Disposal in a digital environment: Workshop at the RIMPA Convention SIG for State Government, 11 September 2011

Janet Knight, Project Officer, Government Recordkeeping, State Records NSW

Introduction

On Sunday 11 September 2011, the Special Interest Group for State Government (with a couple of ring-ins from other jurisdictions) met to workshop the issue of disposal in the digital environment. There were 18 people in total, from various jurisdictions.

I started the discussion by indicating that State Records NSW by no means had perfect, easily implementable solutions to the problems caused by digital disposal: in fact we would probably be adding more to the list of questions! It is an issue that all recordkeeping professionals need to consider, within the framework of a challenging and constantly changing digital environment.

Are people disposing of digital records?

I began by asking if anyone was conducting disposal in a digital environment (i.e. sentencing at creation, actually implementing sentences etc). A few workshop participants indicated that they were indeed sentencing at creation and were beginning to destroy digital records, but mainly those residing in electronic document and records management systems. Some had also started to assess business systems but were finding them much more challenging.

I explained that in NSW when this question is asked in training and seminars most people are not disposing of their digital records, even in recordkeeping systems. We have actively advertised for agencies to speak to us if they are performing digital disposal, but very few have contacted us. It's pretty clear to us that many records managers who have excellent disposal programs in the paper world have not attempted digital disposal.

Digital disposal is undoubtedly happening but much of it is ad-hoc. Some may also be unauthorised. For example:

- Staff members who take it on themselves to delete old digital records in networked environments or on their computers without understanding their legal obligations, the value of the records and whether they have been (or need to be) captured elsewhere
- Ad hoc disposal that happens at systems migration where some records and their metadata are not moved to the new system. Records managers are often not involved in migration exercises (it's an ICT responsibility isn't it?) so they cannot prevent this
- Disposal by neglect e.g. business systems that have been decommissioned but there is no-one to manage the data so, over time, the technology becomes obsolete and the records inaccessible or unreadable.

Do they need to dispose?

For a long time many people believed that in a digital environment as space became cheaper, digital disposal was not necessary anymore. This has never been our view at State Records NSW. Our survey of ICT practitioners (see my paper delivered at the Convention on Tuesday 13 September) revealed it is not their commonly held view anymore either. Organisations are now grappling with the fact that they have far too much information and that is a massive problem. For example:

- It costs a lot to preserve records over time (e.g. costs of assigning metadata, migration costs) and this should only be considered for records that really need to be kept
- There are issues with sensitivities in records e.g. privacy requirements to routinely destroy records
- It is difficult and time consuming to retrieve relevant records when they are hidden in a whole lot of dross
- With new access legislation such as the Government Information (Public Access) Act (GIPA) (and similar FOI legislation in other states and the Commonwealth) agencies are required to make more information available which is difficult when they are hard to find
- Performance of systems will be inhibited when there are too many records.
 Already, systems and backup systems are groaning under the weight of loads of information. Some data centres have reported that data is doubling every 15 months!

Threat to archives and long term records

A major concern for us at State Records NSW is that the lack of sentencing at creation is a real threat to the existence of archives.

- If you flag high risk/high value digital records early, you can create them using suitable formats, apply appropriate metadata and ensure that suitable management and storage requirements are applied while in-house and then transfer them to the digital archives so that they do survive.
- If you don't flag them early, will they survive and if they do by chance survive, how will you locate them amongst all the rest?

For agencies this equally applies for records of long term value – if you don't flag them early how are you going to ensure that the long term records survive and are useable for as long as your business needs them? If our traditional disposal practices are no longer the way to proceed, what is?

Obstacles to disposal

If agencies need to dispose but they are not the next question is why not? Within the workshop the following obstacles for digital disposal were discussed.

1. Disposal authorities¹

While archival authorities moved from series to function-based disposal authorities in order to cope with the digital environment and the need for sentencing at creation, there are still issues with disposal authorities. Their application to some types of digital information is problematic.

An example is how they apply to business systems. Some business systems do keep records. However, often at the design of the system the agencies have not identified what records they need to keep of the systems or even how a 'record' is perceived (which could be quite different to the paper world). Therefore often they may not be covered in disposal authorities, or the authorities (both general and functional) have not been revised frequently enough to keep pace with the changing number and extent of functions and business systems emerging.

If the systems as a whole need to be sentenced, there can be further problems. With some single function business systems (e.g. complaints handling) it may be straightforward to apply disposal classes but with multifunction and complex ones it may be quite difficult. Even if you can apply sentences, have the systems been designed in a way that they can be taken apart?

Disposal authorities are legal authorities that need to be translated into a set of implementable rules in a system. They can't always be loaded into a system as they are and applied to records. There is often translation and interpretation involved e.g. finding an appropriate date or other event data in the system to use to enable disposal triggers. Translation seems to be a challenge for many, and perhaps archival authorities need to give more guidance in this area.

With translation, a certain degree of risk management may be involved e.g. grouping disposal classes together into 'big buckets' if that suits the organisation. It is also worth noting that ICT professionals and business managers often look to us to take a wider view with disposal and to dispose of information in the system too, whether it be a classic 'record' or not, so there may need to be 'information buckets' too.

2. Disposal triggers

Participants indicated that disposal triggers in authorities were also often an issue for implementation. For example, what does 'last action' mean when applied to a recordkeeping system? It should mean the last business transaction on the file but in some systems it is the last time the file was accessed, which will keep delaying disposal.

With disposal triggers is the information for the trigger to be activated even being collected? For example, with human resource management personnel files, is date of birth being collected? Without it, sentencing these files is problematic.

We also discussed the lack of obvious triggers or impetus to carry out sentencing. In the paper world sentencing at file level might be triggered by the thickness of the file. Also, sentencing projects often occurred as a result of needing to clear space and reduce costs or moving offices. In the digital world the closest thing with have to this is migration or decommissioning, and these are often done without a records managers' involvement.

We were quickly running out of time in the workshop so we spoke very briefly about some other obstacles including the following:

3. Records management software

We discussed that records management software packages and the way the packages have been configured may actually act as impediments to digital disposal in some circumstances. As a result, it can be a far more manual process than is necessary. Where it is the fault of systems, more feedback has to be given to software vendors to bring about change.

4. Business systems

We had already spoken about business systems and the application of disposal authorities to them. Most off-the-shelf or modifiable business systems are not operating as recordkeeping systems. Even ones being designed from scratch are not incorporating recordkeeping requirements and cannot manage digital disposal e.g. they can often handle point of capture metadata but not process metadata like sentences and information about the implementation of those sentences (destroy or transfer information). Sometimes business systems are being integrated with electronic document and records management systems (where disposal can be applied) but this can cause problems of its own (e.g. overloaded ERDMS).

Legacy systems are often a problem as often the records manager has had no involvement in the design of the system or its day-to-day use in the agency, but they are required to make decisions on its disposal.

To complicate matters further, what about when business systems are in 'the cloud'? How is disposal to happen in these systems? Generally our advice is that

the organisation should retain control over their data and that the data still needs to be destroyed when required. How this is to be done needs to be examined and built into contracts. But are people always doing this when entering into cloud computing agreements? Are records managers even consulted prior to contractual agreements being made?

5. Shared drives

Some information is not in business systems or recordkeeping systems e.g. shared drives. With shared drives you need to consider what has been saved into a digital or paper-based filing system. How consistently has this been done, particularly with critical records? If the agency does not have a classification system/standardised titling on their shared drives even identifying what it is becomes a problem let alone trying to determine who is responsible for it. This raises the issues of having good business rules and procedures for recordkeeping in the first place, but as we know that often doesn't happen!

6 Fmail

Like shared drives, it can be very difficult to dispose of email records when they are not in context with other records. For example, there is a push to use Gmail and email archiving solutions but this is managing the emails by format not within context, which makes disposal very difficult. Some agencies are placing a disposal sentence of 'destroy after 7 years' and this is really risky! Again cloud based solutions can make disposal a difficult option if the contract does not include suitable disposal provisions or easy to implement export options.

7. Attitudes

One of the problems with disposal in a digital environment is the lack of concern shown by business managers, system owners, ICT and staff. Often it is either that they don't see their systems have anything to do with recordkeeping ('records = paper files don't they?') or its 'out of sight, out of mind' ('it's not a pressing priority and someone else can deal with that down the track'). Some ICT staff are aware it is an issue, but don't always see that the problems need to be addressed at systems development or purchase for any successful change.

There are probably a number of other obstacles, not least of which is the lack of time for records staff to be strategic about disposal. Budget cuts in many states and the Commonwealth have hit records areas hard and the day-to-day grind is too consuming and immediate.

Summary question sheet: Obstacles to digital disposal

- 1. Disposal authorities
- Are they adequate for all kinds of digital records e.g. records in business systems?
- Are they too complex to implement?
- 2. Disposal triggers
- Are they difficult to interpret?
- Can they be applied easily?
- Is the trigger event information even being collected?
- 3. Records management software
- Are there limitations in the software or the way it has been configured that can impede disposal?
- 4. Business systems
- Is it clear what 'the record' is and how it can be captured?
- Is there sufficient recordkeeping functionality to manage/sentence/dispose of digital records?

- How should legacy business systems be disposed of?
- What about disposal in business systems 'in the cloud'?
- Shared drives
- How can disposal in shared drives be managed?
- 6. Email
- How can disposal be managed for email if it is not captured into a recordkeeping system?
- How can we manage disposal with cloud based solutions?
- 7. Attitudes
- Do business managers/system owners/IT/staff see the need for digital disposal?
- If not, how can we influence them to see its importance?
- 8. Other?

What is State Records trying to do to address the problems in NSW?

State Records NSW has established a digital disposal strategy. We are also subject to under-resourcing so progress is slow, but we are trying. The aims of the strategy are to develop products to assist with the implementation of digital records disposal. Work includes:

- A digital disposal project within State records We are using our own TRIM system to trial the implementation of digital disposal in order to work through the process and discover any other practical obstacles and how to overcome them.
- Case studies We have planned to do some case studies to apply existing disposal authorities of agencies to all kinds of records they hold i.e. records in recordkeeping systems, records in business systems, etc to see what the problems are.
- Disposal triggers project An ADRI working party (of which State Records NSW is the lead agency) is developing a nationally standardised approach to the definition of disposal triggers in disposal authorities issued by ADRI members. As a part of this work we are researching various issues associated with digital disposal and are examining the ways by which it can best be facilitated in a range of recordkeeping systems.
- Increased contact with vendors e.g. we are liaising with software vendors including HP TRIM, Objective and Microsoft, to discuss ways their products support records disposal activities and seeking their input on more streamlined triggers.
- Promotion of our new XML schema The XML schema basically encodes disposal authorities in a format that can be ingested more easily into a range of recordkeeping systems. This may just encourage agencies to apply disposal data more readily and incorporate it into systems other than their central records management system. It also allows indexing.
- Open data project The aim of this project is to work out how we can use technology to make State Records' resources available in more accessible formats. As part of this project we have raised the future potential that we could explore the development of an Application Programming Interface (API) to provide access to authorities, terms and classes by stable URLs. (One of the problems is that you sentence with one disposal authority but by the time the record is ready for destruction that authority may have

been superseded. One aspect could be that NSW agencies could sentence their records using an authority reference that is current at the time, but when they come to dispose of the information their systems, whether EDRMS or business systems, could link via the API to the relevant URL and act on the most current authority reference. If it is feasible to develop such an API this could be of benefit to agencies – as they may not need to worry about maintaining old authorities in their systems or mapping between old and new authorities.) However, at this stage, this is a 'future' project.

- Business system workshops These are designed for ICT and records managers to show them how to identify recordkeeping requirements, assess systems and identify and address gaps in recordkeeping functionality.
- Produce a range of guidance This guidance will be targeted at records managers, ICT and business managers to raise awareness regarding the importance of digital disposal and how to address the issues e.g. conducting disposal at migration (when the records are most at risk).
- Case studies on the implementation of digital disposal When it happens!

For further information, see State Records' website at www.records.nsw.gov.au or contact State Records NSW on govrec@records.nsw.gov.au

http://www.records.nsw.gov.au/recordkeeping/state-records-act-1998/your-obligations/monitoring-compliance/2010-digital-recordkeeping-survey-report

¹ Note: The language for discussing disposal authorities differs from State to State so for this section read 'disposal authorities' 'disposal schedules', 'retention and disposal schedules', 'retention and disposal authorities' or a similar variation!

² Many archival authorities, including NSW, are not opposed to the 'big bucket' approach. However, it does pose some risks, so organisations need to consider these carefully. For more information see the ARMA International article *Trimming your bucket list: An approach for increasing retention compliance*, September 2008, available at: http://www.emmettleahyaward.org/uploads/Big_Bucket_Theory.pdf

³ Our compliance survey of public offices in NSW detected that out of the new business systems built or acquired after 30 June 2009 only 23% of the systems include an authorisation reference for the transfer and destruction of digital records and only 20% of systems were able to identify where they transferred records to! See *2010 Digital recordkeeping survey report*, available at: