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Knowledge management

Knowledge management has been hyped as a must-have business solution for a number of years now. However, quite what it is and how you are supposed to manage something so intangible is still a source of much confusion.

In this theme you will:

- ◆ Define knowledge management and its relationship to learning processes
- ◆ Identify the barriers to knowledge management
- ◆ Identify the critical success factors in knowledge management
- ◆ Mobilise knowledge management in your organisation.

How do you manage knowledge?

One of the problems in trying to define knowledge management is that it is sometimes difficult to see how it differs from information management. Swan et al. (2000) see the two as being very closely associated, with each interacting with the other. See Figure 5.1.

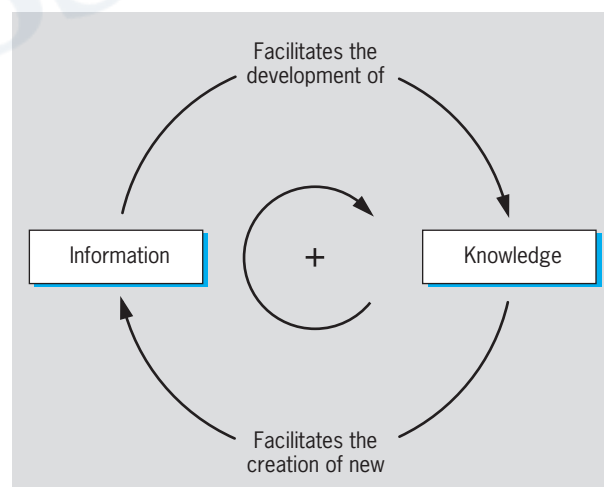


Figure 5.1 *The dynamic relationship between information and knowledge*

Source: Swan et al. (2000)

As explored in Theme 1, knowledge combines information, experience and insight into something that is unique to every individual. But what is knowledge management? Here are two definitions:

Challenges and critical success factors

As a concept, knowledge management can involve some fundamental rethinking about the value of individual knowledge, and how the retention or sharing of knowledge by individuals is perceived and rewarded by the employing organisation. The argument runs: 'If knowledge is power, why should I diminish (or eliminate) my power base by sharing it?' This is one of many challenges that management faces in introducing knowledge management. Here we examine some of the key issues and the critical success factors.

Barriers to knowledge management

Even if your organisation has taken on board the message that using your corporate knowledge more intelligently can be a vital component in competing in the marketplace, it may well face a number of basic problems before it can get underway (Bonaventura, 1997). There may be, for example:

- ◆ no model for knowledge creation and dissemination within the organisation: you've never done it before so where do you start?
- ◆ no processes or systems focused on supporting those activities – they weren't part of the original systems specification so where do they fit in now?
- ◆ no systems able to measure or evaluate how well you are creating and disseminating knowledge
- ◆ no means of evaluating the effectiveness of the knowledge creation and dissemination activities that you are carrying out.

Von Krogh et al. (2000) believe that managers ought to be supporting knowledge rather than trying to manage it, as it is basically unmanageable and not amenable to traditional management techniques. Individual staff may be reluctant to accept new lessons, insights and ideas, and many organisations can be quite challenging places for people learning to overcome the barriers of sharing knowledge with others. Individual barriers can include the following:

- ◆ People approach new experiences on the basis of their experience and beliefs about the world. There will be some situations which are so new and different that they will not have developed a response to them, and will find them too challenging.

- ◆ Some people will see new knowledge as a threat to their self-image, and respond negatively to it.

The organisation itself may contain its own barriers:

- ◆ New ideas will have to be made explicit in a 'language' that people in the organisation can understand
- ◆ The organisational memory and understanding of how things work can be good for bonding people together – but also make it more difficult for an individual to disagree with a 'party line'
- ◆ Organisational procedures may make cross-functional interactions difficult.

Key questions for management

Bonaventura (1997) describes how, where there are no existing models on which knowledge creation processes and systems can be based, management will typically just issue a general call for more 'learning'. This will fail, because the organisation will not have in place the reporting structures, compensation mechanisms or procedures that are necessary to support it, or because they don't understand the knowledge creation and knowledge dissemination process, and think it can be managed just like everything else. Bonaventura puts forward some questions for the management of any organisation (particularly those in the knowledge intensive sectors of the global economy) to ask of itself:

- ◆ What do our culture and our actions as managers say about the value of knowledge in the organisation?
- ◆ How is knowledge created, embodied and disseminated? What is the relationship between knowledge and the kind of innovation that we need to achieve our objectives?
- ◆ What commercial benefits do we expect to gain from more effective knowledge management?
- ◆ Where are we in terms of the maturity of our knowledge systems?
- ◆ What role does IT play in our knowledge management programme?

Skyrme (1998) has identified a number of recurring characteristics within organisations that demonstrate best practice in knowledge innovation, which also translate into key questions for management:

- 1 Is your knowledge strategy separate or clearly linked to your business strategy?
- 2 How much is knowledge discussed in your organisation, and how well is it understood? Is it a key element in your plans and budgets?
- 3 Is the knowledge facet of your business articulated as a real, compelling vision? Is there a framework that guides management decisions?
- 4 Are there knowledge champions throughout your business? Does your chief executive officer (CEO) link the importance of your organisational knowledge to your business success?
- 5 Do you have systematic processes for capturing, organising and sharing knowledge throughout your organisation?
- 6 Are people and information readily accessible through your computer and communication networks? Do these networks extend to customers, suppliers and experts?
- 7 Do you measure the contribution of knowledge to your organisation's performance?

Only when an organisation has realistic answers to these questions can it start to develop real advantage from its knowledge assets.

The employee perspective

So much for management – but what about the staff? As Morling (2000) points out, asking or telling employees to 'share knowledge' is a waste of time. It may look good in the strategic plan, but won't on its own satisfy the needs of staff to feel valued and recognised for their contribution. For an employee, the benefits of knowledge management relate less to organisational performance than to the general human desire for interaction with other people and some kind of shared interest or expertise within quite small groups, where opinions and ideas are freely exchanged, respected and trusted.

These small groups of shared interest or expertise (knowledge 'communities') can fulfil a useful role by creating a balance between the enterprise on the one hand and the individual on the other. A common mistake that management makes in trying to implement knowledge management is to focus on the individual as the source of knowledge – somebody who can deposit a 'knowledge package' of their expertise and experience into the system for use by all. This fails to recognise the role of collaboration in developing ideas, or that for many people the real reward of sharing knowledge is the immediate response from the people they have shared it with.

Morling's company, has developed a system of 'communities', defined as:

...a group of people sharing a common interest or practice, whose purpose is to share knowledge and experiences, help each other to learn, act as a support network and sometimes as an informal centre of excellence.

Source: *Morling* (2000)

The knowledge and skills gained in the community can be applied directly to the needs and issues of the organisation through the members' formal organisational roles and participation in teams. For example, they can be used as a specific project team, or within a geographical sales division. The point is that they become a seeding ground for new ideas, competencies and skills. Here is a summary of the basic principles:

The seven Cs of communities

Context – the community sets the context for knowledge sharing and creation

Contribution – members know where and how to contribute

Creation – knowledge is created through the interaction of members

Collaboration – members collaborate to build on each other's ideas

Consensus – members agree on best practices and how to take ideas forward

Content – knowledge is captured as reusable content

Capitalisation – the organisation can exploit new knowledge and best practices.

Communities do need a certain amount of nurturing to develop. If you've identified a potentially useful knowledge community within your organisation, here are some tips to get it working to good effect:

- ◆ Identify a core group of people with the motivation and commitment to get it started
- ◆ Make sure that the group has a leader who can manage the context of the community, so that when the context shifts the community can respond like a team would
- ◆ Hold regular meetings
- ◆ Enlist management support
- ◆ Ensure access to appropriate technology
- ◆ Give the group self-governance
- ◆ Pay attention to team building, especially by helping new members of the community to feel welcome and comfortable and able to participate actively and constructively.

- 5 What role does IT play in our knowledge management programme?
- a It is seen as an essential enabler, but uses input from across the organisation to develop improvements to systems ☐
 - b The IT department thinks it should be responsible for everything to do with systems and gets quite defensive about too much input from other departments ☐
 - c IT drives our knowledge management programme ☐

Feedback

If you have mostly ticked a, your organisation is well on the way to making full use of knowledge management, and may be an example of best practice in its own sector. If you have mostly ticked b or c, use this activity as an opportunity to reflect on how far the organisation is 'unfriendly' to knowledge management. How far do you personally believe it has real business value?

Knowledge management in practice

Theory is one thing, practice quite another. How do you get from a grand vision to operational reality? How do you start to mobilise the static knowledge held within your organisation? Some of the world's most successful companies have adopted a knowledge management approach as the best way to maximise the value of their own knowledge assets and to build good strategic partnerships and customer relations. Many of them have been more than ready to share their experiences via documented case studies. Some of these are included in this section. Here we set out some practical stages in getting underway when setting up a knowledge management programme.

Approaches to knowledge management

Skyrme (1998) reports that in analysing the way that over 100 organisations apply knowledge management, two main approaches have been identified:

- ◆ **Sharing** existing knowledge so that organisations don't reinvent the wheel because the knowledge they need is available but not known to them. For example, a department of the US giant AT &T spent US\$79,449 to obtain information that could have been found in a publicly available document from their associate company Bell Research for US\$13.

- ◆ **Creating** new knowledge and converting it into new products, services and processes, enabling better, faster innovation. Jaguar is one company that has focused on this. By codifying how the best engineers design a particular car body panel, engineers can develop detailed designs in hours rather than weeks. This meta-knowledge – analysing how professionals go about their work – is becoming an important facet of a firm's knowledge that needs to be captured and shared.

Source: *Skyrme* (1998)

Skyrme found that in both approaches, organisations tend to focus on a few knowledge 'levers' to strengthen their knowledge-building efforts:

- ◆ **Customer knowledge** – develop deep knowledge-sharing relationships, and understand the needs of your customers' customers
- ◆ **Stakeholder relationships** – improve knowledge flows between suppliers, employees, shareholders
- ◆ **Business environment insights** – systematically scan your political, economic environment, etc. and monitor what your competitors are doing
- ◆ **Organisational memory** – share knowledge through best practice databases, directories of expertise, intranets
- ◆ **Knowledge in processes** – embed knowledge into business processes and management decision making
- ◆ **Knowledge in products and services** – surround products with knowledge, for example in user guides and knowledge-intensive services
- ◆ **Knowledge in people** – set up innovation workshops, learning networks, communities of knowledge practice.

The knowledge created within an organisation must add value (Tissen et al. 1998). If the creation of knowledge is to be successfully directed, then the people involved in it must be too. Here are some examples:

Pharmaceuticals company Hoffman-LaRoche is using the approach of knowledge domains and knowledge links in order to reduce its time to market. It has calculated that each day gained in market availability represents a monetary gain of US\$1m.

CIGNA Property & Casualty, an insurance company, has created an 'upward value spiral' for know-how to be shared through the company. Employees' information and knowledge is processed by 'knowledge editors' and distributed throughout the organisation.

Source: *Tissen et al.* (1998)

Procter & Gamble is a consumer-products giant with nearly 110,000 employees spread in locations across the world. Aware that its success depended in part on the knowledge locked in the minds of its employees, P&G used knowledge-sharing software to transform departmental experts into tangible information resources for the whole company. In particular, scientists and engineers working in numerous locations across the world could benefit from collaborating and sharing information and expertise.

The company's intranet was found to be 'doing a good job connecting people to knowledge that was documented and published, but not as good a job in connecting them to experts', commented Mike Telljohann, associate director at P&G's technical centre in Cincinnati. He explained that it was clear people did not know where to go with questions. They suspected that there was knowledge out there that they couldn't access.

In response to this feedback the company introduced an integrated system from AskMe Enterprises that forms a directory listing of individuals noted as subject-matter experts who can be called on to lend advice or collaboration for problem solving and product development. It provided a single knowledge base in the company. But a key advantage of the system was that it was able to reward active participants – 'the more active you are in a particular area, the software highlights you as a featured expert. People in the innovation area enjoy being seen as an expert – it gives a lot of personal satisfaction.' Telljohann and his team spent a lot of time marketing the benefits of the system. But return on investment from the pilot project was enough to persuade the company to invest in large-scale implementation.

Telljohann sums up the benefits: 'I think the experts feel like they can make more of an impact. They typically have close circles they share experiences and knowledge with; this broadens their ability to share what they know, and the people with questions have a place to go.'

Source: *Adapted from Moore* (2001)

Here are some other practical projects that organisations can undertake to improve their knowledge management:

- ◆ Create knowledge databases of best practice, expertise, client profiles, legislative developments
- ◆ Create a knowledge map (a visual representation of information and relationships)
- ◆ Actively manage processes for collecting, classifying, storing and disseminating information
- ◆ Develop knowledge centres that are focal points for specific knowledge, and knowledge webs – networks of experts
- ◆ Introduce collaborative technologies like intranets or groupware
- ◆ Appoint a senior executive to be responsible for the knowledge initiative.

Source: *Skyrme* (2000)

Steps to knowledge mobilisation

To summarise, let's try and pull together all the different aspects of making the most of knowledge assets. Paul Miller (1998) provides a good overview of the process which he calls 'knowledge mobilisation', shown in Figure 5.5.

Feedback

An organisation's website is its public face – what it projects to the world. If you delve into BP's site, you may note the following points:

- ◆ BP's stand on a range of key issues, such as social/ethical, environmental and employee issues
- ◆ the wide range of information about the company's activities that is made available to customers (and employees)
- ◆ initiatives for the wider community including education services and a schools link
- ◆ the company's customer focus, and the image it projects.

Based on the site as viewed December 2004

Although BP doesn't use the term 'knowledge management', it has embraced the principles of knowledge management, especially in the way that it shares knowledge and facilitates communication among people throughout the organisation.

The company has also been used in a case study of knowledge management. For further information see:

www.kmresource.com/exp_cases.htm

Your comparisons with your own organisation's website will depend on your organisation's openness and how much information it is prepared to share, and on how user or customer focused it is.

◆ Recap

Define knowledge management and its relationship to learning processes

- ◆ Knowledge management is a technique for codifying tacit knowledge, and for making it widely available in the organisation.
- ◆ Despite being seen as a technology-based technique, knowledge management depends for its success on the ability of people in the organisation to acquire new knowledge through learning.
- ◆ Double-loop learning supports dissemination of knowledge. It occurs when an error is detected and corrected in a way that involves modifying the organisation's underlying norms, policies and objectives, enabling the organisation as a whole to benefit from the learning.

Identify the barriers to knowledge management

- ◆ There are challenging barriers to knowledge management.
- ◆ Individuals may see knowledge management as a threat to their powerbase or they may lack the experience or context that enables them to acquire new knowledge in a particular situation.
- ◆ Organisations may not recognise the value of their knowledge assets or may not have the culture, language or processes in place to support the creation and dissemination of knowledge.

Identify the critical success factors in knowledge management

- ◆ Knowledge management is a strategic process that needs to be aligned with other elements of business strategy, compensation mechanisms, the reporting structure and the technology processes that are necessary to capture and disseminate knowledge.
- ◆ Collaboration through knowledge communities is an effective way to encourage sharing and development of personal knowledge.

Mobilise knowledge management in your organisation

- ◆ There are 12 steps in Miller's (1998) knowledge mobilisation process – see figure 5.5.

 **More @**

Nonaka, I. and Takeuchi, H. (1995) *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*, Oxford University Press

This is a classic text revealing how Japanese companies translate tacit to explicit knowledge and use it to produce new processes, products and services.

Wenger, E., McDermott, R. and Snyder, W. (2002) *Cultivating Communities of Practice*, Harvard Business School Press

Another highly reputable text arguing that while knowledge communities do form naturally, organisations need to become more proactive and systematic about developing them and integrating them into their strategy.

Gorelick, C., April, K. and Milton, N. (2003) *Performance Through Learning: Knowledge Management in Practice*, Butterworth-Heinemann

This is a practical guide to the key issues surrounding knowledge management from a human resource perspective and it provides

incisive insights into developing a strategy linked to organisational learning.

www.kmresource.com/exp.htm is an excellent knowledge management gateway that provides links to a selection of reviewed sites and/or resources.

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