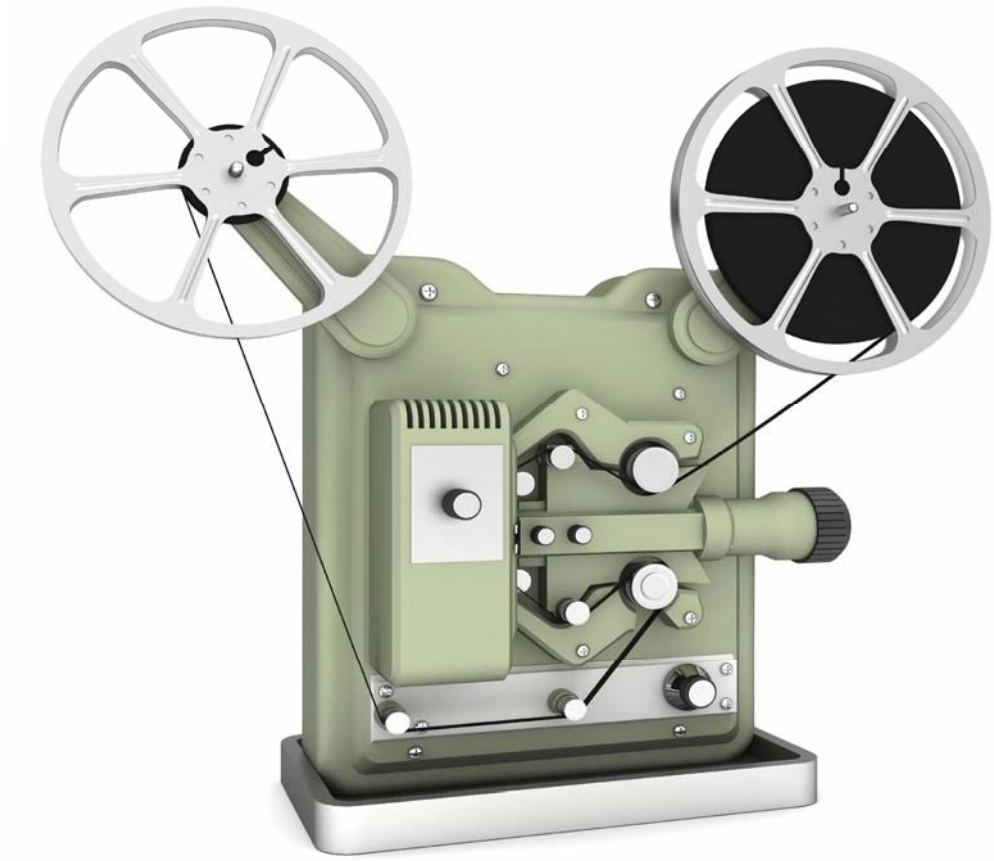
KEEPING AUDIOVISUAL CONTENT ALIVE

PRESTO CENTRE

Tutorial: Making a preservation strategy



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Introduction

Your collection strategy tells you where your collection is going in the long run, i.e. what it will contain. To create a good preservation plan, you need to set up a preservation strategy that feeds into these long-term plans for your collection. This high-level preservation strategy defines what needs to be done, by when it needs to be done and how much it will cost. This document is concerned with the first three of these steps; we treat the cost issue in separate tutorials and tools, all available on the PrestoCentre web site.

To determine what is in your collection, you need a collection map. This describes the content itself, the media upon which it's stored, the condition of those media, the storage facilities and the metadata systems upon which access depends. This map can be made using the document 'Mapping your collection". This guide assumes you have a map of your collection to work with.

For the preservation strategy, the issues are sequence and timescale. All elements in the preservation map that need attention are put in a priority sequence – and time information is added according to how long you want the work to last, or how long the funding lasts, or how long the material itself will last.

The collection map and prioritisation allow an archive to define its overall preservation strategy, and an overall, multi year plan defining the targets of migration to digital formats.

Successively, the operational aspects of preservation are considered in a preservation plan, by focusing on the details of how preservation will be done on a day-to-day basis.

1. Strategic options

A preservation strategy does not have to be complicated. There are really only two options:

1. Conservation;

2. Preservation by transfer to a new carrier.

The requirements for conservation are the first consideration. Think of condition, format, accessibility, and the future perspective for all these. What are absolute necessities before conservation without other forms of preservation is an option?

There are three possible reasons for moving from old to new media:

1. The condition of the current material forces action: this could be physical damage, or chemical processes;

2. The format is no longer convenient to use; it is obsolete or soon will be obsolete;

3. There is a pressing case for adopting digital technology, to improve services and reduce maintenance costs.

For items that have passed beyond the conservation stage, decisions need to be made on when to take action and what specific action to take.

A preservation strategy is simply a schedule of actions. Every type of content in your collection map should have a place in the schedule, showing what action is being taken – and when the decision will be reviewed.

For the preservation strategy, the issues are sequence and timescale

2. Priorities

When thinking of how to fit the preservation strategy in your general collection strategy, you need to set priorities in preservation. Why do you want to preserve your collection? And what are your long-term goals? Think of the following points:

- **Business priorities**
  What are your business activities? Preservation decisions should be about purposes, not about media. Fundamentally, the goal is preserving access, and so it is highly relevant to ask what kinds of access already take place. Who uses the collection, what parts do they use – and what would you the collection manager want to see for future access?

- **Technological priorities**
  If there are areas in the collection that have to deal with format obsolescence, it could become quite necessary to act quickly and preserve those. This should be integrated in your preservation strategy.

- **Physical priorities**
  In the collection map, these priorities are shown in the condition assessment part of the map. For both format obsolescence and material degradation, the priorities for preservation work change over time – so planning has to foresee the point at which obsolescence or degradation become very high priority.

- **New business opportunities**
  This area could be essential, because it could be the prospect of new services that opens the door to new funding. Certainly it's a lot easier to raise funds when describing access and new forms of access – than when describing old material and forms of damage to old material.

Audiovisual collections are in danger of becoming inaccessible if they're not preserved, and priorities depend on the circumstances of your collection. Transferring to new carriers isn't necessarily a priority until the old ones are in danger of becoming obsolete or degraded. And if the carriers are in danger, preserving your objects is the sole priority, and finding new markets could become less important.

3. Selection

In general it is not possible to analyse the programme material of every item in the archive. This typically leads to several approaches.

- A 'mass preservation' strategy is adopted whereby as much of the archive as possible is preserved. The 'cost per item' for this approach is low since economies of scale can be created, and hence the 'cost per use' of preserved items is also as low as possible;

- Preservation is done 'on demand', i.e. items are only transferred when they are requested for use. This approach can appear attractive, however, the cost per item of digitisation on demand is higher than a 'batch' approach;

- General areas of content are identified that have immediate business value or are expected to have business potential, or which are at the most immediate risk of loss Preservation then targets these areas in preference to other parts of the archive;

- Other measures such as 'archive usage' can be used to target preservation at the parts of the archive that are statistically more likely to be requested in the future.

A mass preservation strategy is mainly interesting if a) there is a lot of content to preserve and b) there is a large budget for preservation. For instance, the Netherlands Institute for Sound and Vision is encoding a enormous part of it's audiovisual collection to a format that can be preserved for the long term. During the 'Images for the Future' project, a total of 137.200 hours of video, 22.510 hours of film, 123.900 hours of audio, and 2.9 million photos from the Sound and Vision archives will be digitized to become 15 PetaByte of data, disclosed through various services. The file

formats chosen are all suited for preservation, reuse and can be transcoded to access formats.
The main goal of the project is realising maximum accessibility to the audiovisual material for the targeted user groups (educational institutions, the general public, and the creative sector). To reach this goal, Images for the Future is developing and offering innovative services and applications.
As the three large archives are working together, the project can be set up and executed cost efficiently. An already existing infrastructure is used, saving money as well. If the preservation budget and scale of the collection to be preserved are smaller, mass preservation becomes less interesting.

Preservation on demand is done very successfully by the Amsterdam City Archives. Their collection is growing rapidly and contains over 5.000 different archives,15 repositories, 91.000 prints, maps and drawings, 824.000 photo's, 372.000 reference books and 16.000 video- and audio tapes. The visitors to their physical archive were declining, whereas web visitors inclined. To attract more visitors to the physical archive, the City Archive adopted a new strategy and moved to an attractive building in the city center. The collection database was made available on the web. As digitising the whole collection would take approximately 406 years, that was not an option. The archive therefore decided to digitise those items that were asked for.
The user can place a request for scanning. In principle all requests are honored, unless the item cannot be digitized for material reasons. Scanning costs are low, and get lower once more needs to be digitised. This is attractive for users. The digitised items are made available for other users as well. As long as digitising can be done very quickly and for low costs, preservation on demand can be very successful.

If you're not able to digitise quickly and for low costs, preservation on demand is not so attractive either. Targeting preservation at a specific part of the collection is the best strategy in this case.

The content of an archive can be grouped into categories, and some measure of business value or importance can be attached to each of these categories. Defining content categories and then ordering them in terms of importance is a useful first step in determining what to preserve and what not to.

Preservation decisions should be about purposes, not about media.

Classifying content into categories, e.g. genre, and using statistical measures such as historical usage can be used to make it easier to apply this approach across a large number of items.
Further refinements are made to take into account the likelihood (or knowledge) of exceptional items in the archive that need special consideration.
The result is an estimation of the number of items that are targeted for preservation.

4. Assessment of conditions

For large audiovisual archives, the assessment of the condition of the items in an archive typically begins with an audit of what carrier types are present. The condition of items for each of the carrier type is then determined, often through physical examination of a subset of items of that carrier type.

This information is vital for cost estimation since the cost of digitising clean and playable material differs significantly from that of damaged items; for instance, the BBC estimate that it costs 5 times more to transfer an item if it doesn't playback first time.

Assessment of the overall condition of an archive based on sampling of the contents obviously depends on extracting a representative sample from the collection. Condition of items is typically classified into several levels, for example the five stages of nitrate film decay or the four levels of acidity

indicated by A-D strips for vinegar syndrome monitoring.

If the sample is representative of the archive as a whole, the ratio can be used as statistical predictor that gives the probability of an item taken from the archive being in a particular condition.
The figures derived from a sample are a snapshot of the current state of the archive. The real challenge comes when planning a preservation project in advance, perhaps over ten years, when a projection is needed of what the archive condition will be as a function of time.

Items in a collection might move from one condition to another over time for varying reasons. For example, the process might correspond to the effects of degradation due to wear and tear. Items move from playable to dirty as a result of initial use.
A statistical degradation model for a specific archive, built up from sampling over a period of time, would be used to populate this model for a specific archive.
Some information on the general rates of decay at a broad level is available, and these figures can be assumed to hold over the lifetime of the planned preservation project. At first sight it appears to be a big assumption that the overall decay rates can be approximated as being constant over time, especially for a long period. However, it is possible that this assumption does hold for large archives.

5. Documentation

An archive travels on its catalogue. Documentation enables access. Without documentation material cannot be found, and so material will not be used. Any collection that intends to be of use – to a business or to the public at large – can only achieve its potential if adequately documented.
Digitisation only emphasises that fact. With an analogue collection there was still some chance of 'walking around the shelves' to look for something. In the digital world – certainly in the mass storage world – there are no shelves, and documentation is all.

The collection strategy defines goals for access, so when considering documentation, the issue is making sure the documentation supports the planned access. For instance, public access probably implies a need for simple categories or keywords, and a free-text search engine to back up subject-based retrieval.

A preservation strategy should include documentation, and the following steps are suggested:

- Survey (map) of existing documentation
  As with the physical collections, it is important to know the status of the documentation. If there are gaps, they will have to be filled as part of digitisation – because an undocumented digital file will be completely pointless and unreachable.

- Define goals for the documentation system:
  Documentation gaps need to be filled, but there may be other goals:

    - Getting all documentation into a computer database

    - Adopting one standard for all documentation

Digitisation tends to centralise content, especially if a mass storage approach to digitisation is used. It becomes increasingly inefficient and expensive to have multiple catalogues attempting to point to various kinds of data files – which historically may have distinct physical media with distinct catalogues. As the distinct physical media disappear, so do all arguments supporting distinct catalogues, or methods of cataloguing.

The best guidance for working out how to use documentation to support and achieve desired access, is to look at successful sites.
PrestoSpace has done a review of professional systems for audiovisual documentation, and of international standards: Analysis of Audiovisual Documentation [see references].

6. Planning stages

For any sizable project, the work will extend over years. This means that the strategy will need to extend over years also. The obvious approach to planning is to divide the archive strategy – and the preservation strategy – into stages. One typical set of stages is:

- Immediate steps (1-2 years);
- Mid-range steps (3-5 years);
- Long-range steps (beyond 5 years);

For instance:

- Start collection website: immediate;
- Put catalogue online: immediate;
- Clear selected content for public website: mid-range;
- Align catalogue with standards for a common portal: midrange
- Have all digitised content available on website: long range

As a brief example, below a possible strategy for the B&W plus Ektachrome film collection.

The work that remains is to make another sort of map: a preservation plan covering the entire time necessary to deal with all your preservation needs. This can range from a 6-month plan to transfer a small amount of material from an old to a new format, to a 400-year plan for the storage, restoration and re-mastering (onto film) of an entire film collection.

Preservation Strategy: BBC film

Type of material	Condition	Action needed	Timescale	In-house or contracted?
16m mag sound track - masters	vinegar syndrome!	digitisation to file formats; destruction of originals	2 years starting immediately	Contracted; checking in-house
16m mag sound track - duplicates	vinegar syndrome!	destruction (after respective masters are transferred and checked)	2 years starting immediately	In house
16mm Ektachrome	some colour fade	Access copies made on digibeta and DVD	Starting when budget allows: in 2 years	Preparation and checking in-house; telecine contracted out
16mm B&W film negatives	good	Maintain in appropriate storage conditions; review condition at intervals	Review plan and condition every five years	Review is done in-house
16mm B&W film prints	fair: have been circulated	Maintain in appropriate storage conditions	Keep until preservation actions taken on negatives	Storage is in-house

References

- Moreira, F.,Analysis of Audiovisual Documentation, 2006, PrestoSpace http://www.prestospace.org/project/deliverables/D12-5.pdf Accessed February 9, 2011

- To read more about Images for the Future, visit the website at http://imagesforthefuture.com/en

- To read more about the Amsterdam City Archives' strategy, view their website: https://stadsarchief.amstedam.nl/english/archives_database/introduction/index.en.html

- To read about a large scale, distributed content mapping and inventory project, see the American Archive Content Inventory Map: http://americanarchiveinvetory.org/dashboard/map


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SEVENTH FRAMEWORK
PROGRAMME