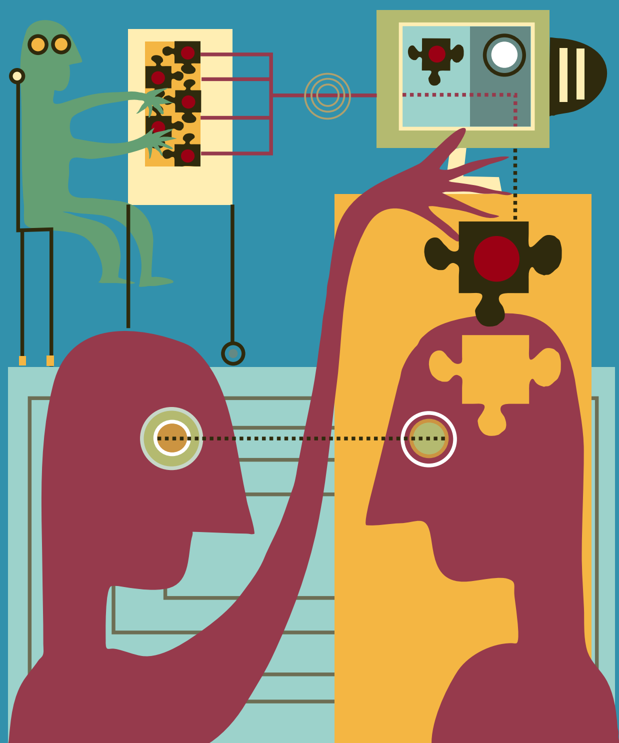
SPECIAL REPORT BY LUCIA DORE

FINANCIAL WORLD

THE CHARTERED INSTITUTE OF BANKERS MAGAZINE



WINNING THROUGH KNOWLEDGE

HOW TO SUCCEED IN THE KNOWLEDGE ECONOMY

IN ASSOCIATION WITH

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Imagine if you could benefit from other people's knowledge without needing their experience, but with the ability and context to put what they know into productive use. Essentially these are the goals of knowledge management, a movement we believe will become a business imperative, combining digital technology, internet culture and new economic models into radically different ways of working.

Xerox has an impressive pedigree in the field. As the pioneer of the photocopier through to our innovations in the computer industry at Palo Alto Research Centre, California, knowledge and its application has been central to our business. In 2000, our achievements were recognised for the third successive year in the awards for the Most Admired Knowledge Enterprise (MAKE). We were in the top 10 companies recognised as benchmark adopters of knowledge management worldwide by Teleos, a UK-based knowledge management research company.

We do not maintain that organisations can manage knowledge per se, however, we believe that we can create an environment in which knowledge can be better shared, used, reused and acted upon. Knowledge for us is essentially information in action, put into action by people who understand how, why, when and where to use it. At Xerox we talk about creating an environment that fosters the continuation, creation, collection, use and reuse of knowledge in applying it within our own organisation. In helping our clients create such an environment we're focusing on tools, services and cultures that facilitate knowledge sharing.

To be successful in managing knowledge our philosophy is that it must start with the people, address their work and culture and use technology to enhance collaboration. Impressive technology alone is insufficient. As the research and case studies in this special report suggest, knowledge management is most effective when it integrates the importance of people, work practices and culture.

Our research, carried out from centres in Grenoble, Cambridge (which carried out a long-term study of the IMF), as well as Silicon Valley, highlights the unique role of documents as the most important vehicle for the transmission of information. Added to this, documents and the social process surrounding them are central to the conversion of this information into knowledge. For us, meaning does not reside in memos or repositories; it develops in groups and communities. Communities require documents as well as connections and conversations to keep them going. The outcome: maximum results for minimal effort and sustainable shareholder value.

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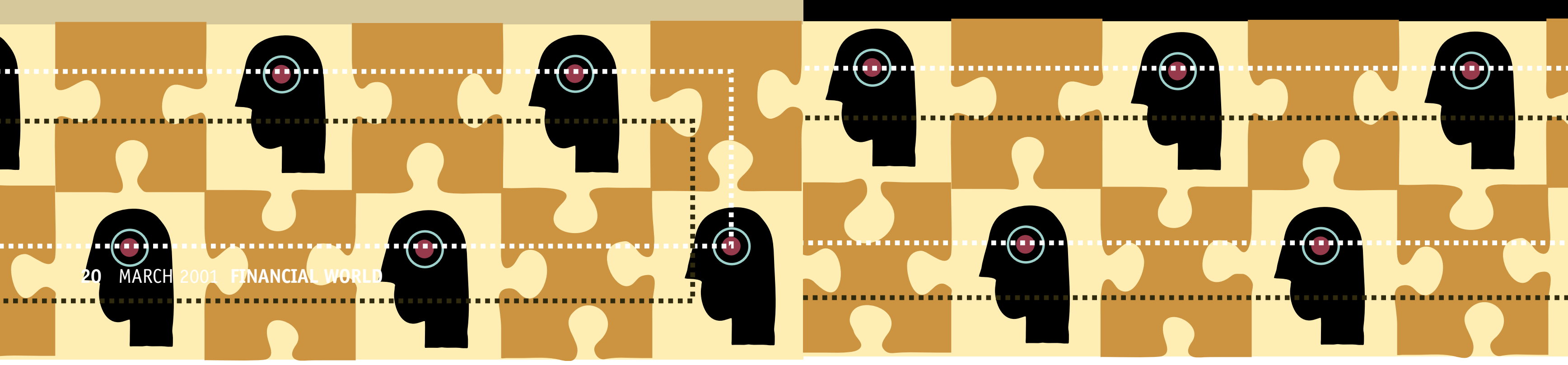


Executive summary

ORGANISATIONS ARE FINALLY WAKING UP TO THE FACT THAT THE OLD ADAGE: "KNOWLEDGE EQUALS POWER", CAN HAVE A DETRIMENTAL EFFECT ON THEIR ABILITY TO FUNCTION. KNOWLEDGE CAN NO LONGER BE PARTITIONED OFF, IT HAS TO BE SHARED. IN ORDER FOR THAT TO OCCUR A NEW PHILOSOPHY HAS TO BE ADOPTED — KNOWLEDGE MANAGEMENT

KNOWLEDGE MANAGEMENT (KM) is coming of age. For years the principles of KM have been rooted in management thinking and in a melange of other disciplines – economics, sociology, philosophy and psychology – but now it has become a movement in its own right. The core principle of KM, that organisations are only truly effective when they leverage the knowledge embedded within it, is the essence of this report.

To leverage knowledge, however, demands understanding how to acquire knowledge in the first place, how to sift through, analyse and use it, as well as having the commitment to share it. And since we all acquire knowledge and act upon it, everyone is a knowledge worker.

But in the age of technological excess we run the risk of having too much information thrust upon us. Information overload is only one of the issues explored in this report; it looks not just at how financial institutions retrieve information but also at the barriers to using it.

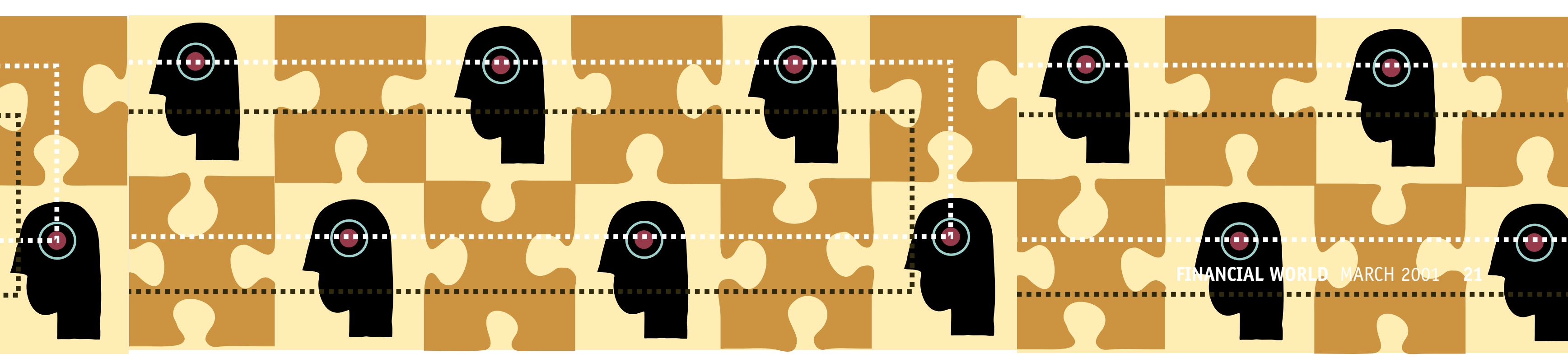
Our survey of 300 banks and insurance companies across Europe seeks to find out more about how financial institutions understand and implement KM. We asked the following questions:

- Do these organisations understand KM?
- What, if anything, are they doing to espouse KM principles and to implement it?
- What are the benefits they see arising from KM?
- How effective is KM and how do they measure its effectiveness?

The key findings are:

- Without KM, financial institutions run the risk of drowning in information overload and "digiglut" and run the risk of being outflanked by those who leverage knowledge.
- The understanding and implementation of KM among financial institutions is still poor. But insurance companies seem significantly ahead of banks in their understanding and implementation of KM. Nonetheless, all organisations need to acquire a better understanding of the benefits of KM.
- The banking sector's approach to KM is too conservative.
- Exponential growth in shareable knowledge bases seem likely.
- The focus on shareable electronic document base needs to be matched by a similar emphasis on communities of interest and other networks in organisations and communities.
- KM is a grass roots phenomenon and decentralised.
- Documents play a key role in KM; going digital does not mean the end of paper as a collaborative technology.
- KM has an intrinsically broad appeal. It can mean all things to all people which has led to confusion as to what KM actually is.
- Although KM lends itself to building off the foundation of customer relationship management (CRM) and its benefits, care must be taken to ensure that KM is seen as separate and distinct from CRM.
- Current measures of KM reflect the breadth of its appeal but these need to be strengthened to sell its benefits and give it greater legitimacy.
- The basis of a successful KM programme is cultural rather than technological change. A different organisational mindset is required. Dabbling in KM does not mean that organisations will be equipped for the future. Organisations hoping to excel in the knowledge economy must mirror the internet in its egalitarian and non-hierarchical nature.

The author would like to acknowledge the valuable imput of everyone who contributed to this report, in particular, that of Richard Cross from Xerox and Victoria Ward from Sparknow Ltd.



How to succeed in the knowledge economy

THE FINANCIAL SERVICES SECTOR, UNDER INCREASING PRESSURE FROM HEIGHTENED COMPETITION AND CUSTOMER DEMANDS, IS FACING A CRISIS OF FAITH. HOWEVER, HELP IS AT HAND — PEOPLE, WITH IDEAS

Nothing stands still and the financial services sector is changing more quickly than most industries. In the face of rapid industry consolidation, technological change, intensifying competition and falling margins, more demanding customers and shareholders, and increased pressure on employees to perform, financial services companies have to find ways of re-inventing themselves.

This requires more than mere "tweaking"; it requires a fundamental change in the way business is conducted. It requires not merely the ability to deliver more, for less – though that helps – but new methods and ideas. The pressure to do so has become greater because of the speed at which information is available and the volume of it. This has heightened customer expectations and forced organisations to focus on adding value to information – if they don't, others in a different time zone will.

INNOVATION

Innovation becomes a key strategy in a sector where companies are increasingly struggling to differentiate themselves and where service is often the only differentiating factor. The aim should be to create value-driven relationships and value-added products and services.

> "THE NEW ECONOMY IS NOT ABOUT DOT.COM COMPANIES AND THE BILLIONS MADE BY THE FEW, BUT THE PEOPLE WHO COME UP THE THE IDEAS"

The key to innovation lies in creative thinking and the generation of value-creating opportunities. It is leveraging these opportunities that leads to improved shareholder value (the mantra of many companies in the 1990s). Most importantly, however, it requires recognising and rewarding those people who come up with the ideas in the first place. It is these people who have the know-how and foresight to interpret, analyse and share information – to turn it into knowledge – who really make the difference.

These people are called knowledge workers and form the backbone of the new economy – or what should really be called the "knowledge economy". For despite the hype, the new economy is not about dot.com companies and the billions made by the few, but rather about the people who come up with the ideas in the first place. For many, ownership of the means of production is at their keyboard. As Aristotle said: "Knowledge sets men free and gives him power." To derive real value from knowledge we must understand what it is, what we are looking for and how to manage it, although managing something intangible is inherently difficult. The concept of knowledge management (KM) was borne not only out of this desire to manage knowledge, but out of the need to recognise the importance of intellectual capital.

It's no accident that Tom Stewart, tycoon of intellectual capital, one of the leading proponents of KM and an award-winning member of the editorial board of Fortune called his 1997 groundbreaking book: *Intellectual Capital: the New Wealth of Organisations*. If organisations choose to ignore this valuable asset they run the risk of letting a great deal of talent walk out the door, especially as labour is becoming more mobile and demand for talented individuals intensifies.

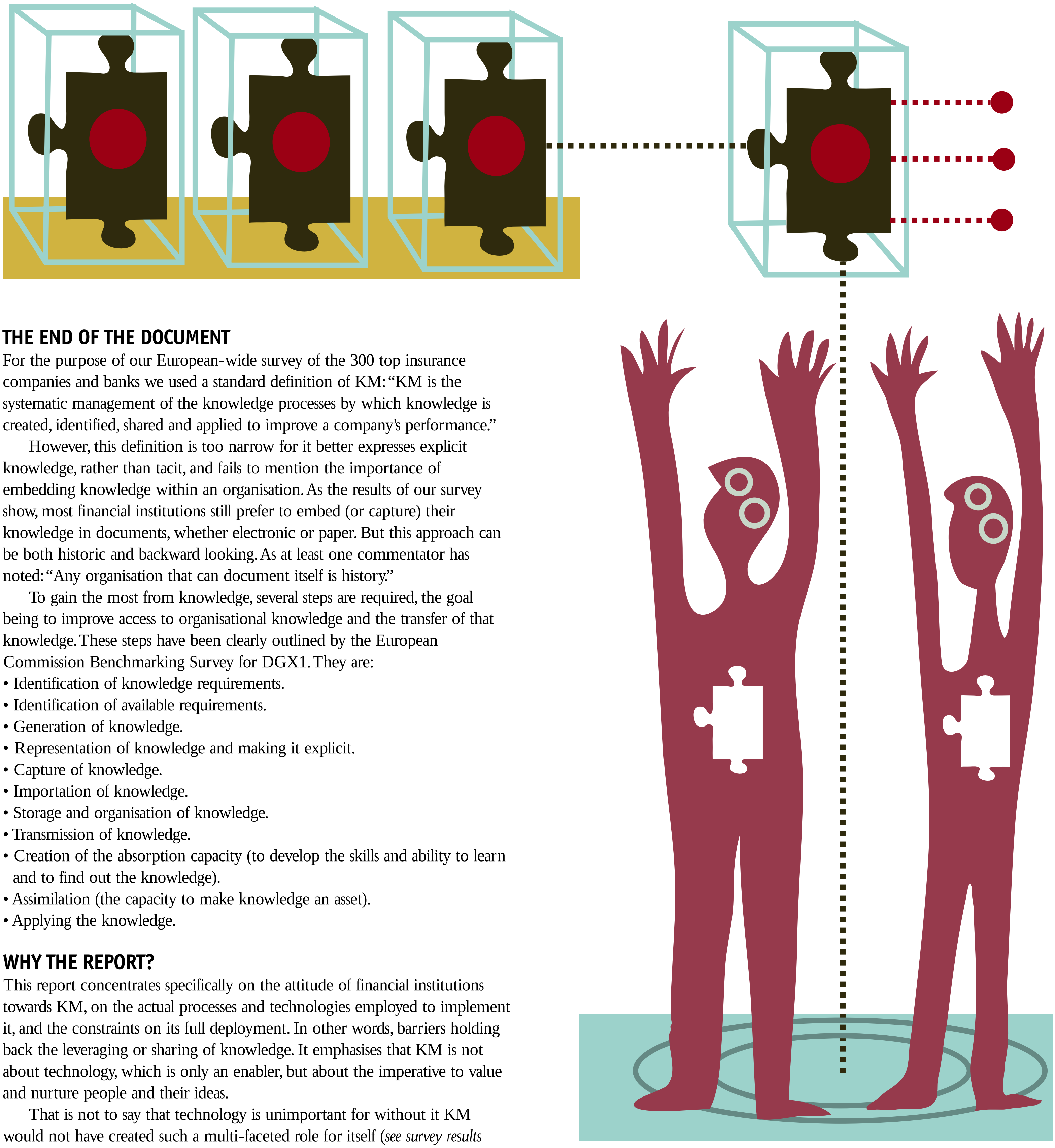
WHAT IS KNOWLEDGE?

There is no one definition of knowledge, nor any unanimous view of what it takes to acquire it. It would be unreasonable to expect this given the philosophical and personal nature of knowledge. Larry Prusak from IBM, for example, defines knowledge as "what the knower knows".

There are generic areas, however, on which there is some consensus. The first is that knowledge is built on data and information, data being the most raw form of information and the most distant relative to knowledge. Information involves some analysis and gives us the opportunity to acquire more knowledge. But most importantly, knowledge comes from interpretation and judgement. It is therefore information that is internalised and embodied through thought and action. According to ancient philosophers, knowledge is a set of justified beliefs.

There are two kinds of knowledge: explicit and tacit. Explicit knowledge is expressed in a formal, systematic way and is embedded in documents and processes. Tacit knowledge is held in people's heads, is at the heart of knowledge creation and, by its very nature, cannot always be expressed easily. It is by making tacit knowledge explicit and leveraging that knowledge through interpretation and analysis that value is created.

Some writers also speak about wisdom, which is something infinitely more complex. It is "tacit knowledge in its most refined form", says Amin Rajan, chief executive of Create. "Wisdom combines all the categories of knowledge to the extent that its deployment requires mental and emotional intelligence; learning and experiencing; thinking and doing."



THE END OF THE DOCUMENT

For the purpose of our European-wide survey of the 300 top insurance companies and banks we used a standard definition of KM: "KM is the systematic management of the knowledge processes by which knowledge is created, identified, shared and applied to improve a company's performance."

However, this definition is too narrow for it better expresses explicit knowledge, rather than tacit, and fails to mention the importance of embedding knowledge within an organisation. As the results of our survey show, most financial institutions still prefer to embed (or capture) their knowledge in documents, whether electronic or paper. But this approach can be both historic and backward looking. As at least one commentator has noted: "Any organisation that can document itself is history."

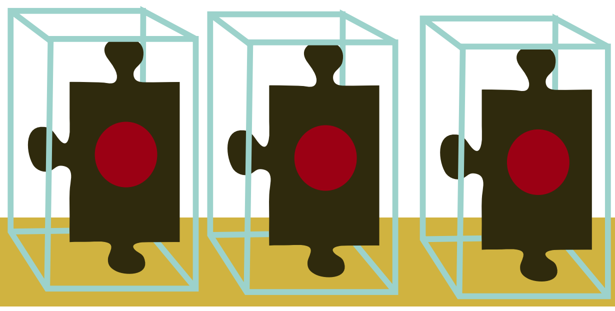
To gain the most from knowledge, several steps are required, the goal being to improve access to organisational knowledge and the transfer of that knowledge. These steps have been clearly outlined by the European Commission Benchmarking Survey for DGX1. They are:

- Identification of knowledge requirements.
- Identification of available requirements.
- Generation of knowledge.
- Representation of knowledge and making it explicit.
- Capture of knowledge.
- Importation of knowledge.
- Storage and organisation of knowledge.
- Transmission of knowledge.
- Creation of the absorption capacity (to develop the skills and ability to learn and to find out the knowledge).
- Assimilation (the capacity to make knowledge an asset).
- Applying the knowledge.

WHY THE REPORT?

This report concentrates specifically on the attitude of financial institutions towards KM, on the actual processes and technologies employed to implement it, and the constraints on its full deployment. In other words, barriers holding back the leveraging or sharing of knowledge. It emphasises that KM is not about technology, which is only an enabler, but about the imperative to value and nurture people and their ideas.

That is not to say that technology is unimportant for without it KM would not have created such a multi-faceted role for itself (*see survey results*



page 25). Technology has allowed information, particularly about customers, to be stored in datawarehouses and to be accessed – when required – at least by those who have access to it. It has made financial institutions aware of the importance of making information available to all those who could benefit from it and the value of shareable documents. It has also allowed organisations to manage their documents more efficiently by adopting document management systems. But KM is not about defining the core problems merely in terms of technological solutions but in finding a more exhaustive approach.

Technology also has a potential democratising influence. By facilitating the sharing of knowledge, it can help break down hierarchies and flatten organisational structures. While the benefit of technologies such as the intranet, internet and corporate portals is only just emerging, their full potential could be immense.

"EVERYONE IS A KNOWLEDGE WORKER NOW"

Underpinning a successful knowledge sharing culture is the need for a strong buy-in from senior management and a wish to create an environment where collaboration is positively reinforced. Building a knowledge organisation is not a matter of digitising what exists, it's a question of values and how organisations and the communities within them collaborate and learn. It's neither a front-line or board-level activity. Everyone is a knowledge worker now.

"IT IS OFTEN WHEN PEOPLE HAVE THE OPPORTUNITY TO 'THINK BEYOND THE BOX' IN LESS FORMAL SURROUNDINGS THAT REAL BREAKTHROUGHS OCCUR"

Each individual carries valuable pieces of information, which their experience, knowledge and associations make even more valuable. For this reason there needs to be more emphasis on building communities of interest (or communities of practice), both within and outside organisations – groups of like-minded individuals who share ideas. It is often when people have the opportunity to "think beyond the box" in less formal surroundings that some real breakthroughs occur. One example is that of a journalist who managed, through setting up Yahoo chatlines, to create a small investor group to select new technologies in which to invest.

Creating the right environment for sharing knowledge underpins successful knowledge management and is at the heart of the knowledge economy. That's what this report is about: the knowledge economy and how to succeed in it, recognising that people matter, that it is people who have knowledge and we can all benefit if that knowledge is shared. What marks one competitor out from the other is the ability to tap into this knowledge and to turn it into value quickly. To succeed is as much about learning faster as well as working harder or improving processes.

Financial institutions are essentially knowledge-driven enterprises – enterprises that need to share knowledge to mitigate risk – and both the survey results and the case studies show their attitude towards knowledge and how they intend to leverage it.

The approaches are diverse. At the most basic level is the recognition that cultural change matters at least as much, if not more, than technological change (*Abbey National*, *page 32; ABN Amro*, *page 45*) and that the benefits of this cultural change can be immense.

The Skandia and M&G case studies *(pages 43 and 47)* highlight how some financial institutions have grasped that knowledge and learning represent: "The pre-eminent source of sustainable advantage in a fast-moving, highly-competitive world" – to use the words of Larry Prusak from IBM – by building elearning platforms and providing incentives for training.

Skandia too (*page 43*), is leading edge in the development of the intellectual capital concept and its measurement, thanks to the ground-breaking work carried out by Leif Edvinsson. The issues raised here merit extensive consideration for further discussion.

The case study on UBS Warburg (*page 34*) emphasises the point Prusak made back in 1996 that knowledge management is risk management. When financial institutions take on board the idea that sharing and transferring knowledge helps to create transparency, which in turn helps to reduce risk, more institutions may see the value in adopting knowledge management practices.

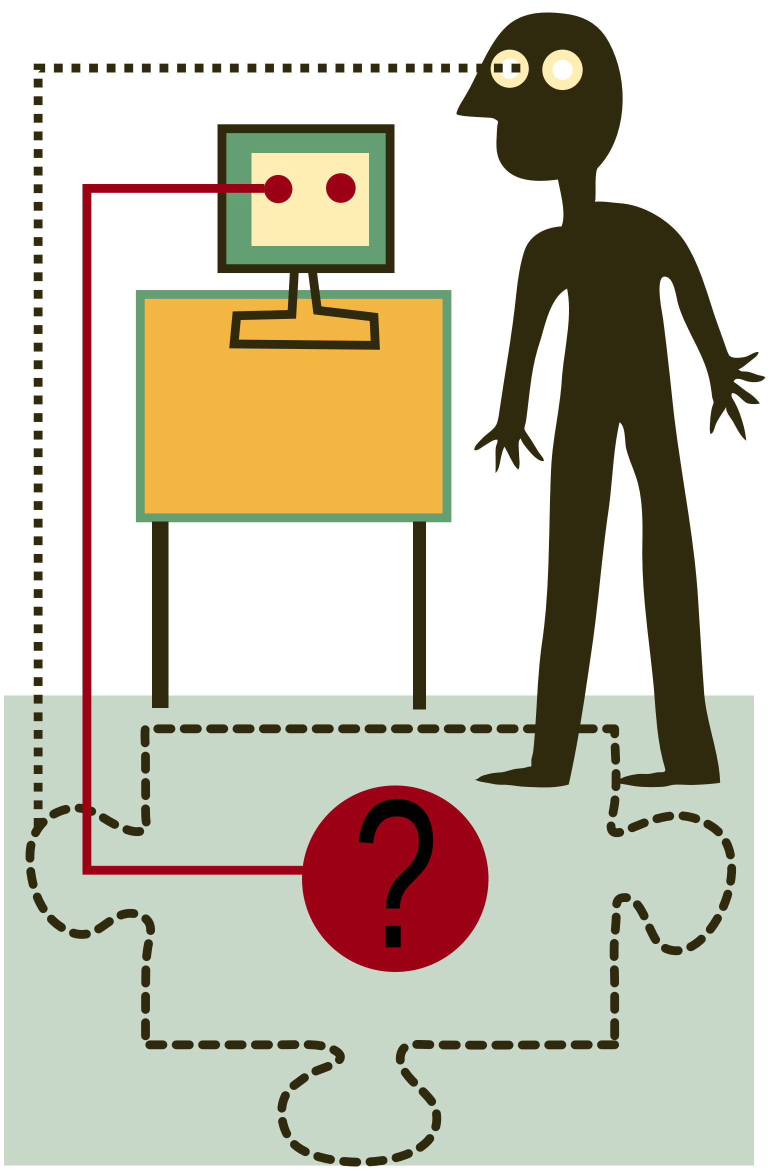
THE LESSONS FROM NATWEST

Finally, the case study on IQ Port (*page 40*) – a venture undertaken by the former NatWest Bank – illustrates how knowledge can be valued and sold and that once we see the benefit of knowledge exchanges, they could become commonplace. Although the venture was abandoned, the lessons learnt from the project have had tremendous application.

This report draws on leading-edge research and the thinking of highly-respected individuals in this field. By producing this research we hope to show that financial institutions have much to benefit from adopting knowledge management practices and that even though they are inherently conservative organisations the willingness to embrace change sooner rather than later is the only way they will stay ahead of their competitors. Some financial institutions, as this report shows, have already accepted this and are yielding the benefits. They are the few, not the many, however, and it is the many we are encouraging to change.

Hard facts for the long view

BANKS HAVE A STEEP LEARNING CURVE AHEAD OF THEM WHEN IT COMES TO INTRODUCING KM PRACTICES, ACCORDING TO THE RESULTS OF A EUROPEAN-WIDE SURVEY OF FINANCIAL INSTITUTIONS. BUT INSURANCE COMPANIES APPEAR TO BE A LITTLE FURTHER AHEAD



The implementation of knowledge management (KM) processes and techniques within the financial services sector is surprisingly immature. The results of this survey carried out by *Financial World*, in association with Xerox, suggest that the real value of KM to financial institutions remains largely unrecognised and therefore unrealised – highlighting the work that needs to be done to raise awareness among financial institutions of the benefits of KM.

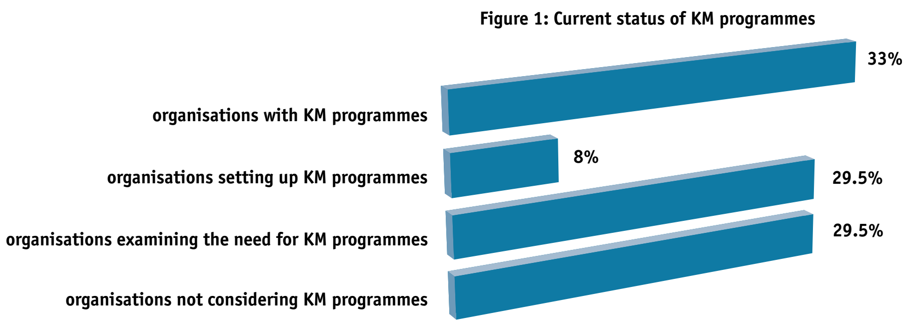
This survey polled the top 200 banks and 100 insurance companies across Europe and all the respondents came from within the top 50 banks and the top 20 insurance companies. The results reflect the relative importance of different KM practices and uses of technologies by financial institutions.

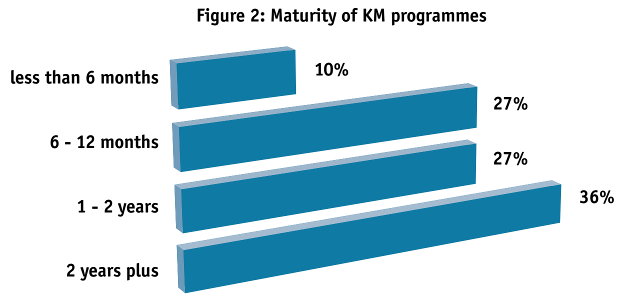
"BANKS ARE STILL UNDER-VALUING THEIR INTELLECTUAL CAPITAL"

They show that only 33 per cent of organisations have a KM programme in place, and that a mere 8 per cent are setting one up. And although nearly 30 per cent of organisations say they were examining the need for a programme, nearly 30 per cent are not considering implementing one at all (Figure 1).

One of the most striking observations from the survey is the difference between the banking and insurance sectors. Insurance companies show they are more aware of KM and its benefits than are banks, and of those which have KM programmes they have been in place for longer. Moreover, among the insurance companies only one respondent says a KM programme is not being considered, whereas among the banks many more say they are not considering any such programme. This suggests that banks are still under-valuing their intellectual capital, the key resource of an organisation.

In addition, since only 41 per cent of organisations have, or are seriously considering, a KM programme, it would appear that financial institutions are either unaware and/or uncertain of the value of KM – despite the hype that surrounds it. And in this regard it appears that European financial institutions are lagging the US in adoption of KM practices, perhaps reflecting the fact





that these organisations are suffering from "initiative overload" – or indicating that some technologies such as customer relationship management (CRM) technology have monopolised attention.

It appears many financial institutions have been slow to recognise and realise the benefits of KM – even though they are knowledge-driven businesses and the World Bank is pioneering work in this area. This is also borne out by the immaturity of the sector: only 36 per cent of organisations have had a KM programme in place for two years or longer (Figure 2). It's hardly surprising then that 76 per cent of respondents say it's too early to tell how effective their KM programmes are (Figure 3).

WHAT'S DRIVING KM?

So, among those organisations that are interested in KM, what is driving their interest (Figure 4)?

According to 63 per cent of respondents, the main driver is to improve knowledge sharing. Obtaining management information and financial data came a distant second at 33 per cent; the retention of intellectual capital and the integration of customer-related information followed close behind at 30 per cent. Consistent with other Xerox surveys only 17 per cent of respondents viewed managing costs as a driver. And the quest for competitor and general market information featured scarcely at all. For the majority of early adopters of KM, the key drivers appear to be globalisation and its ability to add value when developing a company's overall strategy.

One reassuring point to be drawn from these answers is that financial institutions have put the issue of intellectual capital on the agenda. The 30 per cent figure shows that the concept is being considered and one can only assume, and hope, that the nurturing of intellectual capital will continue and that it becomes more important over the next few years.

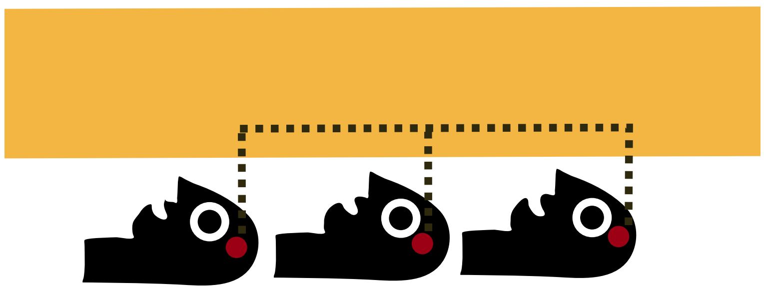
Overall, these results and the breadth of measures used to judge the effectiveness of KM demonstrate that it is driven by a variety of reasons and is a multifaceted discipline. KM technology and processes are used to achieve a variety of objectives and suggests that KM can mean all things to all people – perhaps a little like CRM in its early days – and could end up being seen as a panacea for all sorts of problems. To achieve a more realistic objective about what KM can deliver, and how it can be best leveraged within an organisation, it is clear more education is required. KM needs to be seen as a "multidisciplinary activity" rather than a "technology".

"KM COULD END UP BEING SEEN AS A PANACEA FOR ALL SORTS OF PROBLEMS"

When respondents were asked to list the key priorities within their institution (Figure 5), 56 per cent rank technology, including CRM, as the most important; this was followed by staff training and development at 50 per cent and the development of new products and services at 47 per cent. But since the insurance sector placed significantly greater emphasis on staff training and development than the banking sector, above technology and developing new products, this may also indicate that insurance companies have a more human focus on why they want to adopt KM practices.

LEGITIMISING KM

The survey shows that some respondents are starting to see KM as a separate function within the organisation distinct from HR or IT, for example, and that the level of acceptance of KM within financial institutions is growing. For example, 40 per cent say they have a dedicated KM officer and 74 per cent said they have a specific budget for KM. However,what we should be most concerned about is the 26 per cent who confess to having no specific KM budget at all. This suggests that many organisations still have no idea about how KM can benefit them – and since this response comes from those organisations that are most aware of KM the actual number of organisations having no KM budget at all is likely to be much higher. Of those respondents who say they have a KM budget, 77 per cent say they have decentralised budgets. Location of budgets seem to vary across all functions (Figure 6).



This suggests that anyone wishing to sell KM concepts, technologies or processes into an organisation will find it difficult to identify the precise location of the KM budget and the person responsible for it. As has been recognised in previous Xerox surveys in the early stages of implementation the KM officer is an "invisible organisation person".

A decentralised KM budget also highlights the fact that KM is a grass roots phenomenon – that there is recognition of the fact that KM must work at a grass roots level in order to succeed. It also suggests that KM has not captured the imagination, or attention of senior executives, whose buy-in is crucial if KM is to be successful.

Despite the newness of KM, the survey shows that 80 per cent of respondents intend to invest more in KM over the next two years. Yet 56 per cent also said that it is too early to tell if they are satisfied with their level of investment; another 40 per cent said they are either satisfied or very satisfied. Most revealing, however, is that organisations with the most mature KM programmes tend to be the most satisfied with their level of investment, indicating that KM is not a quick fix – not solved by a simple plug and play solution – but takes time before the benefits are realised.

SHARING KNOWLEDGE AND BEST PRACTICE

Encouraging people to share knowledge is at the core of knowledge management. And it becomes even more important given most respondents say knowledge is stored in peoples' heads, ahead of paper-based documents, shareable electronic repositories and non-shareable electronic formats.

Fifty-three per cent of respondents (60 per cent in insurance) say that communities of interest (CoI) are the most important ways of sharing knowledge and best practice (Figure 7). And although another 50 per cent of respondents say they like to use the intranet/bulletin boards, insurance companies favoured this method less.

Conferences and seminars and formal group meetings are preferred by only 36 per cent of all respondents, but 40 per cent of respondents from the insurance sector say they prefer this approach. Corporate portals have not yet taken off, with only 17 per cent of respondents using them to any great extent; 13 per cent prefer having no formal structure at all – adopting a *laissez faire* approach instead. Total Quality Management (TQM), fashionable in manufacturing organisations during the 1980s and 1990s, was favoured by only 7 per cent of respondents.

Given the relative immaturity of KM in the financial services sector it is probably not surprising that the main barrier cited by respondents for not leveraging or sharing knowledge is a lack of understanding of the benefits derived from knowledge sharing (Figure 8). When this 50 per cent is also combined with the 40 per cent confessing to an insufficient understanding of the benefits, the need for education and examples of success is highlighted.

Technological inadequacies also limit the sharing of knowledge. Nearly 40 per cent of bank respondents say knowledge is held in too many formats and repositories – 66 per cent in the insurance sector; 37 per cent of all respondents say there is no company-wide repository; and 27 per cent say IT

Figure 3: KM effectiveness

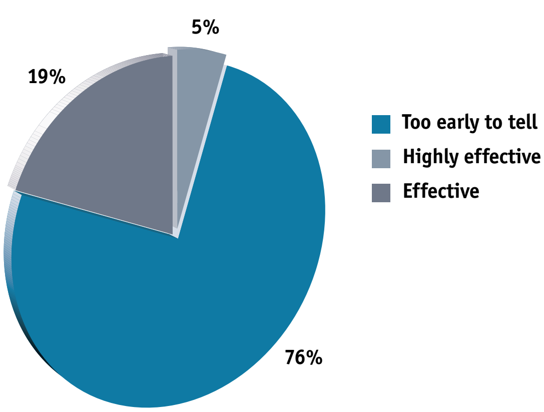


Figure 4: Drivers of interest in KM

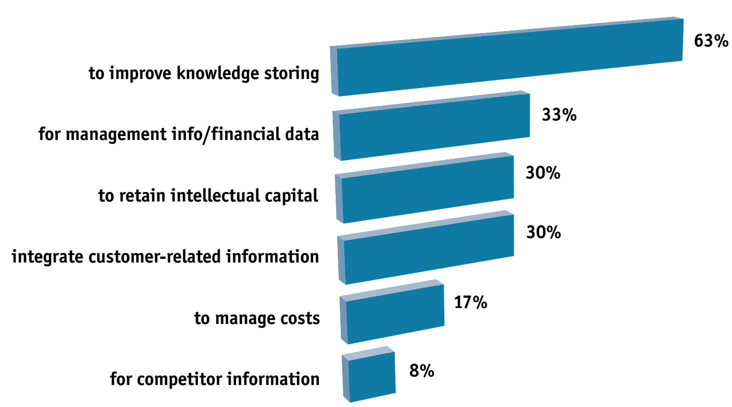


Figure 5: Key organisational priorities

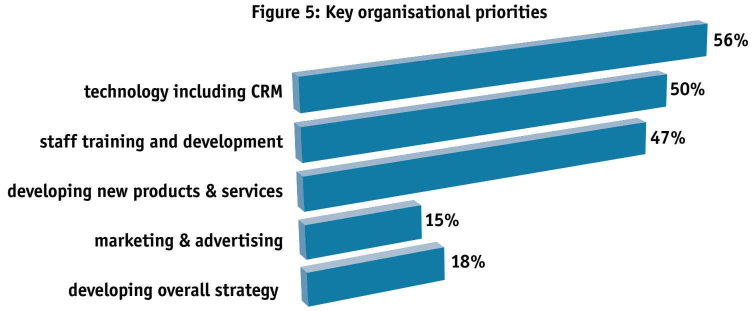
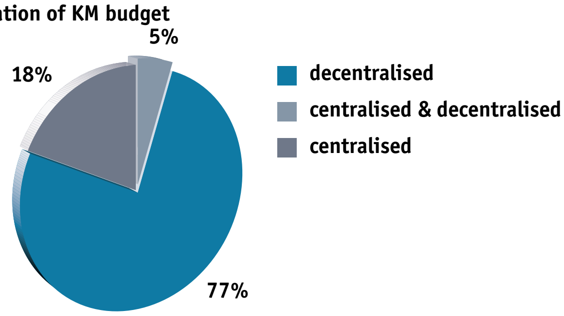
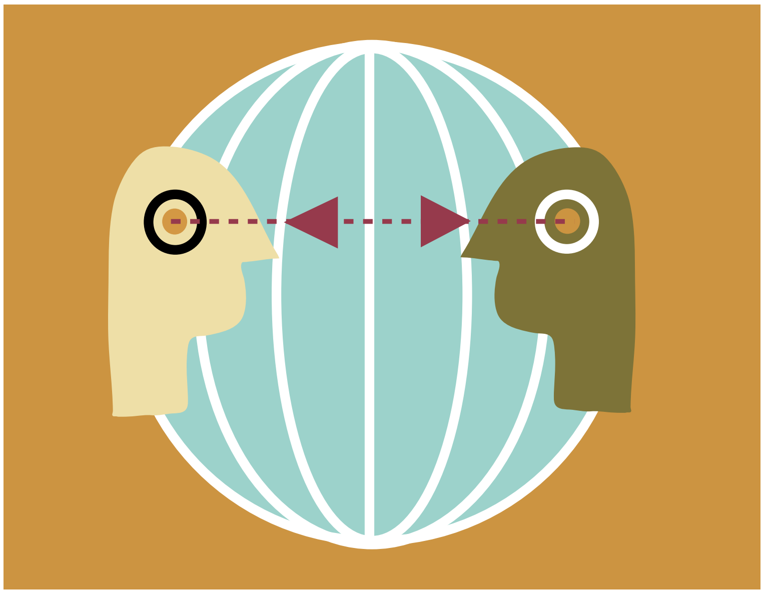


Figure 6: Location of KM budget





systems are too complex and inadequate. Thirty-seven per cent of respondents also cite no clear point of responsibility for KM as another barrier to leveraging and sharing knowledge.

Thirty-seven per cent of respondents also say that the main knowledge problem within the organisation is there is no time to share it; another 20 per cent identify the lack of time to sift and analyse it (Figure 9).

Information overload is also cited as the number one problem by 33 per cent of respondents. This suggests that technology is overwhelming us with information that we have not got time to sift through or analyse. It is also interesting to note that "not using technology to share knowledge" is a concern for 33 per cent of respondents. Yet technology is becoming an important aspect of knowledge sharing.

Herein lies a dichotomy. Much technology was originally designed to augment intellectual input, not for collaborative work. Therefore, are we running the risk of relying too much on technology and ignoring the value of less formal structures, such as networking.

Another barrier for 33 per cent of organisations is "reinventing the wheel". Despite organisations espousing knowledge sharing, this is an uneasy reflection on both human and organisational nature. Another barrier to sharing knowledge is incentives – whether incentives should or need to be put in place to encourage people to share knowledge. Thirty-two per cent of respondents think that the lack of incentives is an important barrier, yet the survey shows that incentives are not the norm. Eighty-three per cent of respondents say their organisations have no incentives at all. Of the 17 per cent that say they do, the incentive system forms part of the appraisal process. In other words, the more knowledge is shared – perhaps measured by the number of ideas or projects that are generated from the initial idea – the knowledge worker receives more recognition. These incentives are not usually monetary.

OTHER KM ISSUES

Other issues addressed in the questionnaire were those concerning the sources of knowledge; how it is embedded in an organisation; the benefits of KM programmes and their effectiveness.

The results were enlightening. Despite the belief that financial institutions are not considered customer-centric the most important source of organisational information is customers (Figure 10). Sixty-six per cent of organisations say this was the case, with 56 per cent declaring colleagues to be the most important source of information. The intranet at 53 per cent and the internet at 43 per cent are both above corporate information at 27 per cent and consultants at an astonishingly 4 per cent. This might even support the myth that consultants learn more from their clients than they provide.

A greater difference is highlighted in the insurance sector where 90 per cent say customers are the most important source of information followed by colleagues. Does this mean, therefore, that insurance companies are more customer-focused than banks? Other key sources of information are: vendors and suppliers (43 per cent) and newspapers and magazines (37 per cent).

When it comes to the type of knowledge most important to business (Figure 11) – that is information which has been interpreted and analysed – the same pattern applies. At an overall level, 77 per cent of respondents say that customer information is the most important source of knowledge, with another 57 per cent saying staff competency is the most important source. Market trends are given 47 per cent and business news, 43 per cent.

Among insurance companies specifically, 80 per cent of respondents say the most important type of information is the customer, followed by 60 per cent for market trends ahead of 50 per cent for business news and 40 per cent for staff competency.

Recognition by financial institutions that customer information and knowledge is extremely important to the overall running of their organisations links to the focus they have on ensuring that appropriate processes and technologies are in place to retrieve it (see previous surveys in *Financial World*).

Sixty-three per cent of respondents say they are either satisfied or very satisfied with their ability to retrieve and use timely, accurate and useful information – but it still leaves nearly 34 per cent who were not. This is true of both sectors.

The main technologies used to retrieve and analyse information are email at 73 per cent, and the internet and intranet, both at 66 per cent. But CRM, call centre and electronic document management (EDM) are also important technologies, all of which are mentioned by 33 per cent of respondents. But one would have expected CRM technologies to have been more important since considerable emphasis is placed upon it. The presence of artificial intelligence and summarising technologies is negligible.

However, when respondents were asked to comment on the technology and processes that they would like to use to improve the availability of timely, accurate and useful information their high awareness of CRM technology is revealed. Perhaps this also indicates that KM is itself building off the foundation of CRM and its enabling benefits. Although intranet-enabled KM strategies came top at 43 per cent (reflecting the focus on colleague information), it was only slightly ahead of CRM at 40 per cent. EDM and intranet-enabled KM strategies were given 30 per cent. But 40 per cent of respondents in the insurance sector say they want to improve EDM strategies, suggesting they have a different focus to the banking sector.

What these results bear out is that CRM technology may be becoming too closely aligned with KM technology; that organisations may see CRM technology as an easy way of implementing KM, either forgetting – or ignoring – that KM is a holistic process, its success more dependent on cultural than on technological change. This could also be a consequence of the influence IT companies have had in creating the impression that technology is the panacea for "knowledge problems" rather than only one component of it.

BENEFITS AND EFFECTIVENESS

Who benefits from KM? According to the survey, it is both the top executives as well as front-line personnel who benefit the most. Fifty-three per cent of respondents say the strategy, planning and research divisions derive the most benefits from KM; another 47 per cent say it is sales/front-line staff and 36 per cent that it is customer service. The financial and management divisions and IT are seen as benefiting less from KM with 33 per cent and 20 per cent respectively.

Respondents in the insurance sector gave similar answers with 50 per cent saying the strategy division derived the most benefit from KM, 40 per cent saying it was the sales division, human resources, customer services and financial management. IT came last at 30 per cent. In both cases these results reveal that the function associated with the delivery of KM and the target of vendors benefits the least from it.

Figure 7: How organisations share knowledge & best practice

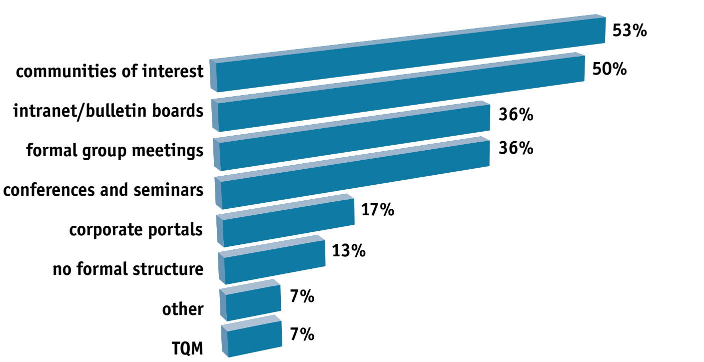


Figure 8: Most important barriers to leveraging sharing knowledge

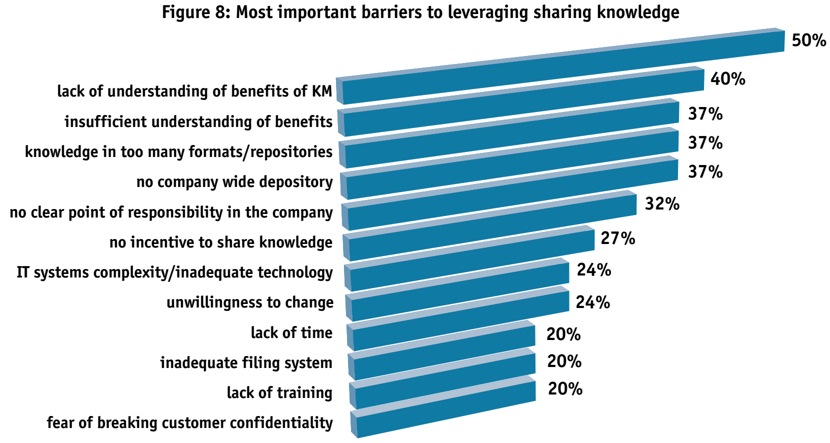


Figure 9: Most important knowledge problems within organisations

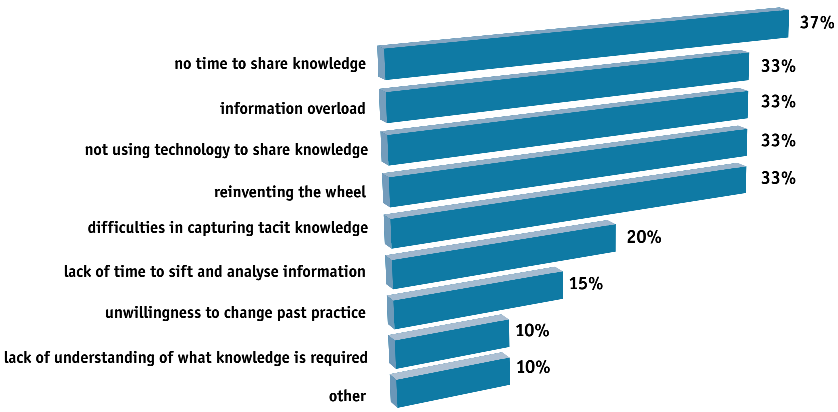
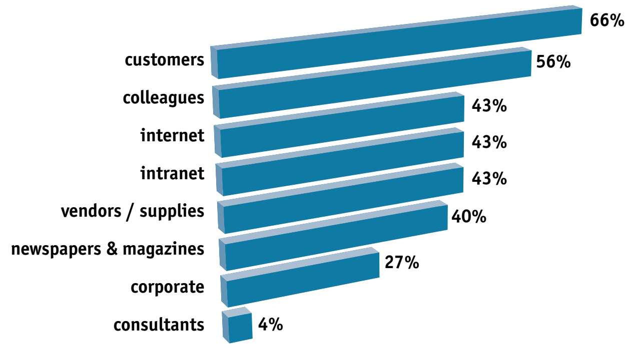
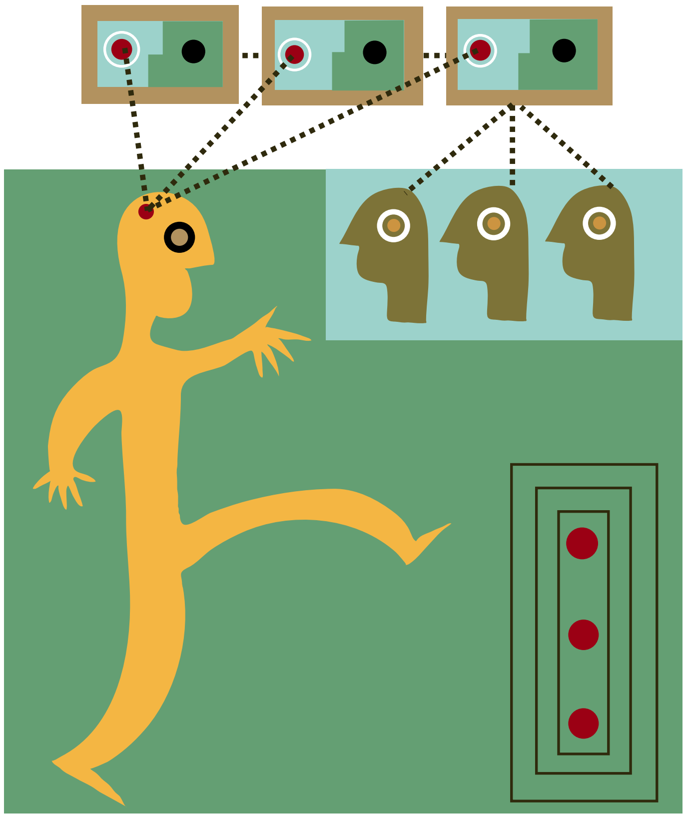


Figure 10: Most important source of organisational information



There is both an internal and external focus to KM. The main benefits from KM or those that are expected to arise from it (Figure 12), are said to be: improved quality of advice to customers and customer satisfaction or service (57 per cent) and improving competitive advantage (47 per cent). KM is also expected to facilitate knowledge sharing, enhance profit and growth, enable better investment decisions and help to achieve a more focused strategy. Improving employee development and helping to cross-sell other products and services are also cited as additional benefits of KM.

In trying to measure the effectiveness of KM financial institutions use a variety of tools, both qualitative and quantitative, such as staff and customer satisfaction, product innovation and the extent to which more business opportunities have been created. The quantitative measures concern cost reductions or profits increases – although a direct cause and effect is difficult to prove.



STORING AND SHARING

We asked for an assessment of how knowledge is stored in organisations. Thirty-two per cent of respondents say most knowledge is stored in "people's heads", followed by paper at 26 per cent, company-wide shareable electronic formats at 19 per cent. These compare with a similar survey undertaken by Delphi several years ago which found that 42 per cent of knowledge was stored in people's heads, 26 per cent on paper, 20 per cent in non-shareable electronic format and 12 per cent in a shareable format.

The preference shown in our survey for storing knowledge in shareable electronic formats reflects the changing attitude, and perhaps improved understanding of KM, over that period, as well as the availability of technology and the impact of digital storage. Indeed, 27 per cent of respondents thought that these figures would change over the next 12 months and 37 per cent believe this would take two years. A massive 76 per cent identify company-wide shareable electronic repositories as becoming the most important way of storing knowledge.

The survey shows that 70 per cent of all respondents still use a mix of electronic and paper-based documents to embed knowledge as against 60 per cent who say knowledge is embedded in processes and 50 per cent who say it is embedded in products and services. In the overall survey, communities score a low 20 per cent.

Is such a reliance on documents and singular emphasis on storage the way forward in this internet-driven age where decisions have to be made in real time, and people rather than documents are the holders of real

"IF KNOWLEDGE IS MOVING AROUND AN ORGANISATION, IT IS EXPANDING AND GROWING"

knowledge? Our view is that businesses need to create digital libraries that contain their ideas and experiences as opposed to archiving what is the most convenient, and often irrelevant information.

However, as information goes digital there is a risk of "digiglut" — referring to an overload of information stored electronically. Storing knowledge in electronic format is a foundation for managing knowledge but there also needs to be emphasis on radically improving the speed and accuracy with which people can search through them.

There are additional elements to be addressed. The first involves the needs of communities of knowledge workers. Organisations should support them with an environment to provide easy access to each other's knowledge – underpinned by technology that encourages casual participation, reward sharing and awareness of community activities.

The second is navigation. Organisations and knowledge workers need tools that map, categorise, visualise and search – or in practical terms make sense of knowledge assets. There is evidence from the recent listing of Autonomy on the London Stock Exchange that the area of search engines will grow exponentially, especially once digital libraries are created.

Yet search is not enough; flow is also critical. If knowledge is moving around an organisation it is expanding and growing, creating new knowledge and value. The ultimate goal is a system that learns and observes the communication patterns and usage of knowledge seekers and providers alike and automatically keeps information and knowledge moving freely among them.

With this comes the responsibility to change culture if necessary. Over-reliance on rapid application of technology without considering the human dimension will detract from investments in KM. By paying attention to these elements in an integrated way organisations can leave behind the status quo and what appears to be a frustrating experience of technology, time and information overload.

PREDICTIONS FOR THE FUTURE

As long as knowledge resides in peoples' heads, financial institutions will have to place more emphasis on establishing communities of interest and other networking processes. They will also need to put more time and effort into staff training and development to ensure that staff have the necessary skills to get the most out of technology. In this respect, the insurance sector appears to be setting the pace

At the same time though most respondents expect company-wide, shareable electronic documents to become the most important way of storing knowledge over the next two years. This shows that financial institutions are becoming more "sharing focused". As technology permits more knowledge to be shared it may in turn, flatten otherwise hierarchical structures. It is also likely that financial institutions will expand the range of tools they currently use to retrieve and analyse information, placing more emphasis on search engines and summarising tools, yellow pages and corporate-personalised web portals, as well as seeking out bespoke solutions based on how people work rather than on how systems are designed. The key to making knowledge sharing a reality in financial institutions is to make it an intuitive part of the normal work process.

The appropriate organisational processes have to be in place to extract information from both customers and colleagues and to permit this knowledge to be shared. This should be a key priority. CRM may have established the foundation but this survey shows that although financial institutions have made a start they still have some way to go.

Figure 11: Types of knowledge most important to business

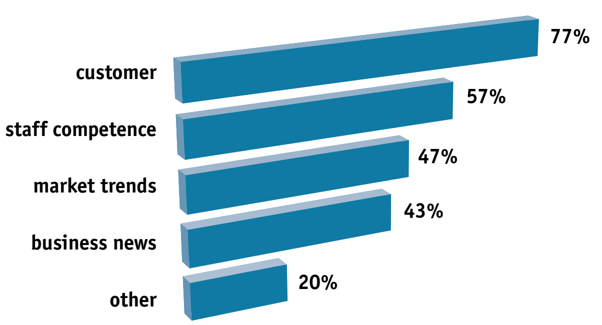
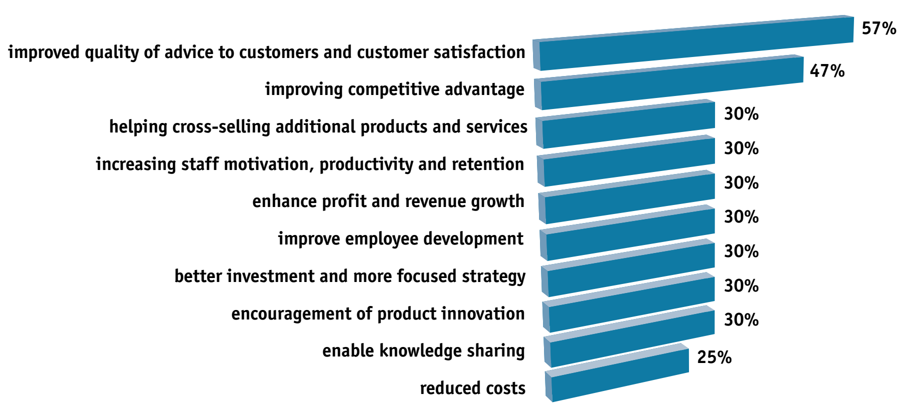


Figure 12: Benefits achieved and expected from KM programme



Implementing knowledge management

CHANGING THE WAY PEOPLE THINK, AS WELL AS THE WAY THEY WORK, ENTAILS A CORPORATE-WIDE CULTURAL CHANGE AND IS THE KEY TO A SUCCESSFUL KM PROGRAMME, AS **ABBEY NATIONAL** FOUND OUT

Abbey National began implementing its knowledge programme two years ago. But it had already caught on to the importance of knowledge management way back in the early 1990s.

Philip Ramsell, the bank's first group knowledge management officer, says: "Back in 1992, KM was something on the horizon in information technology terms, but it stayed in that IT vision until probably two years ago." It was then that a high-level steering group decided that the vision should be developed into a group strategy and then implemented. "But moving KM from a high-level strategy to an actual implementation programme is the tricky bit," says Ramsell. The group's strategic framework is one of growth and, he explains, "KM was to be one of the key factors to growing our group".

Ramsell was appointed group knowledge manager in February 2000, abandoning his career as a corporate lawyer. And although the appointment of a lawyer rather than an IT person might seem strange, Ramsell asserts that as lawyers deal with knowledge, the concept is instinctively easy to understand.

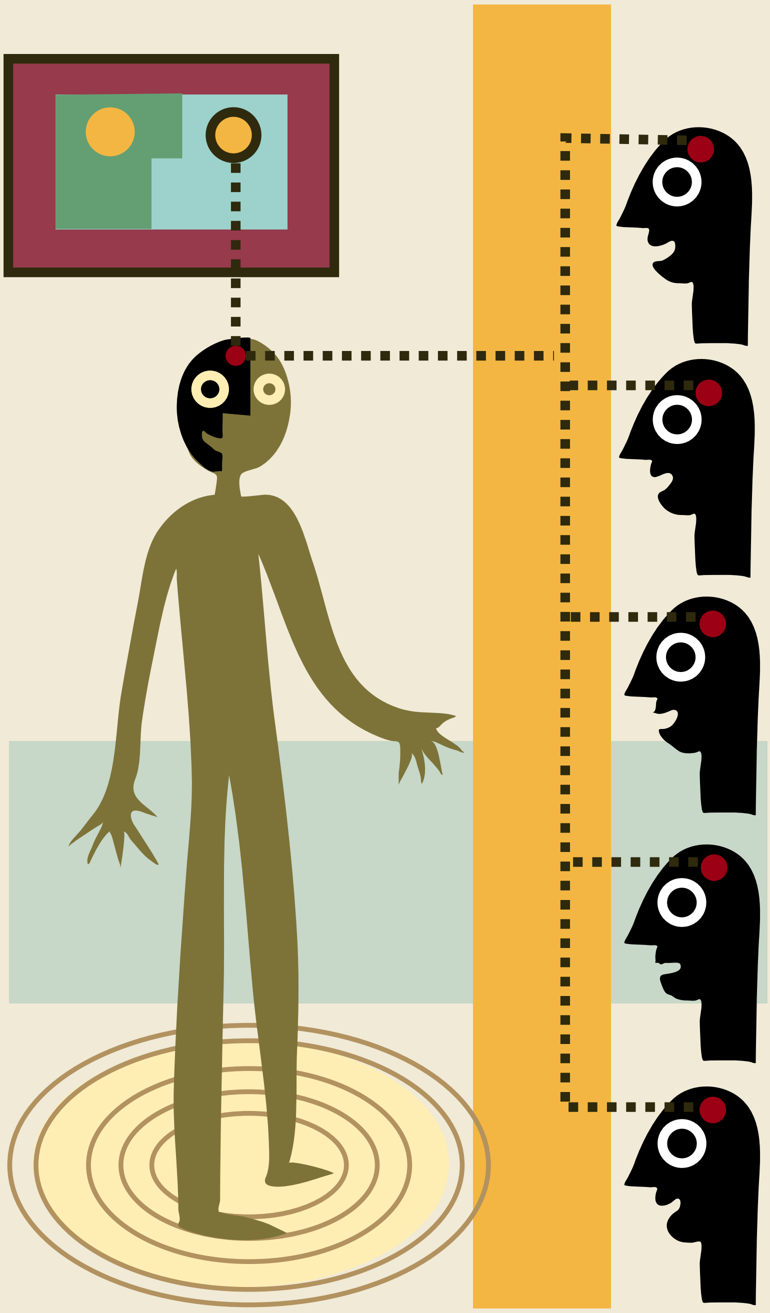
The KM programme started in February 2000 and Ramsell says he inherited a very IT-focused approach. "The programme focused very heavily on document management and on technology to assist collaborative working, such as communities of interest and communities of practice."

But as the programme has developed, and as awareness has grown about what it takes to deliver a best-practice KM programme, the approach has widened. "Although the programme still has a very strong IT focus we realise that it is more about culture and behaviour, so we have incorporated other key activities side by side with the new technology within the programme," says Ramsell. He explains that encouraging new ways of working and behaviour is about changing the culture of an organisation; to encourage collaborative working across divisions in a less hierarchical fashion.

KNOWLEDGE SHARING

Randall says the starting point for Abbey National's KM programme was recognising that knowledge has a value of its own, that it is an asset and that it needs to be leveraged. He adds: "We see collective knowledge as more powerful than individual knowledge. This involves a more knowledge-sharing, idea-generating culture, but it entails a very big change within an organisation."

By improving the organisation's innovative capability and encouraging the sharing of ideas, KM is expected to facilitate faster decision making and organisational integration. In other words, says Ramsell, a KM programme should ensure that knowledge is used effectively so it improves decision making, increases knowledge sharing and supports the company's corporate values. "These values within the group are all about partnerships and team



building," he says. Perhaps, most important of all, KM is expected to give organisations that employ it effectively a competitive edge. "Learning faster than our competitors may well become the only sustainable competitive advantage," says Ramsell, echoing the thoughts of many KM experts.

A NEW TRADITION

Abbey National's approach to KM is very common. First it distinguishes between data, information and knowledge and then between tacit and explicit knowledge. It also strives to move away from the traditional approach where knowledge is stored in processes/systems, in printed manuals and in people's heads, to one where knowledge can be accessed by corporate intranets, electronic document management systems and collaborative workspaces. "We have a traditional, hierarchical business structure, which puts up barriers to knowledge sharing. So we needed to come up with a structure that moves across those lines. That's where we see the communities of practice and of interest approach working because they are non-hierarchical and cross-functional," explains Ramsell.

"We then look at where we have knowledge and compare the old with the new approach, just so we know exactly what is happening," he adds. "The thing we major on in our first phase of the programme is 'document capture' and sharing. But we also concentrate on connecting people – knowing who we've got and where they are: the yellow pages idea." Abbey National recently introduced document management software from Documentum, which is a document management system with a browser access interface. Abbey National has 200 pilot users trialling the system to assess the benefits. "We are also developing our corporate intranet to build on its knowledge capture and sharing potential," says Ramsell.

This, he explains, is to "build on existing synergies and initiatives and bring them together. We prioritise these across businesses where we can add most value." He adds: "We learn more by sharing information. We encourage people to share in a trusting environment." Ramsell admits that this is a "great statement", but says what really matters is how you actually do it.

He also recognises that it's important not only to identify where an organisation wants to get to, but also to ask what employees are expected to get out of a KM programme. These expectations should be clearly set down. Abbey National's expectations are clear: staff are expected to adopt the new technology; to store documents in shared folders; to document their experiences so these too are made available to others; to work online via discussion groups and electronic workflow and assignments; to work as teams, whether as communities of interest or cross-functional groups; to share their tacit knowledge; to publicise their skills such as putting "mini" CVs on line; and to recognise authorship and the contribution of others.

"LEARNING FASTER THAN OUR COMPETITORS MAY WELL BECOME THE ONLY SUSTAINABLE COMPETITIVE ADVANTAGE"

Bringing about this change in attitude in an organisation is a major challenge, however, and requires not only training staff in the way technology is used, but also communicating the vision and purpose of KM. It requires overcoming staff concerns of giving away too much knowledge and the fear that KM will require more work without a commensurate rise in rewards or recognition.

At Abbey National, while there are no monetary incentives for sharing information, the extent to which a "knowledge worker" shares information forms part of the annual performance assessment. Making KM truly effective therefore requires realigning behaviour. Abbey National is developing activities to try and achieve this. A better understanding of organisational behaviour is also being developed by monitoring behaviour, for example.

THE DAFT QUESTION SYNDROME

Ramsell explains that the technique of social network analysis shows four important criteria for an effective knowledge network. First, there must be an awareness of who to ask; second, everyone's contribution must be valued; third, people must feel able to actively engage in solving the problem, and last, people must feel safe to ask daft questions; there must be no personal cost to doing so.

Ramsell says that first it is critical to gain high-level support when introducing a KM programme. He believes resistance comes mainly from lower down the organisation, primarily over fears about the loss of power resulting from knowledge sharing. Second, he says that a KM programme requires the willingness to make a substantial investment upfront, both in technology and training programmes. "The first leap has to be a leap of faith," he says. Third, an organisation should build on existing initiatives and last, but not least, everyone in an organisation must be prepared to change the way they work.

UBS Warburg: why knowledge management is risk management

THE APPROACH TAKEN TO KNOWLEDGE MANAGEMENT BY ONE DEPARTMENT OF THE INVESTMENT BANK **UBS WARBURG** HIGHLIGHTS WHY IT IS ESSENTIAL IN ORDER TO IMPLEMENT EFFECTIVE RISK MANAGEMENT. IT ALSO SHOWS HOW KM CONCEPTS CAN BE APPLIED TO DIFFERENT ASPECTS OF A COMPANY

One department of the global financial services firm UBS Warburg has based its approach to knowledge management on the premise that "active" knowledge management (KM) is essential for effective risk management.

Ian Martin, the investment bank's executive director of legal and compliance, says: "I'm firmly of the opinion that good knowledge management – combined with continuously improving information and communication channels – is essential to manage risk." As one of the main responsibilities of the legal and compliance department is to control the level of legal and regulatory risk assumed by the bank in its day to day business, he says: "The true value of knowledge management is in the risk area, where you have to think 'now that we have this information, how do we really use it?'"

SQUEEZING OUT THE RISKS

KM is about access to information, open channels of communication and attitude, which combine to provide good judgements and responsiveness based on a complete grasp of the predictable and unpredictable elements of a problem. Martin outlines three different types of risks: market, credit and operational. He refers to the latter as "consequential risk", defined as: "The exposure to factors that are not actively entered into, but which are a consequence of our business activity." The imminent change in the Basle capital adequacy rules, whereby financial institutions will have to put up capital to meet operational risk, is likely to make this type of risk more important over the next couple of years.

It is easier for banks to deal with market and credit risk than operational risk as they are areas where they have more information and knowledge. "For credit and market risk we have large amounts of data because there is frequency and magnitude," says Martin, by which he refers to the large volume of loans and client relationships. Banks also have a great deal of historic data on market and trading movements and a long history of developing methods and controls in a department under the guidance of one person. For operational risk, the pieces can be spread between front, mid, or back office or fall between the gaps of departments, internal and external custodians, or processors of information or transactions.

Martin says: "There are risks that bring in rewards and risks that bring in costs because processes are inefficient. We have to understand all of the drivers in our business that cause us to take on any unexpected regulatory, compliance or liability risk." The aim, he says, is "to squeeze out any unexpected loss and be responsive and swift when something unusual and unexpected happens: legal and regulatory risk must be maintained at levels that are acceptable to the bank."

He continues: "At a time when legal and compliance functions are being stretched, and our business frequently crosses national or regional jurisdiction boundaries, we must work 'smarter' if we are to continue to offer an effective risk management service to the bank. We must utilise what we know as a global team: how we access that knowledge, how we learn from it and how we communicate that knowledge.

"Working smarter is partly about raising our game 'in-house'. External counsel and experts have an important role to play when second opinion or specific expertise is required, but we often have the expertise and knowledge in-house: we just don't always know what we know and how to go about accessing our own 'experts'. If we can do that more effectively, we can offer a better and more cost-effective service to the bank."

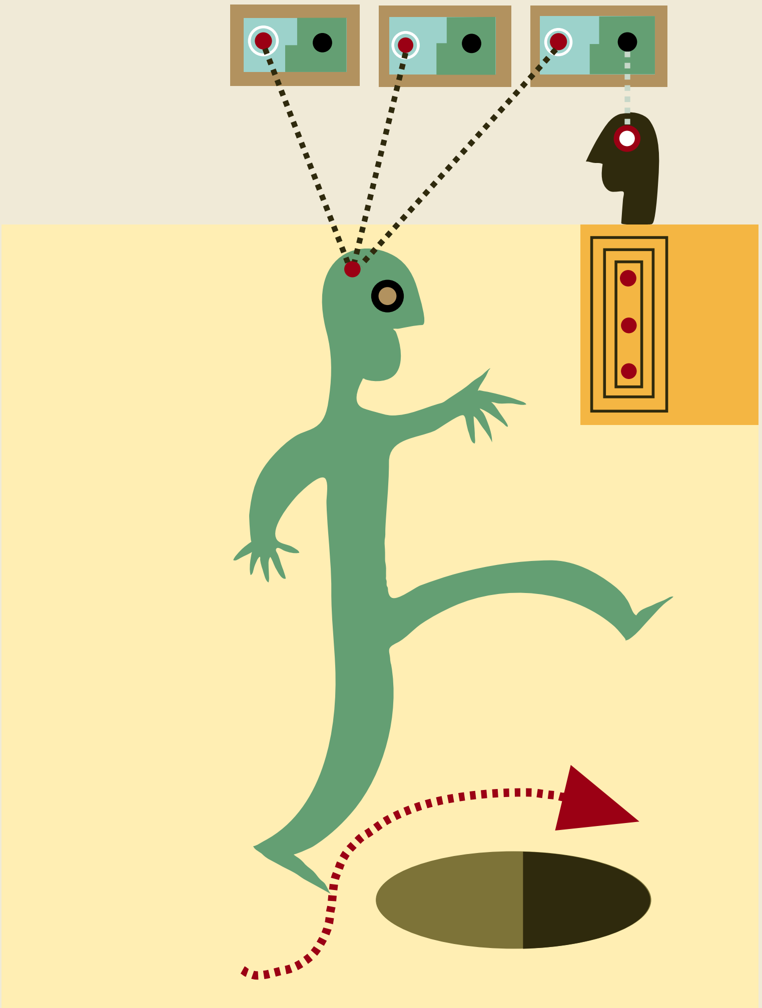
Risk management, explains Martin, "isn't really about IT infrastructure and information systems (although they are important tools), it is about ensuring that people think the right way so they know exactly what they are doing:

- In what context.
- Who else it might impact upon.
- Who else might know something important about it.
- Where they can find that information.
- How the information can be transferred to the right people at the right time so that they can make the right decisions."

IMPLEMENTING KM

Martin says: "Good KM for me means 'active' KM, and by that I mean a way of managing knowledge that is dynamic and fits with and responds to the way we do things."

He maintains that a lot of the KM principles are embedded within the legal and compliance processes in UBS, and in the databases, information banks and libraries that exist already. But he maintains that to make KM 'active', "people have to understand the reality of information flows and communication: not how they work in theory, but how they work in practice, every day, on the ground. As a global bank we also need to know about the way those processes vary in different geographical areas. If we don't know that, how can we expect to share knowledge effectively?"



A named 'KM officer' has not been appointed either in the department or in the bank, but "a lot of work is being done that is of a KM nature," he says. "We can't expect to just bolt on a new knowledge system. We need to have knowledge 'champions' scattered through the organisation. Lawyers and compliance officers are bright and very busy people, they don't want the added pressure of having to conform to a new way of working that doesn't fit with how they do things. They need to be convinced of the efficacy of a new approach and know how it will help them day-to-day."

The legal and compliance department initiated a communications project 18 months ago to increase the understanding of information and communication flows and think of ways to improve them. The objectives can be spilt into four says Martin: "We want everybody to know everything that is going on with our clients. We want to make consistent decisions and give consistent advice. We want to make sure that once a piece of advice has been given, we don't have to give it again, and we want to make sure that all our staff are fully acquainted with everything they need to know to do their job well." In implementing the process Martin says they built the global project team from "the people who deal with our clients on a day-to-day basis around the world.

"We deliberately had no senior management involved because we felt that we had to know from those at the 'coalface', where information provision and communication – and therefore knowledge management – were falling down.

"By constantly asking 'why' things weren't working and how they might be improved, the group uncovered some cultural, as well as practical, barriers to the free and open flow of information and knowledge.

"Two factors were crucial in the success of the group, finding the budget to meet face-to-face, and ensuring that they were well supported by external experts through each stage of the process. What is also interesting is that by looking at technologies, roles and responsibilities, process and culture at the same time, the group had a deeper insight into what might need to change."

There are several guiding principles and tests used to assess and prioritise possible initiatives:

- Does it contribute to a better "early warning system" for risk?
- Will it increase the timeliness of response to an enquiry?
- Will it contribute to an environment of respect and consideration for the experience and needs of individuals in making and responding to enquiries? (And thereby improve the quality of internal communication in L&C and, ultimately, the quality of shared knowledge.)
- Will it consolidate shared opinion?
- Leverage off experience. Constantly ask colleagues: "How would you recommend we deal with this issue?"
- Aim for the sense of a cross-regional presence in each and every office.
- The default should be openness not confidentiality.

There is also some thinking going on into how new tools such as "Chat" and "Avistar" (PC video conferencing), can best be utilised. "The whole point is get information to the right people to use in the right way to create value," says Martin. "Now we know what has not worked in the past so we can move forward with a clearer focus."

Increase your capacity to act

VICTORIA WARD OFFERS SOME ADVICE ON HOW KNOWLEDGE MANAGEMENT CAN HELP GIVE A COMPANY VALUABLE INSIGHT INTO ITS OPERATIONS AND LEVERAGE KNOWLEDGE FOR LONG-TERM BENEFIT

It was in late 1996 that I first came across the notion of knowledge management (KM) in an article in the *Financial Times*. It was as if a light bulb had gone on in my head. By the end of the year, the investment bank where I worked had installed a KM team, of which I was a member.

We questioned the staff and gathered insights into the kind of knowledge approaches that had already been tested. *(See box on page 37.)*

This was the starting point for a programme of activities based around:

- Creating new guides to experts, expertise and resources – "mapping".
- Piloting new ways of working – "mining".
- Increasing the possibilities for a chance encounter and the sharing of experience – "storytelling".
- The bedding of protocols that would prompt behaviours leading to markets in knowledge – "exchange".
- Requisitioning the library and librarian to experiment with knowledge environments.
- Managing collections of assets – "space" and "librarianship".

These six components are still the cornerstones of most of the work and research we engage in.

ECHOES OF FOUR YEARS AGO

Even when we start new assignments there are uncanny echoes of our early work. Last year, we worked with several financial institutions on knowledge-management programmes. Typical examples of the comments to our questions were:

- "Turf protection wherever you turn."
- "It's a labyrinth."
- "It's a bit like a jail, lots of little cells with information and people not being able to communicate."
- "It's like a life belt, information arrives at the last moment."
- "It is as talented a group of people as I have ever met, but has no mechanism or natural inclination to disseminate information."

It seems that the same challenges remain, compounded by conditions of merger, consolidation, outsourcing, e-commerce and shifting coalitions inside and outside the organisation. This has increased the turbulence and instability of the environment.

FIVE QUESTIONS (SOURCE *)

Typically, it seems, there are five questions organisations try to address in various ways, often simultaneously.

How can I:

- know what I know?
- learn from experience?
- structure (or value) a collection of knowledge "assets" and tools?
- innovate using effective approaches from unexpected sources?
- make sure that knowledge and insight are transmitted and received?

Questions are often addressed all over the organisation in different ways, under different guises. Sometimes they are addressed within the framework of a KM programme. Initiatives normally compete or overlap. They rarely communicate well.

TWO SCHOOLS, FOUR MODELS

Broadly, the theory and practice of KM derives from two sources: management theory (knowledge as a managerial concept), and accounting theory (accounting for knowledge and intellectual capital).

It is also possible to identify four models. This classification, although crude, has the merit of having been developed with David Snowden at IBM, and others. This means there is some broad consensus – albeit accompanied by heated debate – as to boundaries and terminology.

(SOURCE **) In crude chronological order of evolution, the models are:

- **The mechanical model:** "It can all be solved by overlaid structured process."
- **The technological model:** "It can all be solved by search agents and data mining."
- **The market model:** "It can partly be solved by creating markets, exchanges and measuring systems, which prompt the formalisation, valuation and exchange of intellectual and social capital."
- **The emergence model:** "It is too complex to solve, but understanding the rules of interaction in a complexity model – and exploiting the links between a coherent framework and anarchic success bubbling up from direct action – will create substantial innovation and sustainable successes."

Encouragingly, there is a growing recognition that sharing knowledge is essentially a social activity, which operates in "shadow" rather than "formal" organisational structures. However, the substantial investment in KM projects has generally been seen to yield rather disappointing results. Consequently, there is a pervading sense that knowledge management is another consulting bandwagon – that it's time to move on and tackle organisational transformation and respond to the demands of e-commerce and mass customisation in new ways.

This would be a mistake. As Marcus Speh Birkenkrahe, from Shell, says: "The way to deal with things is not to pretend they don't matter, or to pretend that the world is a giant, complicated machine and there is one mechanistic formula we can find out."

Knowledge management suffers from ingrained difficulties of identity and attitude. New organisational structures will need to pay attention to the social, cultural and voluntary aspects of knowledge transfer, whether the project is labelled "knowledge management" or not. And any project will tend to come unstuck if it tries to lay a new set of processes over an imperfect existing one,

KNOWLEDGE FACTORS	ENVIRONMENTAL IMPACT	POSSIBLE KNOWLEDGE APPROACHES
EXPERTISE AND EXPERIENCE • "We don't know what we know." • "New entrants naively put the firm at risk." • "A nomadic workforce takes knowledge with them."	"The 'human capital' of the firm is underused. Knowledge is seen as a personal possession."	• Self-governing groups, communities of practice, peer review. • Maps and guides, audits. • Apprenticeship, shared models and values, reflective practice. • Social spaces, markets and exchanges.
INFRASTRUCTURE • Geographical dislocation mitigates against sharing. • No shared information protocols. • Things happen technology-first. • Fragmented ownership of information utilities (phone book, space, intranet).	There is no coherent understanding of what to encode, what to instruct, and what to leave to individuals. Opportunities are missed, for example, to incorporate good knowledge practices round existing business and infrastructure projects such as a building move.	• There are too many formal information policies and a minimum of shared protocols. • Physical space developed as "knowledge asset", project histories and lessons learned
CLIENT MARKETING • Relationship managers as goalkeepers, not goal scorers. • Knowledge assets unmined, for example, tacit knowledge in research, risk. • Important nuggets gleaned in conversation go unrecorded and unshared.	Time, effort and money are wasted on damage limitation. Potentially valuable nuggets lie unused. Big deals, tenders and transactions pass by unexploited.	• Communities. • Strong collegiate culture. • Effective client custodianship. • Guides to identify experience and expertise. Dedicated client rooms to create client knowledge base rather than meeting rooms.
PRODUCTS AND PROJECTS • New possibilities are not shared and there is a limited entrepreneurial responsiveness. • No learning from the past.	R&D (research and development) is unexploited. There is a dependency on replication, not innovation. Incidental intelligence gleaned from one project is not made available to another. Failures are repeated at great cost.	• Anthropological, storytelling, coaching, journalism roles within product and project teams. • Lessons learned throughout the project. • Appraisal shifts from achievement to truthfulness and reflective practice.
RISK REPUTATION • Right information does not get to the right place at the right time, if ever. • Empowerment/control imbalance. • Corporate amnesia. • No collective awareness of risk. • Exceptional versus general-risk identification. • Operational risk falls between gaps in structure.	There is a restricted ability to anticipate. Professional firms are caught out by not being aware of collective risks that can damage their decisions. Individuals involved in detailed process are unable to see the bigger picture, or have nobody to go to with their concerns. Small elements of the big picture go unnoticed with dangerous consequences. Appropriate "whistleblowing" in risk management does not take place.	• Briefing and debriefing systems. • Scenarios, awareness of extremes/exceptions. • "News management methods" for speedy transfer of the right information to the right places. • Time to create shared mental models.
GENERIC SOCIAL/CULTURAL • Sheer weight of knowledge/information traffic – fear of asking for help (vulnerability). • Ignorance of the ability to help, lack of inclination (knowledge is power). • Blame culture. • Tribal rather than community set up. No culture of debate.	There is no culture of mutual trust and help, and no awareness of basic information and knowledge sharing or storing protocols. Individuals guard their own knowledge and only share with those within their network of contacts.	• Communities. • Real and virtual places of information exchange, social engagement, debate, solution finding. • Piloting approach to change management. Small focused communities, multiple tools.

Source: Amended version of a table which appeared in a report to ExCo, June 1996

without much thought as to how to weave the fabric of the old and the new together.

PEOPLE, PATTERNS AND PATIENCE

Everything seems to point to the need to shift the patterns simultaneously at the most macro (organisational, network) and the most micro (individual, smallest organisational unit) levels.

This may seem both unreasonably sweeping and unattainable. All the same, it is the conclusion we have drawn from our experiences of the past four years. As one of the main mantras of management runs: "Learning from failure is our greatest asset."

So what are the risks?

1. UNIQUENESS AND GENERALNESS

As outlined in the article: *Shifting the Patterns*, by Price, If and Shaw: "The practice of shifting patterns is 'problematic' because of the complex interconnections of sub-patterns within larger structures that have both generalised similarities and unique differences. Generalised solutions that ignore the unique attributes and circumstances of particular backgrounds will have limited effect."

2. THE GAP BETWEEN THE "OFFICIAL" AND THE "SHADOW" ORGANISATION

This is most evident in the "I know what the procedures manual says, but this is how it has always worked really" gap.

There is a gap between the formal and the informal, which is either ignored or referred to with the kind of irony which creates barriers for new initiatives.

3. COMMUNITIES OF PRACTICE (CoP)

The emerging recognition and development of semi-formal structures, such as communities of practice, starts to close this gap. As Ross Dawson, managing director of Advanced Human Technologies, says: "With the globalisation of investment/research/M&A, most banks have set up de facto CoPs in industry groups, especially research, though most seem to be self-organising. That is to say, CoPs are implicitly understood to be important, but very little is explicitly done to develop them. To get people to understand what CoPs are, is what KM is really all about."

Institutionalising such structures can generate risks, because the very essence of their effectiveness is their informality and the voluntary nature of commitment to them. *(See the UBS case study page 34.)*

4. LICENCE TO OPERATE

Rarely does KM have a clear role to play in the generation of intellectual capital or risk management. For many of us with backgrounds in both risk and knowledge management, it is increasingly evident that organisations ought explicitly to acknowledge that risk management is knowledge management.

This goes to the heart of the organisation's licence to operate. The most effective future-knowledge programmes in financial institutions should govern risk management and vice versa, particularly with the increased emphasis on operational risk prompted by consultations on the Basel Accord on capital adequacy *(See the UBS case study page 34.)*

5. THE COMPETENCY GAP

The competency gap, is the gap between what an organisation needs and its actual strength. Freddie McMahon, CEO of technology company EXTU, put it this way: "The gap is getting larger as the pace of change accelerates. This puts at risk the strategic investments. This risk is not factored into investment decisions. If it were, the demand for knowledge management would be huge.

"You need to attack CEOs, CFOs and the HR department for not addressing this risk in their investment decisions. You should attack training budgets as inadequate investments for knowledge acquisition and knowledge transfer. *(See the IQ Port case study, page 40.)*

Two core competencies for effective KM are the recognition of patterns and the ability to explore ambiguity. Both are difficult to develop and sustain in times of uncertainty, especially with an increasingly nomadic workforce.

6. MAKING SENSE OF UNSTABLE PATTERNS

Little attention is paid to making sense of things. The emphasis is still on process. If individuals cannot make sense of the organisation and their location in it, or see the small patterns (so often shared by chance) as well as the big picture, they will not be able effectively to judge risks.

Nor will they be inclined to take individual risks, or even be prompted to share what might be critical insights. The development of shared languages, contexts and mental models are the DNA of any successful organisation. This takes time and patience.

7. FROM PROFESSIONALS TO PUBLISHERS

An inescapable consequence of the new information environment is that every individual is a publisher first, and an expert second. All organisations behave as though they are collections of expertise first, and publishers second.

Most individuals either hoard their expertise and are deeply frustrated that it goes unheard when they try to offer it, or are fearful of the consequences if they lose control of their knowledge and networks. Working collaboratively in new media is also immensely difficult. If there is an opportunity to substitute old media and behaviour, people will revert to these in a flash. So the introduction of new media needs to remove old media – hard copy, email – and to educate and value individuals in their new roles.

SPINNING A YARN

BY DAVID SNOWDEN, IBM

A story is a simple way of conveying highly complex ideas. A well-constructed story can be heard many times without loss of impact and always contains new insights. Like the parables of The Bible a story unravels its meaning over time in a complex interaction between storyteller, listener and the communities in which they reside. Telling a story is both a science and an art.

In organisational story telling, we are concerned with how stories can reveal underlying culture of that business community. With story telling we can stimulate the natural creation of myth and construct fables for the multicultural establishment of corporate values. We may create a virus to destroy a misleading urban myth through exaggeration: never argue against a story with fact.

Stories reveal what our customers think of us, they provide a means by which we can integrate the culture of two organisations in a partnership, merger or acquisition. Story can rebuild the context lost in the content focus of much e-learning.

Oral histories provide a rich self-organising knowledge repository. Metaphor allows us to disrupt current thinking and enable emergence. Above all, story is the means by which we educate our children, inform our friends, entertain our companions and destroy our enemies. Story is the most natural and effective means of communication, and knowledge management if it is anything, is about communication. Without story the organisation has no soul.

THE TWO MAIN VEHICLES OF CHANGE

If communities are voluntary groupings, implicit in the networks of the shadow organisation, they can be fostered but not formalised. They will always tend to wriggle free of any formal structure and find their own forms. So what are the tools of knowledge?

There are two possible vehicles of collaboration and exchange that can be formalised, both of which depend on, and reinforce, the sense of community as well as contributing to the sharing of mental models, competence-building and risk-based decision-making and the formalisation and exchange of knowledge assets. These vehicles are exchanges and stories, forms which have existed for thousands of years and have a major role to play in the financial institutions of the 21st century.

1. MARKETS

View the organisation (in its widest sense of employees, suppliers and clients) as an exchange, or a marketplace, with structures governed by membership rules, protocols and systems, all the way down to deep, invisible, hidden values and behaviours.

If you view the cultural and knowledge layers through the same lens, you'll be able to see more clearly the relationships between the intellectual, social and political capital. This will give you the ability to take actions to foster the growth of intangible assets (trust, goodwill, mutuality, ethics, society) so they feed the growth of the tangible ones (intellectual capital, structural capital, knowledge assets).

2. STORY

Steven Denning, author of *The Springboard: How Storytelling Ignites Action in Knowledge-Era Organisations,* calls a story a "tiny fuse", which can ignite a big spark.

Stories, narrative, drama and performance are increasingly being used as tools to effect change and transition. They are the glue of communities. Individual knowledge gets shared through anecdote, vignette, illustration and story.

STORIES AS RISK MANAGEMENT

Markets and risk as concepts have long been explicitly linked. But if risk management and KM are one and the same, how do stories and risk fit together? In Australian aboriginal culture, the story is sometimes known as the "third eye". Stories are passed down from one generation to another and are a way of providing precedents in times of crisis where there is no time to teach and learn.

In an interview with John Barr, an investment banker who is also a poet, he says: "Poems are... about risk because they embrace the unknown and the uncertain. That is why they have excitement and vitality. Poems are long journeys in risk. People don't write poems because they have figured it all out; they write poems in order to figure it out. A good poem contains and preserves, like an insect in ancient amber, that moment of figuring something out forever."

MAKING IT HAPPEN

Avoid:

- Talking about the subject before it can be understood, or before you can demonstrate it.
- Letting people think it is information technology.
- Getting the branding and positioning of knowledge projects wrong.
- Going too far against the grain of organisational style, history and identity.
- Calling it knowledge management or appointing a knowledge manager.
- Centralising.
- Appointing a chief knowledge officer who has organisational "baggage".
- Dictating the subject or structure for communities. Allow them instead to find their own forms and paths.
- Overlooking the danger of shortcuts in knowledge sharing.
- Seeing history as linear, or rational. Or believing to be found in formal project records and best practice databases.
- Doing only post-project evaluations. Set up every project with a beginning that consciously seeds in the best experience and lessons of the past.
- Unnecessary standardisation at the expense of evolution. Once anything becomes formula, it is no longer of value, while new energy creates new values.
- Inconsistency and contradictory values. For example, making it mandatory that people fill in their profiles on a system that is supposed to be voluntary and encourage formal interactions.

Victoria Ward, Claudine Arnold, and Philippa Thompson are from Sparknow Limited

This article could not have been written without the many conversations, debates and pieces of work and research that have been part of Sparknow's activities for the past four years. For a full list of references please see www.cib.org.uk or www.sparknow.net

Source: Extract from Sparknow workshop materials – the 5 element knowledge spiral*

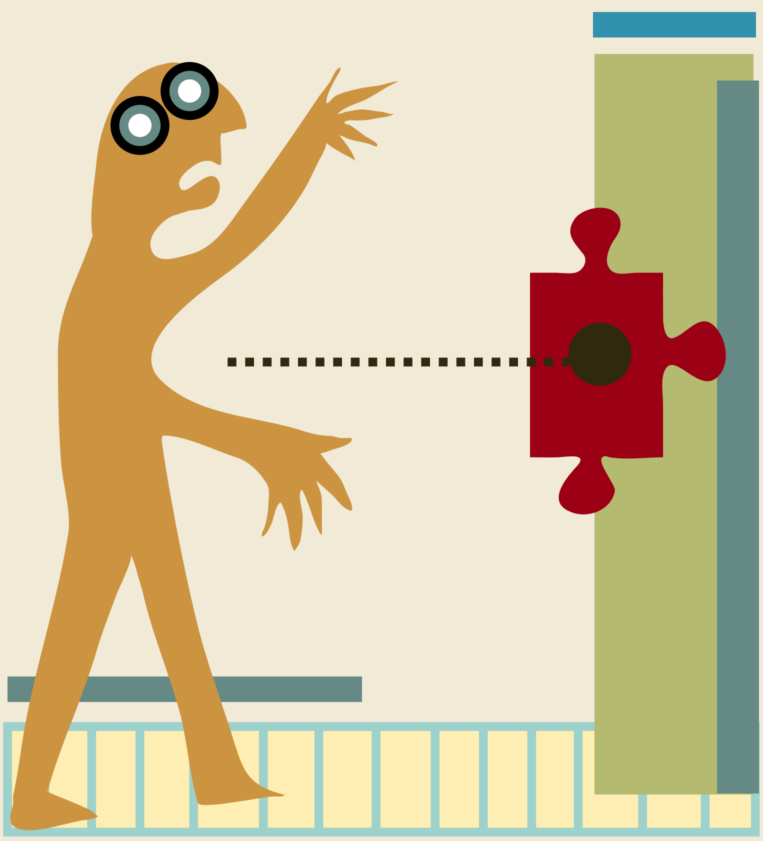
*Source**: Adapted from Sparknow's submission to the Government's Competitiveness White Paper: "Our Competitive Future: Building the Knowledge Driven Economy", December 1998*

TRY TO:

- Connect people in as many ways as possible.
- Abandon the hope of enterprise-wise knowledge management (described by Prusak as a "form of fantasy").
- Split the organisation into small units.
- Create interdependence – make people reliant on each other.
- Set up expert networks peopled by practitioners, not managers.
- Respect variety and innovation that occurs day to day at ground-truth level, that is, the views of people who actually do the job.
- Move people around, generate opportunities for people to meet face to face in order to share problem solving.
- Present a "plausible promise" (Raymond) to a community, that is, it must be solvable in the foreseeable future.
- Make visible who knows what.
- Exploit the library and the role of the librarian at the hub of the network of knowledge "brokers".
- Use process mapping workshops to get people interested.
- Triple the project budget and make sure that 70 per cent is allocated to coaching, collaboration and the creation of stories.
- Make time available.
- Think carefully about the language.
- Acknowledge what is already there.
- Bind people to actions. People are most committed when behaviour is explicit (clear evidence that the act has occurred); when the act is public (people saw it); when it is irrevocable (cannot be undone); and when it is voluntary (Weick).
- Use stories and storytelling. "The only thing, which works is storytelling. There are 16 dimensions to knowledge management and these can all be conveyed in a story of 29 words. A story is a tiny fuse (Denning)."
- Use technology as a "Trojan horse" for change.
- Acknowledge people for the information they have given away.
- Address the rewards system, and embed knowledge sharing deep inside the organisation.
- Interrupt people's normal patterns and expectations.
- Observe the organisation acutely, focus on the small systems (people's interactions with each other day to day and moment to moment.
- Be clear about the distinction between public and private, voluntary and mandated.
- Think both/and not either/or (hierarchies AND networks, generalists AND specialists, bottom up AND top down, technology AND culture, context AND context (Speh).
- Have fun doing it.

Exchanging knowledge: the reality

THE PROCESS OF SETTING UP THE IDEAL KNOWLEDGE EXCHANGE HAS ELUDED MOST COMPANIES. THE ONLY COMPANY THAT HAS COME CLOSE IS ARGUABLY THE FORMER **NATWEST BANK.** SO WHAT WAS THE PROJECT ABOUT, AND WHAT WENT WRONG?



IQ Port, or The Knowledge Exchange, was borne out of NatWest's e-commerce development unit, which became known as Electronic Markets, formed in the summer of 1996. Tim Jones, who was appointed to run Electronic Markets (who incidentally headed up the Mondex project), stayed for only three weeks before being appointed managing director of NatWest's retail bank. Replacing him was Keith Ferguson who, alongside Freddie McMahon – the founder of IQ Port – continued development. The aim was to turn it into a viable, commercial operation.

McMahon says he came up with the idea of IQ Port (originally conceived as a training knowledge exchange) as a way of closing the "competency gap" – that is the gap between an individual's skill set and rapid technological change – because he believed that training alone was not enough.

There were other concerns as well. McMahon believed that organisations were constantly letting knowledge "walk out the door", that "mentoring was been disseminated from financial organisations", and that training budgets were falling. He believed that knowledge needed to be treated as an asset, that it had an intrinsic value. The idea behind IQ Port was to put value on knowledge and encourage people to improve their intellectual capital.

BRINGING THE STRANDS TOGETHER

Keith Ferguson explains the development of the concept: "In essence, Freddie had identified a number of different strands heading from different directions. The first was an increasing awareness of knowledge management; that it was a fundamental requirement of business today and of individuals." This was perceived to be the case both within businesses, which, as he says, "were increasingly using intranets and wondering how on earth they could improve communications and knowledge management of their internal knowledge", and externally. However, Ferguson says, a problem was identified on "how to motivate people [to share information] on top of their day job".

The second strand was the emergence of web and web-related technologies, "but one of the weaknesses in the web was the inability to transfer value very easily and in small quantities," says Ferguson. It was these web-related technologies that brought about the third strand – the exchanges that were emerging on the internet, from clubs and societies through to academic groups and commercial groups trading tangible goods. Ferguson cites the example of "an early trading exchange in the wood industry".

Ferguson says that all these strands got McMahon to conclude that the ultimate commodity to communicate and transfer across the web is intangibles – goods that you don't have to physically ship. He asked: 'Why can't we bring together trading exchanges, knowledge management and buy and sell the stuff? Because if you buy and sell knowledge then both internally within corporates and externally you can create a motivation for people to want to share their knowledge, instead of keeping it because it's to their advantage. There are all sorts of derivations from that model," says Ferguson, but first and foremost the opportunity arose to build a trading exchange for knowledge. And it started life within the company as 'The Knowledge Exchange'.

THE KNOWLEDGE EXCHANGE

The Knowledge Exchange, or IQ Port, was very much a business venture focused on whoever wanted to set up a knowledge exchange. At its core, NatWest was providing the concept and the set of infrastructure software components to make it work, whether for external or internal use. Both the providers and acquirers of information, as well as IQ Port, would receive a fee.

The Knowledge Exchange was based on two principal innovations: accessing knowledge and getting paid for it. Accessing knowledge meant "deconstructing it into manageable chunks and having a very clever cross-indexing system which was the wrapper," Jones explains.

To get paid for it meant not only putting payment mechanisms inside IQ Port, but also recognising that the amount of money per item was often going to be very small, but that this wouldn't matter if volumes were large. It was also important to recognise, says Jones, that the value of a piece of knowledge would be, in some instances, extremely time-critical. "It would be worth £1 today, 50p tomorrow and nothing on Friday," he says.

From that came an interesting set of concepts. Jones says this meant splitting the knowledge into bite-size chunks; providing an index to help users find their way through the information; putting in place a payment mechanism that could cope with low amounts and technology to ensure the timeliness of information, such as email alerts.

"That felt as though it was a viable set of concepts, so a commercial hierarchy was then developed," says Jones. At its most disaggregated level, the same fundamentals of infrastructure were necessary to support all types of search, from which it was then possible to create a particular knowledge exchange.

"ORGANISATIONS WERE LETTING INFORMATION WALK OUT OF THE DOOR"

Ferguson continues: "It required quite a bit of work in identifying natural groupings of knowledge, working with librarians, lexicon specialists and so on to give people a sense of community, but making it expandable so as new topics came along they could be absorbed without any reconstruction of the underlying systems."

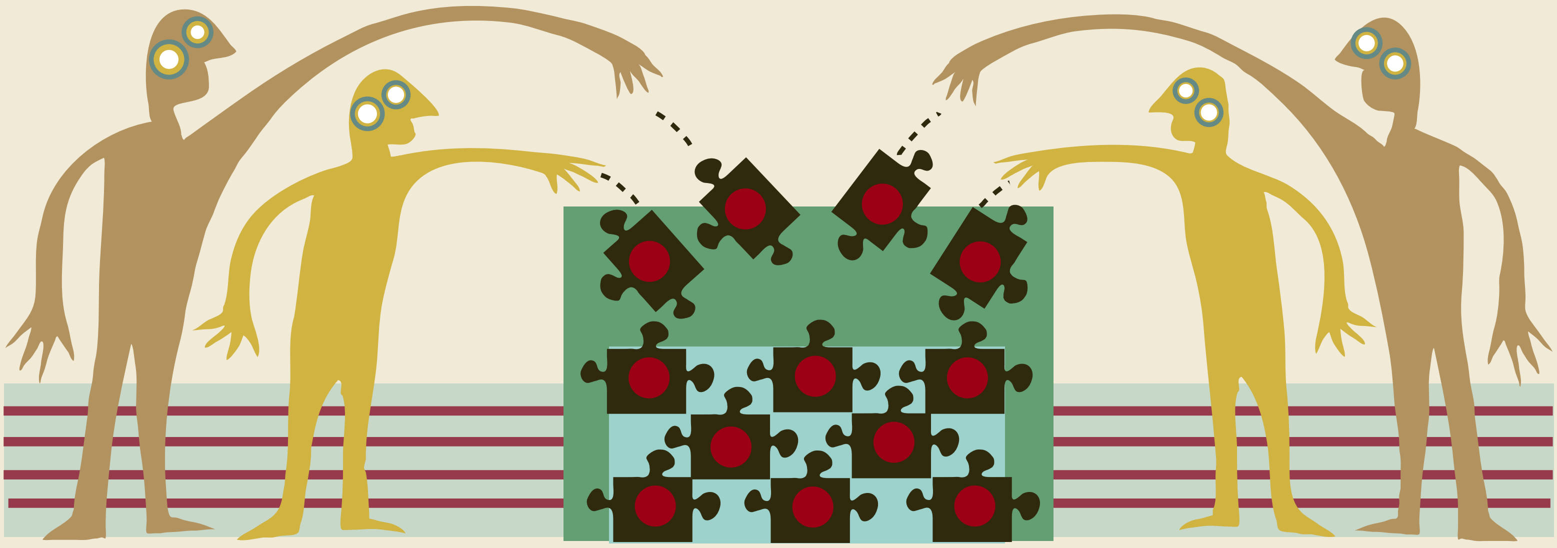
On this, McMahon says: "I underestimated the difficulty of categorising knowledge – the taxonomy of knowledge – for without good codification it is very difficult to get people to sell what they have." On the payment side, it was equally tricky. Even though any individual payment was small, Ferguson points out that it was important that all participants in the value chain felt that they could get value for their part of it. It began with authors who first received more money because the publisher was eliminated and money came straight to them; second, the money came earlier; and third, authors were able to interact more with their audience and therefore improve the quality of their work.

The most complex part of the technology was developing the payments mechanism in such a way that national and international taxes could be paid automatically and that fees for the participants could be taken. This included paying fees to the individual organisations that were running specific communities that were bringing in members, as well as to IQ Port itself which would receive a nominal fee for providing the infrastructure.

Ferguson says: "On the payment side, we were able to support co-authorship with a value split and they didn't even need to be equal contributors. We were also able to support the author if the price was changed hour by hour." The offer should have been compelling. IQ Port offered authors a 60 per cent return, after all taxes and fees, compared with less than 5 per cent in the traditional model.

WHY DID IT FAIL?

Despite the fact that IQ Port eventually folded (in 1999, at about the time RBS took over NatWest), McMahon, Jones and Ferguson still believe it should have been a commercial success. McMahon says: "I do believe that



knowledge exchange will happen," although he also believes it may take some time because it is a threat to existing organisational structures as it breaks down hierarchies. It appears that bad timing (IQ Port's launch coincided with the dot.com bubble) and making the technology too sophisticated too quickly all had a part to play.

BUBBLE TROUBLE

McMahon explains that for IQ Port to survive management had to raise venture capital, but this was at a time when venture capital companies were investing in dot.coms whose business model was one in which knowledge was free – revenues were earned from advertising. So to invest in IQ Port, with exactly the opposite business model, would have only highlighted the weaknesses in other models. "The timing wasn't healthy," acknowledges McMahon, adding that there was a conflict of interest at that time. But he adds: "They have now reached some level of sensibility."

> **"THE RIGHT PLACE FOR KNOWLEDGE MANAGEMENT IS POSH AND BECKS' KITCHEN"**

Jones also comments on the adverse effect of the dot.com hype. "The dot.com bubble created a temporary environment for about 24 or 36 months where income didn't matter, so building a trading exchange with sophisticated ways of shifting money around was deemed to have little value when you didn't need income or income from the participants. It could all be free. Why? Income was coming from banner advertising."

That bubble meant it was not possible to have any rational debate about the importance of generating income and the importance of having mechanisms to generate small volumes of income, says Jones. And IQ Port suffered because this income imperative was shrouded.

But Jones believes there was also another reason. He thinks it became too sophisticated before it started making money. "If more focus had been given to finding one application that started to make money to prove there was profit in this, it would still be going now," he says.

The failure was all the more frustrating, and difficult to understand, because there were some very powerful organisations involved with IQ Port, including household names from North America and Continental Europe. "Some of the organisations were trade bodies, big trade bodies of educators, people you would think would be absolutely desperate for this sort of thing," Jones says. Ferguson agrees that concentrating on developing more sophisticated technology was a mistake: "The balance of effort was in making the technology more sophisticated and less on finding one profit-making application to start to pay the rent and to give other people the confidence to invest more in it."

Jones is also philosophical. The thing with innovation is that to succeed you have to succeed at every stage of its development, he says. "Maybe there were detailed doubts, but there were no fundamental doubts about the concept." Yet NatWest came close to building an exciting new business. As bankers, they focused on building the core infrastructure, "but were completely the wrong people to decide on the content and how it should be organised", notes Jones. However, a mechanism was provided by which information could be validated and endorsed by a recognised authority with higher ratings for the best information. Now, Jones says, "being a brutal capitalist" he's not sure he would have gone to that level of sophistication of endorsement.

AT HOME WITH POSH AND BECKS

He also thinks that too much knowledge management ethos is focused on corporate information, which, he believes, is the wrong place to start. "The right place to start is in Posh and Becks' kitchen because that's where the value is. If Posh and Becks' diary was available say at 10p, it would make a shed load of money because a lot of people would be prepared to spend 10p on a whim. And if that became a typical thing, you could go to Michael and Catherine's kitchen!

"What we stumbled upon was a new imperative for the exchange of value in journalism and rapid-value information. In a sense, I would have become extremely populist about the exploitation of this to make money and then, with the money coming in, you are completely off-risk of anyone closing you down. Then you can explore some of the more sophisticated angles in the corporate world." The important point here is that by setting up a knowledge exchange like IQ Port, you set the price at zero for basic, non-time sensitive information, and then price other value-added information accordingly.

And what were bankers doing in the business of trading knowledge in the first place? Jones answers robustly: "That's the beauty of e-commerce; it takes you to businesses that are quite a long way away from what you are. One of my themes at the time was to say that banks hold on to information – a special type of information – and trade it, and this was a legitimate type of diversification."

Intellectual capital: why it matters

THE MANAGEMENT AT **SKANDIA,** THE SWEDISH-BASED INSURANCE COMPANY, BELIEVE THAT KNOWLEDGE MANAGEMENT INVOLVES KNOWLEDGE SHARING AND THE NURTURING OF INTELLECTUAL CAPITAL

For many years Skandia, Sweden's oldest listed company and the world's 10th largest insurance company was primary involved in unit-linked insurance and savings products.

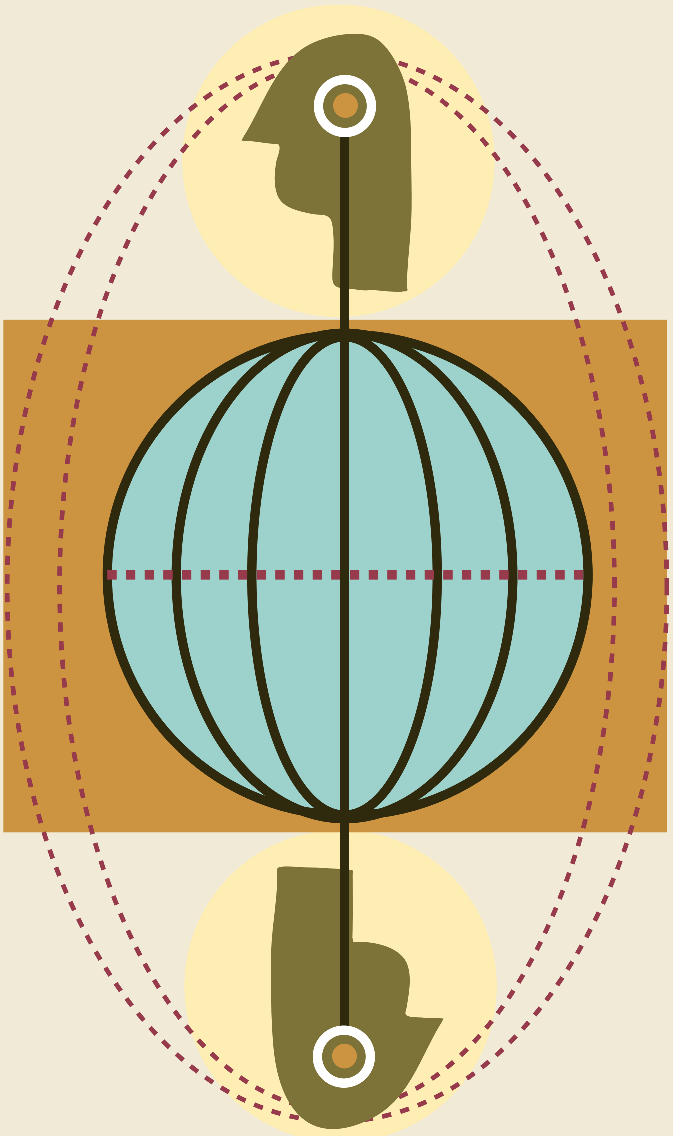
It was a traditional life company, and its interest in intellectual capital was borne out of the need to show that its assets were more than land and government bonds – the primary vehicles in which traditional insurance companies invested. Skandia recognised that its core resources, like any financial services company, were the knowledge and skills of its employees and customers, and that traditional accounting did a poor job of reporting the company's success at increasing these key drivers of growth. Since 1999, Skandia has become a leader in the development and measurement of intellectual capital.

"Focusing only on a company's financial result is like driving a car by looking in the rear-view mirror. It's important to know where you've been, but more important to know where you're going. And a financial result is the product of how well you manage your intangible assets," says Scott Hawkins of Skandia's Open Business XChange (OBX). "We wanted to shift our perspective from the past to the future."

Intensifying competition to acquire skilled staff, as well as new customers, in the financial services industry gave added impetus to Skandia to concentrate on building its intellectual capital. "Attracting, training and retaining employees is very important to show that Skandia is a key place to work," Hawkins adds.

Skandia's intellectual capital focus is based on the management of intangibles, of which knowledge is seen as one component. The Navigator model was developed to explain how intangible assets were managed. The Navigator asks the management team to focus on renewing and developing their customers, staff and processes in order to assure long-term financial success. And as a global company this must take place within the context of the local operating environment.

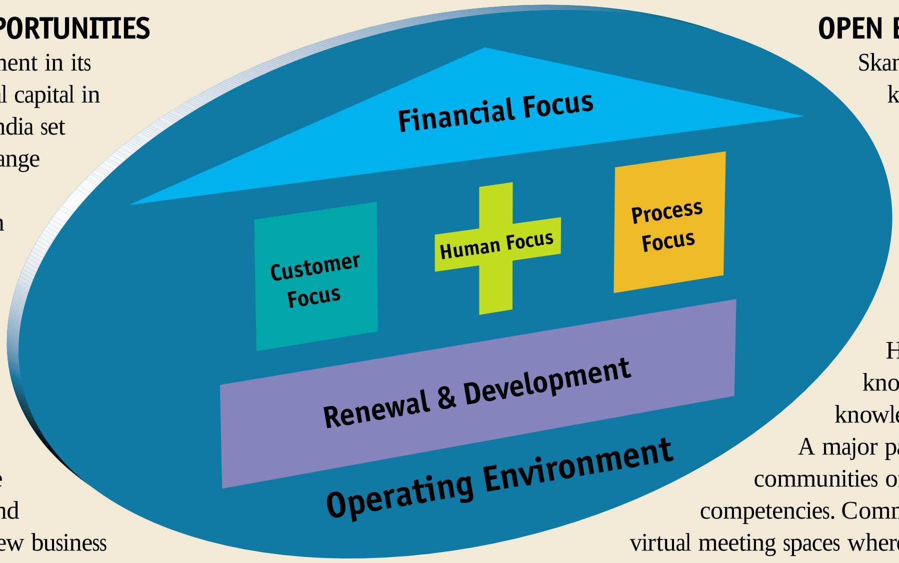
The practical result is a focus on two strands, explains Hawkins. The first is people – looking at how employees relate to customers (customer-relationship management) and to colleagues (knowledge sharing). The second is technology – how the growth of web-enabled technologies facilitates different types of learning and knowledge sharing across the new economy's extended enterprises and virtual supply chains.



NEW BUSINESSES OPPORTUNITIES

Skandia leverages its investment in its understanding of intellectual capital in several ways. Internally, Skandia set up the Open Business Xchange in early 2000 to increase knowledge sharing between the business units around the world. Externally, Skandia has formed various businesses based on different aspects of intellectual capital. One of these, IC Visions, sells software that companies use for strategic management and communication. Another new business is the Competence Marketplace that focuses on helping companies develop their human capital.

Hawkins says that the Competence Marketplace is a great example of how Skandia is leveraging its intellectual capital understanding. Skandia management asked the question: how could it keep employee skills and competencies fresh in a rapidly changing business environment? Although an obvious answer lies in encouraging employees to take more training, Skandia found that asking its employees to juggle work, study and a family life was often not the best alternative. "We devised lots of incentives for employees to go back to school, but there was an issue of employee burnout and we had to work out a way to solve this," says Hawkins. "Therefore, we came up with the idea of the Competency Marketplace."



NEW COMPETENCY MARKETPLACE

The basis of the Marketplace is that employees can save a part of each pay cheque (usually between 1 and 5 per cent), which is put into a savings account and is matched by Skandia. When employees decide to go back and refresh their knowledge and skills they can take a sabbatical from work and continue to receive their income. This allows them to focus on acquiring and improving their skills, without sacrificing their family life. And the savings account can be structured so that it pays Skandia for the employees' temporary absence.

However, the savings account is only part of the Marketplace. Employees have access through the internet to potential jobs within Skandia, career development tools to help them plan their growth and learning providers that offer them quality training. It is a single source for employees to take control of their own continuing knowledge development.

The Marketplace has been received very favourably by employees and is being sold to other Swedish employers. Hawkins says: "Employees loved it, but now they are asking if it is possible to use the savings for things like taking a break to re-evaluate their life, or to spend time with their family. So we have started to address these balance-of-life questions through the creation of a pause-in-life service." Although the Marketplace is only sold in Sweden, Hawkins explains Skandia is working on a plan to take it to other countries. "Companies such as GE, Cisco and Boeing are all showing considerable interest in this idea. Any economy where people are paid for knowledge is perfect for this," he says.

OPEN BUSINESS XCHANGE

Skandia found that as its business expanded, knowledge sharing wasn't increasing. Hawkins asserts: "We needed to overcome the silos that were forming inside operating companies between companies." Skandia realised it needed to seriously address this issue. "We developed Open Business Xchange to increase knowledge sharing", says Hawkins. "And having a unit focused on knowledge sharing makes sense when knowledge is your chief asset."

A major part of OBX's approach is setting up communities of practice for Skandia's core competencies. Communities of practice are physical and virtual meeting spaces where Skandia staff engage in the same business discipline – for example, product development – and meet to exchange ideas, problems and solutions. OBX has developed a very methodological approach to fostering the development of communities within the company. The starting point was to focus on the company's six core competency areas:

- Product development.
- Business control.
- Customer service.
- Information technology.
- Business development.
- Human resource development.

All of these have "functioning communities of practice to share knowledge. These are the bedrock areas that every Skandia unit must excel at if we're to continually be competitive," Hawkins says, adding: "We at OBX view the communities as our 'internal customers'. Therefore everyone within OBX is encouraged to meet communities of practice members when visiting their local office." After selecting an area to foster a community, OBX identifies a 'knowledge champion'. Hawkins says: "We elect someone who is committed to the approach, for example, an executive from a local unit charged with implementing knowledge management." Hawkins is a fervent advocate of nominating a local knowledge champion to get a community up and running, after which OBX supports the community by appointing a co-ordinator to help with global projects and communication.

TECHNOLOGY

Technology plays a vital role in keeping the community together. The technology underlying the virtual communities of practice comprises web portals, the intranet and internet. These tools enable the community to carry on a global conversation and work on any global project they develop.

The success of these communities of practice is measured first by the number of projects and the number of follow-up visits that are generated, and second by how satisfied employees are with the communities of practice. In the first instance, says Hawkins, we ask: "Did any global projects come out of this? Were there any collaborative projects?" On a final note, he sums up Skandia's ongoing interest in intellectual capital, viewing it as a response to change: "Understanding the key role intellectual capital plays, and how to manage it, is crucial to a company's success."

Raising consciousness of knowledge management

KNOWLEDGE MANAGEMENT HAS BEEN INTRODUCED THROUGHOUT **ABN AMRO.** BUT WHAT IS IT AND HOW IS IT BEING ROLLED OUT?

ABN AMRO is a prominent banking group with a strong international focus. Ranked number five in Europe, it is also the 16th largest bank in the world in terms of tier-one capital, has more than 3,500 branches, a staff of some 110,000 people and total assets of over €500bn.

However, it's the work that's going on in global transaction services (GTS) that's important here. GTS covers cash management, trade, international payments services and custody. It accounts for over 6 per cent of the bank's revenues and involves more than 2,000 people worldwide.

Professor Paul Iske, chief knowledge officer at ABN AMRO Corporate Finance, says that all the talk about the "new economy" and the "knowledge economy" encouraged management to implement a knowledge management (KM) programme into the GTS structure. "The new economy", he says, "is the network economy."

Iske says that although ABN AMRO calls itself a network organisation, "maybe it is more accurate to call it an organisation of networks. We have embarked on a major transformation initiative, with knowledge and its management at its core." The process started four years ago. It was prompted by two strategic issues.

The first was globalisation and the increased sophistication of customers who wanted answers to increasingly complex questions immediately. The second was the increasing commoditisation and disintermediation of financial services. This was the result of falling margins, arising from competition, the cherry picking of key services by new entrants and significant developments such as the euro and e-commerce.

The initiative meant transforming:

- over 70 national autonomous units into one single global business line;
- an individual work focus into a team effort;
- commodity products into value-added products;
- a back office/efficiency focus into a customer/service focus;
- a conservative and slowly changing organisation into a learning and improving one;
- steady growth into rapid growth.

"For a traditional, hierarchical organisation," says Iske, "this change is an enormous challenge, but it fits seamlessly in the bank's strategy."

KNOWLEDGE-CONSCIOUS MANAGEMENT

Iske defines knowledge-conscious management (KCM) as: "The set of instruments and activities that deal with what an organisation knows, what it needs to know, how it harnesses and co-ordinates this knowledge and leverages it for sustainable competitive advantage." Equally, he says: "Knowledge-conscious management is the art of transforming common sense into common practice."

The infrastructure to support KCM comprises three areas: KM processes and organisation; the technical infrastructure – which in this case is the database intranet/internet/extranet; and the work environment and culture.

To ensure KCM would be implemented successfully, Iske explains that a knowledge-value chain was implemented (see diagram 1). "Knowledge is often very personal and we spent many hours finding an operational definition." He also says that knowledge management is directly related to change management, which is divided into four areas:

- Insight generation and focus.
- Analysis and design.
- Content development.
- Publication and maintenance.

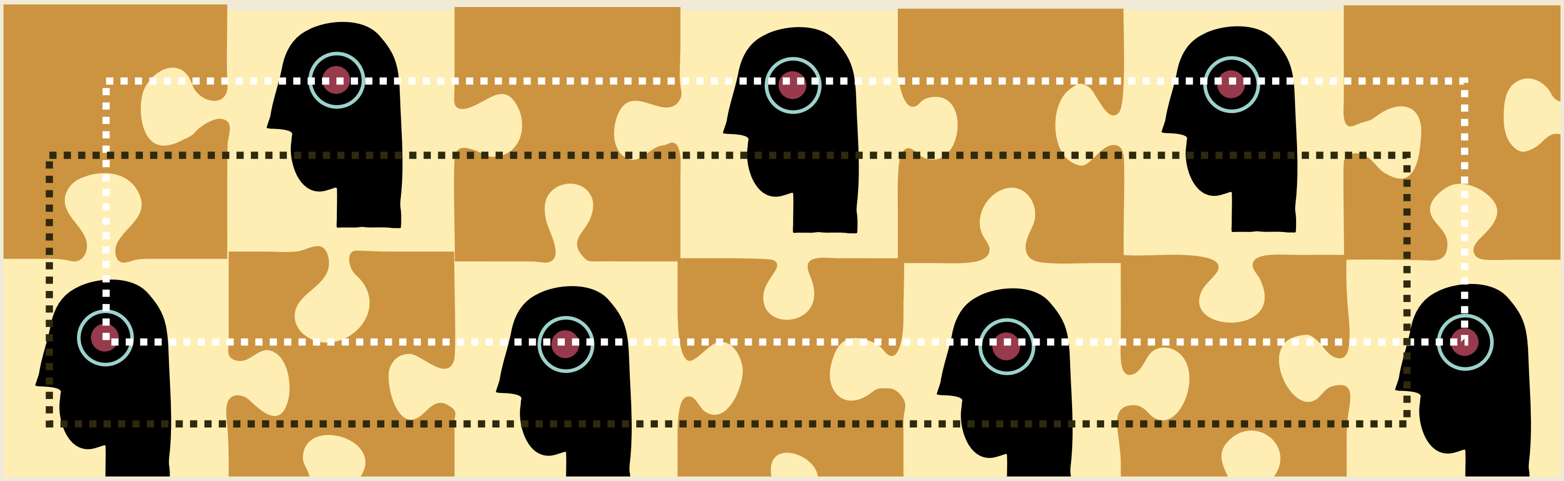


DIAGRAM 1: KNOWLEDGE-VALUE CHAIN

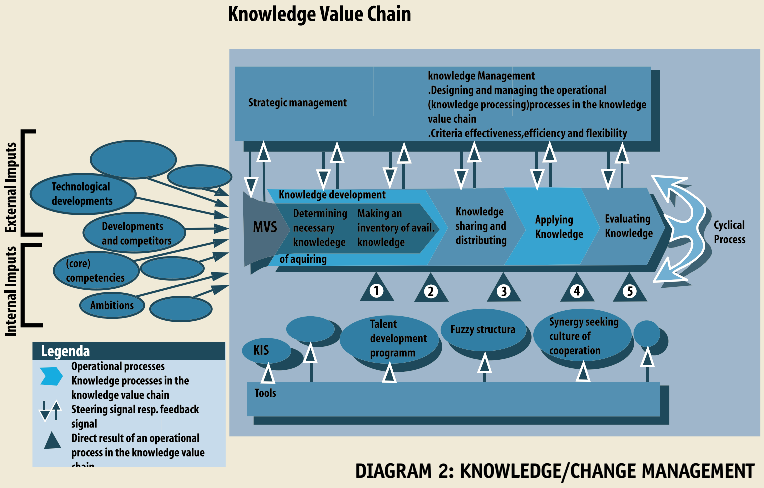
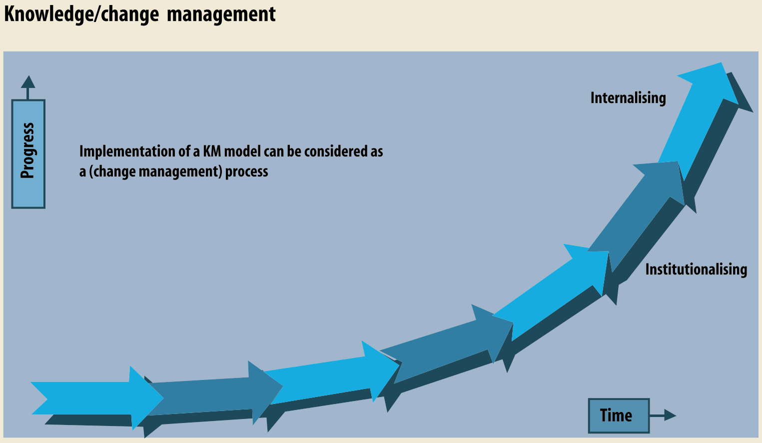


DIAGRAM 2: KNOWLEDGE/CHANGE MANAGEMENT



The KM system, Iske says, had to be integrated: "An integrated KM system is far more effective than a standalone system. If they use it, it will build itself." Quality control is crucial in order that the content on the intranet/internet/extranet is "value-added". To ensure this, content must have: an identified source; a content owner; a content area manager; a publication date; an expiration date; and a security indicator. There are tools available to monitor the quality of the content, to facilitate the maintenance process, and to handle feedback and comments. The processes and tools have been introduced throughout the organisation.

Within GTS, Iske's KM team has served as a catalyst and facilitator during the implementation phase. However, the business is now fully responsible for the execution of KM activities. Iske says that in doing so, "KM has become a distributed effort: everyone is a knowledge manager".

In ABN AMRO various types of "communities" – such as informal networks, communities of interest, communities of practice and communities of purpose, have always played a role. Says Iske: "Communities are a key concept in the new economy" and an example of a KMC instrument. It is important to remember that communities are always people-based. The personal relationships are key to the success of any group, team or community and are a prerequisite for people's willingness to share knowledge.

Other KM tools include the formation of alliances, job rotation, virtual teams, corporate universities and the use of intranet and databases, but "maximum effect is achieved by a combination of instruments", says Iske. He emphasises: "It is mandatory to create an environment (or culture) where people feel motivated to contribute to, and make use of, the knowledge assets. This will only happen if there is alignment of personal and collective ambitions."

ROLLING OUT KCM

How is KCM being rolled out? The end goal is to integrate functionality in a single interface, to ensure that everyone has access to knowledge sharing tools and to a dedicated support process. According to Iske: "Our strategy is to share some of our knowledge and tools with our clients. This will strengthen our reputation as a knowledgeable financial service provider."

For example, via the ABN AMRO website one can access information relevant to a particular country's trade and business. This is a joint effort with several information providers, including Reuters and the Economist Intelligence Unit.

ABN AMRO has also established the Knowledge Management Forum. Its mission, according to Iske, is to "make knowledge management understood, accepted and embedded in our organisation, to make it a way of life within the bank." This forum is a cross-divisional community of practice, supported by senior management, and is the "virtual chief knowledge officer". The forum focuses on four aspects of knowledge-conscious management: measuring the value of KM; identifying and aligning bank-wide KM initiatives; anchoring KM in the business; and integrating KM and human resources.

The forum comprises about 30 people from all over the world who meet three or four times a year and share ideas and experiences. Articles and reports are published on its website by the Information Research Centre of ABN AMRO. "We are identifying and aligning business-wide knowledge management initiatives," says Iske.

BENEFITS

By making these organisational and cultural changes, Iske says management can expect significant benefits to accrue to its clients, fellow colleagues and shareholders (see diagram 2). Clients are expected to receive a more efficient, expert service, new services that add value and assist their decision-making and, in some areas, receive "virtual-client support" 24 hours a day.

Colleagues are expected to benefit from having easier access to information, assistance and help, from working in a more collaborative and rewarding work environment and having the opportunity to see their insights and ideas gain worldwide recognition.

Shareholders will gain as a consequence of "substantial efficiency gains in our core processes," says Iske, supporting ABN AMRO's strategy to be a major player in the selected target markets and creating the value-adding capability boost to our market capitalisation."

Managing for Value is being introduced in the ABN AMRO organisation. "I am convinced that our KM efforts generate a lot of value for all stakeholders of the ABN AMRO Bank," says Iske.

So what are the lessons to be learnt from the ABN AMRO experience? Iske makes the following points:

- Identify where you are on the change curve.
- Start with a plan: select and focus.
- Address the business issues and opportunities.
- Use quick wins as ambassadors.
- Communicate results.
- Don't underestimate practical problems.
- Don't forget the fun factor.

Sharing knowledge: the e-learning platform

A KNOWLEDGE MANAGEMENT PROGRAMME CAN TAKE MANY FORMS AND ONE OF THEM IS A KNOWLEDGE SHARING, OR E-LEARNING PLATFORM. **M&G'S** APPROACH ILLUSTRATES WHAT IT'S ALL ABOUT

Knowledge management at M&G, the investment management business acquired by Prudential in April 1999, highlights the blurring of the boundaries between knowledge management and knowledge sharing – or e-learning. Gareth Jones M&G's head of management development, says: "We talk about 'knowledge sharing' rather than 'knowledge management', and fund management is the ultimate knowledge business." What matters, he adds, is how you add value to that data and make information useful. "The fund management business is very pertinent to e-learning because it is a customer-based business and one-to-one customer driven," Jones says.

Other parts of the Prudential have been developing knowledge sharing platforms as well. Egg, the online banking arm, has a system called Egg Learn. And Egg and other parts of the Prudential are working with M&G on the content development "where there is content relevant both to fund management, online banking and broader financial services", says Jones.

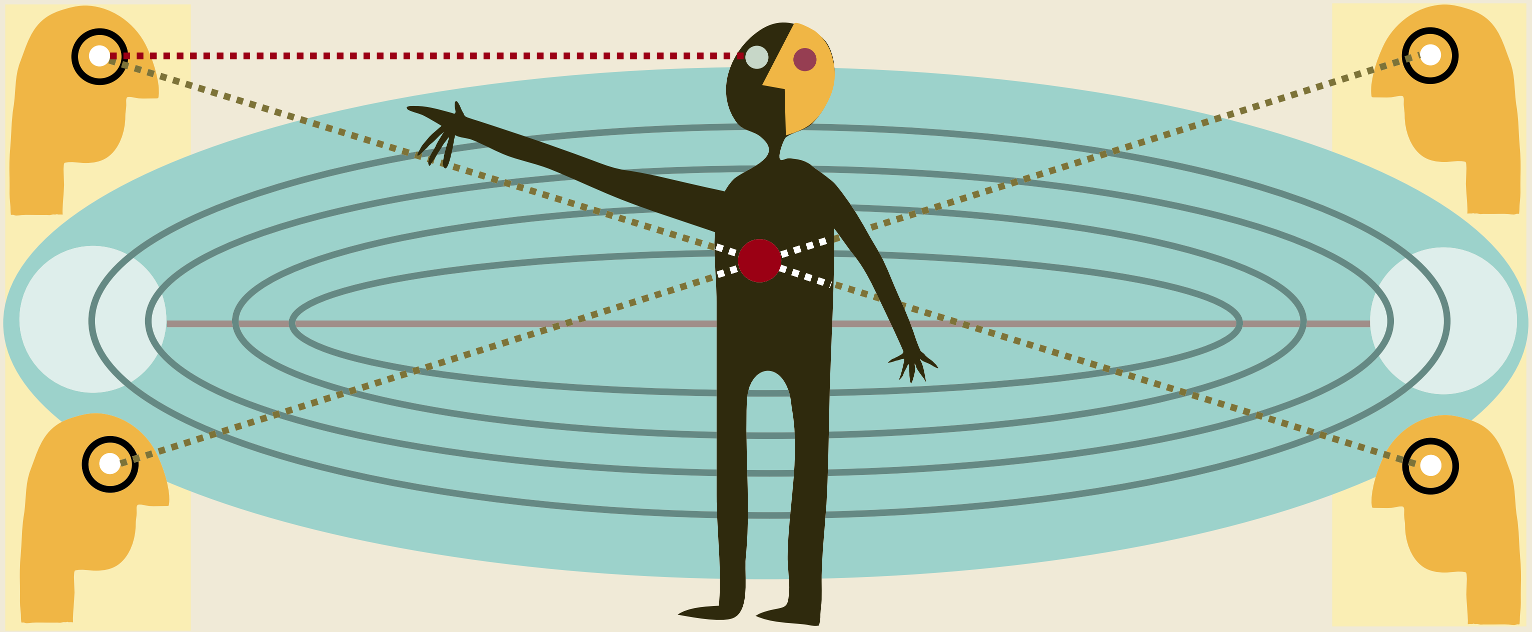
M&G has been developing e-learning and knowledge sharing side-by-side for nearly two years. Says Jones: "Having run the system for about 18 months we conducted some very detailed user research about what users liked and what they found less helpful and less intuitive. Off the back of that we developed a system taking into account feedback in order to make it a lot more intuitive, a lot more user friendly and dynamic.

"One of the benefits is seeing what's worked well, and what's worked less well, and asking which aspects of knowledge sharing people are willing to embrace." One important benefit of knowledge sharing is the time it frees up for individuals to concentrate on their core capabilities, rather than having to focus on non-core areas such as time management. Rather than enrolling on a two- or three-day course, for example, they can use the e-learning platform.

Equally, increased regulation and a general push towards greater transparency means that an e-platform is the ideal forum for educating people, providing timely updates and helping them acquire essential new skills and knowledge.

THE RATIONALE BEHIND THE "I"

M&G's e-knowledge or e-learning platform, which sits alongside the company intranet, is called the "I". Jones says that one of the reasons the company chose this particular brand, rather than saying that this was its e-learning system or knowledge sharing system, is because it is very much up to individuals how they choose to use it. "The 'I' can stand for involvement, inspiration, ideas or investment," he says. The "I" is divided into various business areas ranging from



portfolio management, information technology and management skills. Within each of those divisions there are 10 or 12 subject areas.

However, because everyone wants different information, each person has a personalised homepage. This homepage contains useful bespoke information, storing frequently asked questions and useful exchanges. For example, explains Jones, "a fund manager may be interested in analytical techniques and accounting practice and some regulatory areas in sales and marketing". So the fund manager can register to receive a number of short, personalised information bites. Users can also register to receive short courses where they can receive information bites over a period of weeks, "with useful knowledge updates, tips and guidelines, more detailed study modules and links to various relevant websites or other portals", explains Jones.

On the knowledge sharing side, there are a group of advisers – typically people within the business who have an interest in this subject – who are willing to share information and ideas. Jones says: "For example, if you want to know about a new kind of fixed-income instrument or forthcoming FSA regulation on lending, you can ask the group questions. You can also get into the group and target particular individuals whose profile best matches what you what to find out, or you can find a bit of research that relates to the topic in hand. The group can also point out useful websites and places you can go to for information without having to contact them in the long term."

"PUSH TECHNOLOGY"

The technology underpinning the e-learning platform is best described as "push technology". In other words users need only input keywords or their priorities to get the required information. "The greatest criticism of the old system," says Jones, "was that it was a great library." With the new system, "the adviser networks, the learning bites, the knowledge bites, are all pushed out to people. They only have to go into the system once to register their interest," he says.

This platform means individuals can draw on others' experiences, relating to such areas as client management, or how to manage a particular situation. "If you're in a client management, or sales and marketing role, then the exchange can offer tips and ideas from their experience," explains Jones. Now there are a few external advisers as well, "so that people can provide input on technical topics and project management and exchange ideas on a real-time basis".

In all, there are 13 different areas on the platform, covering everything from induction, investment products and portfolio management to identifying advisers, how individuals can access training and the modules needed to support various training courses. For example, "each area can also link into a range of reading and study resources", says Jones.

DESIGNING THE SYSTEM

When M&G decided to develop an e-learning platform, the choice of technology was limited. "There was document management technology, but in terms of KM and e-learning technology, two years ago the market wasn't particularly well developed," says Jones.

However, M&G wanted more than just a document management system. "It's about responding to the individual needs of a person at any time, so that they can be more effective in their role," says Jones. Therefore, it was decided that M&G's own IT team would work in partnership with SkillGate, an organisation that wanted to develop this kind of technology for wider applications," he explains. "They have a generic site and tailored client applications for e-learning. They provided the infrastructure." On the content side, however, M&G worked with a range of providers to develop M&G specific content.

The driving force for an e-learning platform came from within the training and management development area, with buy-in from senior management. But the e-learning platform was to be more than just a way of running training courses. "We looked at the whole training and development philosophy," says Jones.

"The 'I' was the core," He says. "It's about giving people the skills and knowledge they need to do their job and build capability for the future. Not just about responding to personal development needs. And about doing it very cost-effectively. The content is developing all the time; our whole approach to learning is that it is blended. There is always a role for face-to-face workshops and face-to-face knowledge sharing sessions, but this should be supported through the use of the 'I'." It is hoped that eventually individuals will be able to study for, and sit, the regulatory exams online.

CREATING AWARENESS

Creating an awareness and understanding of the value of knowledge sharing within an organisation is fundamental to maximising the benefits of an e-learning platform. "There is a strong need to market the system and we are in the early stages of doing that, working with business champions and using concrete examples of value added," says Jones of the company's e-learning platform.

Measuring the effectiveness of knowledge sharing is difficult, however, and much is based on anecdotal evidence. But although it is too early to gauge the success of the new e-learning platform, some indication as to how it might do can be gleaned from the reaction to the old system.

Jones says: "Some of the case studies about how people used knowledge sharing, had clear commercial benefits in terms of people getting the information they wanted, sometimes challenging their existing thinking, and doing something more productively as a result. It is also enabling us to drive down the unit cost of non-core training.

"In the early days, we measured the e-learning system in terms of hits and then bandwidth usage. Although there were the same number of people using the system, people were spending longer using the modules, which suggested they were actively engaged in learning, rather than finding their way around the system."

COMPANY CULTURE

According to recent surveys the company has carried out, there is a very positive response to on-the-job training. For example, new graduates use the "I" as a way of understanding the company culture, says Jones, while those who have been with the company longer benefit from the opportunity to continuously refresh their skills and knowledge.

Going forward, M&G has put much tighter performance-management initiatives in the new system. "There are learning plans and there are tests to sit at the end of them," he adds.

However, he insists, this is not about "policing people's learning", but ensuring that people get the most relevant learning and know-how for their role, at the time they need it.

The new power game

IN AN AGE OF INFORMATION OVERLOAD AND TECHNOLOGICAL EXCESS WE MUST FIND WAYS OF CONTROLLING AND MANAGING INFORMATION SO IT INFORMS RATHER THAN CONFUSES

As Xerox's chief scientist John Seely Brown says: "Living in the information age can occasionally feel like being driven by someone with tunnel vision.

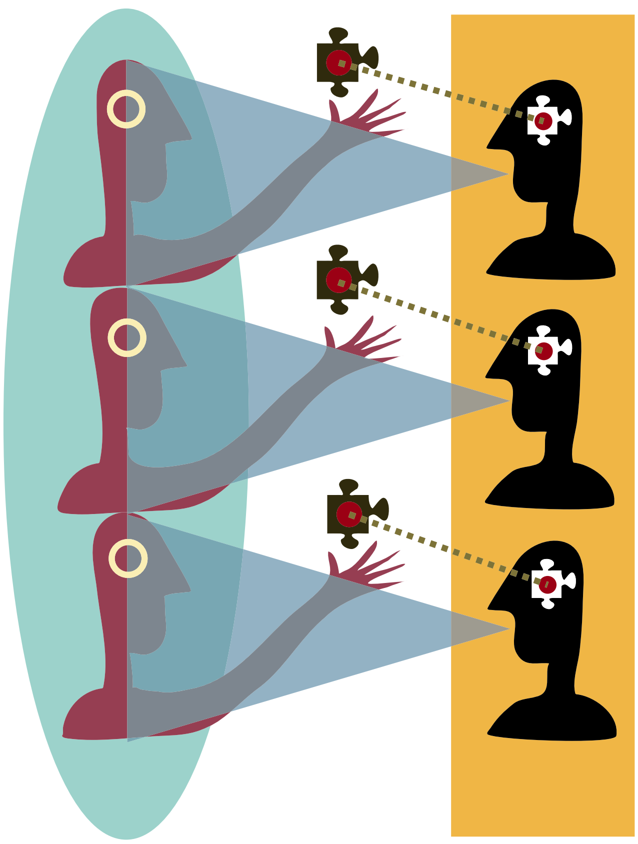
"In the world of the information-only diet we address worries about information by simply offering more. Yet when information is on offer, more often means less.

"The tight focus on information, with the implicit assumption that if we look after information everything else will fall into place, is ultimately a sort of social and moral blindness." We agree.

Success is dependent on more than managing information, although that undoubtedly matters. It depends on turning information into knowledge for it is knowledge that ultimately makes a difference. One of the aims of this report is to show how information can be turned into knowledge and how it can be leveraged to achieve maximum benefit for all stakeholders.

At the heart of a successful knowledge organisation is a willingness to share knowledge or, to put it more simply, to communicate. But sharing knowledge requires a non-hierarchical and egalitarian mindset – understanding that there is power in sharing knowledge, not in retaining it. Our survey shows that few financial institutions have embraced that egalitarian mindset; the idea that "knowledge is power" is still entrenched, although less deeply than in the past.

Nonetheless, we believe knowledge sharing is starting to happen, even if progress is slow. One of the main reasons for a reluctance to share knowledge, according to Shasona Zuboff, professor at Harvard Business School, is "because management doesn't want to share authority and power". This is certainly true, up to a point, but to say that the "paradise of shared knowledge and a more egalitarian environment just isn't happening", is possibly a little too pessimistic.



This report shows that a number of financial institutions, namely the largest and more successful, are aware of KM and of its benefits. Other institutions ought to take notice of this, and take up the challenge of implementing a KM programme.

They would also do well to review some of the well-documented benefits that are now accruing to companies in other industries, such as those in pharmaceuticals.

But just because an organisation embraces KM is no guarantee that it will succeed in the knowledge economy. It does mean, however, that it has some awareness of the importance of people as well as processes; that it puts some weight on developing its core assets – intellectual capital.

For some organisations, the next step will be measuring that intellectual capital, perhaps for inclusion in the annual report, in the same way that Skandia does. But the numbers in this category are small. Most are still grappling to come to grips with the realisation that capital assets are usually less productive than human ones and that human capital requires significant investment in time, effort and money.

The problem too is that justifying knowledge management investment is difficult as the benefits are not necessarily quantifiable or immediately apparent. Consequently, more financial institutions have to be prepared to take a risk – more a leap of faith – that by investing in KM programmes they will more likely prosper in the knowledge economy.

As more successful knowledge management investments come to light, and these successes are built upon, the profile of the KM movement will become stronger so that it becomes the acceptable face of the knowledge economy.