code determined within weeks, the fastest for any new virus. At another level, the questions remains about how well placed government agencies are to respond to such critical incidents at both a national and international level.

Such changes call for officials to be responsive. For this, they need not just the skills that can be honed through simulations and exercises, as happens in the military and emergency services, but access to high-quality and up-to-date knowledge. This calls for knowledge-management systems where knowledge flows quickly and accurately across departmental boundaries.

WHAT THE EXPERTS SAY

"In the GSA, we have downsized 25 per cent in the past eight years. Our average age is 47, and about half the workforce will become eligible for retirement in the next five years."

Remez, S., General Service Administration, cited in *Knowledge Management* (CurtCo Freedom Press, 2001)

"Examine any disaster, such as an outbreak of disease or a train disaster, and buried somewhere among causes will have been a failure to share information between different government agencies, central or local."

Vacher, A., 'Unlocking government knowledge' in *Knowledge Management* (Curtco Freedom Press, 2001)

Differences

Public versus private sector

The most obvious difference between private and public sector is that the former operates in a competitive environment, where a key measure is its financial success, while the public sector often operates in a quasimonopoly situation where its measures of success are perhaps less clear cut and are perceived differently by different stakeholders. This should have little bearing on the need for KM. It does, however, alter

the relative importance of different knowledge domains. Thus knowledge of stakeholders and their needs and of the wider environment replaces competitor intelligence as a core area of knowledge.

There are several areas where, in general, the public sector faces higher levels of complexity:

- It operates at several levels local, regional, national and international;
- Its activities cover many sectors education, health, justice, defence, etc;
- Many public-sector organisations are large, and have staff and offices dispersed over a wide area;
- Governments deal with large numbers of 'customers', often numbering in the millions;
- A high degree of inter-departmental and inter-agency working is often needed to address specific policy areas or to deliver joined-up services;
- It must balance demands for accountability and openness against the need to protect privileged and personal information.

These factors put a premium on developing common definitions and standards so that knowledge can flow easily across the larger number of interfaces. It also means that documents need better classification, to distinguish their status and intended audience.

A more fundamental difference is that of culture and outlook. Many government agencies have traditionally worked on a need-to-know basis. Often the creators of knowledge have worked within their local silos without realising the value that their knowledge might have to others. Many observers feel that these silos are more pronounced than inter-departmental boundaries in the private sector.

Also, there are not the same pressures or incentives relating to rewards and job losses as there are in the commercial sector. Some argue

SOURCES: Aldred, J., 'Untangling the knowledge web' in *Knowledge Management* (Ark Group, December 2002/January 2003); Linda Wishart; www.nhsia.nhs.uk; Arnott, S., 'Public-sector project of the year' in *Network News* (13 March 2003)

Life events

Many public-sector portals and websites simply organise information into logical groups (often according to the department that generates it) rather than starting with the customer focus of 'knowledge for what?'. One approach that is frequently being adopted today, and one that puts the customer's needs first, is that of life events.

A life event is a situation that an individual finds themselves in, and needs access to relevant information and services to overcome. Such events can occur at particular life or career stages (such as getting married, changing jobs, reaching retirement house), irregular occurrences (such as moving house) or emergency situations (such as coping with a natural disaster or even a visit from a government tax inspector). A set of related events is sometimes grouped into a broader event or episode (eg, the episode having a baby may have a sequence of events that includes dealing with pregnancy, getting pre-natal care, changing work patterns and finances, delivery and registering the birth – this example is taken from South Australia's website at www.service.sa.gov.au).

A typical event requires joining up information and services from several public-sector organisations. Usually three or four separate organisations are involved, but some events involve many more individual departments. The information needed to service an event also depends on individual circumstances. Hence there is merit in customising the information given to individuals, as can be done through a portal and its associated CM system. One of the first public bodies to adopt the life-events approach was the State of Victoria in

Australia (see case study). It has now been adopted as an integral part of Victoria's Online Government 2001 strategy and has been copied by other governments around the world, notably Canada, Australia and the UK. For example, in the UK, five councils have created the Leap consortium to organise services around life events, using knowledge maps as a key tool (see www.leap.gov.uk).

BENEFITS

- Life events are readily identifiable as occurrences to which customers can relate:
- A life-events approach forces a customercentric focus within the information and service provider;
- A life-events focus encourages crossdepartmental working and the integration of information to deliver joined up services that meet customer needs;
- Information is related to specific response actions, closely matching the sequence in which consumers require knowledge to address the event.

GOOD-PRACTICE GUIDELINES

- Since the focus is the customer, customers must be involved at an early stage to help identify events and issues they face;
- Use cross-departmental working parties to co-operate on the development of life-event content the use of independent, external editors may be beneficial;
- Segregate events into different types, eg, one-off, recurring, unanticipated, and consider carefully how they should be positioned on a website navigation scheme;
- Think carefully about labels the commonly used language of citizens may not match that of bureaucrats;
- Consider tagging events (and responses) with metadata to allow filtering according to audience and type of situation;

- chief knowledge officer, but is widely recognised as the person who is driving the knowledge agenda forward;
- Chief-executive-officer support ideally with active involvement and visibility in the knowledge initiative;
- Leadership at all levels a mix of top-down, bottom-up and middle-out leadership;
- A vibrant knowledge team and/or network
 those people with KM skills that make things happen on the ground;
- A framework for action the big picture of knowledge activities and how they contribute to organisational objectives.

Leadership may be spearheaded by a single charismatic person, but is more likely than not to be a feature of an organisation's culture, where leadership characteristics are found in a network of 'change agents', those people who make things happen. Our survey indicates that the leadership challenge is one of the main things holding KM in the public sector back. None of our 36 respondents had a "well established and thriving KM programme", while only one had knowledge managers in all parts of the organisation, and four a central KM team. While only 25 per cent identified lack of top-management support as a significant barrier, the existence of other barriers suggest that KM leadership characteristics are not yet apparent throughout their organisations.

Do you need a CKO?

One of the myths of knowledge management is that a CKO at board level is vital to the success of a KM programme. Many organisations known for their good KM practice manage without a CKO. For example, Bob Buckman himself (chairman and former CEO) is the obvious knowledge leader at Buckman Laboratories. In contrast, Hewlett-Packard's culture is one of

distributed responsibility. In its case, a network of KM professionals provides leadership. An approach recommended by the General Accounting Office is that of creating a chief-operating-officer position, with both knowledge-management and corporate-strategic-planning responsibilities. What is needed, either in an individual or in a cohesive team, is a particular combination of knowledge, skills, experience and behaviours.

One of the special-interest groups of the CIO Council's KM Working Group (see case study on page 70), set out the roles and responsibilities of a CKO. It identified the following 14 characteristics:²

Knowledge

- Knowledge of the value added of KM to the business proposition and of how to make the business case – understanding of how knowledge contributes to government performance targets;
- Knowledge of strategies and processes to transfer tacit and explicit knowledge in particular using archived knowledge to take programmes forward and capturing the tacit knowledge of an ageing workforce before it is lost;
- Knowledge of state-of-the-art and evolving technology solutions – including portals, collaboration software and distributed-learning systems;
- Knowledge of an ability to facilitate knowledge capture, sharing and re-use including development of collaborative workspaces, developing partnerships and using incentives;
- Striving for continuous improvement and actively exploring new ideas – knowledge of individual learning styles and behaviours;
- Working knowledge of state-of-the-art research and implementation strategies for knowledge management, information management, document and records