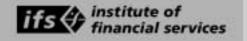


WINNING THROUGH KNOWLEDGE (PART 2)

CREATING VALUE IN FINANCIAL SERVICES

IN ASSOCIATION WITH

THE DOCUMENT COMPANY **XEROX**



Sponsor's introduction

WE LIVE IN A WORLD SATURATED WITH INFORMATION, YET MANY ORGANISATIONS STILL STRUGGLE TO MAINTAIN THEIR COMPETITIVE EDGE. THE CHALLENGE LIES IN GETTING THE RIGHT INFORMATION TO THE RIGHT PEOPLE TO CREATE NEW VALUE

IN TODAY'S knowledge-driven economy, a company's value is increasingly based on its intellectual assets. The challenge of creating knowledge and using it effectively is pervasive.

How to create business opportunities and value from the knowledge that resides within people's heads and organisations in the financial sector is the main premise of this report.

"Winning through knowledge (Part 2)" builds on two earlier reports sponsored by Xerox in association with the *ifs*: "Winning through knowledge (Part 1)", published in *Financial World* in March 2001, and "How financial institutions can maximise shareholder value", published in October 1999.

All three reports focus on the requirement of financial institutions to create value to satisfy not only the expectations of shareholders but also to remain competitive in a turbulent world. Increasingly, knowledge is the important resource that can be leveraged for the advancement of both individuals and organisations.

Paradoxically, we live in a world saturated with information. However, information alone does not guarantee success or productivity – it needs to be marshalled and organised. Some material is structured, in databases, in documents, or on the web in a multitude of digital forms. The rest is unstructured; vested in people it acts as the foundation for their knowledge.

OPTIMISE TO THRIVE

For an enterprise to thrive, it has to optimise use of all these resources. It has to provide timely access to relevant information and knowledge, distributing it to the people who need it, re-using it whenever possible, realising opportunities and removing overheads. This means reinventing business processes and changing work practices.

It also means re-examining the way technology is used. Companies are finding that traditional IT investments are delivering diminishing returns; there's only so much efficiency such systems can deliver. The real opportunity is to help people work together effectively, leveraging their knowledge and skills to create new value. This is what knowledge management, or any other term you wish to use, is all about.

It is a business imperative and will become more so as the economy becomes increasingly knowledge-based. It is a movement that combines digital technology, internet culture and new economic models into radically different ways of working.

At Xerox our vision is: "Helping people find better ways to do great work." Our customers benefit from programmes at our world-renowned research centres. These provide us with an unparalleled understanding of how people work – how they create and share knowledge – and the role that technology can play in helping them. Our leadership and achievements in these areas help organisations absorb and exploit change and introduce innovative systems that enhance the way they work.

We provide advanced document devices that seamlessly link into enterprise electronic workflow, enhancing business performance. And through Xerox Global Services, which was established as a separate division last year, we offer industry-specific solutions to improve strategic relevance by improving mission-critical business processes.

Our services worldwide encompass consulting, systems design and implementation, strategic outsourcing and process management.

PEOPLE, PROCESSES AND TECHNOLOGY

At Xerox, we focus on the artful integration of people, processes and technology. For an organisation to change and develop successfully in response to the many pressures and demands upon it, it must recognise the human and cultural aspects of work and understand how people use systems and processes. Achieving the balance between this social perspective and the opportunities afforded by technology is key to our approach in designing and implementing successful systems. Through process innovation we simplify and enrich work, deliver sustainable business results and productivity, and help our clients create new levels of organisational performance and value.

For more information about the solutions Xerox can offer to the financial services industry or for previous copies of reports please contact:

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Executive summary

KNOWLEDGE MANAGEMENT IS ESSENTIAL, SAYS **LUCIA DORE**, IF FINANCIAL INSTITUTIONS ARE TO FORGE AHEAD. BUT HOW IS IT MEASURED, HOW MUCH NEEDS TO BE INVESTED AND WHAT ARE THE IMPLICATIONS FOR CUSTOMER AND PARTNER RELATIONSHIPS?

KNOWLEDGE will be the key resource in the knowledge economy. The ability of individuals and organisations to harness and leverage knowledge will be the main factor separating the winners from the losers.

Individuals will gain if they are able to leverage and expand their knowledge and use it to create value for themselves – by winning a higher salary for example. Organisations will benefit if they are able to harness the knowledge that exists both internally – the tacit knowledge held by employees – and externally – that held by customers and other partners.

The themes discussed in this report build on *Financial World's* October 1999 report on shareholder value, the March 2001 report on knowledge management (KM) and the risk management report on the proposed Basel 2 Accord, published in October last year. It not only looks at how the knowledge economy differs from the classical economy, but considers the importance of a KM strategy in order to operate effectively within it.

The report asks what exactly KM is or, indeed, if it is possible to define it at all. And, more specifically, why, to date, the general attitude towards KM by financial institutions is not merely conservative but hostile. As such, is it time for KM as a discipline to be reinvented and re-focused if financial institutions are to embrace it more enthusiastically. One of the report's most important aspects is its focus on the strategic issues concerning innovation and value creation, not only how value can be created within organisations but also how its benefits can be realised and measured. We know that the more knowledge we can leverage the more benefits that accrue. But what is the amount of investment required to maximise those benefits?

It is becoming more vital to be able to quantify the benefits of a KM strategy if investment decisions are to be justified. To do this, however, requires not only understanding what KM is, but also finding a way to measure the value of investment and showing how it can improve the bottom line.

Another key theme of the report is the importance of forming strong, trusting relationships in the knowledge economy, not only with customers and employees, but also with external partners. It is by forming such relationships, known as "relationship capital" that knowledge is gained and value created. However, in the knowledge economy the importance of "virtual communities" will increase significantly – they may even become the main means of exchanging knowledge.

The importance of leveraging organisational knowledge not only lies in generating value-creating opportunities, but also in its ability to mitigate risk. And risk mitigation in itself creates value. In summary, if financial institutions are to succeed in the knowledge economy they will have to recognise that:

- KM, if correctly executed, (with a focus on people rather than on systems and processes) can help to unlock the creative potential of an organisation by nurturing a knowledge-sharing and value-creating culture;
- innovation and creative thinking helps to generate value-creating opportunities which, in turn, enhance shareholder value;
- in the knowledge economy, shareholder value will remain a key measure of success, but financial institutions must put in place new value-creating models to generate it, especially because the speed of change is accelerating;
- forming strong and trusting relationships, both internal and external, will be mandatory. These relationships will be the core source of knowledge and the value of these relationships are measurable;
- there will be a much greater focus on customers, using the knowledge extracted from these relationships to leverage value. Customer relationship management will become customer knowledge management;
- virtual communities will become the most important networking channels and financial institutions will work harder at building and retaining relationships;
- new design mechanisms, such as knowledge exchange routes, will be necessary to facilitate relationships;
- focusing on core activities will generate more value; specialisation will become increasingly important;
- effective leadership will require putting in place the appropriate mechanisms to facilitate and strengthen relationships and new models for value creation.

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Knowledge management refocused

KNOWLEDGE MANAGEMENT MEANS ALL THINGS TO ALL PEOPLE, WHICH IS WHY FINANCIAL INSTITUTIONS FIND IT SO HARD TO IMPLEMENT. A NEW TERM AND A FRESH APPROACH TO INFORMATION SHARING IS NEEDED

WHY DOES KNOWLEDGE management need to be refocused for the financial services industry and why does it need to reinvent itself? Before answering this question, we first need to look at what knowledge management (KM) is.

Put simply, KM is "applied information". This occurs when value is added to information in such a way that both individuals and/or organisations benefit, however that benefit is measured. All benefits are considered equal as long as they all result in improved company performance.

In terms of measuring performance this report argues that by adopting certain metrics, based primarily on the strength of relationships with

"ONE OF THE MAIN CRITICISMS AGAINST USING THE TERM 'KNOWLEDGE MANAGEMENT' IS THAT KNOWLEDGE BY ITS VERY NATURE CANNOT BE MANAGED"

customers and partners, it is possible to measure, to some degree, the effectiveness of a KM programme. Over time, this improved effectiveness will result in enhanced shareholder value. As Professor Prabhu Guptara (1999) puts it: "For knowledge management to benefit from the metrics, companies should evaluate

contribution to, and utilisation of, company knowledge in pursuit of profitability versus that of the competitors."

Another way to look at KM is that its ultimate goal is to change the way an organisation works. It helps an organisation take decisions quickly because knowledge is widely and immediately available. By the above definitions, however, it is possible to argue that every decision acted upon in order to add value to an organisation could be called knowledge management, whether it be a human resource or information technology initiative.

This is why the definition used in *Financial World's* March 2001 special report: "Winning through knowledge", has particular merits: it is discrete and captures the idea that it is made up of a number of processes. "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 also causes problems as it implies that it is possible to "manage" knowledge. Indeed, this is one of the main criticisms against using the term "knowledge management" for, as we know, knowledge by its very nature cannot be managed.

Although it is possible to manage data and information – the building blocks of knowledge – contained in huge databases or data warehouses, it is not possible to manage tacit knowledge. And it is tacit knowledge, knowledge that resides within people's heads, which is at the heart of knowledge creation. It is harnessing this tacit knowledge and making it explicit that really matters.

Another semantic barrier against using the term "knowledge management" is that it is used to describe everything from harnessing information to the installation of an IT system with a sophisticated search engine, none of which, on its own, constitutes a knowledge management programme.

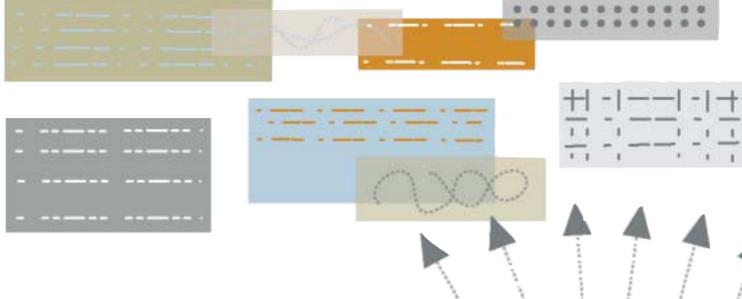
Driven by these concerns about the term, new, more appropriate terms are being sought, although none are necessarily better. One increasingly popular term is "knowledge sharing", another is "knowledge creation". Setting aside the semantic issues, if we look at KM, in terms of the second definition, how do we make it work? Ultimately, KM comprises a series of processes, a mixture of both internal and external approaches to relationships.

THE EXTERNAL APPROACH

The external approach is, as expressed by Guptara, customer-facing KM, which means building strong and trusting relationships with customers.

Financial institutions are all too aware of the need to build such relationships for, as competition in the industry intensifies and products become increasingly commoditised, the strength of the relationship is often the only thing that prevents a customer switching to another institution.

As Guptara says: "Trust is the cornerstone of KM and only genuinely relationship-oriented companies will survive. A customer-facing organisational structure strengthens the commitment to KM because it concentrates on relationship building and flows customer knowledge back into the development of products and services." (This is discussed further in the section: "Innovation and Creativity", page xii).



INTERNAL APPROACH

The internal approach focuses on strengthening relationships with employees. This rests on two elements: building a collaborative culture in which employees are encouraged to share knowledge and putting in place the appropriate recognition and reward mechanisms to make this happen.

One of the most informative explanations of how these processes work together is presented by Julian Birkinshaw, associate professor of Strategic and International Management at London Business School (2001).

Birkinshaw divides KM into three components:

- Improving the informal flows of knowledge between individuals.
- Building systems for codifying and sharing knowledge within the firm.

• Tapping into new knowledge from outside the firm.

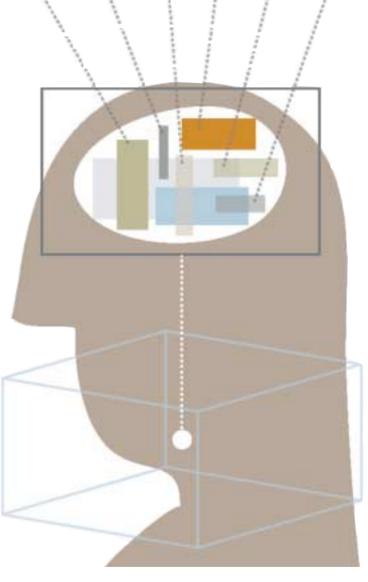
The latter is very important, yet often forgotten, for innovation is most likely to occur when knowledge comes from external, rather than from internal, sources. He also points out that, at the heart of KM, is the simple concept of the firm as a "social institution".

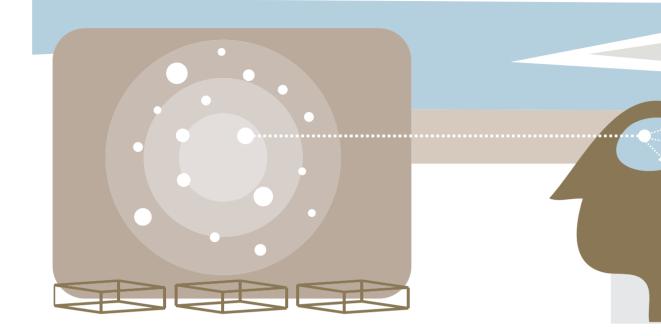
"The firm draws value from the individuals within it and from its ability to harness their knowledge. But individuals also draw value from the firm they work for, to a far greater extent than a simple contract-based view of the world would suggest."

Based on this organisational philosophy, Birkinshaw maintains that "there is potentially a great deal of value in understanding how to make it work. And to do so is essentially about creating structures and systems that enable, rather than constrain, social activity and knowledge sharing. Knowledge management, by this logic, can be seen as a set of techniques and practices that facilitate the flow of knowledge into and within the firm."

Birkinshaw then talks about two related disciplines, organisation learning and intellectual capital. The difference between KM and organisation learning is that the latter is concerned with managing the processes of learning, while KM is more concerned with techniques for building up and applying stocks of knowledge.

For those who are not convinced that there is such a concept as "organisational knowledge" the adoption of a KM programme would be a non-starter. Peter Clark, partner at VBM Consulting and co-author of *The Value Mandate*, argues against the idea of "organisational knowledge".





"THE INFERENCE THAT ONE'S BRAINWAVES ARE A CORPORATE ASSET IS MORE NUMEROUS THAN IT IS INSULTING. IT REEKS OF CONSULTANTS CHANCING UPON A STYLISH CONTENT AND TRYING TO INVENT SOME DATA TO PROVE IT, BACKWARDS"

He says: "Having been at the receiving end of some organisation's 'knowledge data', my basic stance is that it is the knowledge assets of the corporation that matter, that is, those that are valued in the marketplace, which tend to be personal in nature, with transference only to a few, not to the organisation as a whole.

"The inference that one's brainwaves are a corporate asset is more numerous than it is insulting. It reeks of

consultants chancing upon a stylish content and then trying to invent some data to prove it, backwards. The corporation-wide attempts at formalised knowledge accumulation and storage I have seen have resulted in an adverse selection of pedestrian thoughts that one, competitors would not dream of stealing and two, that customers don't particularly value. And these are the only basis for assessing whether or not the resulting corporate knowledge base is a success or failure."

Continuing, he says: "Without the context of how the knowledge would or could be used, it is worthless as data and that context is generally a personal insight. And asking an individual to give up that personal insight is impossible and futile. Impossible, because one is asking a genius how he/she puts it all together and they probably don't know. Futile, because even if they did know, they would be a fool to abandon their only source of job security for nothing."

WHY IS "KM" A DIRTY WORD?

Within the financial services industry, the opinions expressed by Clark are not unusual, especially the "knowledge is power" attitude. It is certainly irrefutable

that the "context of how the knowledge would or could be used" matters hugely. If individuals understood more about how knowledge is to be used, they would know what sort of data/information to look for in the first place and, in all likelihood, suffer less from "information overload".

It is problems like these that have resulted in KM becoming a "dirty" word, especially in financial institutions. To explain why this has happened, it is necessary to look at the attitude of financial services towards the adoption of a KM strategy. According to a report in *Financial World* (March 2001), few institutions are interested in implementing KM.

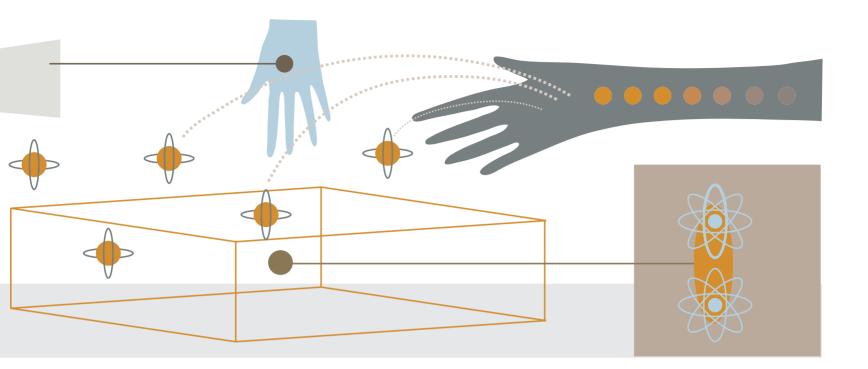
The survey shows that only a small proportion of the 300 financial institutions (200 banks and 100 insurers) surveyed understand KM or, even more importantly, actively embrace it. These results show that only 33 per cent of organisations have a KM programme in place and that a mere 8 per cent are setting one up. And 30 per cent of organisations said they are not considering implementing one at all.

According to figures from analysts IDC, the spend on KM services by financial services was also only 8 per cent in 2000, compared with 18 per cent for business and engineering services. However, this may not be quite as bad as it seems as many of the other sectors were not significantly higher – manufacturing and communications each accounting for only 9 per cent of the total. Overall, the main conclusions from the *Financial World* (March 2001) survey are disappointing. The survey shows that within financial institutions: • the level of understanding of KM is very poor;

- KM within financial services is surprisingly immature;
- insurance companies are more positive about adopting KM;
- KM means all things to all people;
- customer relationship management (CRM) has confused the issue.

These conclusions clearly show that KM still lacks legitimacy as far as financial institutions are concerned. This is despite the fact that it has been about since the early 1990s with numerous dedicated consulting companies, self-professed gurus and magazines focused on the subject. Consequently, not understanding what KM is really about has made it difficult to implement.

This is also highlighted in the March 2001 *Financial World* survey when "a lack of understanding of the benefits" was cited as one of five main



barriers preventing financial institutions implementing a KM programme. The others are:

- Knowledge being held in too many formats and/or repositories.
- No one person having clear responsibility for the management of knowledge.
- No incentive to share knowledge.
- The complexity of IT systems.

Given that the implementation of KM can benefit an organisation enormously if carried out properly, why is it that KM has such a tarnished reputation in the financial industry?

The main reason is that because KM is a multifaceted discipline it can "mean all things to all people". Scientists from many different disciplines are interested in the subject, ranging from business administration and computer science to engineering science, management theory, psychology and sociology. But its breadth is also its downfall.

Change management, business process reengineering, CRM, business to business (B2B) are all, arguably, components of KM, as each seek to strengthen the relationship with the customer and all require extensive knowledge-based information.

Being such a broad discipline is not necessarily a bad thing, however, argues Birkinshaw, for rather than representing a failure, it highlights the fact that KM is on the right track. He states: "[KM] is so central to the make-up of the firm that it cannot be separated out and acted upon in the way that a single business process or management system can."

And because people are not sure what KM means it follows that they are unable to implement it. This is highlighted by the fact that procurement personnel in financial institutions may not always know exactly what they are buying from the IT salesperson or, to put it another way, what the purchaser thinks he/she is buying may be different from that which the salesperson thinks he/she is selling. Is it a CRM or a KM package for example?

The CRM issue is crucial. While some may still contend that CRM is a separate and distinct discipline from KM it is not – CRM is part of KM (see page xvi). There is no doubt, however, that the willingness of financial institutions to embrace CRM is because the technology (and it is not just a

technology) appears to be straightforward. It is concrete and formulaic – with clearly defined inputs and outputs.

In contrast, to be effective, a KM programme must be bespoke and is, by its very nature, an inexact discipline. Many of the sophisticated databases and IT systems that are implemented in the name of KM are really only repositories of codified knowledge. These do not capture the tacit knowledge or expertise that really lies at the heart of knowledge management and normally arise out of informal structures.

THE PROBLEM WITH CRM

Not surprisingly, the chief advocates of CRM are the IT companies. CRM is a key selling point and one whose alleged benefits financial institutions are only too keen to embrace. It would not be too far-fetched to say that all financial institutions are aware of CRM and of the supposed benefits that its implementation are likely to bring – although the jury is still out on this.

Too often, senior executives have seen minimal returns on huge investments of time and money on CRM technology – a figure that strategic consultants Marakon Associates, reckons to be as much as \$19bn over the past five years in the US alone.

Arguably, this is the major problem that KM must overcome: becoming too closely aligned with a specific technology such as CRM. This results in another problem: that the implementation of a KM strategy promises to deliver a great deal but often delivers very little. There are three reasons for this.

The first is that because the focus continues to be technology-oriented rather than people-oriented, the change in culture never takes place – an essential precursor to creating a knowledge company. As we have been told countless times, KM is about people and not about technology: technology is only a catalyst to change.

The second reason is that the often unflinching emphasis on CRM, which treats all customers and products as equally good, means that investments in this technology are not translated into identifiable gains, specifically in terms of delivering optimum returns to the shareholder (see page xii).

The third reason is that, as in all companies, it is likely that knowledge is already being captured and managed through informal networks such as brainstorming sessions and away days. To improve on these existing informal networks means that organisations not only need to develop new tools to capture, share and leverage knowledge, but also eliminate old ways of working.

There is no doubt that organisations find KM difficult to implement. A *Financial World* survey (March 2001) reveals that the most important knowledge problem faced by financial institutions are:

- no time to share knowledge;
- information overload;
- not using technology to share knowledge;
- reinventing the wheel in other words, revisiting what already exists;
- difficulties in capturing tacit knowledge;
- lack of time to sift and analyse information;
- an unwillingness to change past practice;
- a lack of understanding of how knowledge is acquired.

These results are reinforced by research undertaken by Birkinshaw when he discusses the mixed results of KM programmes and initiatives:

- Firms do not sufficiently recognise that they are already doing it.
- IT is often regarded as a substitute for social interaction.
- KM typically focuses too much on recycling existing knowledge, rather than on generating new knowledge.
- Most knowledge management techniques look like traditional techniques.

REFOCUSING KNOWLEDGE MANAGEMENT

These conclusions make clear that within the financial services industry it is necessary for KM to be refocused. This is because, as it stands, KM is a discipline that means all things to all people.

There may be one overarching objective for management – to put in place systems and processes that facilitate the sharing, creation and extraction of knowledge to ensure improved company performance – but, because KM is multidisciplinary, there is no one way, or even one right way, of achieving that objective. It depends on the culture of the organisation, the individuals within it and the product mix on offer.

The concept of KM also needs to be more concrete to be accepted by those in charge of the budgets, especially when a programme no longer fits in the domain of the IT department. Moreover, the metrics are insufficiently developed in most cases to determine whether investment in each project yields a satisfactory return on investment.

The aim of sharing knowledge throughout an entire organisation is an

ideal, where there are no silos and no vested interests, but to do so in some organisations, such as an investment bank, belies the reality of the existing structure. Although it is possible to implement KM within individual departments, undertaking a company-wide roll-out is often a much more difficult scenario.

Within financial institutions a culture of "Chinese walls" often exists, sometimes as a matter of necessity, to preserve client confidentiality. Often there is also a culture where there are hierarchies and an inherent reluctance to break down barriers and a strong belief that knowledge is power. As a result, this hinders lateral communication.

In financial institutions there also tends to be a lack of explanation as to why KM is important and how to make it happen. People must have a reason to share knowledge – "the what's in it for them" factor. Incentives may have to be introduced to institutionalise new knowledge sharing activities but, within financial institutions (given the limited work that has been done in this area), what the best incentives should be remains unclear. Studies in different industries suggest that monetary incentives do not work but whether they would have a role to play in financial institutions is perhaps debatable.

For all these reasons, KM must re-invent itself and in such a way that it is seen as "leading-edge", an absolute necessity, rather than an "extra". It must be seen as something that will benefit the whole organisation and not just one department. To do that, however, would require proving a direct relationship between the implementation of a KM programme and the outcomes – something that is not easy when the inputs are usually intangible and therefore unmeasurable.

A new term for KM is also needed in order to get rid of the negative connotations associated with it. Or, arguably, do we need a phrase at all? Would we be better to discard the term completely and talk about specific projects, whether they are to do with human resource training, change management, CRM or IT.

For all these projects, if conducted properly, add value to knowledge and to do that is simply sound business practice. In its favour, the term "knowledge management" does put in place a framework – an umbrella if you like – under which companies may choose to consider and implement new ways of thinking and operating.

Birkinshaw, J. (2001) Why is knowledge management so difficult? *Business Strategy Review*, 12: 1, 11-18.

Guptara, P (1999, July/August) Why knowledge management fails: how to avoid the common pitfalls. *Knowledge Management Review*, 9: 2.

The challenge of knowledge

AS THE FINANCIAL SERVICES INDUSTRY BECOMES MORE GLOBAL AND COMPLEX, INSTITUTIONS WILL HAVE TO REINVENT THEMSELVES BY EMBRACING TECHNOLOGY AND FINDING NEW WAYS OF CONNECTING WITH THEIR CUSTOMERS

THE KNOWLEDGE ECONOMY, whether we like it or not, is nearly upon us. This will be an economy very different from that of the 20th century when manufacturing and industrial companies were economically dominant, a time when capital assets, measured by plant, buildings and a strong balance sheet, were considered more important than a company's social and organisational capital.

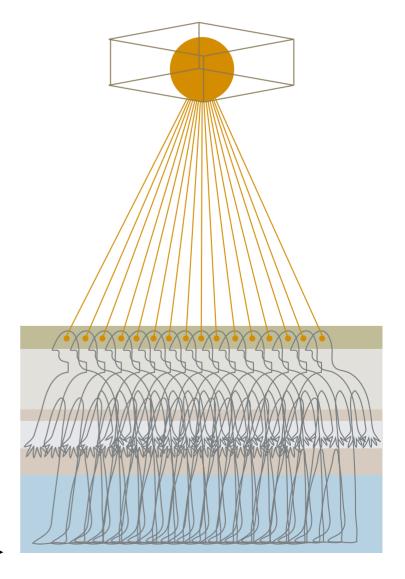
We have entered a century where the service sector is generating more jobs than industry and where an individual's intellectual capital will be as important – probably more important – than a company's capital asset base. Increasingly, it is recognised that it is the sum of the value of each individual's knowledge base that generates a company's true value, especially in those sectors where differentiation by traditional means is either very difficult or impossible – for example, the financial services industry.

However, unlike the last century, the knowledge economy recognises that differentiation is made possible by information about customers, suppliers and competitors. As well as being knowledge-based, the knowledge economy will be global and borderless. A global economy will not only be one in which goods, services, capital, and technology can be traded around the world, but it will be one in which the economy's core components have the institutional, organisational and technological capacity to work as a unit in real, or chosen time. Knowledge can travel effortlessly and the ability to operate in real time (or near to it as possible) makes borders irrelevant.

PRODUCTIVITY AND COMPETITION

The knowledge economy will also be characterised by the interaction between business networks to generate productivity and competition. In turn, this makes the economy more complex. There will be greater interconnectivity between people and organisations than before, largely brought about by technology such as the internet. Value chains and business process will become virtual and will be extended into multiple relationships in networks of organisations and individuals. Managing this complexity will be vital if organisations are to create value.

Already, major structural changes within the global financial services sector are forcing financial institutions to look at new ways of doing business, to find new ways of winning market share and deliver value to customers. Consolidation, competition, globalisation, rapid technological developments (especially the internet), increasing specialisation, regulation and de-regulation are the main factors driving the adoption of new business practices.



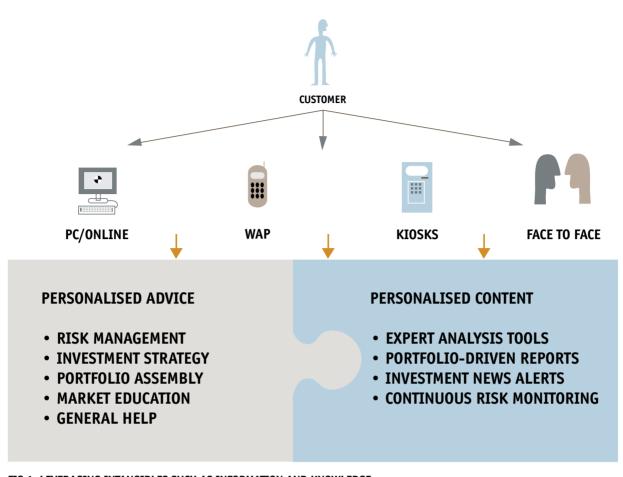


FIG 1: LEVERAGING INTANGIBLES SUCH AS INFORMATION AND KNOWLEDGE Source: Schmidt, C., Lee, S. (July, 1999) *Online trading skyrockets in Europe*. The Forrester Report.

In Europe, for example, there has been an ongoing trend for universal banks and insurance companies to merge, creating integrated financial services companies and providing "one-stop" financial shopping for customers.

The introduction of the euro has significantly accelerated consolidation in a number of payments and foreign-exchange related businesses, while the arrival of the euro-zone bond market has brought into question the viability of the traditional universal banking model.

Worldwide, the internet-based banking model is becoming more appropriate for customers than the traditional branch-based model, although customers still demand a choice of delivery channels.

Non-traditional players, such as supermarkets and utilities, and more specialised players such as the credit card companies, also present a threat to traditional players in specialist areas such as credit cards and savings accounts. Studies (see page xii) show that these specialised companies create more value, measured by shareholder value, than universal banks.

As a consequence of the financial services industry becoming more global and competitive, products and services are becoming more commoditised.

There is often little to distinguish one product from another, apart from brand and quality of service. Rarely is price a differentiating factor, particularly since margins have narrowed.

As a result, developing strong and trusting relationships with customers and leveraging intangibles, such as information and knowledge, have become even more important ingredients for success (see Fig 1).

Their importance has been strengthened by the need to operate in an increasingly virtual world. This drive to provide customers with more personalised service and advice has helped to create the unprecedented demand for products such as customer relationship management datawarehousing and analytics.

At the same time, customers and regulators are seeking greater transparency, both in terms of prices and in the way business is conducted. To keep up with the changes in the operating environment, which has inevitably become more complex and risky (particularly as the speed of change continues to accelerate), the regulatory environment is altering. The introduction of the Basel II Accord is an indication of this, reflecting the changing dynamics of financial markets and, in particular, rapid technological developments and new market instruments.

CREATIVE THINKING

In the face of all these pressures financial institutions are looking for ways of reinventing themselves. They are recognising that to compete within this new environment, and to create value within it, they must adopt a new paradigm. This is happening – slowly. Traditional institutions, such as banks, are offering a greater number of services and modelling themselves on pure retailers. They have also been at the forefront of harnessing technology to enhance business practices, becoming more innovative and creative.

This is essential, for the environment reinforces the fact that the key to innovation lies in creative thinking and generating value-creating opportunities. In this new environment there is no doubt that creating value is becoming more complex. It is clear that rapid technological advances are among the biggest drivers of the knowledge economy, especially the internet. These advances have greatly facilitated the sharing of vast amounts of information and broken down hierarchies by making that information available to everyone who can access it.

However, financial institutions have had no choice but to make the most of technology. As competition has intensified they have had to work harder to stay ahead, both because of the speed at which information is available and the volume of it. Both have heightened customer expectations and forced organisations to focus on adding value to information, not just quickly, but in real time. Technology is undoubtedly the main catalyst changing the ways in which financial institutions deal with customers, suppliers and other partners. In particular, technology has enabled supplier and partner relationships to move from being one dimensional to multidimensional.

As Tony de Bree, interim manager at ABN AMRO Trust, explains, in the traditional environment, customers and suppliers need to establish separate relationships with each financial service provider, sometimes even with each

"FINANCIAL INSTITUTIONS MUST BE PREPARED TO UNDERTAKE GREATER STRUCTURAL AND CULTURAL CHANGE IF THEY ARE TO OPERATE SUCCESSFULLY IN THE KNOWLEDGE ECONOMY" channel, before conducting business.

However, "in the new, more integrated, online economy, content (information, knowledge and services), context (where it is supplied) and infrastructure (the vehicle of transport) can be separated in order to create new ways of adding value, lowering costs and forging relationships with non-

traditional players and partners (see Fig 2).

"This new situation results in a new dynamic competitive environment for banks and financial services companies in which they are forced to choose and focus on one of the three, instead of on all three at the same time," says de Bree. "In every dimension they are facing strong competition from within and outside their traditional industry." (For a discussion of how customer value creation relates to shareholder value and the value of people, see page xx).

While financial institutions are clearly refocusing, it is clear that they must be prepared to undertake even greater structural and cultural change if they are to operate successfully within the knowledge economy.

They must adapt to new realities which means:

• developing trust with customers and partners in a virtual world;

- putting in place better risk management procedures (as emphasised by Basel II) to accommodate a more complex operating environment in which change occurs more quickly;
- establishing long-lasting and profitable relationships with customers;
- reinforcing the importance of brand management and value creation;
- understanding that social capital has become as important as financial capital. There are many areas on which institutions will have to concentrate if

they are to succeed in the years ahead. They must nurture intangible rather than tangible assets and improve communication within their organisations. Companies must also accept that within this new operating framework information is free and not a source of power. In addition, management must

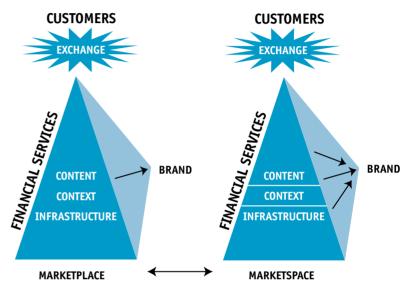


FIG 2: HOW BANKS AND FINANCIAL SERVICES CAN CREATE VALUE

Source: Rayport, J.F., Sviokla, J.J. (November/December, 1994) Managing in the Marketspace. Boston, MA, Harvard Business Review. Page 145.

recognise that value is created through multiple relationships in the network and that innovation is almost always a result of decentralised work practices.

SAVVY AND FLEXIBLE

Without question, the structure of organisations must change in order to make this possible. To meet these demands financial institutions must align their business practices in a number of areas, namely e-business strategies and internet infrastructure, organisational networks, social and cultural infrastructure, supporting e-services and their legal and regulatory frameworks.

Doing so should facilitate the ability of organisations to become:

- nimble, so they can adjust to sudden and/or unexpected changes in market conditions;
- flexible, so they are able to listen to new ideas and to be prepared to accept mistakes and change them;
- technologically savvy;
- able to have the ability to hire good people and have the ability to retain them;
- able to develop strong leadership;
- able to operate in real time/or as near to it as possible;
- innovative.

The importance of innovation cannot be overstated for innovation is a key strategy in a sector where companies are struggling to differentiate themselves and where, increasingly, service is the only differentiating factor. In the knowledge economy the requirement will be even greater to create value-driven relationships and value-added products and services.

Innovation and creativity

COMPANIES HAVE TO BE INNOVATIVE IN ORDER TO SURVIVE. BUT INNOVATION BY ITSELF IS NOT ENOUGH,

IT HAS TO BE EXTRACTED AND TURNED INTO VALUE

CREATING SHAREHOLDER VALUE is the ultimate goal of financial institutions. And in an increasingly global and interconnected economy there is no choice, especially for financial institutions, to become more innovative. The key to innovation lies in creative thinking and the generation of value-creating opportunities. It is leveraging these opportunities that leads to improved value. The need to create value is the key reason why

"ENTREPRENEURIAL DRIVE IS A KEY ELEMENT OF INNOVATION SINCE IT FUNCTIONS AS A CATALYST IN THE TRANSFORMATION OF NEW BUSINESS IDEAS AND PROJECTS AND IMPROVED BUSINESS PERFORMANCE"

companies should become knowledge-based. It is only through applying that knowledge that companies can stay ahead of their competitors or, at worst, remain competitive with them.

The financial services industry is the ultimate knowledge industry for in order to compete in it companies have to go through innovations in processes, products/services,

management quality and branding.

As products and services become increasingly commoditised, one of the few ways, apart from price, to maintain differentiation is to create products that are better suited to customer demands. To do this, however, requires establishing close and trusting relationships with customers. It requires sophisticated and intelligent use of knowledge management processes, techniques and systems.

According to Ross Dawson in his book *Developing Knowledge-Based Client Relationships* (2000, p219): "Knowledge transfer and sharing will be the primary means for adding value to clients with knowledge and the key source of sustainable differentiation.

"The future of business is all about knowledge and relationships. Relationships will become increasingly critical in every industry, as customers and clients gain more choices and knowledge and increasingly go to the cheapest source to meet their needs, barring the existence of priorities or affinity with any supplier."

Innovation itself is a function of three factors:

The creation of new knowledge

To a large extent, many new ideas are generated from external sources – whether as a result of feedback from customers or sharing knowledge with outside consultants.

As Insead research fellow Panagiotis Damaskopoulos put it in a speech at the third European Conference on Organizational Knowledge, Learning and Capabilities, held in Athens, in April this year: "The function of innovation is increasingly becoming a function of open-source networks of co-operation. In other words, innovation is not something that is happening 'inside' firms but rather at the interfaces of firms with the market, regulatory and institutional environments within which firms operate."

However, new knowledge can also be generated internally by having in place appropriate knowledge-sharing processes and incentive structures, and/or the existence of a research and development system.

Without these methods and techniques to facilitate knowledge sharing it is less likely that individuals, especially those who work on their own – often in silos – will generate new ideas. But if they are brought together, outside the office environment, and forced to think more laterally, new ideas can be generated. Individuals must be encouraged to think outside the box.

The right people

The availability of highly-educated labour, individuals who are self-motivated and ideas focused is vital. This kind of labour is the direct result of the quality and quantity of graduates from the education system – or immigration.

Entrepreneurial spirit

The existence of entrepreneurs who are able and willing to take the risks to transform innovative business projects into business performance.

Damaskopoulos states: "Entrepreneurial drive is a key element of innovation since it functions as a catalyst in the transformation of new business ideas and projects into innovation and improved business performance." The degree to which financial institutions are willing to take risks will be determined, in large part, by the response of the share market.

In terms of facilitating the process of innovation, financial institutions need to focus on ways in which the organisational structure facilitates innovation. This means, for example, looking at establishing a culture of knowledge sharing, using communities of interest and communities of practice, and ensuring that management understands that different kinds of

innovation have different characteristics and require various managerial approaches to be successful. The internet is an important technological development that is helping to alter organisational structures by breaking down hierarchies and encouraging knowledge sharing.

The rapid developments in the technological environment in which companies operate also works to the advantage of new and start-up companies, since these have already been taken into account when shaping their working practices. Older, more established companies, have to work harder at accommodating and maximising the opportunities from such developments and to catch up with younger rivals.

SPECIALISATION

Financial institutions also need to focus on what they are good at, for this will be an area in which it will be easier to gain a competitive advantage. The internet is facilitating specialisation, such as, for example, the emergence of electronic marketplaces within financial institutions. (Some of the ways in which companies can innovate are discussed in The Atomic Corporation case study, page xxiv.) If companies move too far away from their basic model of specialisation they can lose the trust of their customers and investors.

As innovation is a complex and fast-changing process, the more specialised organisations are able to think and act more quickly than larger ones, and more readily absorb new ideas from third parties, such as professionals, strategic clients, vendors and other suppliers.

Institutions also need to build alliances with firms from both within the industry and from outside it, such as technology companies, and strong relationships with clients. Companies should aim to build a network of relationships based on trust. For example, numerous studies have shown that alliances generate much greater returns in terms of shareholder value than mergers. This reinforces the idea that innovation is a "network process" – a process that takes place between and across organisations in multiple and often overlapping settings within diverse geographical environments. These include entrepreneurial small firms, large financial services firms, providers of technology and systems integrators.

Once value is created, however, companies have to be able to extract that value so it can be realised either in the form of cash, through patents or licensing, or in strategic positioning. "Unharnessed creativity alone is very unlikely to propel a company into generating stellar shareholder returns," says

FIFTY FIRMS WITH THE STRUNGEST PERFORMANCE INDEX FROM 1996-2000				
NAME	COUNTRY	MV (\$US MM)	SPI	MV RANK
1. Manulife Finl.	CN	15,070	395.1	88
2. Com Bank of Australia	AU	21,757	229.4	65
3. Alliance Capital	US	10,407	211.9	122
4. Great West Lifeco	CN	9,242	210.6	137
5. Northern Trust	US	18,089	206.3	75
6. Robeco Group	NL	18,115	200.1	74
7. Aegon	NL	55,850	198.6	19
8. Skandia	SD	16,651	196.7	80
9. BIPOP Carire	IT	11,286	196.6	115
10. Banca Fideuram	IT	12,549	192.8	103
11. Power Finl.	CN	8,041	189.4	149
12. Danske Bank	DK	13,545	189.4	96
13. Dexia	BG	17,591	188.3	78
14. ING	NL	78,078	186.5	10
15. AIG	US	228,227	184.7	3
16. Baloise	SW	6,439	181.9	168
17. General Electric	US	475,003	181.2	1
18. Cigna	US	20,308	179.2	70
19. BBVA	ES	46,946	179.0	28
20. Mellon Finl.	US	24,003	177.7	57
21. Providian Finl.	US	16,429	177.5	81
22. Capital One Finl.	US	12,961	177.3	98
23. Royal Bank Canada	CN	20,420	176.0	68
24. Fortis	BG	40,093	175.5	32
25. Charles Schwab	US	39,259	175.3	34
26. Bank Of New York	US	40,863	173.8	31
27. American Express	US	73,066	173.3	12
28. Mediolanum	IT	9,236	171.8	138
29. Unicredito Italiano	IT	26,160	171.0	49
30. State Street	US	20,027	170.5	71
31. Citigroup	US	229,368	169.0	2
32. Power Canada 33. Nat. Bank of Greece	CN GR	4,842	168.5	198 141
	GR	8,908	167.7	
34. Alpha Credit Bank 35. Rolo Banca 1473	IT	5,587 8,794	167.2 164.5	181 143
36. AXA	FR	59,641	163.0	143
37. Munich Re	BD	63,118	161.4	10
38. Morgan Stanley Dean		89,697	160.5	7
39. MBNA	US	31,463	158.9	44
40. Marsh & McLennan	US	31,746	157.4	43
41. Merrill Lynch	US	54,913	156.8	20
42. Nat. Commerce Banco		5,033	156.5	192
43. Golden West Finl.	US	10,664	156.3	120
44. Toronto-Dominion Bar		17,967	154.6	76
45. AFLAC	US	19,147	154.4	72
46. Swiss Re	SW	35,141	153.7	37
47. AMVESCAP	UK	15,800	151.5	85
48. Fifth Third Bancorp	US	27,815	150.8	46
49. Westpac Bank	AU	12,870	150.6	100
50. BSCH	ES	48,329	150.2	25

FIFTY FIRMS WITH THE STRONGEST PERFORMANCE INDEX FROM 1996–2000

Source: Oliver, Wyman & Company

ability to increase employee knowledge in order to create new or improved innovations for commercialisation."
Sullivan maintains that value extraction is: "To leverage company innovations in order to maximise profits and/or improve strategic position."

in investment doesn't necessarily generate new ideas."

innovations in order to maximise profits and/or improve strategic position." It is important that an optimum balance is struck between the two. "The optimum balance between creation and extraction is for the firm to create ideas at a pace that is compatible with the pace at which they can be screened and their value extracted," he says.

It is important therefore to make the distinction between value creation and value extraction. Patrick Sullivan (2000) states: "Value creation is the

Nadar Farahati, partner at consultants Oliver, Wyman & Company. "A minimum necessary investment in knowledge management is needed to stop reinventing the wheel, but there can be diminishing returns. A quantum leap

But how is creativity valued? Since there are no metrics for creativity, valuation is tricky. "Overall we haven't found one metric that captures all dimensions of creativity," says Farahati. Valuing creativity is also complicated by the fact that no idea lasts forever. Once a product is introduced and becomes successful it is unlikely to stay "leading" for long. Take the Woolwich for example. Before the bank was taken over by Barclays in 2000, Woolwich had already pioneered the Open Plan scheme. This offering allowed customers to offset their debits and credits in various accounts, including the mortgage account, on a daily basis. Such was its success that it was not long before other banks, such as Halifax's Intelligent Finance and Virgin One introduced a similar product.

In an attempt to measure the main input that produces "creativity", the concept of "intellectual capital" was devised. (The term was first coined by economist John Kenneth Galbraith in 1969.) Underlying its development was the belief that it was possible to develop a language and methodology for measuring intangible assets, in a similar way to accounting – the language used to describe the value of tangible assets.

The leading proponent of this measure is Sweden's oldest listed company and the world's 10th largest insurance company, Skandia. It 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 drivers of growth. By breaking a firm's intellectual capital down into such elements as human capital (the capabilities of employees), customer capital (existing relationships) and structural capital (patents, operating systems, practices) it found it was possible to come up with useful measures that can be monitored and evaluated over time (see *Financial World*, March 2001).

By using this methodology companies can identify the key drivers of value and continuously strive to improve the effectiveness with which these assets are put to creating value. One of the problems with this methodology, however, is that there is no correlation between how much of a resource the firm has at its disposal, above and beyond the necessary and sufficient level, and how much value the firm is able to create. Where there is a strong causality it is down to the ability of the firm to use its resources effectively. This effectiveness can be measured in terms of its strategic positioning and ability to derive value from its "creative process" in the form of intellectual property, for example, patents and licensing.

Although this methodology is of undoubted value when it comes to evaluating the deployment of assets, another problem is that intellectual capital is still not accounted for on the balance sheet; the figure appears in the footnotes. It is up to the analyst to interpret the notes as he or she sees fits and in so doing put a value on a company's "creative process".

This interpretation is extremely important in the context of the knowledge economy because, says Damaskopoulos, "real-world economic calculations are made, not on the basis of the actual profitability of corporations, but in terms of expected growth of financial value".

In the same way, therefore, that relationships with customers are built on trust, it will become increasingly necessary for financial institutions to build up trust with financial analysts and shareholders so that their expectation that "future value will be generated through innovation" will be fulfilled.

INNOVATION AND THE EFFECT ON SHARE PRICE

To show that the degree to which a company is innovative does effect share price, we now look at the ranking of companies in terms of shareholder value. Though many consultants produce such rankings, only one, Oliver, Wyman & Company, does so for financial institutions exclusively. It uses a five-year Sharpe ratio, a common return per unit of risk metric.

In its study (2001), the company analysed the world's 400 largest financial services firms by market capitalisation at year-end 2000 (see table opposite). The cut-off market cap for inclusion in the index was approximately \$1.5bn and the companies were ranked by total shareholder returns (adjusted for risk). This measure is known as the shareholder price index (SPI).

The results are interesting in that they highlight what we intuitively know – that the most innovative companies are the best performers measured by this SPI index, for example, State Street, Capital One and Charles Schwab (see box opposite). The table also shows that specialised companies are the strongest performers, such as the credit card specialist Capital One and discount brokerage Charles Schwab.

As a group the SPI shows that, with only a few exceptions, specialist providers have delivered by far the best risk-adjusted returns over the past five years, while universal banks – including many of the most visible global financial institutions have generated the least value for shareholders. In fact, 45 institutions (that's 11 per cent) of the 400 top financial institutions had negative risk-adjusted returns over the past five years.

Farahati confirms this, using the results from this year's survey – currently being analysed. "Specialist companies tend to be more creative," he says, adding that "specialisation is a potential winner as companies are generally attacking the weaker, more lethargic businesses. Look at the credit card companies or commercial leasing specialists for example."

He also says that specialist companies are more likely to follow through with their mould-breaking ideas, like Charles Schwab, while universal banks often fail to do so. He also emphasises the point that "there are no mature businesses, only mature managers", in the sense that even the most boring and "tied up" segments can be disrupted by creative entrants. A good example in financial services is fund management, attacked by hedge funds that offer a higher-risk, higher-return alternative to the traditional product set.

Charles Schwab is also an interesting case, for although it would never define itself as a knowledge company, it effectively operates as one. It displays all the hallmarks of a knowledge company without being labelled as such. It's forward thinking, customer centric and employee conscious and has used technology to innovate.

Another example is General Electric, a company widely recognised as having delivered very strong returns to its shareholders over the years and which is

consistently hailed as one of

"SPECIALIST COMPANIES TEND TO BE MORE CREATIVE. SPECIALISATION IS A POTENTIAL WINNER AS COMPANIES ARE GENERALLY ATTACKING THE WEAKER, MORE LETHARGIC BUSINESSES"

the top performing companies worldwide. Interestingly, nearly half of the profits are generated by its financial services arm GE Capital, which has specialist divisions in a number of areas ranging from vendor finance to credit card operations on behalf of leading retailers. It has a reputation for being innovative, encouraging creativity and empowering its employees. It has also been hailed as one of the world's leading knowledge companies.

Companies recognised for endorsing knowledge management practices, such as Skandia and Capital One Financial, are also ranked highly (at numbers 8 and 22, respectively). Capital One has a particular take on knowledge management. According to Robin Wood (2000): "Knowledge management will become much more entrepreneurial and less corporately focused, as webbased technologies rapidly accelerate the speed at which new ideas can be tested and taken to market.

"This approach is championed by the successful credit card and financial services company Capital One, where the job descriptions for staff focus on the number of experiments they are able to generate, and the rate at which they can take successful new offers to market.

"Using this data-mining driven, highly iterative approach, Capital One has grown dramatically at the expense of traditional credit card providers, as it is able to focus on niches of a few hundred people and their needs."

To create value and achieve success in the knowledge economy, the most successful financial institutions will have to be nimble and flexible and be able to make decisions quickly. It is likely that smaller companies, those with 200 people or less, will be best placed to survive in the new environment. These companies will find it easier to specialise, to be innovative and to focus on understanding the demands of individual customers.

Dawson, R. (2000) *Developing Knowledge-Based Client Relationships*. Oxford: Butterworth Heinemann, p219.

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Wood, R. (2000) Managing Complexity: How Businesses Can Adapt And Prosper In The Connected Economy. London: Economist Books, p225

Guptara, P (1999, July/August) Why knowledge management fails: how to avoid the common pitfalls. *Knowledge Management Review*, 9: 2.

Some customers are better than others

TO DRIVE SHAREHOLDER VALUE, FINANCIAL INSTITUTIONS HAVE TO RADICALLY ALTER THEIR VIEW OF CUSTOMERS AND USE KNOWLEDGE MANAGEMENT TOOLS MORE EFFECTIVELY

THE KEY TO UNLOCKING the potential within a financial institution lies in the ability of management to tap into and extract the knowledge that lies within it. Only then will it be possible to come up with a better product than your competitors and achieve, for a short time at least, a competitive edge.

Such a strategy will also help to ensure a sustained improvement in shareholder value. And for all publicly listed companies – and financial

"THE BASIS OF CUSTOMER VALUE MANAGEMENT IS TO ENSURE A GREATER UNDERSTANDING OF THE CUSTOMER THAN IS OFFERED BY THE TYPICAL CUSTOMER RELATIONSHIP MODEL" institutions in particular – maximising shareholder value is the ultimate goal and the key measure of success.

This is because success at all other levels, for example, customer and employee satisfaction, customer retention and a strong brand will, in the long-run, result in enhanced shareholder value (see: "How Financial Institutions can maximise

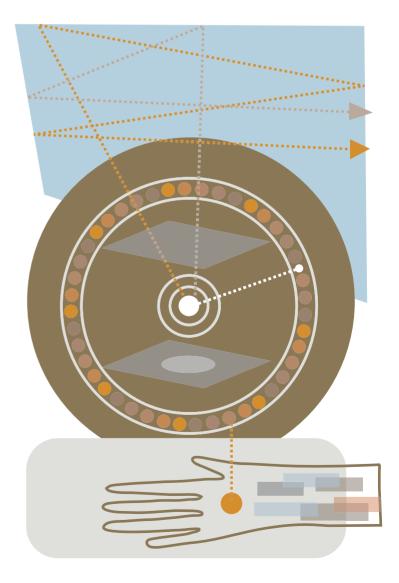
shareholder value", Financial World, November 1999).

While this report has looked at the concept of knowledge and the ways in which companies can benefit from "managing" it, what we must now look at are the ways in which those benefits can be measured.

CUSTOMER VALUE MANAGEMENT

While there is no measurable correlation between a knowledge management (KM) programme and improved shareholder value, there is a metric that can be used to align them more directly. This is known as customer value management (CVM). The basis of CVM is to ensure a greater understanding of the customer and provides a more in-depth analysis than that offered by the typical customer relationship management (CRM) model.

To apply the metric, companies must become more customer-centric, backed by solid management processes and incentives. KM, with its emphasis



on people and sharing information, facilitates this. For financial institutions the challenge is to create new customer solutions and business models that provide differentiation from the competition in order to influence customer behaviour.

ENRICHING THE CUSTOMER MIX

CVM is important because it forces financial institutions to focus on the most profitable areas of their business.

As Eric Armour, partner at international strategy consultants Marakon Associates points out, analysis has shown time and again that the economic profits of financial institutions are concentrated in the top two/three deciles of customers, with the top decile alone accounting for more than 50 per cent of total economic profitability.

Therefore, by enriching the customer mix towards the more profitable

deciles, reducing the number of unprofitable customers and increasing the penetration of total customer spend, shareholder value has been shown to increase. Marakon's research has shown that several early pioneers of CVM have reported major improvements in performance. For example, Royal Bank Canada reported that its returns to shareholders have substantially exceeded the S&P 500 financial index over the past five years, creating an additional \$7bn in shareholder value.

Marakon says that although Royal Bank Canada is "tightlipped" about its success, it has cited an increase in its marketing response rate to as much as 40 per cent, compared with a 2 to 4 per cent industry average.

In addition, National Australia Bank has demonstrated dramatic improvements in performance from its early initiatives, with customer penetration and share of wallet in the small business sector rising to market leading levels of 31 per cent and 77 per cent respectively.

Eric Armour, partner in Marakon Associates' New York office, explains how the concept of CVM is underpinned by knowledge management

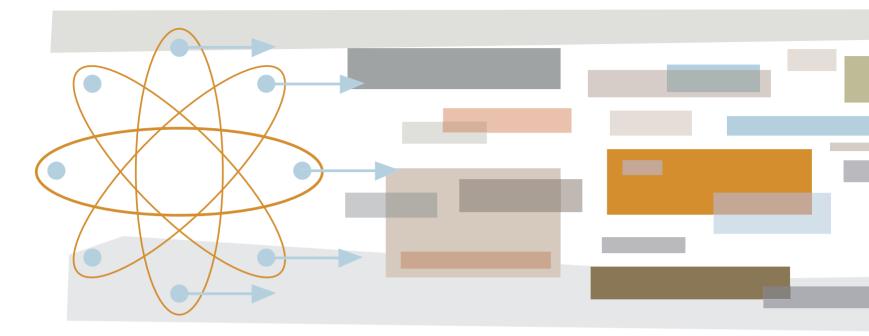
"There are unprecedented opportunities for more sophisticated strategies and tactics to be employed in financial services as a result of the explosion in IT, such as data collection, storage, and analysis capabilities, combined with more sophisticated analytical tools and the ability to network.

Consequently, we are beginning to hear terms like information-based strategies (Capital One) and rules-based decisions and rules-based strategies (GE Capital). It has also become increasingly important for financial institutions to improve the focus, quality and pace of decision-making. With a clearer understanding of the economics of a business and the drivers of those economics, companies can better identify their biggest performance improvement opportunities and focus their management time and resources to capture them.

Enhanced information will also enable higher-quality options to be developed and more rigorous evaluation of these alternatives, leading to higher-quality decisions. As a consequence of the greater need to "manage" knowledge, knowledge management as a discipline has become more important. And within financial services the nature of it has changed. In the early days of finance, it was primarily focused around better assessment of credit risk at the time of the credit decision. More recently, however, more sophisticated companies have been using knowledge management to update the assessment of credit risk over the life of the relationship and to change the terms of the credit, such as the credit line and interest rate, as the credit risk fluctuates.

Leading players in financial services are beginning to use knowledge management to make better decisions across their broad array of financial products, such as which customers to target, what product variation to offer and how best to price. However, we believe the "next frontier" will be to use it proactively to influence customer behaviour. This is important because customer behaviour has a huge impact on the economics (and profitability) of financial services products.

Early examples of this are credit cards where the issuer offers incentives to the customer to activate and use the card by providing a "reward" balance on the account when it is issued. This incentive was driven by a recognition that many people sign up for new cards but never activate them. But cards that are



activated and used within 30 days tend to get much higher usage levels. The more progressive companies are beginning to micro segment the market based upon "advantaged" databases and proprietary insights developed through testing and analysis.

Take, for example, a financial institution analysing credit card customers, one that looks more deeply at the segment of customers with a credit risk score (FICO) of 600–619. While its competitors see this segment, on average, as having a risk of default of 12 per cent, the institution realises that the risk of

"CUSTOMER VALUE MANAGEMENT RECOGNISES THAT SOME CUSTOMERS ARE SUBSTANTIALLY BETTER THAN OTHERS AND THAT THERE MAY BE SOME THAT YOU DON'T WANT TO SERVE"

default varies dramatically based upon the acquisition channel used to acquire the customer.

Clearly this changes their view of the attractiveness of some of the customers in this segment and how they pursue (and react) to customers in this credit-risk tier. Companies that can look more deeply into their customer base and react more decisively upon

an information advantage will substantially outperform their competitors.

To date, most institutions "segmenting" the market have focused on CRM. This has meant that institutions have approached their initiatives from a relationship perspective rather than a value creation one.

This relationship focus has led to ambiguity about the specific benefits institutions are pursuing and, in many cases, to a "have faith" approach to the benefits they would create for shareholder value.

In turn, the ambiguity has led to a substantial dilution in the benefits

captured. Consequently, most financial institutions have been disappointed with their returns from their CRM investments.

Companies must take a dramatically different approach if they are to create true strategic advantages. Rather than concentrating on CRM, financial institutions should concentrate on CVM, clearly signalling that the priority of top management is to create shareholder value as opposed to customer satisfaction.

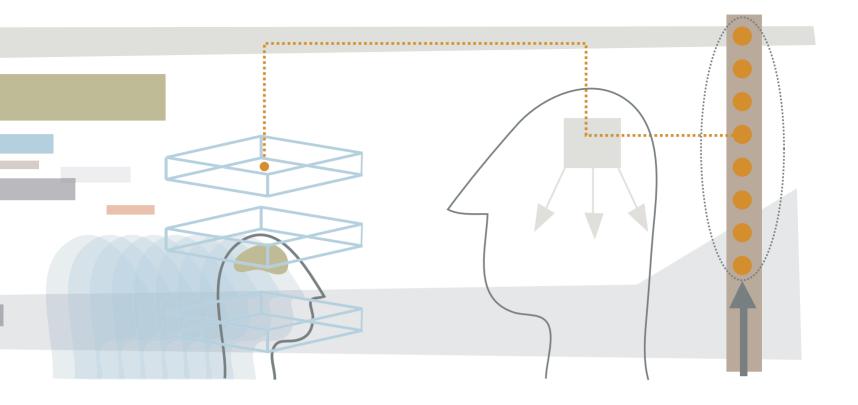
THE DIFFERENCE BETWEEN CRM AND CVM

Although CRM and CVM have the same overarching goal: "To substantially improve business performance by better focusing on serving customers", there are fundamental differences. CRM tends to treat all customers equally. It assumes that all customers are good, that more business from any given customer is good and all incremental product sales are good. CVM, however, focuses on the link between customer value and shareholder value, the true economics of enhancing customer benefits.

It recognises that some customers are substantially better (more profitable) than others and that there may be some customers that you don't want to serve. It also recognises that some products should be prioritised over others because they are more profitable or they establish a relationship with better economics. For example, some customers have slower rates of attrition or no attrition and are more likely to carry higher balances and buy an additional product once they hold this one.

An important distinction is that CVM helps to force tough trade-off decisions, for example, not to serve some customers and to focus more marketing and/or service dollars on some customers at the expense of others.

CVM is particularly important in financial services because the economics are less clear than in other industries. Wide variances in customer profitability can exist on the same product because the product profitability is so dependent on customer behaviour, which cannot be accurately predicted.



For example, in retail banking there are often wide differences in average balance levels, fees incurred and customer services used. Understanding these drivers and how they vary by customer segment and delivery channel, is crucial to understanding the true profitability of the customer. Therefore, given the wide variance in customer and product profitability in financial services, sophisticated knowledge management offers the potential for huge rewards.

CHANGING THE BEHAVIOUR OF THE INSTITUTION

To extract the most value from a customer, however, it is necessary to change the behaviour of the financial institution. There are three elements to this:

Philosophical

It is necessary to get out of the mindset that all customers are profitable and that all products are profitable. Even the concept that you want to influence customer behaviour (rather than reacting to it) needs to be learned.

Organisational

Most banks are organised around product silos which are very powerful and drive sub-optimal decisions from a customer's perspective. There rarely is a business manager accountable for maximising the total value of customer X.

Informational

There is a need to start tracking the right information that enables a "clear line of sight" to economic profitability - profits over and above the cost of capital. This needs to be captured at a significantly lower level than it currently is and from multiple perspectives to enable the development of unique and powerful insights.

So how do you make this happen? First, establish a consensus that this is an important issue. Offer tangible examples of how different customers behave differently and how their behaviour impacts on the profitability of the business. Make these economics come alive with "real stories".

Second, remember that this is not the type of change that you can carry out overnight. Look for some "early wins" to build momentum. Successful companies have started by picking off one to two large profitable growth potential in order to demonstrate the power of the tool. These help to pave the way to moving towards

"WIDE VARIANCE IN CUSTOMER PROFITABILITY CAN EXIST ON THE SAME **PRODUCT BECAUSE PRODUCT PROFITABILITY IS SO** customer segments that offer **DEPENDENT ON CUSTOMER BEHAVIOUR, WHICH CANNOT BE ACCURATELY PREDICTED**"

a "matrix" organisation with increased decision authority and accountability being given to the customer dimension.

Third, the organisation must develop the capability to continuously identify, evaluate and deliver initiatives to significantly increase customer value. A fundamental underpinning of this is a substantially improved view of the profitability of the business and its key drivers. This requires delving much deeper into the business than most competitors look today.

Companies must then understand how customer behaviour impact these economic drivers and focus on how they can influence customer behaviour to improve performance.

This is different from what, historically, has been purely an introspective exercise where companies use this type of information (usually at a higher level) to determine the need to reduce costs or raise price.

To create true sustainable, profitable differences, financial services companies need to be become much more externally focused and aggressively look for ways to improve their performance by actively influencing their customer mix and the behaviour of their customers."

Shareholder, customer and people value

DISCOVERING WHAT SHAREHOLDERS, MANAGEMENT AND EMPLOYEES WANT OUT OF A

COMPANY ADDS TO ITS VALUE, SAYS TONY DE BREE

THE DISCUSSIONS about shareholder value and the perceived contradictions between optimising shareholder value, customer value and people value, embedded in a company's employees and its partners, are becoming less fierce.

There is a clear relationship between shareholder value, customer value and people value (see Fig 1). All three want to maximise their benefits over time. In traditional, management-accounting approaches towards valuation and measurement (including ones like the balanced scorecard) it is assumed that people, independent of their roles, are driven by financial and other material imperatives, for example:

- shareholders are satisfied if the financial results of companies are as expected;
- customers are driven by product attributes, measured in terms of satisfaction, like price;
- employees, including managers, are mainly driven by salaries and other tangible benefits.

Research, however, indicates that more emphasis should be placed on why stakeholders behave as they do and how we can ensure they continue to do so in the future (Ernst & Young, 1997). Investors are often driven by non-

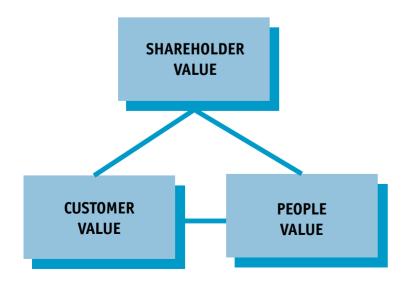


Fig 1: focus on delivering customer value. Source: Bree, T.P. de (2001)

tangible elements when making decisions. For example, the way a company treats its employees, the degree to which it is able to attract and keep its best people and how it is perceived to be pursuing a clear and consistent strategy. Financial satisfaction becomes less important and investor loyalty

"CUSTOMER VALUE IS INCREASINGLY PRODUCED IN CLOSE COLLABORATION WITH THE LOYAL CUSTOMER AS WELL AS MANY DIFFERENT EXTERNAL PARTNERS" more important.

Individual customers are increasingly driven by intangible benefits such as the perceived customercentric behaviour of employees and managers in the company and the experience of others.

Customer satisfaction based on the attributes of products is increasingly

becoming a "dissatisfier" – individual customer loyalty is becoming the new metrics of choice – and the behaviour of individual employees is becoming increasingly influenced by the way they are treated by the organisation.

Rewards and career development are important, as are factors such as management style and company culture. The organisation has to focus on how it can attract the best people and keep them. It has to be able to deliver unprecedented individual people value. Employee satisfaction is replaced by employee loyalty as the decisive driver.

CONCENTRATING ON THE OVERLAP

We now revisit our focus on delivering value and the link between these elements (Fig 2). The roles of customers, employees and shareholders can overlap. Many investors are likely to be customers of the company and may even work there (or once worked there). That is why it is important to identify these types of links by combining different databases (internal and external). The information can be used to influence positive future behaviour.

Changes brought about by the knowledge economy, however, force the extension of this limited focus on internal employees, direct customers and direct investors. Customer value is increasingly produced in close collaboration with the loyal customer as well as many different external partners. Many different types of non-ownership-based relationships are leveraged by implementing electronic links. At the same time, customers can

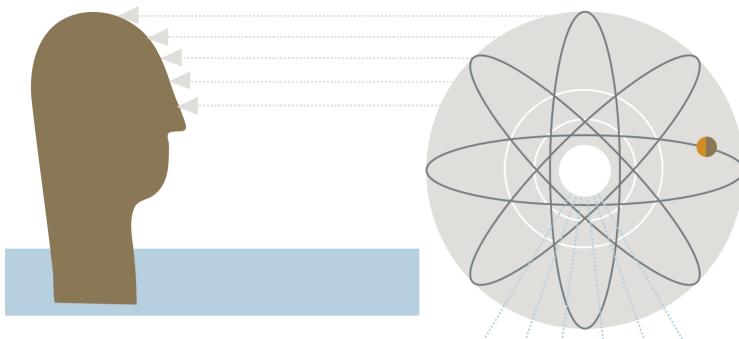
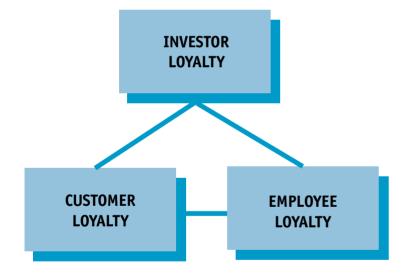


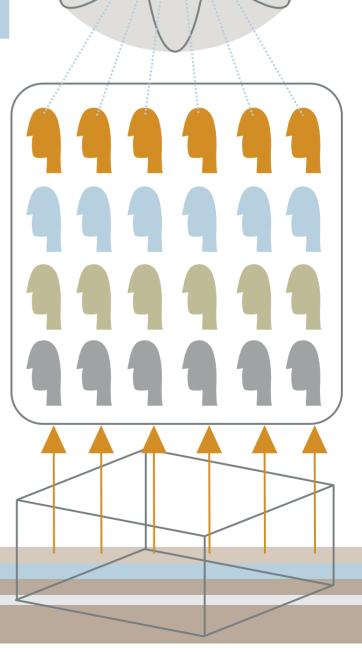
Fig 2: measuring customer value creation by linking customer loyalty, to investor loyalty and employee loyalty Source: Bree, T.P. de (2001)



be competitors and suppliers. However, this complicates matters. If employees of partner companies are neither satisfied nor loyal, this will have a negative impact on the customer experience and customer value created.

In some cases, customer value might even be destroyed. This means, therefore, that forging, monitoring and ending external relationships becomes a critical factor for success, next to a clear focus on a suitable internal organisational design. So "possessing" a high-quality portfolio of loyal customers and other rewarding external relationships becomes a strategic intangible asset. However, to be able to estimate what these relationships are worth in terms of customer value creation, we turn to the concept of "relationship capital".

Relationship capital includes the value of an organisation's relationship with the people with whom it does business. It represents the depth (penetration), width (coverage) and attachment (loyalty) of the franchise of the organisation and the likelihood of their customers continuing to do business with it.



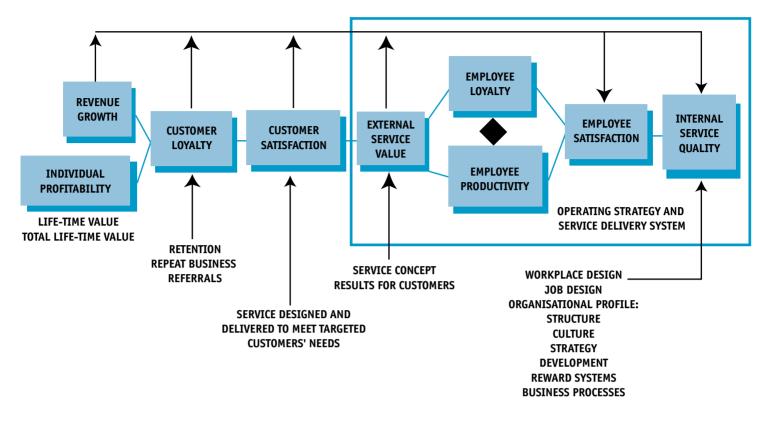


Fig 3: the financial services customer value chain Source: Bree, T.P. de (2001)

Therefore, all relationships (including internet-based communities), crossing the traditional boundaries of the organisation should be considered as relationship capital. However, how can customer value be measured by linking the different loyalty drivers in this relationship capital context?

By applying the principles described above, a relationship capital measurement system (RCMS) can be designed and implemented by using internet technology (de Bree, 2001). The system measures and monitors the different drivers discussed above. In this way, future customer value creation can be estimated based on the loyalty of the individual stakeholders co-

"TOTAL LIFE-TIME VALUE CAN BE USED TO RETAIN LOYAL CUSTOMERS OR CONVERT INTERESTING PROSPECTS OR SATISFIED CUSTOMERS INTO LOYAL ONES"

producing that value for the customer. But to what extent can these drivers be connected to economic and financial results such as increasing revenues, the level of cross selling and individual profitability?

LIFE-TIME VALUE

To measure and monitor the individual profitability of customers, one can use

measures like life-time value (LTV) or size-of-wallet. The results can be used to improve customer-value processes or even terminate such processes if they destroy customer value. In this way, emphasis is placed on current and potentially future customer value creation by leveraging relationships with a wide range of stakeholders. This approach has another advantage. By extensively using co-producers of such value, a high degree of total life-time value (TLTV) or total share-of-wallet can be obtained, including revenues from sales initiated with one of these relationships. The costs of owning the resources can also be decreased.

The system can be based on information regarding past transactions, but can also be used, for example, to find out why a customer did or did not buy a particular product. Consequently, this information can be used to retain loyal customers or convert interesting prospects or satisfied customers into loyal ones. This results in increased revenues as research indicates that loyal customers buy more, and more often, thereby increasing LTV (Evans and Wurster, 1997).

In Fig 3, the complete financial services customer value chain linking the different drivers is described as the basis for RCMS (de Bree, 2001). These drivers, based on the degree of loyalty of the different stakeholders, are translated into behavioural profiles, which in turn are used to compare future behaviour of users making a high degree of personalisation and customisation. If loyal customers seem to become less loyal, they can receive automatic incentives to maintain or even increase their LTV.

The external service value will often be produced by including other companies and in this way more customer value can be produced without extra investment. Companies like Yahoo! and Amazon are using these type of systems and approaches to generate revenues by including the customer value created by their partners and earning revenues from the referrals.

The advantage of such an approach is that they can leverage the intangible and tangible resources of their partners without running the financial risk of owning them. Research carried out in 2000-2002, shows that this is the main reason why many new companies prefer to create large numbers of nonownership-based relationships rather than ownership-based ones. This approach can be seen as an extension of the first so-called "intellectual capital measurement systems" in use at companies like Skandia. It monitors and measures the customer value creation of customers and other relationships.

ACCURACY OVER HYPE

An interesting side-effect is that such a system provides a more accurate accounting value of relationships than the traditional approaches used during the internet hype, when the value of a customer's relationships was often calculated by dividing the marketcap by the number of customers (Schonfeld, 2000). It was a first step in explaining why a company garners a certain kind of valuation. For instance, a customer at web portal Lycos, which had a \$7.4bn market cap in February 2000, had a value of just \$244, a customer at Amazon.com was worth \$1,400, Yahoo! \$2,083 and at Charles Schwab, which had a \$30bn market cap, a customer was worth \$2,281.

At AOL a customer was worth \$5,781. The highest score was calculated for VerticalNet with an average of \$2,827,931 per customer which results in a rather high worth per (virtual) relationship and one not based on earnings. Market leaders like Yahoo and later Amazon, already knew in 2000 that by implementing RCMS type of systems (excluding employee loyalty) the actual customer value created, measured in LTV, was rather different. If we apply the principles described above, based on life-time value, it shows that companies such as Schwab, Yahoo! and E*Trade were really doing well, whereas companies like Amazon were losing money.

If the real numbers, based on customer value, of Yahoo! and Amazon are compared in greater detail, the reasons become apparent. Yahoo's market cap was \$86bn, versus Amazon's \$26bn (in February 2000). Yahoo, which had 42m customers, but doesn't sell much of anything itself, earns only \$18.99 a year in revenues per customer. Amazon, however, averaged \$160.01 a year from each of its 17m customers. While those revenues include the money Amazon charges affiliate e-retailers, they mostly reflect cash paid for products like books and CDs by direct customers of Amazon.com.

Yet the market believed that each Yahoo! customer was worth \$2,038 versus \$1,400 for each Amazon customer. How can someone who just clicks through a search engine be worth 46 per cent more than someone who buys books and CDs? It is because advertisements and referrals are worth more than commerce (involving physical goods) because of price pressure.

A company cannot make money if it ships books and other merchandise at a loss. If one looks closely at the numbers, the point is clear. Amazon's gross profit per customer is only \$20.79. In other words, the cost of the CDs, books and consumer electronics Amazon sells to reach that average of \$160.01 per customer is typically \$139.22. However, when another \$42.47 per customer is subtracted to take into account the amount Amazon spends on marketing, the company loses \$21.68 a customer. And that's merely a partial measure of loss because we haven't deducted an additional \$19.83 for warehousing, shipping, customer service, and other operating expenses. Yahoo, in contrast, doesn't ship physical products, so its 86 per cent gross margins gave it a gross profit of \$16.42 per customer. It spent only \$6.11 per customer on marketing, so its partial profit was \$10.31 a head. Subtract all other operating expenses and Yahoo! still earned \$7.53 per eyeball pair.

GET CONNECTED

It is clear from these numbers that

being a market leader in services can be much more profitable and less risky than being a company dealing in physical goods.

"BEING A MARKET

LEADER IN SERVICES

CAN BE MUCH MORE

RISKY THAN BEING A

PHYSICAL GOODS"

COMPANY DEALING IN

PROFITABLE AND LESS

By adopting this practical approach outlined above, financial institutions can connect shareholder value, customer value and people value by using an internet-based RCMS.

The critical drivers are based on increasing and maintaining the loyalty of different stakeholders by monitoring and measuring their behaviour. The analyses can then be used to keep them loyal or convert interesting prospects and satisfied stakeholders into new loyal ones.

This approach connects these loyalty-based drivers with specific economic and financial measures like LTV and TLTV. Its second advantage is that if the results of these analyses are disclosed to investors and accountants, a more realistic book value of the value of relationships could be included in the balance sheet, instead of the overestimated values from the period of the internet hype.

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Tony de Bree's PHd thesis: Transformation of financial services companies in the global knowledge economy (2001), can be obtained by contacting him on: t.de.bree@planet.nl

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The knowledge economy in the atomic age

HOW WILL FINANCIAL INSTITUTIONS RESPOND TO THE CHALLENGES OF THE KNOWLEDGE ECONOMY? MARTIN FARNCOMBE, CO-AUTHOR OF THE ATOMIC CORPORATION, SPOKE TO LUCIA DORE ABOUT HIS VISION OF THE FUTURE

ONE OF THE BASIC premises of *The Atomic Corporation* by Martin Farncombe and Roger Camrass (2001) is that the future corporation will be relationship-centric rather than product or service-centric.

The strength of that relationship will depend on trust, for knowledge is best extracted and re-used in an atmosphere of high trust.

According to the authors: "We think the most important and sustainable source of shareholder value in a connected economy will be the network of relationships that a company has created and will go on to create over time.

"Every large company today has many thousands or even millions of valued relationships with its customers, suppliers, shareholders and employees.

"IN THE FUTURE FIRMS WILL GET SMALLER, A LOT SMALLER, AND WILL CONCENTRATE ON DOING ONLY ONE OR TWO THINGS VERY WELL" We call this relational capital – the monetary value of these current and future relationships."

Farncombe and Camrass show how future shareholder wealth can be linked to a company's relationship-building capabilities. The four main factors required to achieve this are: customer intimacy,

alliance building, corporate agility and trust.

Shareholder value is equal to the sum of customer intimacy and value networking, multiplied by innovation capacity and accelerated by the power of trust. Another premise is that the company of the future will be considerably smaller than is typically the case today and will be broken into a number of business units. The authors call these smaller units atoms, which bind together to form "molecules" – "the future means of delivering more accurately and efficiently the demands of tomorrow's customers".

MIGHTY ATOMS

Farncombe was keen to point out that in the future "firms will get smaller, a lot smaller, and will concentrate on doing only one or two things very well".

Farncombe also believes in the "not-so-new theory" that, as a single

entity, a company is worth less than the sum of its parts. "A bank broken up is going to be worth more than it would be as a single entity," says Farncombe. And more importantly, financial institutions must specialise. "Financial institutions, and indeed all companies, have to stop kidding themselves about what they are good at," he says.

According to Farncombe, three important factors are forcing change in an increasingly interconnected economy. The first is that customers are becoming more demanding. "Immediacy is what is sought," he says.

"The new forms of connectivity are interactive which transfers a lot more power to customers and they are expecting a lot more as a result. They are expecting more in terms of service than before. Strengthening the relationship with the customer is vital. Connecting with the customer is a very valuable source of wealth.

"However each customer probably needs only one or two portals, or ways of accessing a financial product. Not everyone is going to succeed in this market and many banks are woefully ill-equipped to understand the customer." The importance of building relationships is emphasised throughout the book: "It is about understanding and leveraging the individualised information that is produced by intimate exchanges.

"Corporations will have to find ways of mining the value of their myriad relationships, both with customers and with their other stakeholders, and determine how much of their traditional functions they can try to perform without becoming dangerously unwieldy."

The second factor forcing change is, according to Farncombe, falling transaction costs. "Take the oft-quoted steel industry where steel brokers used to charge hundreds of dollars per transaction and where now the transaction charge is tiny. Falling transaction costs should bring down the size of the firm.

"In the knowledge economy transaction efficiency will be an important source of value. In an ideal world, there would be no need for more than one stock exchange clearing system, apart from competition, and there would be no reason for a transaction to cost anything other than a tiny fraction of a penny. Now e-commerce and the emergence of marketplaces are bringing down transaction costs."

The third factor significantly impacting the way companies operate is the increasing pressure faced by management to return value to shareholders.

"He's got the firm as efficient as he can get it so where can he go from there?" asks Farncombe. The key component of the "atomisation" thesis put forth by Camrass and Farncombe is that future success for corporations will come from excelling in just one of four dimensions (see diagram on page xxvi).

INNOVATION

Innovation is important because the engine of the economy will be small, knowledge-intensive smart companies. "The idea of a smart company is one that trades on knowledge and innovation," explains Farncombe. "In financial services terms, the new innovative producers create a new source of wealth in their own right. Virgin, has come up with a few good financial products, for example."

In this environment of innovation the authors predict that we will see more electronic marketplaces, both vertical and horizontal. They state: "The successful vertical marketplaces of the future will be the ones that offer more than just the initial cost benefits of aggregated demand.

"They will succeed because they offer an environment in which supply chain participants can collaborate to their mutual benefit. This will ultimately be most relevant to direct purchasing requirements, leaving plenty of room for a re-emergence of horizontal marketplaces to more efficiently service the indirect requirements." In this context, Farncombe can see a time when the execution arm of a bank, or even a trading company, becomes an electronic marketplace and where the transaction-processing arm becomes a separately quoted independent company.

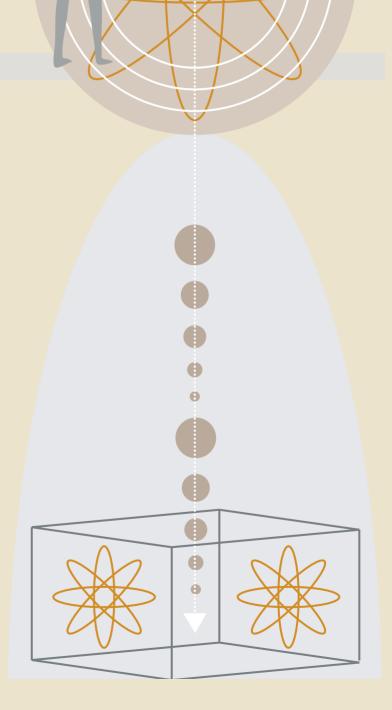
RELATIONSHIPS

There are two types of relationship:

Customer managers

The role of the customer manager is particularly relevant to frontline financial services such as retail banking and insurance. "Customer managers know the customer and can help them out," says Farncombe.

"For insurance companies too it is important that they own the relationship; it is a good place to be." He also believes that a number of wholesale banks, and newer start ups in the retail sector, are more customer focused than the traditional retail banks. \triangleright



CAPITAL

Webspinners

"A webspinner is someone who puts a business relationship together," says Farncombe, someone who "will mediate the relationship between the supplier and the customer at each stage in the supply chain and emerging value webs".

In financial services, one of the best applications of this model is the independent financial adviser who selects a bundle of goods and services to meet each customer's individual demands. In the future, however, webspinners will "exist partly to introduce new blood into the value chain and partly to co-ordinate services that cross industry boundaries which need to be assembled for a particular customer offer," says Farncombe. "The webspinner forges the relationship; the marketplace(s) make the communications work."

ASSETS

According to Farncombe, companies must have competence around the deployment of assets, which are called asset platforms. These platforms will deliver global economies of scope and scale in areas such as manufacturing and logistics. "Although they are less appropriate to financial services, they do have something to do with branch networks," says Farncombe.

More relevant to financial services is the management of assets, known as service platforms. These platforms will manage process-related activities like human relations, procurement and finance across a variety of sectors. Farncombe says: "Banks are entrusted to get the transaction right. In financial exchanges there's a whole operation required to get it right and banks are extremely good at doing this."

The consolidation occurring in financial services could also benefit those institutions prepared to take a hard look at their operations. "How many cheque clearing systems, or equity clearing systems do you need in the world?" asks Farncombe.

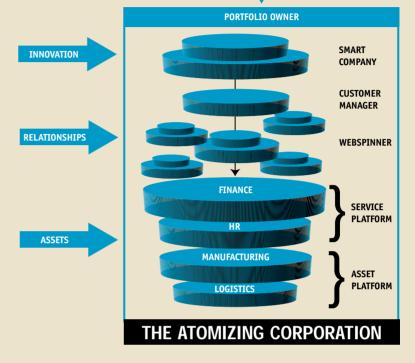
"A financial institution, which is smart, could clean up the market in terms of looking at economies of scale and getting the transaction process right every time. It may not be glamorous but it is good, profitable business."

CAPITAL

"Shareholders will reap the rewards from the unlocking of relational capital as giant corporations are transformed into portfolio owners, holding equity in the atomic companies they have spawned," write the authors. Farncombe says: "The role of the financial services company will expand to include a much wider range of commodities that are traded now."

"A FINANCIAL INSTITUTION, WHICH IS SMART, COULD CLEAN UP IN THE MARKET IN TERMS OF LOOKING AT ECONOMIES OF SCALE AND GETTING THE TRANSACTION PROCESS RIGHT EVERY TIME"

For the "atomisation" theory to work, it is important for companies to know what they are good at and to stick to it. Farncombe says: "Financial institutions must be realistic about what they're good at. Too many high-street banks believe they are good at customer intimacy but, in reality, not one high-street bank is good at knowing the customer.



"They kid themselves. What they are good at, and trusted for, is the transaction. In the UK, operations like First Direct and Tesco are better at understanding the customer than the banks." Maintaining trust is crucial and the failure to do this, maintains Farncombe, is what brought about the world's largest corporate failure – Enron. "Enron is a failure of trust and maybe this is a model for the 'failure of the future'," he suggests.

"The way the business-model changed away from being asset-based to transaction-based (a classic webspinner or incubator-type model) was the root of the problem. Once the company started to make as much money, if not more, out of financial transactions than from its physical assets then it started to operate as a bank/financial institution – it then lost the trust.

"A series of events killed them: the booking of transactions as sales rather than commissions and trading a large amount of shareholders' money in return for junk loans.

"If Enron had been an oil company, rather than acting like a financial institution, then it may have survived," says Farncombe. In the case of Barings, however, he believes its demise was because of a failure of process, not a failure of trust. Given the atomisation theory, what are the three points that financial institutions need to do to survive in the future?

First, says Farncombe, they need to "be realistic about what they're good at. Second, they must think radically about their organisational structures and only deliver what they do best.

"Third, financial institutions need to expect change to happen faster than it did in the past, which means they have to think strategically. Don't assume because things have moved slowly in the past they will move at the same pace in the future."

Camrass, R., Farncombe, M. (2001) *The Atomic Corporation: A Rational Proposal For Uncertain Times*. Oxford: Capstone Publishing.

Swiss Re: investing in knowledge

THE RE-INSURANCE COMPANY SWISS RE'S KNOWLEDGE MANAGEMENT PROGRAMME IS SEEN AS A BENCHMARK

THROUGHOUT THE FINANCIAL SERVICES INDUSTRY

FOR SWISS RE, investing in knowledge management (KM) has been well worth it, increasing both the speed and effectiveness of decision-making and helping to enhance customer relationships.

Swiss Re is the world's second largest re-insurer with more than 70 offices in 30 countries. Its KM initiative is considered a benchmark for other organisations, especially in financial services where the number of ongoing, successful KM programmes is limited.

The success of Swiss Re's KM strategy appears to be the result of three important factors:

- an organic and flexible approach;
- buy-in from senior management, most notably from the executive board;

• a culture that encourages knowledge transfer and knowledge sharing. Sheldon Ross, co-deputy head of knowledge and information, stresses

that personal contact, a long-term outlook, motivation, training and appropriate incentives are all essential in bringing this about.

TASK FORCE

The company's focus on KM started back in 1987. Co-deputy head of knowledge and information management, Sandra Gisin, says that it was never set up as a single project with a separate budget. The original idea was to develop global information services. However, five years ago CEO Walter Kielholz gave the initiative a boost by establishing a KM task force.

Kielholz believed that in order to gain competitive advantage, knowledge had to be leveraged. His endorsement of a KM strategy, at a time when it was becoming "trendy", helped to spur on other initiatives.

"Without it the pace of development would have been slower and more fragmented," says Gisin. The KM initiative was set in motion at the company headquarters in Zurich and the US operation began in 1998 as a "hub and spokes" operation.

The original team was given a specific mandate to "find ways of using knowledge more effectively", says Gisin, even though the importance of doing this was already an integral part of the corporate ethos. "KM activities are not separated from the broader aspects of what the company does," she says. The drivers behind the KM initiative were threefold, explain Gisin and Ross. These drivers were:

- the need to detect, internalise and therefore protect intellectual capital;
- to use knowledge more effectively;
- to stop "re-inventing the wheel".

In other words, there was a real desire to find ways in which knowledge could be transferred and re-used in different parts of the organisation all over the world. The company expects to realise both time and cost savings from doing so.

In respect of external data and information contracts, for example, the company found that once common issues were identified, tangible savings (in both time and money) could be made by making the information available to all who needed it. Ross explains: "In addition to discounted pricing, global contracting makes consistent, authoritative data available worldwide. A common language and lexicon are created."

KNOWLEDGE NETWORKS

With technology and software as enablers they have been able to shave hours off individuals' research time. A number of "knowledge networks" based on Notes technology and focused on strategic topics, such as marine insurance, have been developed. In each network there is a group of international experts with core knowledge. "Any Swiss Re employee can go on the 'Engineering Knowledge' platform, post a query and get an expert's response within 24 to 48 hours," says Gisin.

Swiss Re's culture has also facilitated the sharing of knowledge, with buy-in at both management and grass-roots levels. This is because, emphasises Ross, "the initiative has happened organically and because people can tangibly see the value. For us, knowledge has always been a crucial asset within the company and we have always supported it."

Another benefit the KM initiative has delivered is a consistent approach to, and heightened awareness of CRM.

Gisin explains how it happened: "Our department was instrumental in bringing together the interested parties, developing a concept and common understanding then distributing a product. The KM orientation provided a broad viewpoint about how the group can leverage customer information." Since then, CRM was further developed by other departments making it possible to globally collect, capture and retrieve information about customers and, therefore, making it easier for business professionals to build and maintain successful relationships.

While the KM initiative at Swiss Re still remains internally focused, plans to also get direct customer involvement are being considered. "This would be on a password-protected basis to ensure confidentiality," explains Ross. But whether this happens or not, executives at Swiss Re are in no doubt that investing in knowledge is well worth it.

Knowledge management as risk management

AS THE ENRON COLLAPSE ILLUSTRATED, CONCENTRATING KNOWLEDGE IN THE HANDS OF A FEW CAN LEAD TO DISASTER

AS GLOBAL FINANCIAL markets become ever-more complex and technological developments occur ever-more rapidly, the refrain: "Risk management is knowledge management", is likely to become increasingly familiar.

There is little doubt that the pace of change is accelerating – possibly nowhere faster than in the financial markets – and will accelerate further, creating an environment where the only certainty will be uncertainty.

In this environment it will be imperative for financial institutions to have sound risk management systems and procedures in place. It will also mean having a robust knowledge management (KM) strategy, one that facilitates the

"THERE IS OFTEN NO KNOWLEDGE ABOUT THE CONTEXT IN WHICH INFORMATION IS USED – ESSENTIAL IF IT IS TO BE INTERPRETED IN A MEANINGFUL WAY" dissemination of information throughout an organisation in such a way that everyone is able use it.

By making KM an integral part of the risk management strategy, an institution is actively creating value from knowledge. As Ian Martin, former director of legal and compliance at global financial services firm, UBS

Warburg, said: "I'm firmly of the opinion that good knowledge management – combined with continuously improving information and communication channels – is essential to manage risks" ("Winning through knowledge", *Financial World*, March 2001, p34).

The success of the combined strategy will be reflected not only in an organisation's ability to stem losses – trading or otherwise – but, as a result of the regulatory requirements for Basel II Accord, in the ability to make better use of available capital. This is because the Accord permits financial institutions to reduce the amount of capital they need to offset risk – both expected and unexpected – if sufficiently robust risk management systems, methodologies and procedures are in place. Successful KM will also mean being able to make better decisions, more quickly.

STEMMING LOSSES

The issue of stemming losses has come to the fore over the past five years as a result of a series of high-profile disasters. In the late 1990s we saw the demise of Baring Securities, Kidder Peabody and Metallgeseilschaft Refining and Marketing. More recently, we have witnessed the downfall of Long-term Credit Management (LTCM), a \$500m loss at Allied Irish Bank as a result of poor control mechanisms in the trading department and the catastrophic collapse of Enron – to date, the US's largest corporate failure.

All these disasters arose for similar reasons: poor control mechanisms, both technological and human; an inability and/or unwillingness to leverage knowledge across the whole organisation; poor company-wide communication with a strong tendency for people to hoard information; and a lack of understanding of what information matters. In other words, there is often no knowledge about the context in which information will be used – essential if information is to be interpreted in a meaningful way.

WHAT YOU DON'T KNOW CAN HURT YOU

The bankruptcy of Enron, the US energy trading company, is an excellent example of how failures in all (or even some) of these areas can result in disaster. Enron announced losses of \$630m for the five-year period 1997-2000 after over-stating profits in the same period by almost the same amount. This was a consequence of its ability to use "upfront accounting" or in US parlance "market-to-market accounting", and its extensive use of special purpose vehicles.

However, this was only possible because of collusion between key members of staff and the fact that these people hoarded vital pieces of information. Other members of staff were not encouraged to know what was going on. The whole company clearly operated in a culture that thrived on non-communication.

Although accessing and transferring knowledge was actively discouraged, it was clearly exacerbated by employees taking the stance of "not knowing" – deliberately or otherwise. In this instance, as they discovered to their considerable cost, what you don't know *can* hurt you. To exacerbate matters, most employees appeared to care more about protecting themselves or their own departments, rather than the organisation as a whole. This "not knowing" extended beyond Enron itself to other partners, such as investment banks and government.

BASEL II

In terms of Basel II, the proposed Capital Accord highlights the need for KM processes to be part of a risk management strategy even more extensively. But before proceeding, what is Basel II? Published in January 2001, Basel II builds on the 1988 Accord and offers a three-pillar approach to risk management: capital requirements; supervisory review and market discipline (sometimes referred to as disclosure requirements).

From 2005, the Accord will apply to all internationally active banks in the G10 countries and is likely to extend to other financial institutions in the EU. The Accord aims to enhance the soundness of the financial system by aligning the regulatory capital requirement to the underlying risks in the banking business. It encourages banks to invest in more risk-sensitive models, providing incentives for them to undertake better risk management and enhancing market discipline.

Overall, the proposals reflect a concern that a more risk-sensitive framework with more complex associated measurement techniques is needed – one that reflects the changing dynamics of financial markets, in particular rapid technological developments and new instruments. (*Financial World*, October 2001, "The New Basel Accord: What Does It Really Mean?")

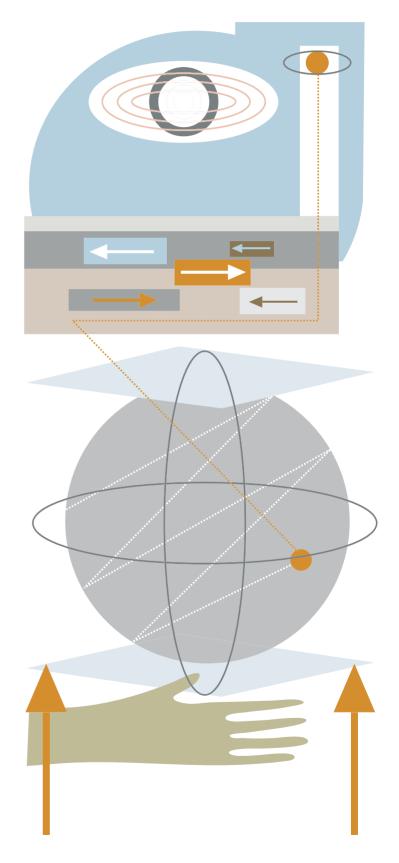
The Accord emphasises two aspects of the monitoring, controlling and measurement of risk:

- The degree to which quantitative techniques can be used to control and measure risk.
- The extent to which reasoned judgement should be used to calculate risk, particularly in respect of Pillar II, supervision, and Pillar III, disclosure requirements.

ENSURE THAT:

- organisations understand what knowledge is and know how to seek out the knowledge it needs;
- organisational knowledge is transferred to those who need it in their daily work;
- organisational knowledge is accessible to those who may need it as events warrant;
- new knowledge is rapidly generated and made accessible throughout the organisation;
- controls are developed to embed the most reliable and robust knowledge;
- organisational knowledge is tested and validated periodically;
- the organisation facilitates knowledge management through its culture and incentives;
- organisational change is required.

Source: Marshall, C., Prusak, L., Shpilberg, D. Financial Risk and the Need for Superior Knowledge Management.



RESPONSIBILITIES:

- Determining the required levels of trading and managerial knowledge with regard to risk management.
- Enabling the centralised collection of that knowledge from sources, internal and external.
- Representation of knowledge in documents, databases and other clear and widely-used formats.
- Embedding of that knowledge in processes, policy and control mechanisms.
- Refinement and testing of that knowledge for instance by stress testing the firm's existing models with worst case scenarios.
- Overseeing the transfer of knowledge and information to decision-makers and senior management monitoring risk management.
- The creation of an infrastructure to support all these activities.

Source: Marshall, C., Prusak, L., Shpilberg, D. Financial Risk and the Need for Superior Knowledge Management.

The Basel Accord places considerable emphasis on quantitative techniques, both in regard to credit and operational risk. However, the extent to which risk management and risk mitigation can be carried out exclusively by relying on quantitative techniques remains unresolved.

It seems unlikely that mathematics alone can provide the definitive answer, especially in relation to operational risk. For the most part, reasoned judgement, which comes from experience, would play an important part in decision-making.

"DECISION MAKERS NEED KNOWLEDGE TO INTERPRET THAT INFORMATION. INFORMATION WITHOUT KNOWLEDGE IS LIKE POURING WATER INTO A SIEVE"

As Marshall, Prusak and Shpilberg (1996) state: "Control systems can provide essential information to decision-makers. But decision-makers need knowledge to interpret that information. Information without knowledge is like pouring water into a sieve." More than a few people

concur, judging by the submissions to the Bank for International Settlement (BIS) in response to the Committee's second consultative paper last year.

One respondent, director of group risk management at Lloyds TSB Michael Green, commented that "what is so dangerous is the misguided attempt to develop a quantitative methodology that calculates operational risk capital in a deterministic manner". However, while it is difficult to disagree with the importance of "reasoned judgement", an approach that relies on judgement alone in the present environment might not be a good idea either. And in the future there may well be a much greater need to rely on "reasoned judgement" rather than on historic data.

The patterns that are derived from such data reflect the past rather than the future, making any analysis drawn from them increasingly unreliable, especially when the world is changing so quickly. In terms of data, the scale and complexity of requirements place an enormous burden on financial institutions. For instance, they must have time-series data available for a number of years if they are to build up a database to justify using more sophisticated methodologies, both in the context of credit and operational risk.

Even when they have fulfiled all the data requirements, institutions will still have to "interpret" that data. This means that institutions will require sufficient internal knowledge and judgement, which can only be provided by critically-thinking people, to interpret the data. The demands of data management are therefore much greater than mere information management and data mining. IBM, in its submission to the BIS, discussed the challenges facing institutions in implementing the Basel proposals, arguing that the most fundamental challenge is the sourcing, management, scope and interpretation of the required data.

In particular, IBM recognises that an uncertain and unpredictable economic environment makes it difficult to design and build appropriate IT systems. It notes: "Managing risk is complex and has complex interdependencies. As market and credit risk have shown, these challenges are effectively addressed with a statistical risk model, which enables management to focus on and prioritise remedial action.

"However, although market and credit risk models are sufficiently generic to be replicated throughout the industry, institutions' operational processes and infrastructures are so diverse that it is a major challenge to develop a generic operational risk model."

CREATING REAL VALUE

To cope with these challenges therefore, the ability to leverage knowledge within an organisation so that informed judgements can be made is crucial. The importance is even greater when it comes to supervision and meeting disclosure requirements. Given that at this stage of the consultative process all banks are expected to implement the new Basel Accord by 2005, it is certainly time to assess risk management strategies, especially in the context of knowledge management. If, by implementing a KM strategy – which may require changes in organisational structure (see boxes on this and previous page) – losses are reduced, capital requirements lowered, or market fluctuations made easier to manage and predict, then knowledge has created real value.

Marshall, C., Prusak, L., Shpilberg, D. (1996) Financial Risk and the Need for Superior Knowledge Management. *California Management Review*, 138: 3, 77–101.

Action, time and vision

FINANCIAL INSTITUTIONS WILL HAVE TO BECOME SMALLER, MORE NIMBLE AND CONCENTRATE ON WHAT THEY DO BEST IF THEY ARE TO SURVIVE IN A RAPIDLY-CHANGING WORLD

THE ENVIRONMENT in which financial institutions are seeking new ways of creating value is a tough one.

Speed of change is accelerating, information technology and communications are transforming the way in which organisations do business, product commoditisation is becoming the norm and the ability to tap into and leverage knowledge is one of the few means by which they are able to differentiate themselves. This report emphasises the importance for organisations to put in place structures that strengthen their ability to cope with this change.

In many instances this will require organisations to become smaller, more nimble, flexible and specialised so they can more easily identify and tap into value-creating opportunities. Companies will also have to identify what they do best and focus on it. In other words, they will do well to capitalise on their comparative advantage.

However, companies will also have to improve or change their organisational structures to facilitate the transfer and sharing of knowledge. Organisational knowledge must be nurtured and extracted. To do this requires flexibility, a highly skilled and motivated labour force and structures that facilitate and reinforce dynamic relationships, both internal and external.

MAKING IT WORK IN A VIRTUAL WORLD

As a result of the constant evolution in technology and communications, it is likely that virtual communities will become the main means of exchanging knowledge. The principal task of financial institutions (apart from managing risk) will be to ensure, therefore, that relationships work in a virtual world.

To do this they will have to ask themselves how best to make these communities work, to what degree a "social" component is required and how individuals can be best motivated and/or have their behaviour altered. As virtual communities become more dominant, the concept of knowledge exchanges (not a new idea – see the IQ Port Case Study, "Winning through Knowledge", *Financial World*, March 2001) will finally come into its own.

Perhaps most importantly, financial institutions will realise that the knowledge derived from developing relationships – relationship capital – not only creates value but is measurable (using the various metrics discussed in this report). It will be important for institutions to go beyond simply implementing a knowledge management and/or a customer relationship management initiative.

They will need to be able to use knowledge to extract even more detailed information about customers, partners and employees if they are to fulfil their goal of maximising shareholder value.

One of the biggest challenges facing financial institutions as they go forward into the 21st century will be to create new organisational structures that meet the requirements of the knowledge economy. Not only will companies be "knowledge enterprises" they will also have to be "network enterprises". They will be characterised by:

- flat, non-hierarchical structures;
- work processes organised on the basis of teams structured around processes, rather than tasks;
- customer satisfaction and retention becoming primary measures of performance;
- appropriate awards being put in place that are most likely based on team performance;
- the maximisation of contacts with suppliers and customers becoming an integral part of the business process;
- continuous training, so a true learning organisation emerges.

A TOUGH CHALLENGE AHEAD

This report emphasises the importance of knowledge management initiatives if financial institutions are to become "learning" organisations, where knowledge is used to gain a competitive advantage in the business world. Such an initiative provides organisations with the tools to change structures, processes and, most of all, thinking. For most companies, however, creating a new organisational structure is one of the toughest and most politically explosive challenges they face.

As Michael Goold and Andrew Campbell state (2002): "For most companies, organisation design is neither a science nor an art; it's an oxymoron. Organisational structures rarely result from systematic, methodical planning. Rather, they evolve over time, in fits and starts, shaped more by politics and policies. The haphazard nature of the resulting structures is a source of constant frustration to senior executives. Strategic initiatives stall or go astray because responsibilities are fragmented or unclear. Turf wars torpedo collaboration and knowledge sharing. Promising opportunities die for lack of managerial attention. Overly complex structures, such as matrix organisations, collapse because of lack of clarity about responsibilities."

The task of senior executives will be hard. Not only will they have to accept that change is inevitable, but they will have to buy in to the fact that their organisational structures and processes will have to be remodelled accordingly. The knowledge economy will be complex and new operating models will be required if organisations are to create value. Putting in place knowledge management initiatives is one step in the right direction. And if the term "knowledge management" puts you off, discard it and simply think about the structures and processes required to manage change in a changing world for, ultimately, that's what knowledge management is about.

Goold, M., Campbell, A. (March, 2002) *Do You Have a Well-designed Organisation?* Boston, MA. Harvard Business Review, p117.