Report on the Survey Regarding
Digital Preservation in Local Authority Archive Services

Introduction

The aim of the survey was to collect a snapshot of current preparedness for digital preservation within the local authority archive sector. Invitations to respond to the online questionnaire were issued via the Association of Chief Archivists in Local Government [AGALG] in England and Wales, the Archivists of Scottish Local Authorities Working Group [ASLAWG], and the Local Government group of the Records Management Society. The survey was also promoted via the Digital Preservation Coalition website, and reminders were posted to the archives-nra and records-management-uk mailing lists. The survey was available throughout September 2008.

Responses

38 responses to the survey were received. Regional analysis showed varied levels of uptake: no responses were received from two English regions, and only one from Wales. Response rate cannot of course be determined due to the wide distribution of the survey. However, a large majority of identifiable responses were received from ACALG or ASLAWG member organisations. As a point of evaluation, the ACALG distribution went to 69 heads of repository.

Section A – Digital Preservation Planning

Most respondents (78.9%, 30/38) chose to describe their service as 'reacting to depositors' when it came to digital preservation planning, although several services reported moving towards a more active position. Some respondents felt that it was inappropriate to encourage deposit until they had policy or procedures in place for handling digital material, but only two respondents (5.3%) actually claimed to be turning away digital material. Significantly, all but two respondents also reported already holding some digital material. The two services which currently have no digital material did not correspond to the two services which are turning away digital deposits.

Digital Preservation Policy & Procedures

It is encouraging that nearly half (47.4%, 18/38) of survey respondents reported already having a Digital Preservation Policy, and several others commented that work was in progress or included in service planning targets for this year or next. Most services, however, have only implemented digital preservation planning at a high policy level: only 15.8% (15/38) of survey respondents have developed guidance for depositors of digital records or currently have an accepted file formats list, whilst just 10.5% (four respondents for each category) said they have a digital deposit form or guidelines for ingest. Again, there were comments that more detailed documentation was being drafted, and there are evidently documents already available which could usefully be shared across the sector.

Digital Data Sources

In terms of the provenance of digital material local authority archive services might be expecting to preserve, most respondents apparently wished – or at least hoped - to maintain the *status quo* with respect to collecting archival material from a wide variety of record creators. Unsurprisingly, 89.47% of respondents felt that preserving the digital records of local authorities is very important, but 71.05% also gave top priority ('very important') to the records of small local 'official' organisations, such as schools and parish councils, and 63% to the records of religious organisations. Opinion was more divided on the subject of locally held 'Public Records' – the records of certain central government organisations currently held by local archive services as recognised Places of Deposit by the National Archives [TNA]. A fifth of respondents to this question were of the opinion that local Public Records were not important, or relatively unimportant for local authority archive services to preserve, although

over half (55%; 21/38) had still ticked the 'very important' box for this category. At least four fifths of respondents also regarded it as relatively or very important that local authority archive services continue to collect material created by external organisations, such as businesses, charities, local societies and private individuals. There was some awareness that this may be problematic, given the lack of control over record creation that an external depositor relationship implies: "The official records – local authorities and public records – are going to be difficult enough. It is the privately created material that really worries me in terms of how it will be documented, range of formats etc."

Section B – General Awareness of Digital Preservation

Awareness of digital preservation R&D activity was generally low, although 28 respondents (73.7%) knew of support available from the Digital Preservation Coalition [DPC], and 21 people (55.3%) had heard of the Digital Curation Centre [DCC]. 18 respondents (47.4%) were aware of the UK Web Archiving Consortium [UKWAC], and 17 (44.7%) recognised 'Seamless Flow' as TNA's major digital preservation programme, but only 13 (34.2%) knew of the more recent TNA Digital Continuity project, which is intended also to be relevant to local government.

One respondent commented that "A lot of the work on digital preservation is very high level and difficult to place in a 'normal' archival setting…At the moment there is little help in supporting organisations to get a foot in the door of digital preservation." This view was supported by another reply observing that "Much of the existing work in this area is large scale – and not low cost meaning that practically the obstacles for engaging in this activity are huge. This obstructs learning, awareness and progress."

Disappointingly, the East of England Digital Archive Regional Pilot [DARP] projects[1] and the Paradigm project[2], also registered low levels of awareness, at 36.8% (14 respondents) and 34.2% (13 respondents) respectively. These are two projects which challenge the perception that current digital preservation research is poorly aligned to the local archives context.

Awareness of digital preservation standards and data schema reflects the earlier responses showing that preservation planning in local authority archive services is only just beginning to reach beyond the policy stage. 55% (21 individuals) of respondents were aware of the high-level Open Archival Information System [OAIS] model, or were planning to make use of it. By contrast, 63% (24 respondents) did *not* know about the PREMIS metadata set, and 66% (25) had not heard of METS, whilst even those who did know of these standards had no plans to implement them.

Section C – Practical Digital Preservation

Volume of Digital Data

The survey revealed a lack of knowledge about the digital material that local authority archive services already hold. For a start, there was a discrepancy in the proportion of respondents reporting having received accessions of digital records with the earlier question in section A which asked about digital holdings by type. Nevertheless, over four fifths (31/38) admitted here to already holding either born-digital materials or digitised images. Most made some stab at trying to assess quantity, with estimates ranging from 1.5MB (a mistake for GB?) to around 5TB (this appeared to be largely digitised audio files, so the quantity is feasible), and

[1] http://www.data-archive.ac.uk/news/publications/darp2006.pdf and http://www.mlaeastofengland.org.uk/_uploads/documents/DARP2Report.pdf

[2] Exploring the practical issues involved in preserving digital private papers: http://www.paradigm.ac.uk/

between 30 and 160,000 individual files. Several respondents admitted they had "no idea" about quantity, or had made a rough estimate, possibly because the digital material is often "scattered through various accessions", and on different kinds of transfer media.

File Formats

Still image formats – jpeg and tiff (plus pdf) – are the most frequently held digital file types, presumably because many local authority archive services have invested heavily in recent years in digitisation initiatives. Office-type documents were also frequently reported, particularly Word, Excel and Access, with a fair smattering too of older, obsolete formats, including Lotus 1-2-3, Publisher 2, and Claris Filemaker. There was some evidence of niche proprietary formats, such as Kodak Photo CD and the family history software package, Gedcom. Many services also held digital moving image and sound collections, and there were two reported instances of CAD/CAM designs. This variety of reported file types is not a surprise given the *de facto* mixed collecting remit of UK local authority archive services.

Storage & Handling

A high proportion of respondents to this section (87.1%, 27/31) had some of this digital material stored on optical media, such as CD or DVD, although the majority also make use of some kind of server file network, which is at least backed up. Currently only one respondent is outsourcing digital storage, and another has the use of a content management system. Unfortunately, 41.9% (13/31) of respondents admitted that no action was taken when digital records first come into the archive service – digital records are merely stored on their transfer media in the archive strongroom. Just over half of respondents to this section (51.6%, 16/31) would at least check to see whether the records could be opened, and 45.2% (14/31) would copy them to different storage media (presumably usually to file server storage).

There were low reported levels of further processing (checksum generation 6.5%, migration to current file formats 9.7%, normalisation to open formats 6.5%). Indeed, most services do not currently collect the kind of creation environment information (format, software version, operating system environment, compression formats etc.) that would be necessary to plan practical preservation strategies for incoming material. One respondent pointed out that "Our digital deposit form asks all these questions – that is not to say that depositors fill it in properly! In fact, our experience is that extracting these kinds of details from depositors is very difficult and we are looking to see what automated tools are available for some of this work."

On a more positive note, there were many reports of 'work underway' in these areas, and evidence of a growing awareness of digital preservation issues, although many services clearly already have a backlog of digital material previously accepted without any kind of preservation strategy being put in place. Several services reported involvement in collaborative or practical projects; an obvious next step will be to find ways to disseminate this knowledge and experience more widely across the sector.

Access

Preservation is pointless without access. Most services (67.7%, 21/31) - if they are able to provide access to digital records at all at present (16.1%, 5/31 cannot) - rely on *ad hoc* arrangements involving CDs or memory sticks accessed in the searchroom. 8 respondents (25.8%) claimed to be providing access via the internet, although in practice this appears to refer to galleries of digitised images rather than a comprehensive storage and access architecture for all digital material.

Section D – Electronic Information Management

86.8% of respondents (33/38) reported having a records manager within the authority. Most services have good working relationships with their records managers, although only about half (47.4%, 18/31) of archive services are involved in the implementation of EDRMS within their authority. For the majority, however, the EDRMS is only in a pilot or an early phase of implementation, and nobody reported any EDRMS contents having reached the end of their retention periods.

There is divergence in the role and level of ownership the respondents have at any stage of the EDRMS procurement or deployment. There was no obvious correlation between archive service involvement in EDRMS roll-out and progress in digital preservation, although in several cases digital preservation has been included within the remit of the records manager. Several respondents commented along the lines that "current workload prevents any organised expansion into this field". Various cases of real data loss due to obsolescence were given, but only occasional evidence that archive services had been in a position to respond with 'joined up' risk management strategies across the authority.

Section E – Infrastructure/Issues for the Future

Barriers to Digital Preservation

A question on barriers to finding a practical and sustainable solution to digital record preservation was completed by 95% (36/38) of respondents. Recurrent themes were identified and teased out of the responses. The main barriers that were articulated were, not surprisingly, those that had been suggested in the question, but responses can be aggregated into three main areas:

- Cultural (organisation, political, awareness, external partnerships/relations and motivation)
- Resource (time, costs, funding, storage)
- Skills gap (training, competencies, IT)

Barriers	Count (approximate)	Ranking (approximate)
Funding	12	1
Training	7	=6
Political Support/Awareness	8	=4
IT Support/Relations	10	=2
Storage	7	=6
Cost	8	=4
Organisation	5	8
Skill set – expertise/experience	10	=2
Resource – Time	2	11
Staff motivation	3	=9
Lack of leadership/clear guidance	3	=9
Strategic partnerships	1	12

From this rather crude count, it would seem that funding is identified as the key barrier which will cascade down and impact on the other challenges. These findings were similar to a survey that was conducted by the Digital Preservation Coalition earlier in 2008 as a follow-up study to the 2006 *Mind the Gap* report[3].

[3] http://www.dpconline.org/graphics/reports/mindthegap.html

Very few respondents actually picked up on the invitation to comment on next steps for overcoming these barriers. For those that did, the majority were seeking organisation 'buy-in' on all fronts, developing and embedding policies and procedures.

Skills & Training

This question was completed by 89% (34/38) respondents and all agreed that there was a skills gap which needed addressing. The suggestions raised from softer more generic skill e.g. project management, negotiation, through to basic generic ICT skills to more detailed courses addressing specific issues e.g. advice on file formats; migration strategies; digital accessioning. From some respondents there was an acknowledgment that a range of skills were required depending on the role and responsibilities of the specific staff within the archives.

Suggestions about the mode and type of delivery varied from formal education, to in–house CPD, to on-line learning, through to placements and job shadowing to practical based training courses to customised in-house training.

A recurrent theme was the aligning of traditional and emerging competencies and skills – to support people's confidence and to address the skills shortage. There was a call for practical based training addressing specific processes and a sharing of collaborative expertise across the community.

All of the above is predicated on the assumption that there is funding for any of this activity. From the responses there certainly is no budget at the individual local authorities.

ICT Support

In contrast to the generally good relations between archivists and records managers, working relationships with ICT support services were sometimes characterised as poor, even antagonistic. This is one area where there is clearly scope for action to improve mutual understanding of each other's role in digital information management. Whilst 71.1% (27/38) claimed to have access to ICT project management expertise, and 52.6% (20/38) to software developer expertise, in many cases ICT development time is subject to a competitive bidding process, or is outsourced or otherwise chargeable. Few services have been able to include funding for digital preservation activities in the archive service budget, and even fewer have experience of major scale ICT infrastructure development projects of the kind which might be required to meet the digital collecting aspirations outlined in responses to section A of this survey.

Future development of digital preservation

There was very little consensus over potential models for the future development of digital preservation within the local authority archive sector. An in-house repository or a regional repository for a group of archive services were rated as the most likely, preferred option by the largest number of respondents (10/38 for each option), but conversely, almost as many voted an in-house repository their *least* preferred option, and two respondents felt this option was not viable at all. Only outsourcing to a private supplier was truly unpopular, with 11/38 respondents considering it not viable, and a further 8 marking it as the least preferred option. To an extent, this may reflect budgetary constraints, although of 35 respondents to the question "Would you be willing to pay for a third-party digital preservation service?", 13 said yes (budget allowing), 11 no, and 11 maybe.

Conclusions

There were few, if any, surprises in the responses to the survey. It is reassuring that some local authority archive services are already beginning to address some aspects of digital preservation, providing some real proof of concept studies and a basis for knowledge and skills sharing across the sector; a determination that "we are not a time capsule for paper and parchment".

We believe suggestions for a strategic way forward should be invited upon the following four key issues:

1) What kind of organisational model is appropriate for digital preservation in local government?
2) How can we leverage funding for digital preservation in local government?
3) What means of political advocacy for digital preservation would be most effective in local government?
4) What professional partnerships can we forge in order to promote digital preservation in local government, both within and external to the LA sector?

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3 November 2008