Beam Me Up, Scotty:
Reforming Archives

*By Associate Professor Sue McKemmish**

"The collective memory of a nation is indispensable if we want to understand who we are, to understand where we come from, to better comprehend where we find ourselves and where we are going. Archives are the documentary base of this collective memory, which itself is so important to maintain and strengthen national identity . . ." [1]

Records of social and organisational activity are created in the course of transacting business of any kind, whether by governments, businesses, community organisations or individuals. The documentation may be stored in any medium and is increasingly an electronic process. Records provide evidence of the social and business processes of which they are a part - from this they derive their meaning and informational value. The effective management of records throughout their life span is critical to the role they play in our society, contemporaneously and over time. It establishes the preconditions for an information-rich society, and underpins the public accountability of government and nongovernment organisations, freedom of information and privacy legislation, protection of people's rights and entitlements, and the quality of our collective memory.

Recordkeeping professionals help manage records from the time they are created for as long as they are of value - whether that be a nanosecond or millennium. Increasingly, their work is seen as managing a continuum of integrated recordkeeping and archiving processes that enable records to be carried forward through time and space and to be delivered to users living in other times and places - the archival equivalent of "Beam me up, Scotty".

Records are valued in our society because they:

- witness personal, business, government and community activity, thus enabling accountability;

- establish personal, group and cultural identity;

- function as personal, corporate or collective memory; and

- help regulate and control business and social relationships between people and organisations.

In a clay tablet or paper world, recordkeeping and archiving processes were essentially custodial, based around the control and management of the physical artefact, the record.

In an electronic, networked environment, *where* records are located is no longer particularly relevant. The walls we have built around physical stores of records begin to collapse. Transfer of physical custody ceases to be a significant event. The boundaries we have put in place between different kinds of access regimes based on such geographical arrangements may no longer make much sense.

Records managers and archivists are reinventing their professional practice to manage records as logical entities in a virtual world, and to make them accessible in electronic networked environments. This involves building different structures and processes than those that worked in a physical world and forming partnerships with a much wider range of users, stakeholders and other information professionals than has previously been the case. These changes have far reaching implications for our current archival legislative frameworks.

The new technology provides some fundamental challenges to effective recordkeeping and archiving, and the opportunity to reinvent records management and archives practice.

Imagine that a chief executive officer sends a crucial policy-related email message to her corporate administrators on November 23, 1994 and attaches a report containing graphs generated from spreadsheets linked to a database whose values change daily . . . Imagine also that one of the managers is later fired for failing to carry out the CEO's directives . . . and that he sues the company for wrongful dismissal, claiming he never received the CEO's email message. If that same message had been sent in 1984 or 1974, or even 1904 . . . any legal dispute could be settled by recourse to the paper file ... with evidence of signatures, routing slip initials, or acknowledgement of receipt stamps. Not so with the electronic version. Even if the computer system's backup tapes survive, which is no guarantee in many workplaces, could the corporation retrieve and, more important, reconstruct the CEO's compound electronic document two years, or maybe even ten years, after the fact? Could it prove that the offending administrator had actually been sent the document? Could it prove that he received the document and either filed or deleted it? Could it recreate the attachment as it existed on November 23, 1994 from the ever-changing spreadsheet tables? Could it prove that no subsequent alteration or unauthorized access to the data or system had occurred?

Terry Cook, "It's 10 O'Clock - Do You Know Where Your Data Are?", *Technology Review*, January 1995.

Electronic networked environments are the wild frontier of our post-modern society. Although there have been some advances since Terry Cook wrote in early 1995 about the "widespread amnesia now threatening our electronic world", most software applications - including integrated business applications like word processing, spreadsheets, graphics, database, document management and work flow programs - do not yet have the capacity to support full recordkeeping functionality. Even when they do, rules about what records to capture and when, how long they need to be kept and access terms and conditions need to be built in at the front end. In the paper world, the act of writing a letter or completing a form automatically resulted in the creation of a document. In the electronic world, such acts no longer automatically create documents and record making needs to be a much more carefully planned and conscious activity. In the paper world, disposal and access arrangements could be developed and implemented retrospectively. In an electronic world, they need to be built into systems prospectively.

Electronic networked environments are breeding new species of compound and dynamic documents that are a contradiction in terms in relation to traditional definitions that stress the 'fixed' nature of documents as stored, retrievable and accessible information. A key challenge to information professionals, including records managers and archivists, is that of enabling virtual information objects to function as documents in the traditional sense. Discovering ways to achieve this involves defining what a document is in this new environment and specifying how it needs to function to fulfil its purpose. An interesting insight into how the definition of a document is being reconstructed is the growing consensus around the notion that, in electronic networked environments, a document can be defined as an information-like object that represents itself identically to any user whenever it is accessed.

In tomorrow's electronic networked environments, records will increasingly be managed along with an expanding array of other information resources. Public access to electronic records and other information resources will be provided via common user interfaces in this networked environment. Most public access users will access records, not by visiting an archival search room, but by accessing its cyberspace equivalent. In networked environments, as in the paper world, information

resources need to be adequately identified, authenticated and quality rated. They need to be readily accessible and retrievable for as long as they are required, then to be disposed of systematically. Terms and conditions of access and disposition need to be managed, monitored, updated and implemented.

Reformed legislative frameworks will be needed to enable the regulation of public recordkeeping and the management of our collective memory in these environments. Traditional social and legal constructs of accountability, privacy, intellectual property and copyright, all critically linked to recordkeeping, will also need continuing attention.

Existing archival laws in Australia have been characterised as either first or second generation Acts. (Chris Hurley, "From Dustbins to Disk-Drives", *The Records Continuum*.) First generation Acts are mainly concerned with establishing archival authorities as "collectors and holders of records of permanent historical interest". (The current NSW Act - soon to be superseded - is an example of first generation archival law.) Second generation Acts (for example, the Commonwealth and Tasmanian, and, through its standard-setting provisions, the Victorian Act) regulate records management, mandate transfer and storage and establish public access regimes. They are concerned with the role of an archival authority in relation to accountable public recordkeeping and the responsibilities of CEOs for managing the public record, as well as with the preservation of the collective memory of the nation or the state. But current second genera-

tion Acts were developed when professional best practice and the level of technology still supported custodial approaches to managing records. Third generation Acts will need to provide a legislative framework for postcustodial practice. This practice will involve strategies and mechanisms that can assure public accountability through recordkeeping and the preservation of collective memory where records are maintained virtually in networked environments.

The paradigm shift from the written to the virtual record parallels that from the oral to the written record in its impact on society. This shift is linked to changes in social institutions and organisational structures, including the changing relationship between the public and private sectors. Moreover, the changes caused by the new information and communication technologies are compounded by the forces of economic rationalism, which have resulted in government agencies being radically restructured, while many services have been outsourced or privatised. These developments raise a further set of recordkeeping challenges, including what recordkeeping requirements should be built into the contracts governing outsourced functions and services.

In a society that increasingly conducts its business on electronic networks, the re-engineering of accountability mechanisms and their nexus with recordkeeping also take on a new dimension. The accountability-recordkeeping nexus has been placed on the reform agenda by a range of government inquiries over the past decade.

The 1980s in Australia were marked by government and corporate scandals. The royal commissions and inquiries that followed have held that not only did public officials and business and professional people behave corruptly, but the system of parliamentary democracy and administrative law, and the regulatory and other mechanisms in the financial sector were not able to ensure accountability. In taking that view, they put matters relating to accountable public recordkeeping, the role of the archival authority and the need for better standards of recordkeeping onto the public agenda. Significant links were uncovered between mismanagement and corruption on the one hand, and poor recordkeeping on the other.

> Proper record keeping ... is a prerequisite to effective accountability. Without it, critical scrutiny by the Parliament, the Auditor-General and the Ombudsman can be blunted. Secondly, records themselves form an integral part of the historical memory of the State itself. A record keeping regime which does not address both of these requirements is inadequate...
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> The record creation, maintenance and retention practices of government and its agencies are matters for which ministers and chief executive officers bear a particular responsibility. These matters, doubtless, are ones for which those officials are to be held accountable in their management of their portfolios, departments and agencies. But overall responsibility for records cannot be left with these officials. A separate body should be entrusted with the general oversight of public records, equipped with powers adequate to the purpose.
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> (Western Australia, *Report of the Royal Commission into Commercial Activities of Government*. 1992, 7 volumes, Part II, p.4.6)

Recordkeeping professionals see the following strategies as critical to meeting the challenges outlined above:

- the development and extension of standards and codes of best practice relating to records creation, management, disposition and accessibility;

- the establishment of recordkeeping compliance auditing regimes;

- building partnerships that enable recordkeeping professionals to contribute their expertise to the development of an infrastructure of rules and protocols for managing and delivering information resources, including records, in electronic networked environments.

Such strategies aim to provide frameworks for:

- improving access through common user interfaces to records for government, commercial, corporate and democratic accountability and cultural purposes, contemporaneously and over time;

- underpinning government information goals relating to the visibility and accessibility of government information to support citizens' rights and entitlements, accountable public administration and democracy;

- supporting electronic commerce;

- assuring the authenticity, reliability, and quality of records in networked environments;

- resolving terms and conditions of access, and disposition for records in networked environments.

The guiding principles for the revision of Commonwealth archival legislation proposed by the Australian Law Reform Commission have embraced the view that "the effective conduct of the affairs of the nation and its citizens will always depend on the creation, maintenance and accessibility of comprehensive records in reliable and enduring systems" (ALRC, IP 19, Dec 1996). They also support legislating for a regime of standards relating to "the creation, management and preservation of accurate and reliable records for as long as they are required for business, social or cultural purposes", and for statutory rights of public access underpinned by "effective information and service delivery procedures". Another guiding principle refers to the need for new legislation to have "sufficient flexibility to accommodate changing technology relating to the creation, custody and accessibility of records".

In an increasingly virtual world, there is a compelling need to build third generation archival legislative frameworks, which will enable the delivery of effective public recordkeeping regimes to support democratic accountability, preserve our collective memory and assure public access to 'essential evidence' of government activity for as long as it is needed.

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End-notes:

1. Translated extract from an editorial in Avui, a Catalan daily newspaper, 1996, concerning demands for the repatriation of Catalan government records seized by the Castilians during the Spanish Civil War and housed ever since in the Archives of Salamanca.