

# Strategies for Audiovisual Digitization Projects

## Effective Outsourcing with Audiovisual Digitization Service Providers

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Wednesday, June 14, 2017

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# Background



*Fig 1. "Degradation"*

*Fig 2. "Obsolescence"*



Lightning talks

# Agenda

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# Agenda

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Lightning talks

Moderated  
discussion



# Agenda

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Lightning talks

Moderated  
discussion

Q & A

# Bay Area Video Coalition

# **bavc**

Effective Outsourcing with Audiovisual Digitization Service Providers

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Digital Library Federation Webinar, Wednesday, June 14<sup>th</sup>  
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**

A grayscale background image of a man wearing a Superman t-shirt, sitting at a desk and working on a computer. He is in a server room, with large server racks visible in the background. The image is semi-transparent, allowing the text to be overlaid clearly.

# **Your Request for Proposal**

- **Clarity**
- **Specificity**
- **Know your needs**
- **Know your collection - and its condition!**

The background of the slide features a faded illustration of three DC superheroes: Superman on the right, Batman in the center, and Robin on the left. They are standing together, looking forward. The entire slide is framed by a green border at the top and bottom.

# 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



## Resources

<https://bavc.org/preserve-media>

<https://github.com/bavc/qctools>

<https://github.com/bavc/signalserver>

<https://bavc.github.io/avaa/>

<http://www.avcompass.bavc.org/>

[https://archive.org/details/@bavc\\_preservation\\_dept](https://archive.org/details/@bavc_preservation_dept)

**THANK  
YOU!**

The logo for the Bay Area Video Coalition (BAVC) is centered on a light gray background. It features a grid of squares in a lighter shade of gray. Overlaid on this grid is the acronym "BAVC" in a large, bold, black, sans-serif font. Below the acronym, the full name "BAY AREA VIDEO COALITION" is written in a smaller, white, sans-serif font, centered within a horizontal band that spans the width of the text.

**BAVC**

BAY AREA VIDEO COALITION

# Film Scanning at The MediaPreserve<sup>SM</sup>



Diana Little

Head of Film Preservation

[little@themediapreserve.com](mailto:little@themediapreserve.com)

# Formats

8mm

Super8

16mm

35mm

# Formats

8mm

Super8

16mm

35mm

9.5mm

17.5mm

28mm

70mm

# Workflow

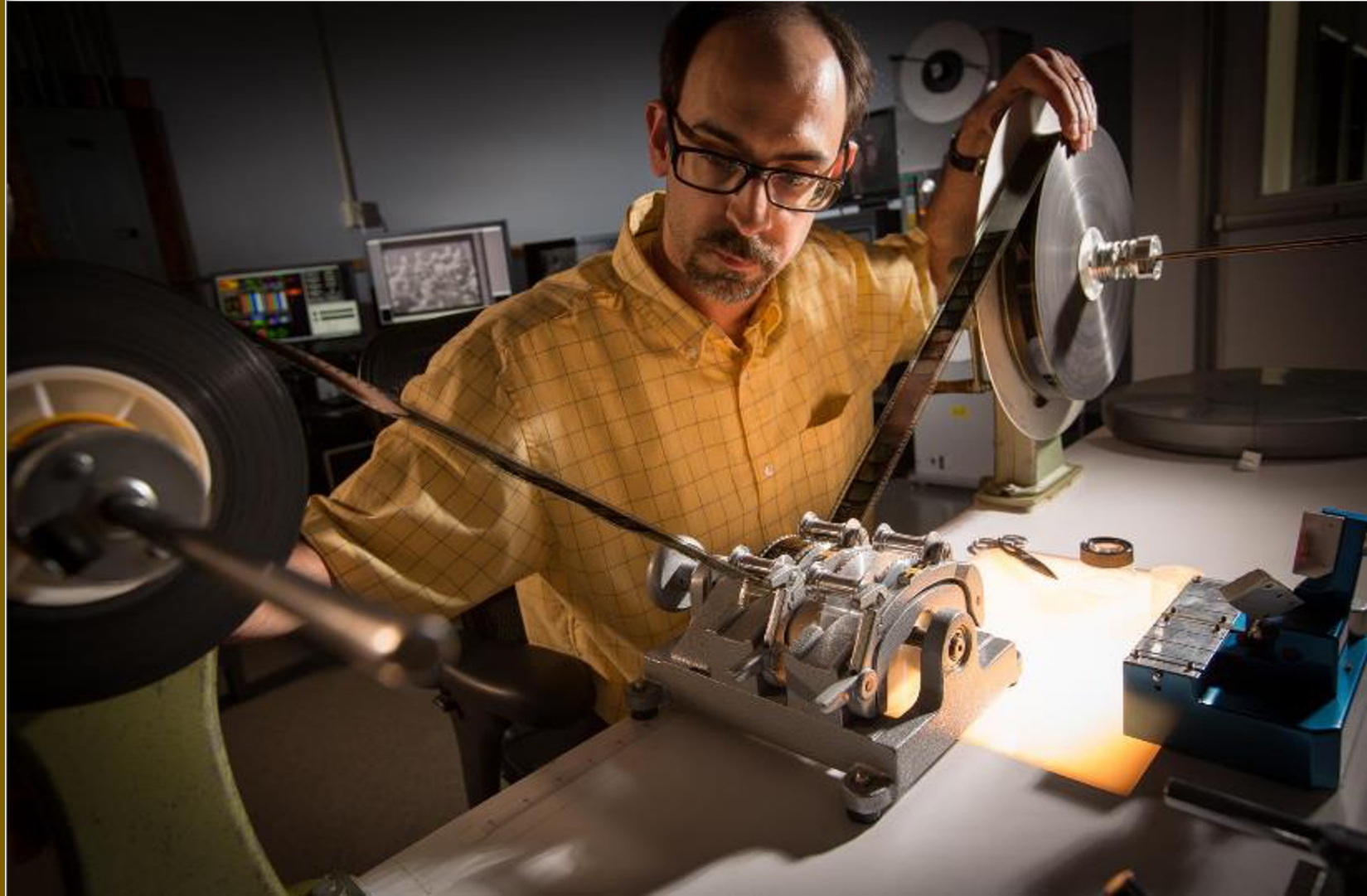
Or, how a film becomes a file

- 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!

The MediaPreserve  
111 Thomson Park Drive  
Cranberry Township, PA 16066

800.416.2665

info@ptlp.com

[www.themediapreserve.com](http://www.themediapreserve.com)



# Memnon Archiving Services

JUNE 2017



VIDEO, AUDIO AND  
FILM DIGITIZATION



OUTSOURCING & ONSITE  
MANAGED SERVICES



METADATA  
MANAGEMENT



MEDIA  
RESTORATION



CONTENT INDEXATION  
AND ENRICHMENT

# 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.

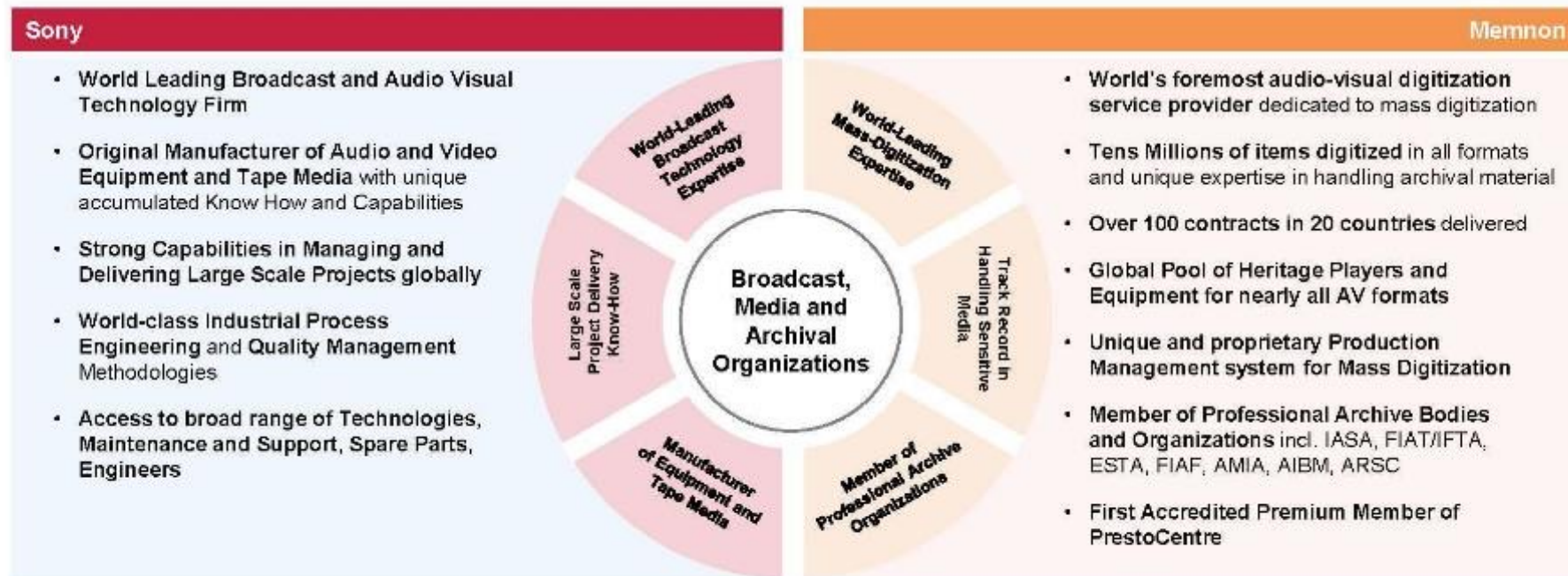
Our unique workflow system is designed to **ensure quality** while allowing **large volumes** of materials to be preserved. Memnon's services are suitable for a wide range of archive owners – from cultural institutions, libraries, universities and broadcasters.

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

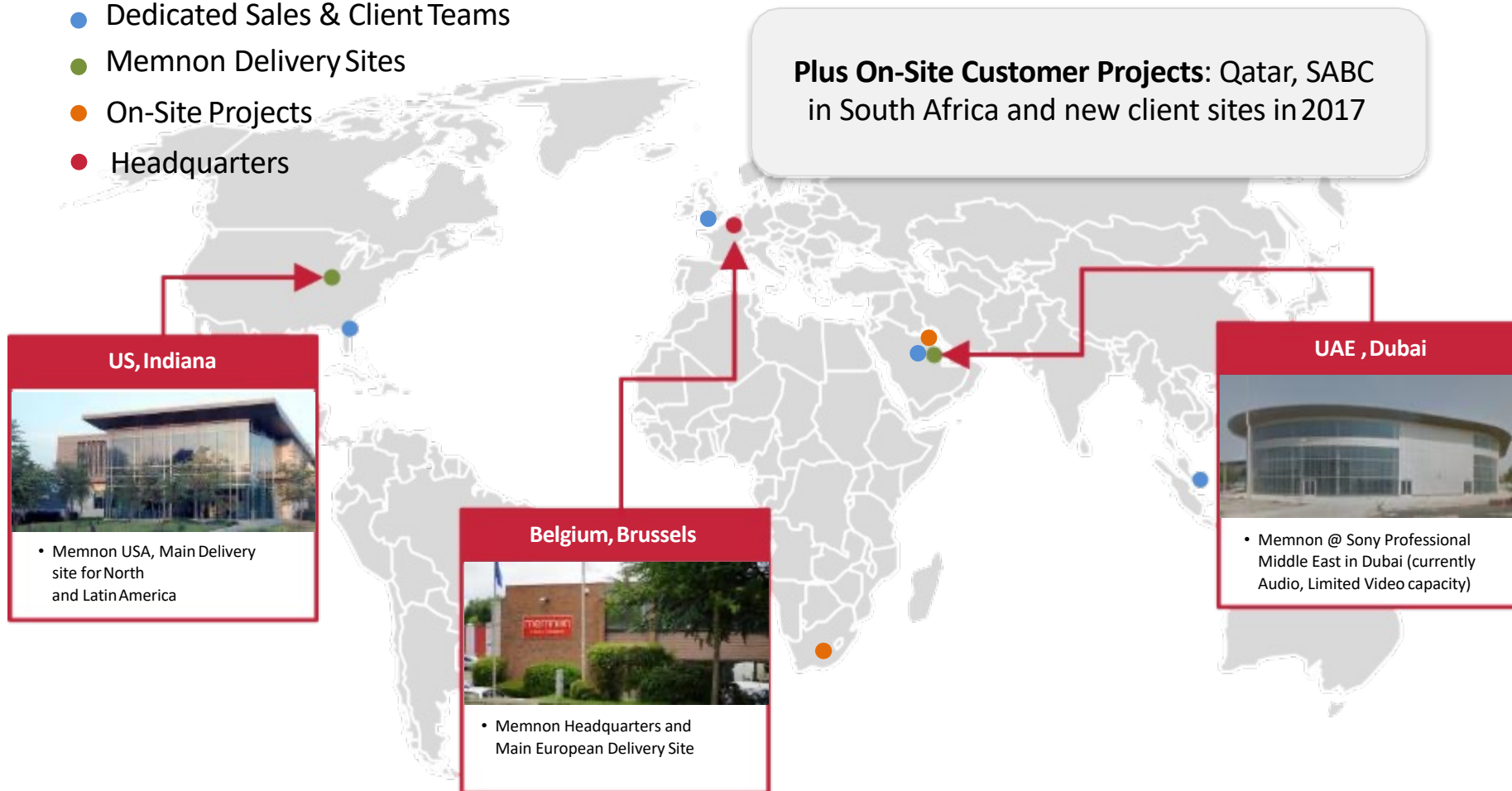


# A WIDER GLOBAL NETWORK

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

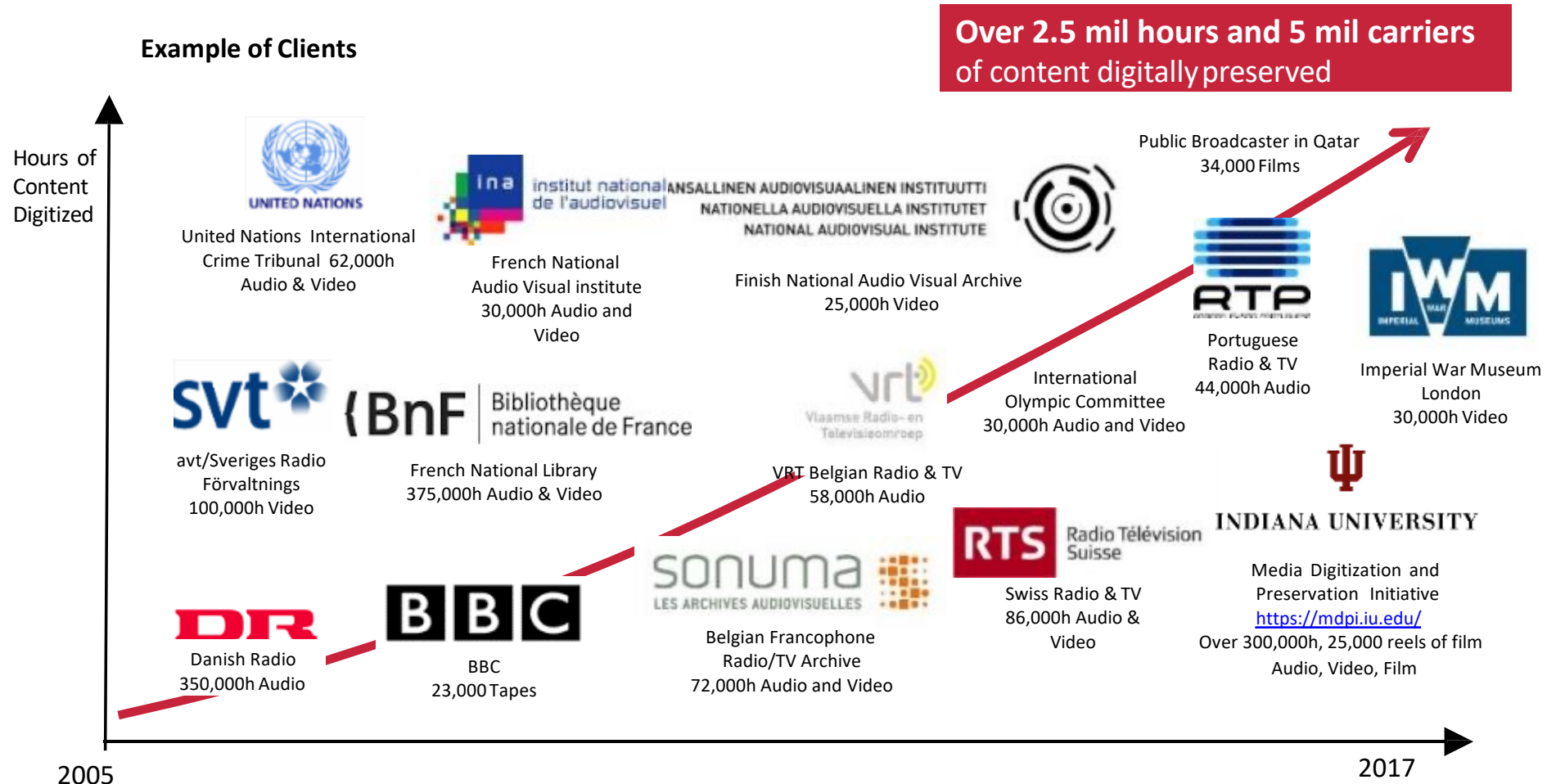
- Dedicated Sales & Client Teams
- Memnon Delivery Sites
- On-Site Projects
- Headquarters

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



# OUR EXPERIENCE: MEMNON'S TRACK RECORD

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



# 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

QA/QC	Process Stage	Details
<b>Level 1</b>	<b>Preparation</b>	<ul style="list-style-type: none"> <li>• Visual inspection during check-in</li> <li>• Visual inspection during carrier preparation</li> </ul>
<b>Level 2</b>	<b>Digitization</b>	<ul style="list-style-type: none"> <li>• Machines are adjusted for each carrier</li> <li>• 100% of files checked by digitization tools</li> <li>• Flags/levels generated by equipment</li> </ul>
<b>Level 3</b>	<b>File Analysis</b>	<ul style="list-style-type: none"> <li>• Proprietary Tools and Workflow integration, e.g. Baton or BAVC QC tools for Video and NOA or Quadriga for Audio</li> </ul>
<b>Level 4</b>	<b>Post Digitization</b>	<ul style="list-style-type: none"> <li>• Operators check equipment generated flags</li> <li>• Operators look for abnormalities</li> <li>• Operators can flag a file for an additional check by the QC specialist (PBC)</li> </ul>
<b>Level 5</b>	<b>Final QC and Statistical Control</b>	<ul style="list-style-type: none"> <li>• Check all operator flags - PBC</li> <li>• Check all equipment generated flags</li> <li>• Check random samples using AQL</li> <li>• Check metadata</li> </ul>

Full Integration of 3<sup>rd</sup> Party Industry Standard Tools



Proprietary Quality Management Tools



# WHAT DOES PARALLEL TRANSFER LOOK LIKE IN ACTION?

## Example: Grooved Media

Disc check-in

Re-sleeving

Visual inspection



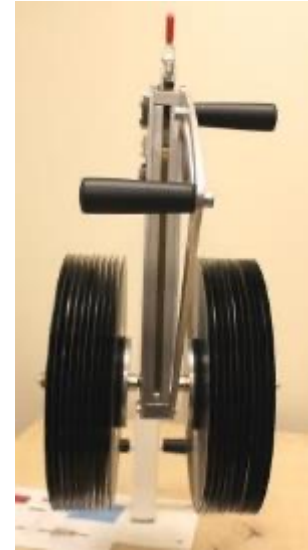
# WHAT DOES PARALLEL TRANSFER LOOK LIKE IN ACTION?

## 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

[jan.jones@memnon.com](mailto:jan.jones@memnon.com)

(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



NORTHEAST  
DOCUMENT  
CONSERVATION  
CENTER

Bryce Roe  
Manager, Audio Preservation Services  
[broe@nedcc.org](mailto:broe@nedcc.org)



**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

- 1/4" Open-reel audio tape
- Compact cassette tape
- Digital Audio Tape (DAT)
- Compact Disc (CD)



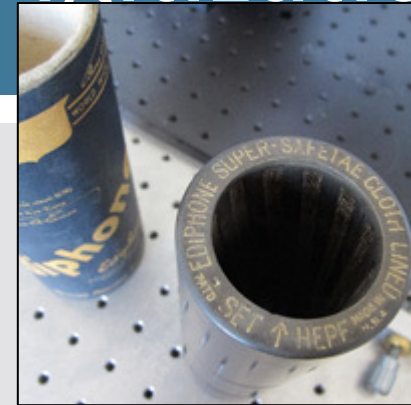
## Grooved Media

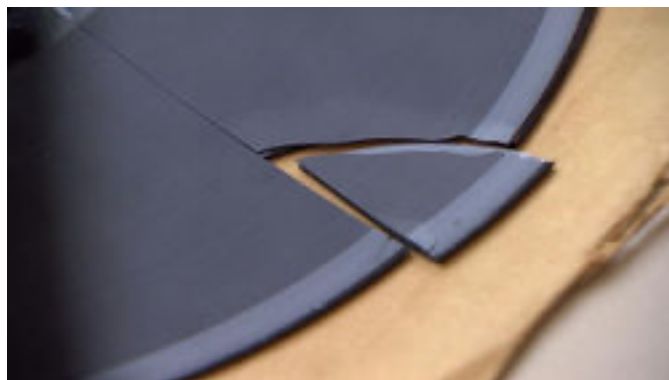
### With IRENE

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

### With Stylus

- Metal master disc
- Long-play (LP) vinyl disc
- Shellac disc

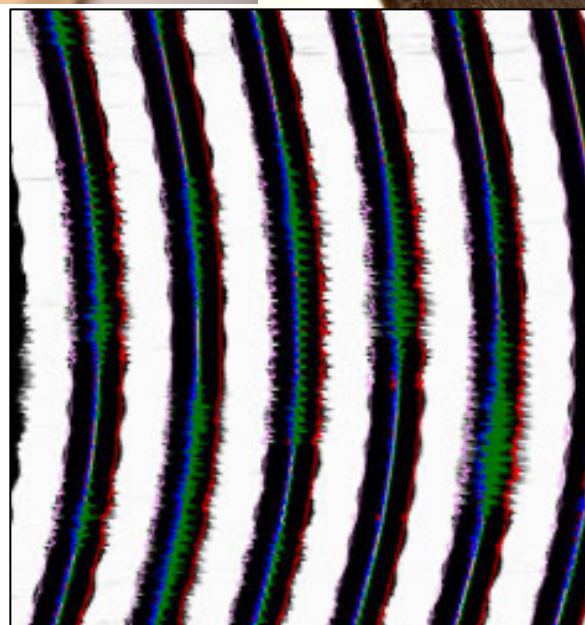




# IRENE

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

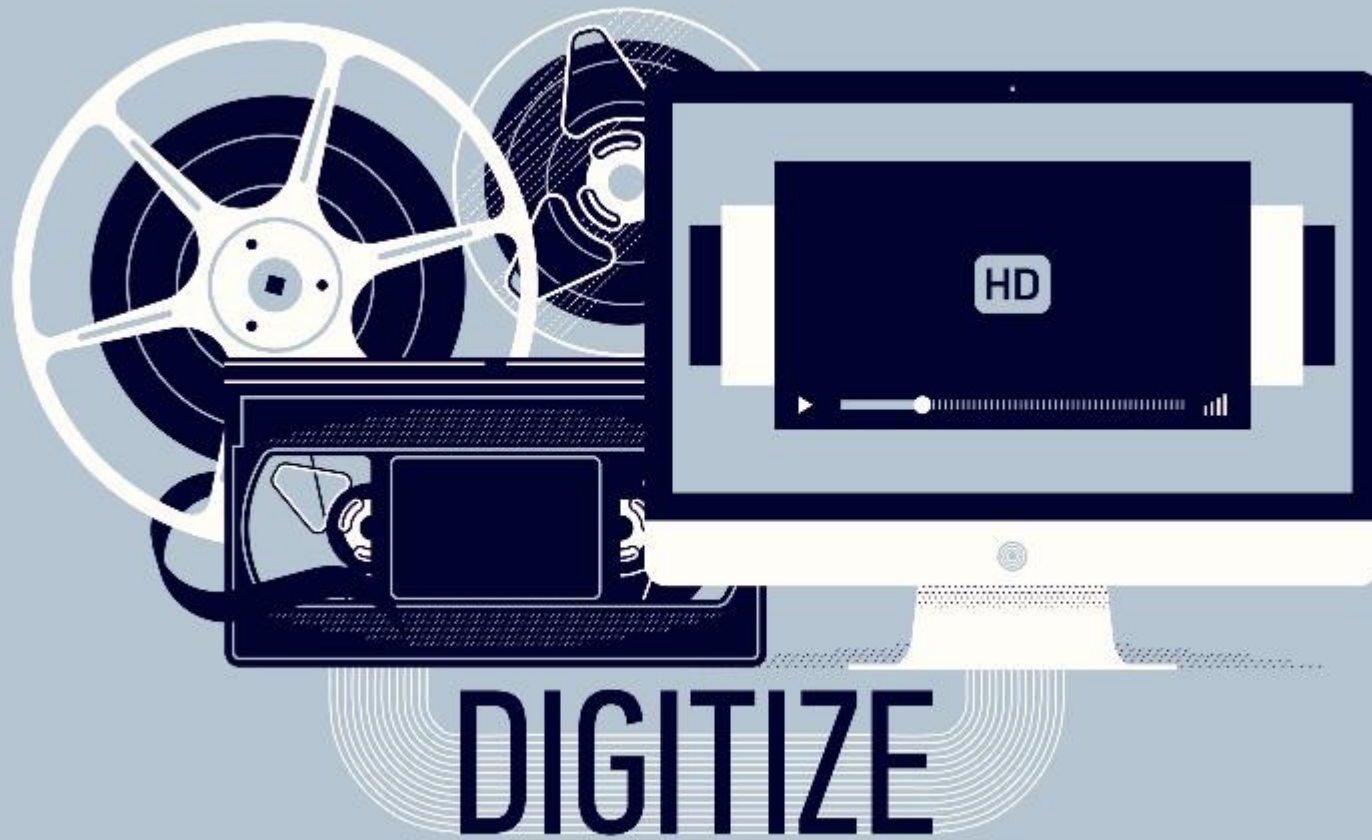
## **Website**

- “About Audio” and “Working with Audio Preservation”
- Funding opportunities

# Thank You!

broe@nedcc.org  
(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?

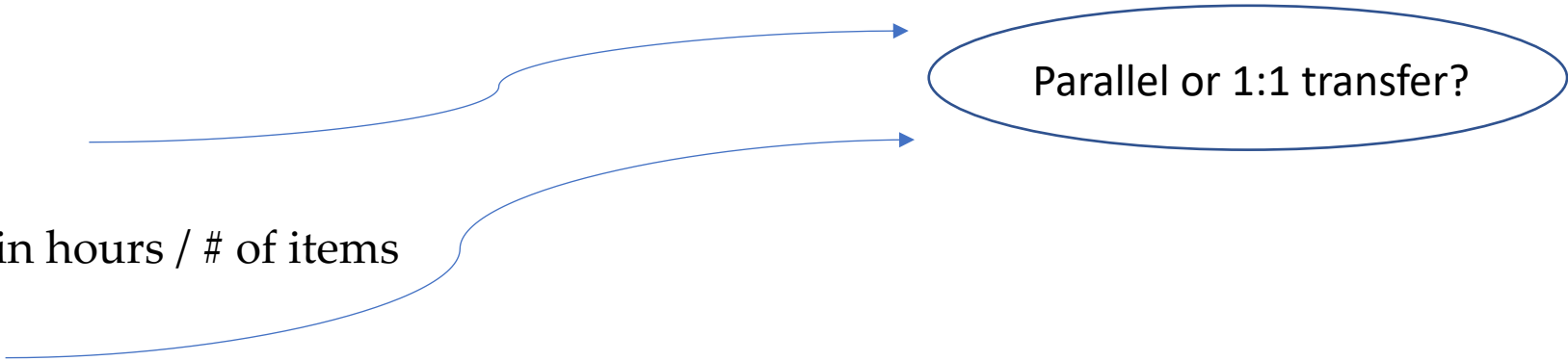
# Moderated Discussion

- 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

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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

# Moderated Discussion

- What advice can you give re: seeking out and identifying the most “qualified” service provider?

# Moderated Discussion

- 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

# 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?

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- 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**

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**Wednesday, June 21, 2017 @ 2 PM ET**

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Technical Director, CLIR



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