking for the evidence. This will be found in the effects of the culture. One way of doing this is to look at the effects on the people who work in the organisation. One of the organisations we looked at regularly surveyed its staff to ascertain whether they felt that:

- As individuals they had a high level of autonomy in their work

- Whether team working and collaboration was encouraged by the 'way the organisation did things'

- Whether they felt the organisation was committed to their training and development

- Whether they felt able to fully use their skills and abilities

- Whether they felt valued

- Whether they felt there was sufficient variety in their work

- Whether they felt adequately informed about and involved in decisions that were made.

The answers from staff to questions such as these give a good indication of the type of culture in existence. It will also be a good indicator of how likely it is that knowledge management can be successfully introduced.

1. Is there a low level of 'office politics' and an avoidance of 'hidden agendas'?

2. Do they encourage a shared stake in the outcomes/ownership of issues?

3. What emphasis is there on sharing ideas and what are the rewards for doing so?

4. What efforts are they taking to make work stimulating and meaningful for all staff?

5. Is there a strong sense of the need for minimal but effective bureaucracy?

6. Does co-operation between staff bring more rewards than competition?

Figure 4.1: Questions for senior managers

The Government White Paper *'Our competitive Future – Building the Knowledge Driven Economy'* (4) speaks of an economy in which the generation and exploitation of knowledge plays the predominant role in the creation of wealth. It identifies the need to use and exploit all types of knowledge in all areas of economic activity and describes knowledge, skills and creativity as the distinctive assets for achieving a competitive edge within a global marketplace. Without a culture conducive to effective knowledge management, this particular competitive edge is unlikely to be achieved.

Making practical changes will focus on those organisational systems and processes, the ways of doing things, which transmit the organisational culture to new employees and reinforce the organisational culture with existing employees.

New organisational forms in the knowledge economy

In earlier chapters of this Report we have considered new ways of working in the knowledge economy and have identified some of the approaches associated with effective management of knowledge and of knowledge workers.

In addition to new ways of working, there are also new organisational forms developing. The use of information and communications technology reduces the impact of geographical location and physical presence on the shape and form of organisations. It reduces the value of traditional organisations as structures that integrate and co-ordinate various resources and activities to deliver a service or product. It also offers the potential to reach customers directly rather than through traditional distribution means. These changes take away some of the fundamental reasons which have created many organisations in their current forms. These are the need to:

- Provide a physical location and base for work to take place

- Co-ordinate and integrate activities

- Provide direction to activities

- Distribute products and services

- Promote and market products and services

- Provide the capital to develop new products and services.

Meeting these needs through a traditional organisation has required an infrastructure of 'support' services, ranging from people who manage premises through to people who market products and services.

Where the use of ICT removes these needs (for example, the need for a geographic 'base') or meets them through different means (for example, co-ordinating activities over the Internet) the infrastructure of a traditional organisation can become a hindrance to competitive success. This is leading to changes in structures. Structures are changing to accommodate virtual teams and flexible working practices such as home working, as well as the increase in the number of 'employees' seen as periphery workers. Periphery workers used to include those on short-term contracts and consultants. Increasingly it is including those knowledge workers who are perceived as mobile and, although on permanent contracts, are not expected to stay very long with the organisation. These workers are also finding that there is less interest in investing time and money in their development and are having to take an increasing level of personal responsibility for their own development.

The development of ICT is also seeing the creation of new, knowledge based, products and services. These products and services can be developed and distributed through the use of the Internet by 'organisations', that may comprise a few core people and a network of associates. The development of many of these products and services is dependent upon the ability to bring together the knowledge and skills of different individuals in collaborative working.

In the area of traditional products, ICT allows the 'one person in their front room' type of business to have a worldwide presence and worldwide sales – something that until recently would have required the infrastructure of a typical large organisation. One example is the violinmaker who operates his business over the Internet, with secure credit card transactions on his site provided by a specialist provider. The business operates from his home but has worldwide sales.

ICT is also leading to increasing numbers of 'communities of interest'. Groups of individuals sharing their knowledge and collaborating on ventures without any formal organisational structure specifying their relationship to one another. Some of these communities will be acting as pressure groups in social policy matters, others will be developing products for non-commercial distribution (particularly in software development), some are simply individuals with a shared hobby, occupation or interest. These are the 'unorganised' organisations based upon people's free association, mediated through the Internet. The existence of these communities of interest may seem peripheral, however the 'business model' they embody can affect traditional organisations. A striking example of this is a major corporation such as Microsoft™ identifying Linux, the free operating system, as a potential business threat.

However, it is notable that the development of new types of organisation and business opportunity is not leading to the demise of old-established businesses in quite the way that was being predicted a few years ago. An example of this, is the role of the 'middleman'. It was widely predicted that the direct access potential of the Web would lead to the demise of these 'brokering' services. Instead, Web based brokering services have developed, such as electronic clearinghouses, transaction brokers, and virtual trading communities.

There is also a considerable amount of business-to-business (B2B) commerce conducted over the Web, in addition to business-to-consumer. According to a recent OECD published report (5), the B2B sector on the Web has been more successful than the business-to-consumer. It has also been dominated by 'old' businesses utilising ICT as part of their natural evolution, part of a continuing process of improving the use of information, reducing production costs and streamlining the supply chain.
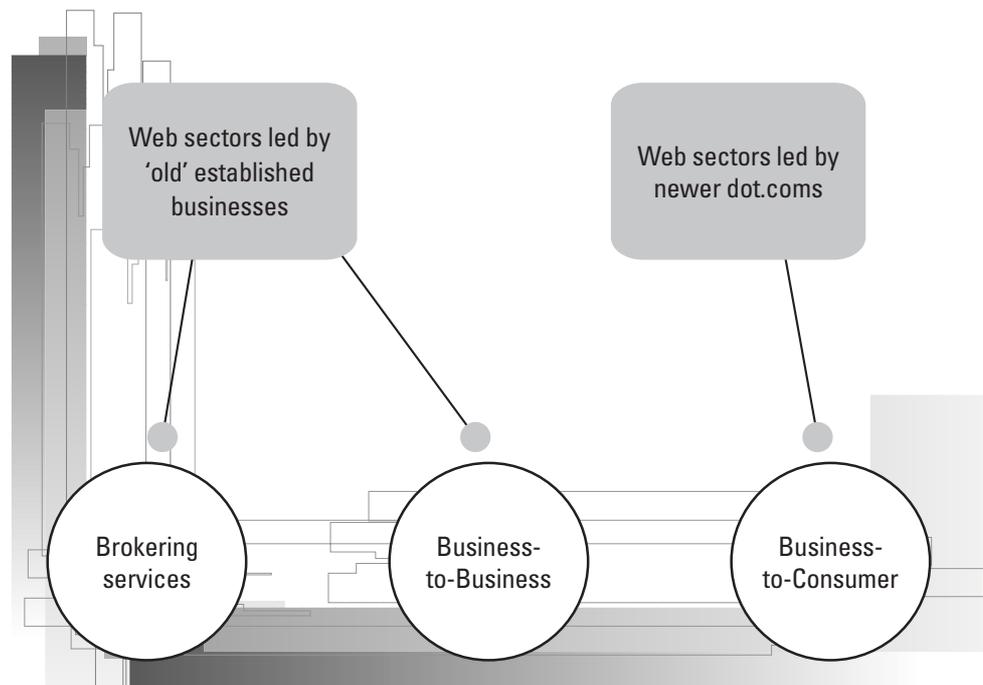
Figure 4.2: Business leadership on the Web

Just as traditional forms of organisation were developed as an effective response to perceived needs, so new forms will need to be adapted to the needs of the knowledge economy. Dependent on the particular sector, this will mean adopting organisational forms that can:

- Obtain and analyse market intelligence

- Change in response to market changes

- Exploit new technology and resolve technological issues

- Speedily develop and bring new products and services to the market

- Retain or acquire essential knowledge and skills

- Manage their knowledge base effectively

- Interact effectively with a global (and often invisible) customer base

- Continuously learn and apply that learning, creating new knowledge.

The indications so far appear to be that many 'old' businesses are successfully making these changes.

Identifying knowledge resources – knowledge audits

There is no 'one-way' to conduct a knowledge audit. In this section, we outline one possible approach. The model adopted needs to be tailored to the culture, size and level of complexity of the organisation involved. Whatever the model adopted the overall purpose of a knowledge audit remains the same. It is to identify the current knowledge assets within an organisation. This can make those knowledge assets accessible and useable as well as help to identify potential or actual knowledge gaps. A knowledge audit answers the questions, 'what does the organisation know?', 'what could it know?' and 'what should it know?'. The ultimate aim is to leverage maximum added value from the knowledge resources.

Preliminary steps to conducting a knowledge audit often involve establishing 'knowledge management' as a corporate initiative. Typically this includes:

- Identifying an internal 'champion' for the process. For some organisations, this has involved creating a post of 'Chief Knowledge Officer'. For others, the role has been given to a senior manager. To be effective it is important that the 'champion' is at a senior level (e.g. director) and has visible support from the top.

- Establishing a knowledge management project team. Given the range of sources of knowledge, this will often include IT, personnel and records management staff.

- Identify any external assistance required. Whilst not always necessary, it can avoid 're-inventing the wheel'.

- Formulating and communicating to the organisation the objectives and anticipated outcomes from the project. This is particularly important given that much of the knowledge base rests in the records, files and minds of individuals.

The first stage of the audit process will often focus on identifying and mapping the structure of an organisation's knowledge rather than the content. This provides a common frame of reference and helps to scope the task. It is also a resource that can be made accessible within the organisation to enable others to access existing knowledge resources.

The knowledge of the organisation is likely to be contained within:

- Skills, experience, qualifications of employees

- Documents held centrally, in departments and by individuals

- Archives

- Electronic systems – databases, e-mails, intranet etc.

- Contacts and networks of which the organisation is part

- Contacts and networks of which the individual within the organisation is part (both internal and external)

- Libraries (either central or distributed within the organisation)

- Relationships with other firms

- Training materials

- Patents, publications and research projects

- Finance and personnel department records.

In addition, there is further knowledge that is accessible to the organisation although not held by it. This includes knowledge accessible through the Web, in public domain sources, through Central and Local Government, in professional institutes and similar bodies. It may also include knowledge held by customers and suppliers.

Having mapped the knowledge assets, the next step is to produce an outline of content and to address the questions:

- Is the knowledge we have accessible? How can it be made more accessible?

- Is the knowledge we have continuously updated? What are the processes for capturing new knowledge and updating existing knowledge? Are they effective?

- Is the knowledge we have sufficient to meet the present and future needs of the organisation? Where are the 'knowledge gaps' and how can we fill them?

- Are we using the knowledge we have effectively? How can we leverage more value from it?