Scoping IASA's training brief for a changeable world
Chris Clark, Head of Documentation and Selection, British Library

(This is an expanded and updated version of the talk given at the Multi.co.m workshop, September 23rd 2008 in Rome, entitled Creating and managing digital resources: leadership issues arising from recent British Library initiatives)

IASA's contributions to the training and development of audiovisual professionals have been impressive. Its various publications and guidelines have been adopted over the years, expanded, cited, consolidated and refined by other bodies, such as UNESCO, MEMORIAV, the British Library’s technical internships and the online course devised by Multi.co.m.

It was for the final meeting of Multi.co.m that I was invited to Rome last year by former IASA Vice President Maria Carla Cavagnis Sotgiu to talk, from a British Library perspective, about training needs in relation to the work that I had been involved in with the Archival Sound Recordings project and, to a lesser extent, with the early planning stages for a Digital Research Centre, which will be placing digitised sound and moving image among the central components of its content offering. These projects have involved and will continue to involve significant change. Coping with such change, which amounts to cultural rather than incremental adjustments, requires capable leadership and my thoughts while writing my talk were guided by challenges to leadership, as I have perceived them to be, rather than notions of best practice or core competencies that have been the focus for IASA hitherto. The aim of this paper is therefore to serve as a companion measure to training initiatives that are already underway in IASA since the Sydney conference, to help identify existing strengths and weaknesses and to consider some of the lessons learned from recent experience.

I began my presentation in Rome with a typical story from today’s museums and archives community. Around the middle of 2008 CNN reported on the Smithsonian’s ambitious programme of digitization:

“The Smithsonian will digitize its museum collections (137 million objects) to make them viewable online”

“I worry about museums becoming less relevant to society”, new chief says

“Officials don’t know how long it will take to digitize the 137 million-object collection”

Nor, most likely, did the Smithsonian know for certain if such momentous effort and expense would ensure its future relevance. Similar statements even five or ten years ago, typically in relation to cataloguing and preservation targets, would have appeared without the attendant uncertainties. In a developed world dominated by expanding industrial output, the annual tally of catalogue entries produced and items preserved were in themselves indicators of relevance and training programmes would be in place to ensure that appropriate standards were applied and upheld to keep the numbers up. This world - its culture, its research communities, its designs based on industrial/military precedents - has moved on.

We can illustrate the change as an opposition between closed and open organizations.
This opposition of new and old world orders draws on similar ideas and diagrams presented by Charlie Leadbeater (e.g. at TED), Clay Shirky’s book *Here comes everybody: the power of organizing without organizations* and presentations about the future of content by media futurist Gerd Leonhard. In the familiar organizational model we talk about safeguarding ‘heritage’ (*la patrimoine*) and providing expert services TO users. Specially trained people are hired and trained further to work in specially appointed places where they think up special ideas for delivering information to users who are perceived as passive readers and listeners, who are themselves conditioned to interact with organizational policy accordingly. Systems operated by such organizations are typically closed, their services and tools designed around physical copies (of sound recordings, books, journals, etc.) that are protected by rules, rights and patents. This model both prevents and is threatened by the emerging model, which is not an organization at all but a miscellany (some would say ‘a chaos’) of creative activity where ideas are shared, exchanged and remixed with fewer controls. Compelling products and genres emerge from this creative openness that challenge the organized model. Their tools are found openly on the Web, content is increasingly open and if protected adheres to creative commons rather than statutory, territorial recitals. It is a world where the design principle is governed by the preposition WITH people instead of TO and FOR people. It’s a model designed around the choice people have to pay or not to pay with their attention instead of being given privileged access to copies.

In this article I am therefore arguing that in order to remain viable and relevant, organizations such as those most of us in IASA work in, must avoid the trap of thinking that mass digitization will in itself ensure continuity and relevance. We must engage energetically with the open model illustrated on the right hand side of the diagram.
As a starting point I had the idea of a list of twelve themed activities that are commonly encountered or which are beginning to be experienced, especially in projects that are about access to digitized collections. Some of these activities are within our Association’s comfort zone but others remain marginal and poorly perceived, even resisted. The list is by no means definitive or exclusive.

I group these twelve themes into the four quadrants of a grid, whose vertical axis ranges between being relative strengths and weaknesses and whose horizontal axis denotes a scale of ‘hard’ to ‘soft’ leadership challenges1, where ‘hard’ denotes doing things for measurable benefit and in a scientific manner by breaking work tasks down and allocating them in the right order to the right people, while ‘soft’ denotes social awareness and sensitivities, having to relate yourself to others and to differing circumstances and adapt accordingly.

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<tr>
<th>Hard skills (being, doing)</th>
<th>Soft skills (adapting, relating)</th>
</tr>
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<td><strong>Strengths</strong></td>
<td><strong>Weaknesses</strong></td>
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<td>Effective policies governed by strategy and branding</td>
<td>Curation of data resources (lifecycle stewardship)</td>
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<td>Communicating with stakeholders</td>
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<td>Digital literacy</td>
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Each of these twelve themes will be described in relation to the Archival Sound Recordings project and the emerging challenges of the Digital Research Centre. I regard both of these as instances of generalised change taking place within the British Library.

I’ll begin with those three activities that are already carried out with a measure of competence. They are also the activities that have received the most attention in training initiatives.

**Effective policies governed by strategy and branding**

The pursuit of excellence should be a primary value for any organisation. Knowing if you have achieved or failed to attain excellence will depend on how the terms on which the work that is carried out have been defined. The British Library has devoted a lot of time in the last decade to answering the question ‘What are we doing?’, and more specifically, ‘What is the purpose of a national library in the 21st century?’ Answers came in the form of various statements defining mission, vision, strategic priorities and organisational values.

1 leadership challenges can be represented as four inter-dependent activities:

- **Being (spirit)**
- **Doing (getting things done)**
- **Adapting (learning and changing)**
- **Relating (connecting and responding)**
In other words, a framework emerges that supports a more economical and purposeful deployment of resources against which notions of success or failure can be objectively measured.

Most organisations will have considered these things if they are to function well and deliver value for money and relevance for the public subsidies they receive. For the British Library the mission is not, as many once believed, to acquire every possible book and sound recording and catalogue them but *Helping people advance knowledge to enrich lives*. Its accompanying vision looks in four directions:

- playing a leading role in the changing world of research information, i.e. adjusting services to be more flexible in order to meet a variety of user needs;
- existing for everyone who wants to do research – for academic, personal or commercial purposes, i.e. not the privilege of those who are or have been in higher education;
- promoting access to collections and expertise through integrated services that are increasingly time and space independent, i.e. not expecting everyone to have to use services, such as catalogues, that are only available in reading rooms located in London;
- connecting with the collections and expertise of others, and working in partnership to fulfil users’ needs, i.e. "no archive is an island".

Note that each of these statements is about looking at what people are doing rather than striving to keep up with the latest technological wonder: it is a vision that addresses not what impact the Internet, for instance, will have on the organization but how the organization can best serve society to make the most of the opportunities the Internet and other new technologies offer.

A clearly stated vision, available for all to see, then allows a set of strategic priorities and organizational values to emerge that supports the organization’s brand – something people can identify with instantly, something they can trust and respect.

The most predictable of the British Library’s six key strategic priorities up to 2008 was ‘Grow and manage the national collection’ and yet this apparently obvious activity, which might be better stated as an *acquisitions policy*, contained a number of features that remained inadequately covered: the importance of clear statements about provenance and ownership, for instance, which have assumed ever greater prominence as libraries and archives seek to expose more of their collections on the Web.

Collections have often been acquired haphazardly in the past and many years after a collection or item has been acquired a difficult question may be asked (for instance under Freedom of Information entitlements) to which the answer cannot be found easily. The British Library therefore appointed a Cultural Property manager, with a legal background, who set about ensuring that all acquisitions policies were ethically sound (against a contemporary background of items that had possibly been looted from various embattled zones) and devising a course in due diligence.

Due diligence can be defined as “taking all reasonable measure and making all possible checks to ensure that any item being purchased, borrowed, received or exchanged ... constitutes a legitimate acquisition”. All acquisitions (other than those acquired by legal or voluntary deposit schemes) are therefore obliged to contain statements such as:
a. [Name] is the legal owner of the Archive and have been granted all necessary rights to donate the Archive to the British Library;
b. [Name] has the full capacity and authority to enter into this Agreement and the performance of its obligations under it will not result in a breach of, or constitute a default under, any instrument or agreement to which [Name] is a party or by which [Name] is bound or result in a breach of any order, judgment or decree of any court by which [NAME] is bound.
c. That the legal title to the Archive is full and free, without time limit, and subject to the restrictions outlined in 1 (i) and 2 (below), is free from any interest, encumbrances, and any third party rights, and any other restrictions whatsoever;
d. That the Archive has been lawfully acquired;
g. With respect to the Archive:
   (i) [NAME] is not involved in any litigation, arbitration, administrative or criminal actions (“Proceedings”); and
   (ii) no such Proceedings by or against [NAME] are pending; and
   (iii) [NAME] has not received notice of any claim likely to give rise to Proceedings;
h. [NAME] is not aware of any claim that the Archive infringes any right of any third party.

Applying best practice to collections management

The activities of UNESCO, IASA and the financial assistance available from regional sources of funding (e.g. European Commission) have ensured that this remains a primary focus for training and as such is an area in which we feel justifiably strong. Recent successes include IASA’s own TC 03 and TC 04 (2nd edition), the TAPE project, PrestoSpace and the British Library’s Sound Archiving internships.

Types of work covered include: theory and practice of audio archiving; the management of fragile and unstable analogue carriers; digitisation for access and preservation; signal extraction from originals; cataloguing, metadata and unique identifiers; storage (electronic and physical), etc.

Collaborative projects

The work of audiovisual archives is increasingly about collaboration, for instance, collaboration between archives with assistance from a funding organization, collaborations between teams within an organization and mixtures of the two.

Such projects proceed rather like a complicated juggling act. The objects that need to be juggled can be thought of as a microcosm of the twelve themes of this paper and can be illustrated by means of a diagram known as a ‘cultural web’.
Central to this diagram is the governance of the project where various collaborative actions are concentrated. Additional resources (external suppliers, hired in expertise) lighten the burden of making critical masses of sound files and metadata available on-line but they can also add to the list of risks that have to be managed. The Project Manager's most useful tool will therefore be a register of risks, adequately profiled and including controls to be applied when difficulties are encountered. Here is a copy of part of the risk register employed during an early phase of the Archival Sound Recordings project which allows for rapid assessment of risks using colour coding.
<table>
<thead>
<tr>
<th>Internal/External</th>
<th>Risk</th>
<th>Risk Rating</th>
<th>Probability</th>
<th>Impact</th>
<th>Controls in Place</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>External</td>
<td>Delay in IPR acquisition</td>
<td>HIGH</td>
<td>HIGH</td>
<td>HIGH</td>
<td>Monitor the external rights-clearer to establish if one person is sufficient resource to undertake the clearances. If not, buy in additional resource or suggest that the rights-clearer employs a researcher. Also continue internal rights research for specific content packages. Carefully monitor progress on a daily basis and push for updates on progress.</td>
<td>Imminent</td>
</tr>
<tr>
<td>Internal</td>
<td>Complexity of materials may raise unforeseen issues.</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>Less of an issue due to ASR experience. Careful planning. More spot checking to root out problems.</td>
<td>Imminent</td>
</tr>
<tr>
<td>Internal</td>
<td>Delay in production of METS</td>
<td>MEDIUM</td>
<td>HIGH</td>
<td>LOW</td>
<td>Depending on internal sign-off and early commencement of production. Still dependent upon internal sign off @ beginning September 2008. Sign off must happen by 19/09/08</td>
<td>Imminent</td>
</tr>
<tr>
<td>Internal</td>
<td>Scope creep: web requirements</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>HIGH</td>
<td>Careful specification. Revision of web strategy</td>
<td>Remote</td>
</tr>
<tr>
<td>Internal</td>
<td>Loss of content due to overestimation of number of hours.</td>
<td>LOW</td>
<td>LOW</td>
<td>LOW</td>
<td>Better understanding of this since ASR but still an issue. Quoted hours possibly an underestimate.</td>
<td>Remote</td>
</tr>
<tr>
<td>Internal/External</td>
<td>Change of content due to complex IPR issues</td>
<td>LOW</td>
<td>LOW</td>
<td>MEDIUM</td>
<td>Closely monitor progress with the more complex packages. See risk ASR2-R-4 for approach.</td>
<td>Remote</td>
</tr>
<tr>
<td>Internal</td>
<td>IPR licensing costs higher than expected.</td>
<td>LOW</td>
<td>LOW</td>
<td>MEDIUM</td>
<td>Less likely than with the ASR project as lower risk materials are proposed. Careful management of budget.</td>
<td>Remote</td>
</tr>
<tr>
<td>Internal/External</td>
<td>Emerging usability and re-purposing requirements cut across realistic licensing objectives.</td>
<td>LOW</td>
<td>LOW</td>
<td>HIGH</td>
<td>Keep expectations realistic.</td>
<td>Remote</td>
</tr>
<tr>
<td>External</td>
<td>External IPR suppliers cannot do what they claim.</td>
<td>LOW</td>
<td>MEDIUM</td>
<td>HIGH</td>
<td>Suppliers are well versed in the Library needs</td>
<td>Imminent</td>
</tr>
<tr>
<td>External</td>
<td>Supplier relationships breakdown.</td>
<td>LOW</td>
<td>LOW</td>
<td>HIGH</td>
<td>Careful contract management and partnership working with open communication. Supplier representation at Project Board.</td>
<td>Imminent</td>
</tr>
<tr>
<td>Internal</td>
<td>User testing takes too long.</td>
<td>LOW</td>
<td>LOW</td>
<td>LOW</td>
<td>Careful scheduling. Do less testing as ASR testing extensive. A budget allocation should be made for user testing.</td>
<td>Remote</td>
</tr>
<tr>
<td>Internal/External</td>
<td>User testing casts up too many problems.</td>
<td>LOW</td>
<td>LOW</td>
<td>LOW</td>
<td>Not likely but careful scheduling and early engagement with community.</td>
<td>Remote</td>
</tr>
<tr>
<td>Internal</td>
<td>Change of requirements (scope creep).</td>
<td>LOW</td>
<td>LOW</td>
<td>LOW</td>
<td>Drafting of a Project Initiation Document minimises risk. Well defined business case and deliverables list.</td>
<td>Remote</td>
</tr>
<tr>
<td>Internal/External</td>
<td>Criticism for not meeting accessibility standards</td>
<td>LOW</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>To be mitigated by a joint statement with JISC on accessibility.</td>
<td>Remote</td>
</tr>
<tr>
<td>Internal/External</td>
<td>Procurement uncertain.</td>
<td>VERY LOW</td>
<td>VERY LOW</td>
<td>VERY LOW</td>
<td>Much less uncertain since ASR project but issues need to be addressed early on.</td>
<td>Remote</td>
</tr>
</tbody>
</table>
The various collaborators on Archival Sound Recordings were governed by a project manager reporting to a Board, which was itself made up of representatives of external and internal parties. From within the British Library, key people included the head of Web Services, head of Higher Education marketing and various collection heads. The Board was chaired by a Senior Responsible Owner (in this case the Head of the Sound Archive). Well-developed project and people management skills were therefore essential to ensure that deadlines were adhered to and delivery targets met. The risk register was therefore the Project Board's main governance and surveillance tool.

Communicating with stakeholders

Meaningful and regularised conversations with users are essential to the relevance of products and services, but on the understanding that in an unfamiliar situation one is unlikely to get things right straight away. So, when the interface to Archival Sound Recordings was first discussed the Library made the first move and proposed a well-described, well-packaged resource, to which the response from the users was ‘give us the raw data’. Having presented the content with minimal metadata and adornment the same group then asked for more curatorial interpretation. We addressed this by introducing some Web 2.0 features, tagging and a weblog.

Encourage feedback from users. This makes them feel a part of the project and it can provide useful material for case studies, or stories, as evidence of demand and satisfaction. For instance, a PhD student who used some of the historic African recordings on the ASR website wrote to us to say:

“\textit{The recordings are extremely useful. In Bunyoro kingdom, for example, an official recently told me that they had instruments that are not played because nobody knows the skills and their music. I feel that the music can be restored through listening to the digital sounds…}”

Licensing content

Until new business models emerge with legislation to suit, libraries and archives have no alternative but to work within existing legal frameworks, which means consulting each and every contributor and rights holder associated with a given recording and negotiating a license and fee (payable in advance) to cover all expected uses, e.g. streaming, downloading, repurposing, etc. invariably for a fixed term. Familiarity with administrative structures (collection societies and associations) and the prevailing political climate will save a lot of time and frustration and there may be no alternative but to employ short-term expertise. However, even the employment of copyright experts is no guarantee that rights holders, once identified, will comply with a request and laws are seldom free from interpretation – which is not surprising given that most of the legal framework for our actions predates the circumstances that we are trying to address. Neither will payment necessarily be the most appropriate consideration. For traditional music from countries without evolved copyright legislation the solution was to offer digitized copies or a one-off payment to a central body, such as the local musicians’ union or national archives.

Sustaining services

The early Web was (and remains) full of isolated, forgotten project outcomes, fit for purpose at a given moment but unable to move beyond the restrictions of code, software, hardware or available expertise. Project management must ensure there is a sustainability plan that will ensure life after the project has ended. The plan devised by the Archival Sound Recordings...
project ensured that there would be: a hand-over of skills (e.g. metadata compilation, rights clearance) each of which can be championed by a member of the full-time regular staff; that there is long-term technical support for the software and website design; that there is a migration strategy, including system integration.

**Curation of digital resources (or lifecycle stewardship)**

I have often used the following image as an illustration of the way we used to be able to do things in sound archives - some of the time:

![Image of boxes labeled "Family Circle" and "Talents".](http://www.clir.org/pubs/reports/rothenberg/contents.html)

The picture was taken at the British Library during the course of a move where a number of examples of makeshift catalogues and evidence of half-completed initiatives came to light. I refer to such boxes (or biscuit tins) of knowledge as instances of 'benign neglect'. As long as people continued to be employed by the organization who were aware that the answer lay in one of these tins (and had passed on this detail to their successors) the knowledge was reasonably secure. As an example of lifecycle stewardship it has obvious shortcomings, though the notion that all items in an analogue collection and their attendant documents (acquisition agreements, catalogue records, conservation reports, etc) continue to absorb resources, particularly as storage and conservation costs, is a relatively recent cause for concern.

When digital alternatives emerged during the 1980s it was common to hear talk of such costs as being a thing of the past. By the late 1990s reports began to emerge, mostly from the United States, that warned of the dangers of inadequately informed digitization programmes and it became apparent that safeguarding digital collections in perpetuity and on a large scale was likely to be even more expensive. Centres of digital expertise were established, such as PADI in Australia, Sun Site at Berkeley in the United States and the Digital Curation Centre in Edinburgh, all of which continue to produce streams of wisdom and valuable insights for our profession.

2 One of the most influential of these was Jeff Rothenberg's *Avoiding Digital Quicksand* (CLIR, 1998) [http://www.clir.org/pubs/reports/rothenberg/contents.html](http://www.clir.org/pubs/reports/rothenberg/contents.html)
In short, the dependency on machines to assist with lifecycle stewardship demands a high degree of integration in workflows (especially as applied to preparing objects for ingest), constant technological vigilance (to ensure that hardware and software components remain current) and an eye for exactitude in all matters pertaining to data, particularly the creation and management of directories and file names, not to mention the avoidance of perpetrating errors of discographical fact.

The Archival Sound Recordings project saw very few setbacks, one of which was the failure to devote sufficient time and attention to quality checking the descriptive metadata and the matching of the same to sound files and images. Catalogue records help to find things on shelves and when those few requests came in to fetch the item an expert on the staff could override any infelicities encountered in the documentation. Metadata is more like product packaging, not in the marketing or advertising sense but as a means “of data distribution and processing (an Information Technology issue)”\(^3\). Mistakes are therefore compounded though being more visible and, worst of all, are liable to be trusted as correct by an online user. An earlier quality assurance measure in the project of one file in fifty to be checked was quickly adjusted to one in ten and for some content packages, every single file was quality assured.

**Coping with MASSIVE amounts of data (and metadata)**

Total quality assurance is obviously unrealistic for the massive quantities of files that are being generated by semi-automated digitization programmes. At approximately GBP 100 per digitized recording for the Archival Sound Recordings project\(^4\) the added cost of checking every file manually would be unbearable. For organizations that pride themselves on offering unadulterated authenticity to users, however, this remains an essential activity the cost of which will need to be offset by achieving efficiencies elsewhere, such as faster rates for audio transfer and metadata compilation.

Moreover, reports at the 2007 IASA conference in Riga from early implementers (Austrian Media Archive and National Library of Norway) alerted us all to the under-estimates of time it would take to migrate a very large set of data.

Clearly the responsibilities of digital stewardship are beginning to out-strip the capacity of single institutions and some of the processing and storage will, I feel sure, have to be shared, as is the case already with some branches of scientific research. It will be useful to weigh up the advantages and disadvantages of GRID and CLOUD computing and to examine what such solutions might mean for dedicated curation.

While we agonize about how best to deal with our legacy collections, the figures for newly created digital content that is OF rather than FOR the Web dwarf all previously known measurements. People have embraced the creative and participatory opportunities of the Web and the recognition that follows. People project their lives onto cyberspace in as many ways as are available, with thirteen hours of material being uploaded to YouTube every minute (late 2008 statistic). Mobile audio recording devices, such as Audioboo, are emerging at the time of writing that may be destined to reach a similar rate of growth.

We need to re-examine catalogues. The comparative ease with which people find stuff on Google, regardless of authorized spellings of names, and get it presented in ranked order has generated impatience with institutional catalogues, even those blessed with sophisticated search functionality. This is not entirely fair, though the reliance of all catalogues on presenting results as text, possibly in alphabetical or date order, is a severe limitation when large

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\(^3\) Searching for Audiovisual Content. European Audiovisual Observatory, 2008. p. 32

\(^4\) This unit cost is all-inclusive, i.e. digitization, plus licensing, plus versioning, plus metadata, etc.
numbers of hits are returned. Alternative ways to display large sets of data are needed. Apple has demonstrated some success with its well-designed interface, complemented by Genius. Cool Iris and Music Intelligence Systems have evolved appealing applications for video and audio respectively. They are all examples of visualisation:

Visualisation is the process of representing abstract information in the form of images that can assist in the understanding and analysis of the data. The best visualisations convey large amounts of information in a smaller space than can be managed in text. Maps, for example, fulfil such a function, as do workflow diagrams. David Staley's recent book Computers, Visualization, and History: How new technology will transform our understanding of the past (M.E. Sharpe, 2003) provides a wealth of examples of the current and potential uses of visual forms in the heritage and education sectors. (DigiCULT, 2005)

Dealing with new genres

The idea that one should archive the Internet as though it is a publisher (on a vast scale) of new copies seems to me to be a misunderstanding. Clearly there are records of events that only exist on the Internet that must be captured and archived on a localised basis. This was easier to do before Web 2.0 let everybody converge with the content. The outcomes of those convergences may in future be a focus for research, in which case we will need new taxonomies for organizing our captured web pages. Lorcan Dempsey wrote in 2007 about several types of metadata including: professional (provided by the originators of the resource as authorized data and controlled vocabulary); contributed (content generated by users, such as tags and comments); intentional (data that is collected from usage that typically ranks search results as a way of recommending certain paths through the data over others).

Such added value adheres to numerous Internet genres, most of which are probably not yet on the list of things to be acquired electronically:

- Podcasts;
- on-line files;
- blogs and micro-blogs (political blogs are said to be "transforming our democracy";
- Internet radio;
- Games (with audio).

How do we even begin to find them all?

"multimedia search is still in the crawling stage, but sometime in the not-too-distant future, it's going to grow up and take off fast".

Helping to improve multimedia search are a number of specialised search engines such as Everyzing (http://www.everyzing.com/), Podscope (http://www.podscope.com/), TVEyes (http://www.tveyes.com/) and Google's audio search tool (http://labs.google.com/gaudi).

And so to the final trio of themes, perhaps the least understood within our Association.

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5 Lorcan Dempsey. Four sources of metadata about things (Orweblog May 20 2007).
http://orweblog.oclc.org/archives/001351.html

6 "transforming our democracy" Nigel Morris. The online lobby: the blog sites transforming our democracy. The Independent (September 15 2008). http://www.independent.co.uk/news/media/online/the-online-lobby-the-blog-sites-transforming-our-democracy-930391.html

7 Ron Miller. The search is on. (Streaming Media.com December 15th 2007).
http://www.streamingmedia.com/article.asp?id=9879&page=2&c=31
Open to social sharing & exchange – collective intelligence (or the wisdom of crowds)

The traditional connections or interfaces with users, by means of catalogues and enquiry desks, have always been a potential source of mutual benefit in that a certain amount of research may be recycled, over time, into catalogues and curatorial expertise. The interactions help to enhance the intelligence of the collection. The Internet introduces a better connection, replacing identifiers with identities, geographical accident by purposeful interest. If I write something on the Internet and somebody attends to it just by reading it, the chances are that what I wrote will never be found again. But if that same person makes a link to it, and better still, comments on it, it will have extended the network. It will have increased the collective intelligence.

The definition of ‘content’ therefore expands to include activities that take place around digital assets. Eric Lease Morgan\(^8\) believes that the library catalogue will be “less about inventory and ownership. Instead it will be more about access and usefulness. Put another way, library catalogues will provide information that goes beyond “We have such and such an item” and move towards “Here is a set of items of interest, and these are the actions you can apply against them”.

He listed some of the things users expect to be able to do with content found in catalogues (the most common actions are in bold):

**Annotate & share** • buy • cite • compare & contrast • count occurrence of idea • create flip book • create tag cloud • discuss • do morphology • elaborate • find more like this one • find similar & different • get • graph • highlight • map • print • rank • reformat • remove from my list • renew • save to my list • search content of • search my list • share • summarize • trace citation forward & backward • trace idea forward & backward • translate

Content generated by users in the form of blogs, links and tags can add enormous value and visibility to collections and since I wrote this presentation, the surprise value of microblogging (via Twitter and Yammer, for instance, off-shoots of teenage chat rooms) has become apparent. Its conversational immediacy removes at a stroke the notion that messages within organisations and between organisations and their users must be carefully managed, by cascade and privilege. Nonsense and rubbish is swiftly identified and ignored: new concepts of etiquette and protocol establish a degree of conformance and acceptable behaviour.

The implementation of so-called Web 2.0 applications into British Library business has been surprisingly swift, its benefits quickly understood. Training is barely necessary: the joy of almost all of these applications is that there are seldom any learning curves to negotiate. You open them up and it is immediately clear what you need to do. It is more a case of being aware and finding the right set of social networking tools for you and your audience. A case in point: I wanted to find a way to create a social networking tool that would enable audiovisual archive professionals to connect with users, and vice versa. A page I put on Facebook in December 2007 languished unnoticed for almost a year. Towards the end of last year a recommendation in Educause [http://www.educause.edu/] led me to Ning. Resources for Studying Sound Recordings was created in about fifteen minutes: dozens of people signed up within a fortnight and after five months there are over 200 members who are free to add their own content, form their own groups and publicise their own activities. Its continued success and relevance will depend on the degree of interest it manages to maintain and the extent of the collaboration.

Digital literacy

This is a phrase encountered frequently and has several meanings. If taken to mean 'I can use Facebook and know how to write a blog and contribute to a wiki' then what are the skills that need to be taught and learned?

On another level it equates to a requirement commonly seen in job applications since the mid 1990s - IT skills. The article in Wikipedia begins with a recommendation that it be merged with the earlier article about computer literacy. It proceeds with the following useful definition:

**Digital literacy** is the ability to locate, organize, understand, evaluate, and create information using digital technology. It involves a working knowledge of current high-technology, and an understanding of how it can be used. Digitally literate people can communicate and work more efficiently, especially with those who possess the same knowledge and skills. Certifications are available to determine if a person is digitally literate.

Among such certifications is Microsoft’s on-line Digital Literacy Curriculum in five courses, which starts from the basics of computer literacy:

- Computer basics
- The Internet and the World Wide Web
- Productivity Programs
- Computer Security and Privacy
- Digital Lifestyles

The last of these, 'Digital lifestyles', looks at how digital audio, video and photography are 'shaping the world we live in', creating 'new career opportunities'. Another definition of Web 2.0 sees it as the addition and proliferation of audiovisual applications, such as YouTube, GAUdi and Audiobook, and a whole generation is emerging from higher education into the job market with a different understanding of how the world works as a result of the reduced dependency on teaching by narratives constrained by words on paper and fluency with AV formats that have had their professional aura stripped away by digital.

To paraphrase David Weinberger (*Small pieces loosely joined*) the Web is a space that has no natural boundaries: it is an artificial space that is creating itself and adding new value to sense-making and knowledge through being able to accommodate and organize many views and positions through devices that enable fast sharing and exchange, devices that are increasingly mobile and multi-functional (think i-Phone, not PC). People are carrying around very large personalised collections - their digital lives. Libraries and archives will need to find ways to allow those devices and personalised collections to mesh with their own systems and collections. A phrase often quoted at the second Unlocking Audio conference (London, March 2009) was "if it [content] doesn’t spread, it’s dead".

Change management

It takes a persuasive thinker to make sense of new situations and show others the way. Those 'others' will follow if it makes sense to them as well. In order to ensure that libraries and archives remain relevant, those in positions of influence in our organizations and in our Association must therefore:

- identify the best practice and the best policies;
- mobilise these quickly and globally using the power of the Web.
Professional associations, such as IASA, are well-placed to help this come about – the TC series being an excellent example of this in practice. As for the future of services to users and ensuring our organizations remain relevant, I have taken note of much of what Charlie Leadbeater has been saying\(^9\) and was delighted to have persuaded him to take part in the Unlocking Audio conference in March, where his message to delegates could be summarised as ‘be an ingredient’, by which he meant that services and resources should be co-created – users become co-producers and contributors. This will mean new roles for professionals – ensuring content expertise is closely allied to technical/IT skills when designing services and that support is available for inter-disciplinary research and collaborative working. The tone of this collaboration is personalised and conversational, not corporate and prescriptive.

This kind of thinking and capability is beginning to emerge in our profession. It needs to find a new confidence that can help it provide a lead rather than react to the herd. It needs to realise that society is headed in its direction (Here comes everybody). To paraphrase Charlie Leadbeater: we are all becoming archivists, creating, storing, retrieving, recommending material.\(^10\)