# Knowledge Management

## in Cable and Wireless

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# Executive Summary

This is a story of efforts to develop a strategy for managing knowledge in Cable and Wireless. The work involved scaling up from a series of tactical, local interventions designed to meet practical business needs to a strategic initiative driven by needs emerging from major strategic change. Cable and Wireless had shifted its strategy towards internet-based data and voice services primarily in the key business markets of the US, Europe and Japan.

When the environment changed this made the 'big' knowledge management project susceptible to cuts in funding as the business struggled and the approach reverted to a tactical series of OD interventions built around reviewing the knowledge management practices of key groups in the business.

The key learning from the work was:

- Commit at the top of the organisation to manage knowledge in a co-ordinated way.

- Appoint an individual with dedicated responsibility and a *small* team. And consider a steering group from key business leaders to keep the work anchored in the business.

- Map what knowledge is being managed already and how this is being done. Identify strategic knowledge assets and assign ownership.

- Use IT to support and encourage transfer and exchange of know-how.

- Look for 'quick wins'.

- Provide a user forum to exchange useful knowledge management approaches.

- Identify existing 'communities' in the business that represent customer segments or professional groups and help them to communicate effectively.

- Define the culture and behaviour for effective knowledge sharing.

- Measure against this another measures that track success.

- Develop the HRM practices to move towards these goals.

On this last point, there are clearly challenges for HR who rarely take the lead with this type of work, which has historically been driven by the IT function.

# **1.** **Introduction**

This note describes and analyses the work done to take a strategic approach to knowledge management in Cable and Wireless during the eighteen months from January 2000 to October 2001 — a period of major change in the strategic direction of the company.

But during the last year, the company has:

- seen its share price fall by 85 per cent
- left the FTSE 100
- appointed a new chairman
- is replacing its Chief Executive and some other board members.

So the tale I have to tell, like many projects and interventions in organisations, cannot be described as an unbridled success nor does it offer a blueprint for others. What it does do is:

- describe a journey started
- identify some of the early successes and problems
- illustrate what happens to a major project such as this when there are seismic shifts in the organisation
- question what managing knowledge strategically can offer, and
- reflect on whether such a project can be strategic or should stay tactical.

Some key points at outset. In Cable and Wireless, knowledge management was viewed as strategic lever both for improving performance in the short term and transforming the culture of the business in the longer term. It was not, however, strictly a new initiative. Much was already happening and providing tangible returns when the Global Learning and Development Team became involved. What changed was to treat this as a strategic intervention. The team also had to change approach and ambitions as business pressures affected the project's funding.

In the following sections, the paper explores:

- Why knowledge management was a strategic issue for Cable and Wireless.

- What were the ambitions of the initiative and how did the team approach it?

- What was learned along the way, particularly the role of HR and HR Development?

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# 2. The Significance of Knowledge Management to Cable and Wireless

## 2.1 The company

Cable and Wireless is a UK headquartered global communications company. For 130 years it has constantly reinvented itself to embrace the latest technological advances with the aim of better serving customers' needs. It now operates through two principal business divisions: Cable and Wireless Global and Cable and Wireless Regional.

Cable and Wireless Global provides integrated communications and e-commerce solutions to business customers, in particular to multinational and large national corporates. It offers advanced, internet-based data and voice services primarily in the key business markets of the US, Europe and Japan. Cable and Wireless Regional provides a full range of telecommunications services to both consumer and business customers in 33 countries around the world, including the Caribbean, Panama, Macau, the Middle East and South East Asia.

Until last year, when the company recorded a loss of over £800m on a fall in turnover of 36 per cent, Cable and Wireless had been highly profitable. The regional businesses remain so.

## 2.2 Why was knowledge management a strategic issue?

The impetus for the initiative to look at knowledge management strategically came from business leaders who identified it as a priority following a review conducted with them by the embryonic Global Learning and Development Team in Autumn 1999. When Cable and Wireless Global became a reality in 2000, a director was appointed with responsibility for the project.

The **business drivers** behind the plan to share knowledge and experience more effectively were:

- The economics of the telecommunications and Internet industries give rise to an intensely competitive market. With rapidly reducing margins in telephony and IP (Internet

protocol) there was a need in 2000 to avoid and reduce costs wherever possible.

● In response, Cable and Wireless was changing. From being a telecommunications company providing a wide range of services to *all* customers, the emphasis switched in early 2000 to 'delivering the Internet promise.' The company sold businesses no longer seen as central to this objective, including Hong Kong Telecom, and OPTUS in Australia. The focus switched to providing data and IP services to business customers in the US, Europe and Japan. Cable and Wireless acquired small Internet service providers (ISP's) in Europe and web-hosting companies in the US. These needed to be integrated swiftly and smoothly.

● Effectively Cable and Wireless was building a new organisation to sit alongside its regional businesses. Cable and Wireless Global was formed from discrete businesses in the UK, Japan, Europe and US. At the heart of this development were emerging programmes for all key processes to be 'e' enabled (web-based.) The transition involved harmonising the discrete businesses, then integrating and e-enabling them as shown diagrammatically below.

**Figure 2.1**
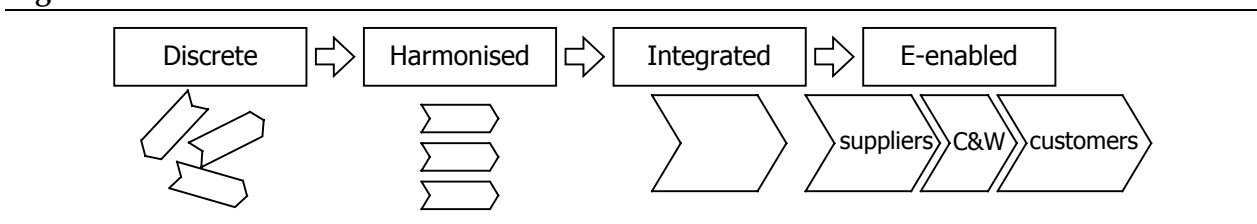


Cable and Wireless' challenge at this stage was, therefore, to create a single global organisation. The thinking was that when work colleagues are co-located and shared same culture (national/business), sharing knowledge is something that 'happens'. With dispersed locations and different cultures managing knowledge requires deliberate action. With an emphasis in the business at this stage on creativity and innovation it, developing effective teamwork was pre-requisite to developing the new ideas and knowledge to share in the first place.

The arguments of David Ulrich (Knowledge Management Conference 1999) provided another compelling reason and set of arguments. Ulrich had argued that the relationship between companies' earnings and stock price has fallen from 80 per cent in the 60s to 45 per cent by the 90s. What else is explaining stock price if not earnings? Ulrich argues that there is evidence that it is intellectual capital which includes factors such as the quality and talent and the people in the organisation their capabilities, how they work together, leadership and so on. Put simply, this

**Figure 2.2**

| | | | Dispersion & diverse culture **KM requires deliberate action** |
|---|---|---|---|
| **Culture** | Diverse | → | |
| | Same | Co-located & shared culture **KM happens** | ↑ |
| | | Same | Distant |
| | | **Location** | |

argument suggests that the value in Cable and Wireless was the know-how of its people and how it made use of this.

These last two points mean that knowledge management was seen fundamentally an organisation issue both an integral part of Cable and Wireless' broader approach to leadership development, the development of key capabilities and talent management. There was also a close affinity with the 'e-transformation' or development of the company through eHR, eProcurement and so on.

## 2.3 What benefits was Cable and Wireless seeking?

If we take a step back, it is important to be clear about what knowledge management meant to Cable and Wireless and what specific benefits were being sought.

Knowledge management is not a new idea. Its roots lay, amongst others, in the notion of the master craftsperson or founders of family businesses passing on knowledge to those that follow them. Cable and Wireless' business task placed a premium on innovation and knowledge creation and sharing. The company's business involved selling the enabling technology and they needed to ensure that they had swift access to their key capabilities and the ability to replicate them to meet customer needs.

In building the case, the argument used was that knowledge is information that has been interpreted by people who have added to it their experience. Knowledge grows when people share it with others and it is thus a people issue and an organisational issue.

Following Nonaka's (1991) arguments, we can distinguish explicit knowledge from tacit knowledge. Explicit knowledge is that which is codified, written down. It is therefore highly dependent

on the context that created it. Tacit knowledge is that which is shared through personal contact (for example selling skills.) The balance of emphasis on each may vary for different organisations and within a company such as Cable and Wireless, different groups or professions may emphasise tacit (sales) or explicit knowledge (engineers).

There are many definitions of knowledge management in the literature but the company felt that it was important to be clear what it meant to them. Cable and Wireless talked about '… *getting know-how to those who need it in order to benefit our customers*.' Behind this general definition lay some specific benefits that the company was seeking to gain. Some might be described as the 'usual suspects'  benefits that might be expected from other organisational development initiatives. Others offered both short and long term benefits and some are more easily measured than others are! They might be summarised as improving speed and quality of service to customers resulting in delivering consistent global offerings and included:

● faster innovation by sharing ideas widely and quickly

● growing value through developing intellectual capital

● better business decisions through the quality of knowledge available

● exploit fully the e-transformation of Cable and Wireless

● growing business and improving service by re-using customer solutions with similar customer sets

● cost saving and avoidance by:

- quickly delivering business critical knowledge to those who need it

- reducing the duplication of effort

- using the knowledge we have already before importing it, and

- enabling people to contact and connect with those who can help them do their job.

● building one company through sharing Cable and Wireless 'know-how' widely.

# 3. **What was Done and Achieved?**

## 3.1  How Cable and Wireless approached the work

As we have said, as a strategic intervention, the origins of Cable and Wireless' approach to knowledge management lay in HR development  the Global learning and Development team and not, as often the case with the IT group. In overview, the approach was to:

- identify and meet key stakeholders and build the case **with** them
- conduct outside research
- begin to identify 'key knowledge assets'
- bring together users
- secure funding
- set up a steering group of business managers.

The work with **stakeholders** involved meeting the key business leaders, representatives from IT, HR, *etc.* adding others as the consultation process unfolded and taking care to report back to stakeholders to engage them as partners in the work. As the approach formed, it was advanced within the management hierarchy, including the Head of Corporate Development (a Board member) and the Chief Executive of the Cable and Wireless Group until recommendations about how the benefits might be realised began to crystallise. Despite a sticky moment where the Chief Executive did not see that knowledge management related to 'what keeps me awake at night', board level sponsorship was secured as was the proposal to treat this strategically.

As part of building the case, the Global Learning and Development Team researched the lessons that were to be gained from inside and also outside the organisation.

Outside the aim was to see what other companies were doing and to see what benefits and results they were both seeking and realising. Cable and Wireless looked closely at organisations such as Cisco and IBM  both strategic partners  Xerox and consultancies such as Detloitte's and Booz Allen, Hamilton in the US. Other key

themes emerged from this research that gave more information about the key things upon which we had to focus. These included:

- Sponsorship, commitment and example are needed from top team.

- Success depends primarily on people and behavioural issues and knowledge management requires an inclusive approach to ensure commitment.

- The importance of building knowledge development into the bloodstream of organisational practices such as the work of project teams.

- Recognising and rewarding knowledge creation, sharing and re-use.

- Developing an effective knowledge management culture can involve new roles and responsibilities such as a Chief Knowledge Officer and knowledge librarians.

- Technology must provide basic 'connectivity' and reflect balance between the demands for tacit and explicit knowledge.

Inside the organisation there were a number of existing users who were attempting to share knowledge and expertise in an organised and structured way. What emerged was a picture of 'islands' of good practice'; of groups already focused on managing knowledge but in isolation from each other, the very pattern that might be expected in a highly decentralised organisation.

Examples, one concerning tacit knowledge and another explicit, included:

- **The Knowledge Library:** a document management system providing market intelligence over the Cable and Wireless Intranet. This made available on-line over 3,000 documents on competitors previously only available during London office hours. Its use trebled in six months yielding tangible results. Teams were better informed and over 60 person days saved in work on calculating prices for the next year.

- **Knowledge partners**: a formal structure and process to manage critical knowledge and learning as part of customer project management in the UK. This was helped by a knowledge management system (Signpost) designed to connect those people who needed knowledge that each other had. Turnover in the group was affecting basic service delivery and placing at risk the company's capability to respond to new challenges.

One such project concerned 'Livelink' a proposed global document management system that had secured funding and would be accessible through the new Global Intranet OneWeb.

What emerged from this research inside and outside the company was that early returns are possible from taking a strategic view of knowledge management but those who are successful and showing major returns have been working at it for five or six years. It is also vital to get the technology component right!

## 3.2  Securing funds

Although it was never the intention to set up a new and distinct function to manage the knowledge management initiative, funding was required for some of the key components in the strategy outlined below. Whilst it had proved easy to talk about the aims of the work, it was also necessary to be clear about what the returns could be if Cable and Wireless was to commit development funding that might be used elsewhere.

This emphasises the importance of selling ideas by attaching financial returns to those things that are frequently not valued or costed in a business. For example, the argument was mounted that managing knowledge in Cable and Wireless more effectively could yield significant returns. The claim was made that this could be as much as $122m over a two year period! This was made up form returns, and both saving and avoiding costs from sources such as:

- using fewer consultancy days (saving 110 from each of Cable and Wireless' 12 business programmes per year).

- reducing turnover amongst staff frustrated by being unable to access the knowledge they need to do their jobs (50 managers/IT specialists per year).

- effective use elearning (50 per cent employees using of elearning).

- saving people's time in looking for the knowledge they need to do their job (30 minutes per day).

These are clearly not things that we are used to costing and measuring but the arguments were accepted, funding of $2m allocated against a final projected return reduced to $80m for measurement purposes.

## 3.3  The strategy and implementation

The strategy for knowledge management was built on the vision of moving the company from being knowledge aware to knowledge managed based on the KPMG cited in the Roffey Park report (Evans, 2000) and shown in the model below. Most stakeholders had agreed that the company was knowledge aware and that the realisable journey that could be made was to knowledge managed.

**Figure 3.1**

| Stage | Characteristics |
|---|---|
| Knowledge Centric | • KM part of mission<br>• Knowledge value recognised in market cap<br>• KM integrated to culture |
| Knowledge Managed | • Integrated frameworks<br>• Benefits case realised<br>• Issues below overcome |
| Knowledge Enabled | • Benefits of KM clear<br>• Standards adopted<br>• Issues relating to culture and technology |
| Knowledge Aware | • Awareness of Km need<br>• Some KM processes<br>• Technology in place<br>• Sharing information an issue |
| Knowledge Chaotic | • Unaware of concept<br>• No information processes<br>• No information sharing |

*Source: KPMG*

To make that transformation, our strategy focused upon three main components (Figure 3.2).

During the first year, the aim was to 'join the dots' between what was already happening across the business. Because this was not simply another project driving the eTransformation of Cable and

**Figure 3.2**

| Strategic component |
|---|
| **A strategy for knowledge** |
| • What do we need to 'know' about what? What knowledge is most important to us? |
| • How do we create and share knowledge effectively? |
| **Knowledge-sharing culture** |
| • Embedding knowledge-sharing, understanding and skills in our culture |
| • Using the lessons we learn globally |
| **Technical support and infrastructure** |
| • Providing the technologies to support the needs and the processes |
| • Stewardship and protocols for managing knowledge |

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**Figure 3.3**

| Action | Benefits |
|---|---|
| Agreed strategy with eGo board | • Give commitment to strategic importance of caring and sharing knowledge<br><br>• Ensure structured approach |
| Created user forum and steering group | • Identify key business areas<br><br>• Develop common understanding of issues and opportunities |
| Completed identification key knowledge areas | • Focus efforts on areas of greatest return<br><br>• Provide leverage to other areas |
| Provided training support for 'Livelink' | • Ensure behavioural elements included to maximise use |
| Developed programme with Europe team for new acquisitions | • Facilitate integration<br><br>• Ensure know-how captured for CW |
| Commence implementation of KM process in other targeted areas | • Focus efforts on area of greatest return |
| Developed behavioural education programme | • Focus on developing the right behaviours for KM<br><br>• Spread culture through whole business |
| Implemented specific on-line KM solutions (inc. eLearning) | • In line with eTransformation of CW<br><br>• Enhance speed and efficiency of sharing |
| Developed HR approach to encourage knowledge sharing | • Ensure recognition and reward aligned<br><br>• Integrate with performance management |

Wireless Global, it was also about changing behaviour and developing the culture.

In putting the strategy together, it was important to secure quick wins as well as provide a strategic focus and the small team worked on three month rolling programme of deliverables with clear benefits associated with each. These are shown in Table 4 above.

Some highlights here that the team achieved:

● Brought together a user forum of the existing knowledge management practitioners.

● Key knowledge areas and projects were identified and set up (*eg* how do we use the lessons learned in one part of Europe with another).

● Set up steering group of areas where knowledge sharing key issue (product development, Digital Services, Europe *etc.*

- Supporting the 'Livelink' global document management programme  a key piece of infrastructure for the management of explicit knowledge across Cable and Wireless Global.

## 3.4  Seismic shifts!

Based on this approach and strategy, it is estimated that Cable and Wireless had achieved $8m of the projected returns by September 2001 against a significant reduction in the agreed investment. In a context of cost pressures and tight budgets arising from intense competition in the IP business, all projects were reviewed in March 2001 and the approach to knowledge management strategy had to change as funding was reduced. Since then, the company has adopted a different and more tactical approach to knowledge management focusing on:

- Managed implementation of the 'Livelink' web-based collaborative working tool (systems solution) in combination with reviewing knowledge assets, organisational design and work practices (people and processes solution).
- Key parts of the business (Operations Development, Product Management, Europe and Digital Services).
- Establishing objectives for managing knowledge with each of these with the goal of increasing margin and integrating recently acquired businesses.
- Supporting the implementation with marketing and publicity.

# 4. The Lessons of Experience

## 4.1 Key lessons

The key lessons that emerged for practitioners from this project and the research upon which it was built include:

- Commit at the top of the organisation to manage knowledge in a co-ordinated way.

- Appoint an individual with dedicated responsibility and a *small* team. And consider a steering group from key business leaders to keep the work anchored in the business.

- Map what knowledge is being managed already and how this is being done. Identify strategic knowledge assets and assign ownership.

- Use IT to support and encourage transfer and exchange of know-how.

- Look for 'quick wins'.

- Provide a user forum to exchange useful knowledge management approaches.

- Identify existing 'communities' in the business that represent customer segments or professional groups and help them to communicate effectively.

- Define the culture and behaviour for effective knowledge sharing.

- Measure against this another measures that track success.

- Develop the HRM practices to move towards these goals.

## 4.2 Challenges for HR

On this last point, some key questions emerge for HR. HR has an influential role to play in ensuring that the organisation develops the intellectual capital needed to meet its business objectives. The reality is often different and Evans (2000) suggested that the HR team is rarely pro-active and that it is the IT function that takes the lead. As a result, the cultural aspects are overlooked.

The critical thing is that HR systems and practices align with knowledge management strategy and that HR works in partnership with business  acting as a catalyst to get knowledge management on the agenda. This may mean raising and asking key questions of the business, for example:

- How aware is the leadership team of the part managing knowledge plays in creating value?

- Have we, *with them*, defined the culture we need?

- Do our values, capabilities and behaviour reflect that culture?

- Do we organise structures and space to facilitate sharing?

- Do our key HR processes (reward, recognition, and performance management) encourage the relevant behaviours? In recruitment and selection, do we identify the skills, attitudes and behaviour associated with knowledge creation and sharing? Do we base selection decisions on plugging knowledge gaps rather than a job analysis? Does the company reward knowledge creators, takers and sharers

- Does the HR team model learning and sharing?

There are specific challenges too for HR development (Mayo, 2001)

- Do we seek to develop sharing and innovating behaviours?

- How much do we invest in better work-based learning?

- How much do we use events to share work experiences, mistakes and good practices?

- Do we build in the transfer of learning from events?

- How much do we facilitate sharing between communities?

## 4.3  Postscript

This has been a story of an attempt to scale up from a series of tactical, local interventions designed to meet practical business needs to a strategic initiative driven by needs emerging from major strategic change. When the environment changed, this made the 'big' knowledge management project susceptible to cuts in funding as the business struggled. In practice, improvements in the Intranet coupled with 'Livelink' provided the extra dimension.

On a separate point, it is interesting to reflect on where the fall in share price from £15 to 62p in three years leaves this argument! Perhaps the value of know-how was inflated. Maybe it reflects a downgrade to the value of the leadership of the company.

# References

Evans C (2000), *Developing a Knowledge Creating Culture*, Research Report Roffey Park Management College

Mayo A (2001), *The Human Value of the Enterprise,* Nicholas Brealey, London

Nonaka I (1994), 'A dynamic theory of organizational knowledge creation', *Organization Science*, Vol. 5 (1), pp. 14-37

# 5. Appendix: 'Livelink'

'Livelink' is a web-based, collaborative knowledge management system that offers scalable architecture allowing a single instance to be deployed globally. The product has a global base of four million and is used by many global organisations (*eg* BT, Nortel, AT&T, Glaxo Wellcome, Lockheed Martin, Motorola, Siemens, and Swissair).

Its features include:

- multi-document types with full version control
- information access mapped to users and groups, nine levels of permission
- aliases, favourites, URLs and item linkage
- threaded discussion groups
- news channels
- change notifications  register interest in items
- task lists  work management and capture
- projects  virtual teams able to collaborate
- automated workflow  controlled management of information flow
- all items searchable and reportable
- easy, controlled submission and retrieval from any location, 24 hour per day, seven days per week.