Strategies for Audiovisual Digitization Projects

Effective Outsourcing with Audiovisual Digitization Service Providers

Wednesday, June 14, 2017

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Background
Fig 1. “Degradation”

Fig 2. “Obsolescence”
Agenda
Agenda

Lightning talks

Moderated discussion
Agenda

Lightning talks

Moderated discussion

Q & A
Bay Area Video Coalition

Effective Outsourcing with Audiovisual Digitization Service Providers

Digital Library Federation Webinar, Wednesday, June 14th
Kathy Rose O’Regan, Preservation Manager, Bay Area Video Coalition
BAVC - A Bay Area Community Hub

- Operational for 40 years +
- Non-Profit
- Bay Area community hub
- Focus on education, content creation, preservation
- Inclusive, diverse, welcoming and
BAVC Preservation

- Fully monitored transfers
- Archivist staff members
- Non Profit
- 23 Years of proven experience
Who Is BAVC Preservation?

• Part of BAVC’s Engagement Department
• Small, passionate staff
• Three full time staff members
• Two contracted preservation technicians
• One on call equipment technician
Services We Provide

- Digitization of a wide variety of videotape formats
- Digitization of limited audio formats
- Collection assessments
- Tape cleaning and baking
- Preservation consultations
How We Insure Quality

• Staff trained in archival and preservation best practices
• Wide selection of professional decks
• Time base correctors and analog and digital scopes used to ensure transfers of the highest possible fidelity
• Work with dedicated maintenance engineers
• Extensive Quality Control
Your Request for Proposal

• Clarity
• Specificity
• Know your needs
• Know your collection - and its condition!
How To Help Your Vendor

• Maintain open lines of communication with your vendor’s point of contact throughout project

• Ask as many questions as necessary to ensure project workflow is successful

• Ask for examples of vendor work previous to beginning of project
Helping You Over Hurdles

• Dedicated archivist staff members
• Personal client interaction
• Grant writing professionals on staff
• Assessment and advice
BAVC Tools (Freeeeeeee!)

- QC Tools
- SignalServer
- AV Artifact Atlas
- AV Compass
THANK YOU!
Film Scanning at
The MediaPreserve™

Diana Little
Head of Film Preservation
little@themediapreserve.com
Formats

8mm
Super8
16mm
35mm
Formats

8mm  9.5mm
Super8  17.5mm
16mm  28mm
35mm  70mm
Workflow

Or, how a film becomes a file
1. Check in
2. Inspection & prep
3. Cleaning
4. Scanning
5. Post production
6. QC & transcoding
7. Deliverables build... & deliver!
Equipment
Equipment

Prep
Equipment

Prep
Equipment

Cleaning
Equipment

Scanning
Equipment

Scanning
Equipment

Scanning
Post Production
Post Production

Cropping
Post Production

Color Correction
Audio & Video

Multiple Ingest
Audio & Video

Multiple Ingest
Checksums
QC
Derivatives
Metadata
Packaging and delivery
Thanks!

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www.themediapreserve.com
ABOUT MEMNON ARCHIVING SERVICES

Memnon offers a range of services to **digitize, restore, preserve and provide access to audio-visual** and cultural archives. We offer on-site, out-sourced or hybrid services to meet our clients needs.

Our unique workflow system is designed to **ensure quality** while allowing **large volumes** of materials to be preserved. Memnon’s services are suitable for a wide range of archive owners – from cultural institutions, libraries, universities and broadcasters.

Memnon has accrued nearly **20 years of experience** working with audio-visual technology throughout in Europe, North America, Africa and the Middle East. Our workforce has evolved into a multi-disciplinary team of engineers, computer specialists, meta-data experts and project managers.

**A Sony Company since 2015**, Memnon now has access to large quantities of video tape players, spare parts and technical knowledge only available to Sony Group companies.
Sony and Memnon – a 100% Sony Europe Company

**Sony**
- World Leading Broadcast and Audio Visual Technology Firm
- Original Manufacturer of Audio and Video Equipment and Tape Media with unique accumulated Know How and Capabilities
- Strong Capabilities in Managing and Delivering Large Scale Projects globally
- World-class Industrial Process Engineering and Quality Management Methodologies
- Access to broad range of Technologies, Maintenance and Support, Spare Parts, Engineers

**Memnon**
- World’s foremost audio-visual digitization service provider dedicated to mass digitization
- Tens Millions of items digitized in all formats and unique expertise in handling archival material
- Over 100 contracts in 20 countries delivered
- Global Pool of Heritage Players and Equipment for nearly all AV formats
- Unique and proprietary Production Management system for Mass Digitization
- Member of Professional Archive Bodies and Organizations incl. IASA, FIAT/IFTA, ESTA, FIAF, AMIA, AIBM, ARSC
- First Accredited Premium Member of PrestoCentre
A WIDER GLOBAL NETWORK

Sales & Client Teams in Brussels, Basingstoke, Bloomington, Miami, Dubai & Singapore

- Dedicated Sales & Client Teams
- Memnon Delivery Sites
- On-Site Projects
- Headquarters

Plus On-Site Customer Projects: Qatar, SABC in South Africa and new client sites in 2017

US, Indiana
- Memnon USA, Main Delivery site for North and Latin America

Belgium, Brussels
- Memnon Headquarters and Main European Delivery Site

UAE, Dubai
- Memnon @ Sony Professional Middle East in Dubai (currently Audio, Limited Video capacity)

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Memnon helped a wide range of customers with Prestigious Archives and Invaluable Content to digitize their archives. Clients include world renowned National Archives, Broadcasters, Organizations etc.

Example of Clients

- United Nations International Crime Tribunal 62,000h Audio & Video
- Portuguese Radio & TV 44,000h Audio
- Finish National Audio Visual Archive 25,000h Video
- International Olympic Committee 30,000h Audio and Video
- Belgian Francophone Radio/TV Archive 72,000h Audio and Video
- Swiss Radio & TV 86,000h Audio & Video
- VRT Belgian Radio & TV 58,000h Audio
- Belgian National Library 375,000h Audio & Video
- French National Audio Visual Institute 30,000h Audio and Video
- BBC 23,000 Tapes
- Danish Radio 350,000h Audio
- Imperial War Museum London 30,000h Video
- Public Broadcaster in Qatar 34,000 Films
- AVT/Sveriges Radio Förvaltnings 100,000h Video

Over 2.5 mil hours and 5 mil carriers of content digitally preserved

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MEMNON ARCHIVING SERVICES, BLOOMINGTON

- Located in the Indiana University Innovation Center, a Silver LEED rated building
- Co-located with Indiana University’s MDPI studios
- Memnon space completely remodeled in 2015
- Memnon installed more than 30,000 feet of CAT 6E, 10,000 feet of Hi Def COAX, 10,000 feet of balanced audio cable
- The facility has three sources of power with a dedicated 50 kVa Power Distribution Unit for all digitization equipment
- Multiple data networks including two high speed 10 Gbs fiber optic connections
- Rolled marmoleum floors to reduce the potential for static electricity and provide a clean, dust free environment
- Multiple studios are designed to be easily repurposed and allow allocating the required number of ingest lines for a given format depending on volumes and time constraints.
MEDIA DIGITIZATION AND PRESERVATION INITIATIVE
INDIANA UNIVERSITY

MDPI PROJECT

• Completion by 2020
• Over 280,000 various A/V media carriers, plus 25,000 reels of film
• Production floor: 17,000 sq. ft.
• Staff of 50
• Current peak production (with further room to expand):
  • 616 tapes/media carriers digitized/day
  • 27 TB/day

216,273 items to date
MEMNON BLOOMINGTON FORMATS

We currently digitize a range of formats and are constantly adding new ones as the need arises from our customers. We can also handle delicate or rare formats in collaboration with our partners at MDPI.

We fully customize to client specifications but typically deliver back a package of files to include a preservation master, mezzanine, access files with embedded metadata, plus XML and QC files.

**Audio**
- ¼ inch reel to reel
- Cassettes
- DAT
- CD
- Grooved media (LP’s, 78’s, 45’s, transcription discs)

**Video**
- 1 inch open reel
- Betacam family (SP, SX, Digital)
- ¾ inch U-Matic
- VHS
- DVCAM
- D2
- miniDV
- Hi8

**Film**
- 16mm
- 35mm
MEMNON’S CHOOSES THE RIGHT PROCESS FOR THE MEDIA

Unitary Process (1 at a time)
- 78 rpm: short tracks, needle and amplification curve selection, possible needle jumps
- Complex: 2” quad video tapes, film scanning, any items in bad conditions
- Very short tapes

Low Parallel Processes (3-6 depending on format)
- Good quality ¼” tapes with standard speed and track configuration
- Average quality video cassettes (U-matic)

High parallel processes (depends on formats but can be 8 to 32, or use of robotics)
- DAT
- Average to Good Quality Audio Cassettes
- Good Quality Video Tapes- BetaSP, VHS
OUR SERVICE FLOW & TOOLSETS

MEMNON TOOLSETS

Key Memnon tools developed by our in-house R&D subsidiary specifically for large scale digitization:

- Memnon Workflow and Production Management System (Memnon PMS)
- Memnon Cataloguing Platform (Catalyst)
- Memnon Ingest (MIS)
- Memnon File Management system (MediaFeeder)
- Memnon IPI Manager for Metadata generation and segmentation (IPI)
- Memnon ScanManager for workflow logistics
### 5 LEVEL QA/QC PROCESS

Standard Levels of Quality Control for Volume Digitization

<table>
<thead>
<tr>
<th>QA/QC</th>
<th>Process Stage</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Preparation</td>
<td>• Visual inspection during check-in</td>
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<tr>
<td></td>
<td></td>
<td>• Visual inspection during carrier preparation</td>
</tr>
<tr>
<td>Level 2</td>
<td>Digitization</td>
<td>• Machines are adjusted for each carrier</td>
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<tr>
<td></td>
<td></td>
<td>• 100% of files checked by digitization tools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Flags/levels generated by equipment</td>
</tr>
<tr>
<td>Level 3</td>
<td>File Analysis</td>
<td>• Proprietary Tools and Workflow integration, e.g. Baton or BAVC QC tools for Video and NOA or Quadriga for Audio</td>
</tr>
<tr>
<td>Level 4</td>
<td>Post Digitization</td>
<td>• Operators check equipment generated flags</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Operators look for abnormalities</td>
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<tr>
<td></td>
<td></td>
<td>• Operators can flag a file for an additional check by the QC specialist (PBC)</td>
</tr>
<tr>
<td>Level 5</td>
<td>Final QC and Statistical Control</td>
<td>• Check all operator flags - PBC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Check all equipment generated flags</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Check random samples using AQL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Check metadata</td>
</tr>
</tbody>
</table>
WHAT DOES PARALLEL TRANSFER LOOK LIKE IN ACTION?

Example: Grooved Media
Disc check-in
Re-sleeving
Visual inspection
WHAT DOES PARALLEL TRANSFER LOOK LIKE IN ACTION?

Example: Grooved Media

2nd Visual Inspection

PAM Tracking

Ultrasonic Cleaning
WHAT DOES PARALLEL TRANSFER LOOK LIKE IN ACTION?

Example: Grooved Media

4 Digitization Work Stations

Multilevel Quality Assurance and Quality Control:
Combines human QC with automated and semi-automated QC
THANK YOU

Please reach out to us.

We are happy to share information about evaluating your media, best practices and provide quotes for services.

Jan Jones, Business Development Coordinator
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(812) 856-6882

Memnon.com

Meet with us during these upcoming conferences:

American Libraries Association
Chicago, June 22

IASA
Berlin, September 17

DLF/NSDA
Pittsburg, October 23

Association of Moving Image Archivists (AMIA)
New Orleans, Nov. 29
NEDCC is a nonprofit that serves collections-holding institutions nationwide by offering conservation treatment, digital imaging, audio preservation, assessments and consultations, training programs, disaster assistance, and free web resources.
Audio Preservation Services

• **Conservation/Preservation**
  - Cleaning, re-housing, repair
  - Digital imaging and conservation of original paper-based containers and related materials

• **Consulting**
  - Collection/item-level level assessments of audio holdings/carriers
  - Workshops, webinars, “preservation leaflets” on audio preservation

• **Digitization and Reformatting**
Audio Preservation Services: Digitization

**Magnetic and Optical Audio**
- ¼” Open-reel audio tape
- Compact cassette tape
- Digital Audio Tape (DAT)
- Compact Disc (CD)

**Grooved Media**

*With IRENE*
- Lacquer disc
- Aluminum transcription disc
- Wax cylinder
- Tin foil
- Other rare formats

*With Stylus*
- Metal master disc
- Long-play (LP) vinyl disc
- Shellac disc
Non-contact approach

Able to digitize damaged, fragile media
Magnetic Audio

- 1:1 fully-attended transfers
- 100% quality control
- Fully-informed consent: cleaning, conservation and rehousing options
- Strict adherence to industry standards (IASA TC-04; FADGI)

**Good candidates**
- Important collections where “stakes are high”
- Fragile collections that are too risky to be transferred unattended
- Clients who have no time/staffing to completely listen to deliverables
How to Approach NEDCC

Call or Email!
  • Proposals are a consultation, not a price matrix

Physical examination or photos of carriers
  • Secure, climate controlled storage
  • No storage fees for pending projects
  • Packing and shipping tips on website

Inventory or summary statistics
  • We provide template with information we need to estimate cost

Website
  • “About Audio” and “Working with Audio Preservation”
  • Funding opportunities
Thank You!

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(978) 470-1010
@NEDCCInfo
Moderated Discussion
Moderated Discussion

“Need to know” vs. “Nice to know”
Moderated Discussion

• What type of information is required when I first reach out to service providers?
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- Format type(s)
- Length of time in hours / # of items
- Condition
- Deliverables
- Photos
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Parallel or 1:1 transfer?
Moderated Discussion

- What type of information is required when I first reach out to service providers?
  - Format type(s)
  - Length of time in hours / # of items
  - Condition
  - Deliverables
  - Photos

Parallel or 1:1 transfer?

What types of files?
- Preservation masters
- Production copy (mezzanine)
- Access copies
• What advice can you give re: seeking out and identifying the most “qualified” service provider?
• What advice can you give re: seeking out and identifying the most “qualified” service provider?

  • Best practices = compare 3 proposals
  • Do your homework: check relevant guidelines (FADGI, IASA, ...) for info on deliverables
• What type of infrastructure should my institution have in place before we seriously consider digitization of A/V assets? Is there a minimum viable digital preservation plan we should aim for?
Moderated Discussion

• What type of infrastructure should my institution have in place before we seriously consider digitization of A/V assets? Is there a minimum viable digital preservation plan we should aim for?
  • Storage
  • Fixity
  • Security
  • Metadata
  • File Formats
Moderated Discussion

• What are some strategies and/or important considerations for when I am prepping materials to go to service provider?
Moderated Discussion

• What are some strategies and/or important considerations for when I am prepping materials to go to service provider?

  • Manifest
Strategies for Audiovisual Digitization Projects

NEXT WEEK!

Low-Cost, DIY, and Community-Based Approaches to Audiovisual Digitization

Wednesday, June 21, 2017 @ 2 PM ET

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