Anyone asked at short notice to give a presentation on hybrid records management would first review the paper delivered by Peter Horsman at the Records Management Society’s 2000 conference in Nottingham entitled ‘The Intelligent Management of Hybrid Record Systems’. Horsman stressed that he was concerned with intellectual, and not physical, control of records in hybrid systems. He suggested “to manage record systems, one must be capable of controlling the system, not becoming part of it”.1

No doubt this is true in theory, and I do not set out to contradict Horsman’s engaging and entertaining paper, but in practice I believe that effective hybrid records management inevitably involves a complex interplay between the intellectual and physical control of records, which is my central theme. Everything that follows is very much a personal perspective on the issues involved in this topic, and is based upon my recent experience of piloting a hybrid records management system at Westminster City Council.

Overview
I would first like to explore definitions of the term ‘hybrid’ in order for us to agree on what we are talking about: no small task before an audience of international records managers and archivists from all business sectors. Secondly, I will outline what I see as the key issues of hybrid records management. Thirdly, by examining the hybrid implementation at Westminster, I hope to illustrate some of these issues. Finally, I will suggest some conclusions for you to discuss, while acknowledging that there are no easy solutions.

Does anyone know what hybrid records management is?
I think we can all agree on the noun hybrid. The Cambridge Online Dictionary defines the noun hybrid as “a plant or animal that has been produced from two different types of plant or animal, esp. to get better characteristics, or anything that is a mixture of two very different things”.2 But what is hybrid records management?

Let’s look at the ISO Standard. The term ‘hybrid’ is not in the index, and I have not found any reference to it within Parts one or two. But there on the front page is the explanation. The Standard “applies to the management of records, in all formats or media”.3 It is silent on this matter. It is media-neutral.

What about the ARMA Glossary of Records and Information Management Terms? A hybrid system “contains mixed components of other systems”.4 At least it was mentioned, but I think you will agree that the definition is not very helpful here.

So I looked in the textbooks. Robeck, Brown & Stephens propose that the concept of hybrid records management systems “refers to a sharing of technology between micrographic systems and electronic imaging systems . . . scan-on-demand micrographic to Electronic Information Management conversions, aperture card and CAD applications, COM image output, and image transmission systems.”5

Although it is an important area of concern, I don’t think this is what we really mean by hybrid records management today. It is important that we recognise that there are competing hybrids in the records management vocabulary. Indeed in the 1990s the British Computer Society was promoting the notion of hybrid managers – people with “strong technical skills and adequate business knowledge or vice versa”6. This reminds me of the courtier described in Philip Jones’ ‘Records Manager for the Millennium’.7

What really is hybrid RM?
You are no doubt familiar with the European Community Model Requirements Specification for Electronic Records Management (MoReq). Drawing upon the UK Public Record Office’s Functional Requirements for Electronic Records
Management Systems (ERMS), MoReq proposes “A hybrid file is a set of related electronic and physical records stored partly in an electronic file within the ERMS and partly in a related paper file outside the ERMS”.

Note the word ‘outside’. I am assuming that MoReq means that the physical file is obviously physically outside the record-keeping application, but that there is a record or metadata entry representing the physical file within the application. I acknowledge that the record-keeping system is more than just the application, but please let us assume this interpretation.

Indeed, section ten of MoReq explicitly states that an “ERMS should be able to register physical files under the same classification scheme as the electronic records, and provide for the management of hybrid files of electronic and physical records”. I think this is what we mean by the term ‘hybrid records management’.

Why hybrid? Why not 100% digital?
So let us agree that hybrid records management is the management of records systems containing paper and electronic records, in particular the configuration of an ERMS to manage paper and electronic records.

Why not 100% digital? For a start, most of us will have legacy paper records to manage. The volume may run into many thousands of paper files containing millions of documents. It is often uneconomic and undesirable to convert all this paper to electronic images. It is a business decision, of course, and some of the considerations include:

♦ How large is the paper legacy? What are the costs of conversion, or between the choice of in-house scanning or bureau services? What is the retrieval profile? Is it cheaper to use off-site manual storage?
♦ Have the electronic legal admissibility issues been resolved, including electronic signatures? How many organisations today have electronic deeds and contracts?
♦ How long is the retention period? This factor impacts upon the preservation strategy and the choice of preservation format e.g. paper, microfiche, COM, COLD etc.

Even if you could draw a line under your paper legacy, and resolve all the issues above, you can only stop new paper records being created if your electronic roll-out is corporate and comprehensive, an unusual IT extravagance while records managers remain sidelined from strategic information decisions. During this transition period someone, somewhere will still be creating paper records that will be sent to the conventional records centre.

I guess that most of us are probably within this phase. I am no futurologist or rainmaker, but given these issues it looks as though hybrid records management is here to stay.

Why hybrid? Why not distinct systems for manual and paper records?
Hybrid records management systems give a single point of access, and a single index, facilitating cross-media information retrieval. This is powerful for Data Protection and Freedom of Information enquiries, and it is vital for knowledge management.

There are also key records management benefits. There is a single audit trail for transactions. It reduces the duplication of effort to ensure that consistent classification, security, access controls, and retention policies are applied across the board. Let us not forget that there are also some similarities between manual and electronic records. They are all records that need to be consistently managed, and we need to look at the way that we try to organise them using folders and files, and use a common vocabulary to describe them.

What are the conflicts within hybrid RM?
What are the tensions when managing electronic and manual records in the same records system? At the risk of stating the obvious, the first issue to consider is user expectations. Electronic records can normally be viewed immediately at the desktop, in contrast to the retrieval of manual records that need to be physically transported to the customer. We are all familiar with the phenomenon of placing a request for manual files - and waiting. This might even be a short period for a physical file to be scanned on demand and placed on a corporate intranet - but it is a significant delay to information retrieval in an era of broadband immediacy.

Secondly, consider the issue of usability. There is a risk of duplication if a user is uncertain and declares a paper record to the record-keeping system when an electronic original already exists – perhaps because the system doesn’t make this clear or there is not a label on the manual file indicating this fact. We must always help the user to prevent duplication and redundancy in the hybrid records management system. Can you rectify misfiling or poor referencing correctly?
Thirdly, there appear to be overlapping metadata requirements for electronic and manual records. Due to the fact that manual records are objects in the real world, elements such as physical location, movement history, requests and bar-codes enter the hybrid records management system. These elements do not easily co-exist with metadata fields common to all records, for example the title or owner.

Fourthly, manual and electronic records require different methods of secure destruction. Compare the expensive and undeveloped process of overwriting digital data with 0s and 1s to prevent forensic recovery, with the tried-and-tested security shredding of manual documents.

Parallel worlds?
When you get down to the configuration of your ERMS, you begin to inhabit parallel worlds where electronic and manual concepts mean different things. Let’s take the hybrid metadata field of Current Location as an example. How do we assign a current location to electronic records?

Their physical location is fixed: the document store on a server. I assume that the user declaring the records securely deletes the local original, and I am ignoring for obvious convenience the untidy epi-phenomenon of unmanaged local caching of electronic documents on workstations or the presence of electronic archival back-ups of server traffic.

We bring the intuitive techniques of manual records management to electronic records, storing electronic documents within electronic folders. But electronic folders are virtual folders – merely metadata. Documents are not really contained within folders. Indeed, for one TRIM user in Australia “. . . the current location field has evolved from simply saying where the paper file is, to being assumed to indicate who is responsible for an action” - consistent with the meaning of current location for electronic records. What is the meaning of this metadata field if we declare a manual document within an electronic folder?

The current location of electronic folders is not in truth an individual or his/her section, as is the case with manual files. It is here that hybrid records management potentially breaks down. The tracking of manual documents in an ERMS appears to be categorically different from the tracking of electronic records.

But does the system really break down? Take for example a hypothetical physical transfer of electronic records from a records centre to a state-of-the-art archives centre (e.g. a place of electronic deposit). If all local electronic versions are securely deleted from the donor organisation, then the current location of an electronic record has indeed changed to its new owner, and the hybrid records management system is accurate.

Other issues to consider include the migration of electronic documents over time. MoReq describes how “a physical document copy can be converted into an electronic record copy, by scanning or other means of digitisation. Several physical document copies can also be converted into a single electronic record copy. One physical document copy can be converted into several electronic copies . . .” This can be repeated over several cycles. You may scratch your head and ask yourself, which is the true record?

Hybrid records management at the backend?
Before we attempt to solve this conundrum, let’s also look at the place of hybrid records management in the records continuum. As Tony Hendley has recognised, “With the move to Electronic Document Management in many organisations, the traditional records centre has tended to be bypassed, with paper records being sent to the centre but electronic records being held on the Electronic Document Management system. Some organisations are beginning to implement Electronic Records Management systems at the back end in the records centre, so that electronic records can also be moved to the records centre and managed alongside paper and microfilm records in a hybrid records management system”.

But for Kennedy and Schauder “the current type of ‘catch-all’ records management systems should only be seen as interim solutions while the . . . profession, along with systems developers, strive to better define how record-keeping requirements should be met. At issue is the question whether it is more logical to incorporate record-keeping functionality into business application systems, or whether records should ‘fall-out’ of business applications”.

I think this is what Stephen Harries from the UK Public Record Office means when he considers records management itself as a type of workflow that operates on business objects (structured and unstructured records) as part of a business process. The record-keeping function should be more or less invisible to the user. However the accepted concept of declaration, where a user must decide to register a record within a hybrid ERMS, implies
distinct personal and corporate workspaces and assumes a back-end, object-based approach.

**Westminster’s hybrid objectives**
This is a case study of a back-end, object-based approach. I’m not going to review the whole project at Westminster but you need to know something about the context of our implementation to understand our configuration.

We had three clear objectives before we went to tender.

1. To export 250,000 records held in an Access database (relating to manual files, including ownership and movement histories) to a commercial, off-the-shelf records management application. We would thereby streamline records centre transactions concerning approximately 25,000 boxes, and open up the database to our users via a Web browser.

2. To digitise 80,000 pages of historical Committee documentation to facilitate access within the same record-keeping application.

3. To permit our users to declare their electronic records by the same rules as their manual files, and have the records management service manage these records on their behalf.

**The product**
The advertisement for the turn-key application that we bought claimed that it “seamlessly integrates electronic and paper records into a secure, scaleable and manageable environment, empowering desktop users to manage and share their corporate knowledge.” This might sound like a hybrid product, but like any database, when you get TRIM out of the box it doesn’t do anything, there is nothing in it. Configuration is down to you, with assistance from your Value-Added-Reseller (VAR).

**Configuration – manual record types**
Record types are the building blocks of your hybrid ERMS: your folders or boxes, your hierarchical structure. When you create a record, you must choose a record type. Different metadata values and functionality can be assigned to different record types. Our priority was the continued operation of the existing manual records management service. Given our situation, this is the approach we took.

For our manual records, we created box records (representing the physical box), that could contain item records (representing the physical file folder), which in turn could contain piece records (representing a single manual document or an individual on a multiple-client file). The latter record type was created to cope with a legacy database table, and is no longer in active use.

Each box was allocated a unique nine-digit number, and items enclosed within this container inherited this box number as a prefix (e.g. 000090000-1).

For each box record, access controls were deployed to restrict viewing to the owner location. Any items placed within that container inherited these access controls.

For many years, the customers of the Westminster records service have provided the metadata for manual records (such as title, covering date, action date) within an Excel spreadsheet. It was not feasible to roll out TRIM to all our users in one big bang, so we had to engineer a way for this process to continue (an Excel loader was built by our VAR to perform this task). Excel is also an ideal tool for completing large amounts of repetitive data, a virtue that is difficult to replicate within an ERMS. One disadvantage of this method was that we could not use the vocabulary controls of our record-keeping application, and we thus used free-text titling for manual item records.

We exploited the use of the space management module within TRIM, with each box allocated a shelf space in our storage facility. We also bar-coded our shelves and boxes, and printed bar-codes for retrieved items to allow automated processing of manual file movements.

**Configuration – e-record types**
For our electronic records we created top-level e-folders (representing the function), that could contain sub-folder records (representing the activity), which could in turn contain document records (any e-records, e-mail, Word doc. etc. representing the transaction). Note that we were intent upon exploiting the DIRKS methodology for new electronic records.

Each e-folder was allocated a unique nine-digit number. Subfolders enclosed in this container inherited this record number as a prefix (e.g. E00090000/3~1).

We were able to exploit the features of the record plan, and created a functional plan for titling, automating access controls and retention for the top-level folders (e.g. Corporate Records Management - RMC Operations - Disposal - 2001/02).
Documents placed within a container inherited these access controls and retention policies. By controlling the folder titling and inheriting controls in this fashion, we were able to make declaration less onerous for the user – simply placing a free-text titled electronic document into its respective folder or sub-folder with a minimum of metadata fields to complete.

How to link manual and electronic records?

And so we are led to the Holy Grail. How to link your physical and manual records, make sense of these links, and maintain control?

Let’s consider a pertinent example of hybrid records management, a formal Subject Access Request (SAR) under the Data Protection Act. The completed SAR and evidence of identity and address have been received from the data subject in hard copy, as perhaps are the screen-dump results from your departments. But your Word or e-mail correspondence with the data subject remains in electronic form. There are, in effect, two files relating to this SAR – one manual and one electronic.

Within TRIM, there is a facility to link or relate records, so that once you get a list of search results you can click on the relevant icon and retrieve all related records. At Westminster, we still have a long way to go to ensure that all hybrid assemblies are linked in this fashion, but it is a satisfactory interim measure.

One other approach that is feasible, particularly when a record series is predominantly manual and you are scanning on demand, is to attach the electronic document to the manual item record. But if this item is placed in a physical box and moved to the space management system, you will have to live with the incongruous current location for this electronic record of, say, B74/4.

But there are many permutations to explore. The same TRIM user in Australia that I quoted above “. . . felt it better to have the one record entry for a topic and have all the paper and electronic documents somehow linked to it than have more than one entry for a record and the possible confusion at that level. This was also due to the fact that you can’t make users only put a given record type into another specific record type and hence if you have separate paper files and electronic containers, stop them from putting the electronic documents ‘into’ the paper file.” 14

I interpret this approach as nesting electronic and manual records within a media-neutral container. Obviously the Australians have a lot more experience of this than us, but it does show that your hybrid configuration must evolve to meet your specific business requirements.

Conclusion

To conclude, it could be argued that the management of unconnected manual and electronic records systems is the true hybrid records management, – as it is found today in many organisations. Indeed, Bob McLean from the Wellcome Trust has suggested to me that hybrid records management embraces all the information inputs and outputs within an organisation, whether or not they are captured and managed in a formal record-keeping system.15 With my Data Protection hat on, I too see the need to manage external disclosures of personal data by every member of the organisation, be it documentary or verbal. Hybrid records management in this sense embraces policies, procedures and staff training. But whatever it means, its looks as though it’s here to stay.

Despite the obvious advantages of hybrid records management, there is a philosophical conflict at its heart that requires a complex configuration to overcome. No doubt, on a practical level at least, hybrid records management requires intellectual and physical control in the virtual and real worlds.

Finally, there are many solutions to hybrid records management, particular to your organisational context. As the contexts change and our skills improve, we can expect to see a Darwinian evolution in the scope and structure of hybrid systems. In the UK, I feel that we are still in the early stages of development, and I look forward to next year’s Conference to see how the hybrid pioneers among our membership are addressing these challenges.

Let me leave you with a provocative thought from Stephen Harries: “Working electronically and attempting to manage paper records is not a viable long-term strategy”. 16

References


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