

FIAT  IFTA 2014 World Conference

 COST OF INACTION  
CALCULATOR

Chris Lacinak  
**AVPreserve**  
chris@avpreserve.com  
@avpreserve

Hello and thank you having me here. I'd like to thank Daniel Teruggi for the invitation and encouragement to be here. My name is Chris Lacinak from AVPreserve. We are a consulting and software development firm based out of the U.S. but we work internationally. Our clients include VIAA, American Archive and several public broadcasters in the US, HBO, the U.S. Library of Congress, and Museum of Modern Art in NYC. The work we do is wide ranging from collection assessments and inventories, to facility development, to digital asset management selection and digital preservation environment auditing. We also develop software across the spectrum of services we offer. In addition to this we also create and publish many free and open resources for the community. The Cost of Inaction Calculator is one of these that we've developed internally.

So, last week at an archives conference a twitter friend that was in a workshop on using spreadsheets for data management tweeted the question:

□



**Rebecca Ghoulman**  
@DerangeDescribe

Is there a reason why Excel is so bad with dates?  
[#bmoreMARAC](#) [#w3](#)

10/16/14, 9:35 AM

to which my colleague Joshua Ranger tweeted the reply

□



**Rebecca Ghoulman**  
@DerangeDescribe

Is there a reason why Excel is so bad with dates?  
[#bmoreMARAC](#) [#w3](#)

10/16/14, 9:35 AM



**AVPreserve**  
@AVPreserve

[@DerangeDescribe](#) It's inattentive and poor at  
conversation. Hay-o!

10/16/14, 1:00 PM

I tell this “joke” not only because I personally think it is hilarious but because it also strikes at the heart of my talk today. How? It speaks to the fact that no matter how much conviction we have about the cultural and intellectual value of our collections on the other side of the decision maker that we are making our plea to about the loss of cultural heritage

□

Income	
Donations & Endowments	\$ 1,000,000
Services	\$ 1,000,000
<b>Total Income</b>	<b>\$ 2,000,000</b>
Expenses	
Conferences & Meetings	\$ 125,000
Equipment	\$ 200,000
Insurance	\$ 50,000
Professional Services	\$ 125,000
Real Estate	\$ 400,000
Salaries	\$ 700,000
Utilities	\$ 150,000
<b>Total Expense</b>	<b>\$ 1,600,000</b>
<b>Net Income</b>	<b>\$ 400,000</b>

is an Excel spreadsheet staring them in the face.

Regardless of how strong a case or how sympathetic an ear we have, the fact is that Excel has no sentiments and can not calculate the loss of cultural heritage.

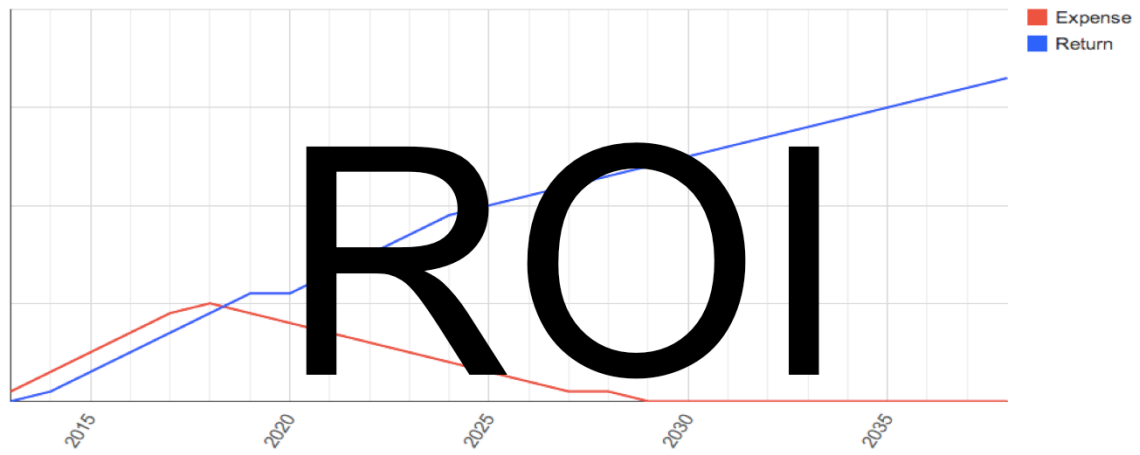
There is a question that is often raised when initiatives to digitize and preserve collections within organizations have garnered enough support to reach the decision makers and budget holders within the organization. The question is this:

□



If I give you the funding your asking for to digitize and preserve our legacy AV collections

□



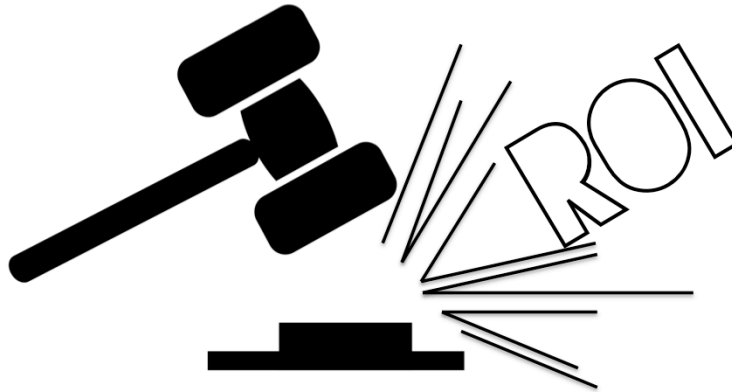
what will be our return on investment?

□



As a community our response to this question has been somewhat of a side-step, hinging everything on an argument based on the potential loss of cultural heritage. The importance to scholarship. The importance of providing a complete historical record. This is an argument that is well appreciated within our community and understood amongst our colleagues within organizations like AMIA, IASA, ARSC, FIAT. However, we have lacked a mechanism for putting this into quantifiable terms that decision makers can use. And not just this, but we have actually lacked metrics as a field. Unlike other fields, archives have not established key performance metrics. Without these it is hard to assess, quantify and advocate.

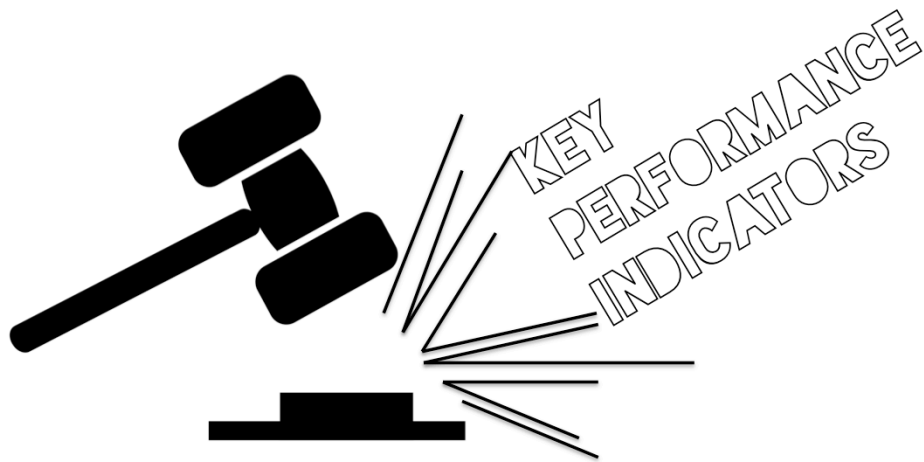
□



We have simply allowed others to define us through the metric of their own choosing responding to ROI as if it was the right fit as a sole measure of our worth and success. Is ROI an appropriate metric by which to judge the success of an archive? I would say that in some cases it may be one reasonable metric but as the only metric it fails in a major way to measure the success of an archive.



□



Other fields have lots of metrics that they use to assess their success. These are called key performance indicators and they cover operational, strategic and financial aspects.

□

- AVERAGE VISITORS PER HOUR OF THE DAY
- AVERAGE SALE
- PROFITABILITY
- PERCENTAGE OF SALES RETURNED
- AMOUNT OF TRAFFIC PER EMPLOYEE LABOR HOUR
- PERCENTAGE OF VISITORS THAT MAKE PURCHASES
- COST TO ATTAIN A SINGLE CUSTOMER
- MOST POPULAR PRICE POINT



For instance retailers might look at these as key performance indicators

□

- BILLABLE HOURS PER MONTH
- EFFECTIVE HOURLY RATE
- PERCENTAGE OF CASES THAT GO TO TRIAL
- PERCENTAGE OF TRIALS WON
- AVERAGE SETTLEMENT AMOUNT RATIO
- EMPLOYEE RETENTION
- PROFITABILITY



And a law firm might look at these

▫

- NUMBER OF REQUESTS
- REQUEST FULFILLMENT TURNAROUND TIME
- REQUEST FULFILLMENT ACCURACY
- REQUEST FULFILLMENT CONVERSION
- AVERAGE ITEMS PROCESSED PER WEEK
- CUSTOMER SATISFACTION



Operations KPIs for archives might consist of something like these

□

- NUMBER OF PRIORITY LEGACY ITEMS DIGITIZED
- NUMBER OF OUTREACH CONTACTS MADE
- SIZE OF BACKLOG
- NUMBER OF ITEMS FOUND/LOST PER YEAR
- LABOR HOURS TO CONTENT HOURS RATIO
- EMPLOYEE RETENTION



Archive Administration KPIs might look something like this

□

- FUNDING ATTAINMENT RATIO
- COST PER CONTENT HOUR/ITEM FOR:
  - PROCESSING
  - DIGITIZATION
  - INGEST
  - CATALOGING
  - STORAGE
  - RIGHTS CLEARANCE
- AVG REVENUE GENERATED PER REQUEST



And financial KPIs for archives might look something like this. Now I know that lots of people here have probably been through strategic planning or reorganization initiatives and you may have very well experienced KPIs. Many people in archives that have will roll their eyes and take a deep breath at this conversation, but I would say that the reason that archives feel this way about KPIs is because they have not been involved in creating them. Instead they have had others define the KPIs for the archive and saddle them with them. KPIs are not effective when this is done. The KPIs must come from the archive in order to be meaningful. We shouldn't run away from them. We should embrace them and have more control over them. They provide a way to demonstrate our worth and success.

□

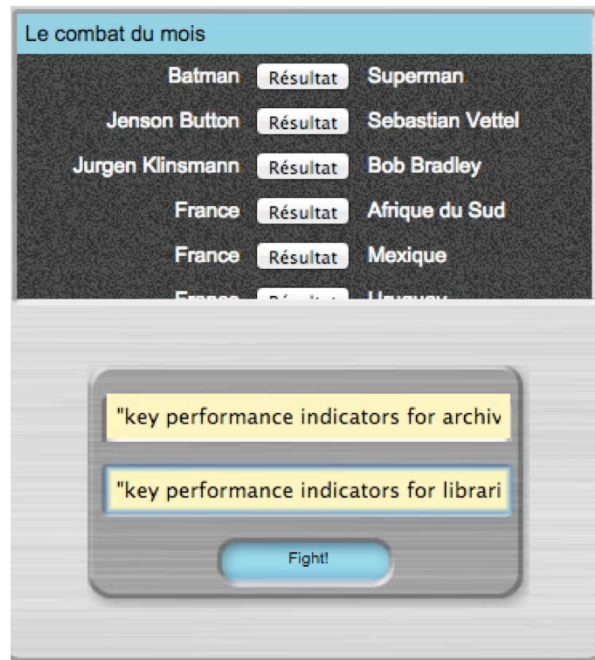


- NUMBER OF ITEMS BY FORMAT
- PERCENTAGE OF COLLECTION DIGITIZED
- PERCENTAGE OF COLLECTION THAT IS PRIORITY
- PROJECTED GROWTH OVER NEXT 3 YEARS
- ACTUAL GROWTH OVER THE PAST 3 YEARS

Not only do we not have common KPIs – and I’ll demonstrate just how much we don’t have KPIs in a minute - but I often find that archives are unable to answer even the most fundamental questions. I don’t say this to wag my finger and cast judgment. I am part of this community and in the trenches. I say this because if we don’t come to terms with our own issues we can’t begin to address them and make progress.

But why is it that we have found ourselves in this situation with KPIs and fundamentals? People in archives are smart, talented, passionate people that do great work. One possibility is that archives have historically not been asked to produce this information and so it hasn’t been a focus. A demonstration of the result of this can be seen in doing a comparison of Google results of “Key performance indicators for archives” vs “key performance indicators for libraries” looks like this.

□



And while the results that Google Fight gives us are not accurate they are entertaining.



▫

# KEY PERFORMANCE INDICATORS FOR

Archives: 4

Libraries: 4050

Manufacturing: 8150

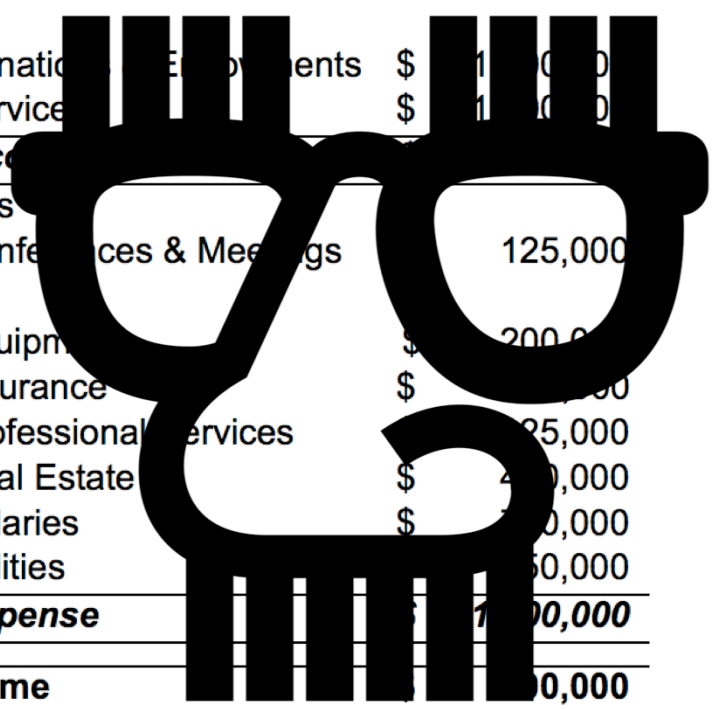
Here's the breakdown comparing Google results of "Key performance indicators for archives" returns 4 results. Compared to "Key performance indicators for libraries" which returns 4050 results. Compared to "key performance indicators for manufacturing" which returns 8150 results.

□



Another thing that I have seen come into focus is that we as a community have a self-image problem. We prefer to lay low and not make any noise, hoping to fly under the radar so we can just keep doing what we love doing. Leave us alone and we won't bother you.

<b>Income</b>	
Donations	\$ 1,000,000
Service	\$ 1,000,000
<b>Total Income</b>	<b>\$ 2,000,000</b>
<b>Expenses</b>	
Conferences & Meetings	125,000
Equipment	\$ 200,000
Insurance	\$ 25,000
Professional Services	25,000
Real Estate	\$ 400,000
Salaries	\$ 700,000
Utilities	50,000
<b>Total Expense</b>	<b>\$ 1,600,000</b>
<b>Net Income</b>	<b>\$ 400,000</b>



I have had archivists and heads of archives tell me that they do not want their organization to know the real numbers out of fear. “If the numbers are made clear they might choose to shut us/our project down.” This is not a stance from which someone can advocate for funding and change or make a compelling argument for the value of the archive. The more we are armed with good information, the better we can articulate our need, value and successes.

**4C** Collaboration to Clarify the Costs of Curation

Search... Go

Login Register Site Map SHARE

Home About 4C Work Packages Community Resources Roadmap News and Comment

## 4C Roadmap

We have released our draft Roadmap. Tell us what you think. Please read, think and feedback.

Find out more

# Investing in Curation

## A Shared Path to Sustainability (Draft)

4C on Twitter

**4C** RT @KEEPSOLUTIONS: @4c\_project has reached Brazil with a well attended workshop at the Archivist

### Welcome to the 4C Project

Collaboration to Clarify the Costs of Curation.

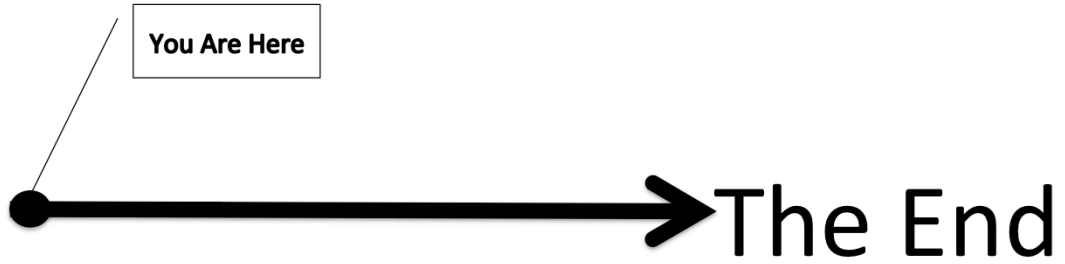
4C will help organisations across Europe to invest more effectively in digital curation and preservation. Research in digital preservation

### Latest News

**Defining a Roadmap for Economically Efficient Digital Curation**

I find much hope in the great work of the this project which aims to help organizations quantify the costs of curation in a way that addresses my prior concerns. And in fact we have shared a great deal with each other because our work is in the same spirit. But today, I am going to focus in on one particular metric – The Cost of Inaction, or COI. In order to get to the COI Calculator we first have to recognize a few important considerations.

□



Obsolescence and degradation will eventually create a scenario in which physical legacy AV collections will not be able to be digitized at a reasonable cost, with sufficient quality for preservation, at scale. This is what I am calling “The End”. When will this be?

▫

“...it is alarming to realize that nearly all recorded sound is in peril of disappearing or becoming **inaccessible within a few generations.**”

--National Recording Preservation Board in “Capturing Analog Sound” (2006)

This NRPB report from 2006 made this statement. Things have changed in much more dramatic ways than anticipated at that point. We would now say *within one generation*.

□

“in the mid- to long-term there is a major risk that carrier **degradation combined with playback obsolescence will defeat the efforts of archivists...**”

--International Association of Sound and Audiovisual Archives  
Task Force to Establish Selection Criteria Report

We would now revise this to say *short term* instead of *mid – to long-term*

□

“...many analog audio recordings **must be digitized within the next 15 to 20 years** – before sound carrier degradation and the challenges of acquiring and maintaining playback equipment make the success of these efforts too expensive or unattainable.”

--The Library of Congress National Recording Preservation Plan,  
page 7

This is an important plan released in 2013, and while this gives an optimistic 15 – 20 year window it was in the works since 2009, and



▪

“So that’s it: going, going, **gone for analog by  
2023**”

--Richard Wright, 2013 PrestoCentre.org Blog

Others, like our esteemed colleague Richard Wright are more pessimistic on this topic

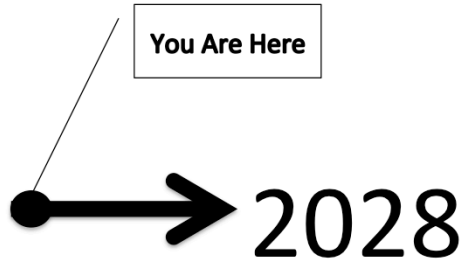
▫

## “How much time do we have? **10 – 15 Years**”

--Michael Casey, Indiana University  
2013 Association for Recorded Sound Collections Conference

General consensus at the moment is 10 to 15 years. However, you don't have to agree with this time window for COI to be useful to you. If you think otherwise that's fine, but for the purpose of the talk today I'll be using this window of time as a common reference point.

□



But let's call it between 2023 and 2028. Why between 2023 and 2028? Because when we say 10 – 15 years we have a funny way of failing to recognize the passing of time, and continuing to say 10-15 years as years pass by. Putting a date to it makes it absolute rather than relative, making it real. And I'm not that bad at math. I'm sticking to 2028 because we started using 10-15 years in 2013.

□



Again what we're talking about here is the ability to digitize at a reasonable cost, with sufficient quality for preservation, and at scale. To get a sense of what these might look like let's look at some numbers.

□

240,000,000 Undigitized, Preservation Worthy  
Audio Items in the U.S.

We recently conducted a study which resulted in a statistically valid estimate that within the U.S. there are over 240M preservation worthy undigitized audio items.

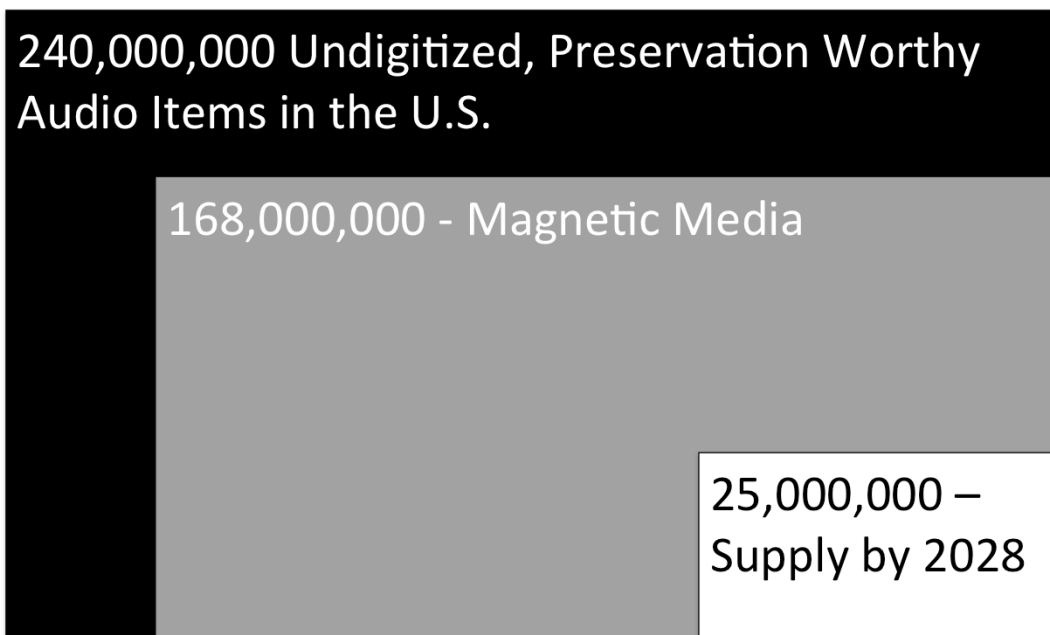
□

240,000,000 Undigitized, Preservation Worthy  
Audio Items in the U.S.

168,000,000 - Magnetic Media

Over 168M of those are magnetic media.

□

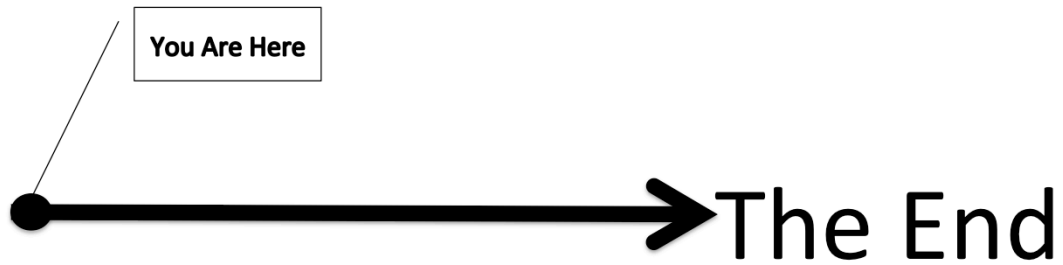


To get some sense of what that looks like in the US alone... Let's be generous and say that are 5 organizations in the U.S. that could each digitize 30,000 hours per month. There are not, but let's say there were. If each of those 5 organizations digitized 30,000 hours every month starting this month and going through 2028 they would digitize 25M hours. Less than 15% of the total magnetic media.

Some would argue that this makes a good business case for there being a continued market for digitization. We don't see this happening though. We only see manufacturing businesses in this domain going away. We don't see them starting up or growing.

What's the other thing we know from economics 101 about the laws of supply and demand? When demand is high and supply is low the cost goes up. However currently the cost of digitization is the lowest it has ever been. This is because of the funding issues that have made actual demand low. In other words there aren't as many people buying digitization services as there are people who need preservation services. I'm hoping this changes, but in the meantime I speculate that these decreases in cost exceed what is justified by technological advancements and efficiency gains, likely meaning that vendors are losing money. This is unsustainable and we will see prices rise because of this. They will also go up because operations will cost more to run and maintain as obsolescence increases. Accompanying the rise in obsolescence, the quality of maintenance will suffer and there will be a decrease in the quality of the transfers as well.

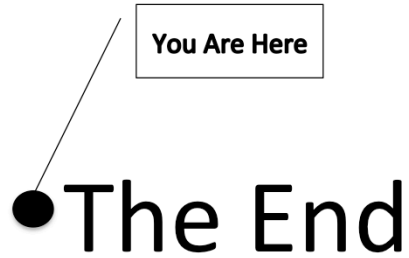
□



Anyhow, regardless of whether you believe that “The End” is 2019, 2028 or 2050 there is a finite window. Adding a reference point and putting *the end* on the horizon tends to get more attention. Still people become philosophical and get into theoretical conversations about the relative virtues of film over tape, or vinyl records over CDs, and people put stock into technical innovation or heroism swooping in at the last minute to save us from a certain end.

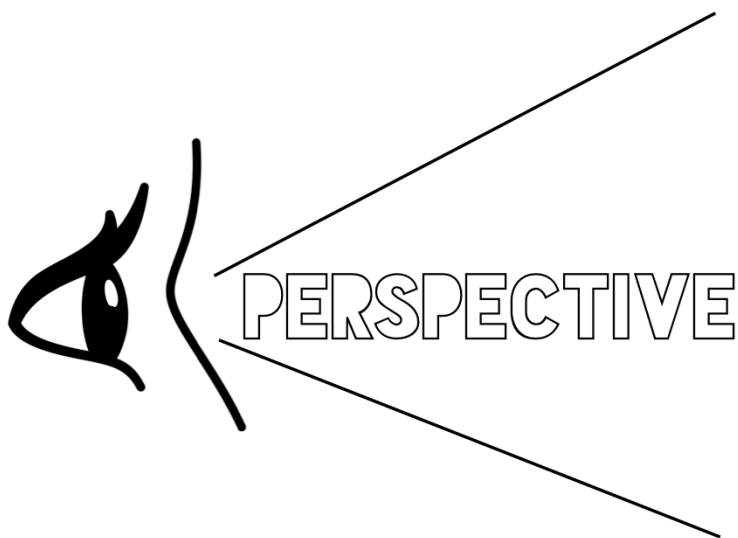


□



In unfortunate circumstances, such as natural disasters we find that the threat of the end is thrust upon us suddenly. It is remarkable, the amazing stories that come out of disasters like this of people springing into action and sparing no amount of effort to save what are recognized in these moments as priceless cultural materials. A particularly interesting thing is the contrast between the perspective that is found at a moment like this compared to the perspective on the longer term disaster that is playing out in front of us.

□



These realizations and moments help remind us that there is a reason that we maintain these materials in our archives. There is value in them. And it's not just in the 20% of the content that is most accessed. And on the flip side of this, of course there is content in every archive that is not preservation worthy, either because of rights, content, duplication, or for any of a number of other reasons. But there is a large majority of the collection that has value.

What kinds of value:

▫

“Local production costs of saved programming at public broadcasting’s approximately 560 stations totals over \$10 billion invested by the American people in content no longer available to them.”

- Corporation for Public Broadcasting 2008 Report

£48,000 per hour of content produced across radio and television  
-BBC

€300,000 per hour for a high-end drama series  
-VRT

For broadcasters and production companies it starts with the investment with production.. Looking at costs for production here are three reference points.

□

”The importance of this archival content increases though, with the increase of the popularity of non-linear media consumption such as digital TV, catchup services, online or mobile media consumption. **Having available an extended back catalogue of own archival content is thus not only a matter of heritage and legitimacy. It is for a broadcaster also an important asset to fill linear and non-linear channels.**”

-Brecht Declercq

Brecht Declercq pointed out in an article in 2009 the value of the archive for both linear and non-linear channels in the evolving marketplace and the associated opportunities for distribution.

We see this logic coupled with arguments focused on operational efficiencies, public interest and educational initiatives with organizations that are leading the charge like

-

**ina**

Search Site

ABOUT US | OUR COLLECTIONS | OUR EXPERTISE | **PRODUCTS & SERVICES**

AUDIOVISUAL SALES | TRAINING & RESEARCH | AUDIOVISUAL HERITAGE | AUDIOVISUAL PRODUCTIONS | CONTENT PROTECTION

Products & services > Audiovisual sales

**ina**  
MEDIAPRO

CONTACT  
Marketing and Sales Contacts >>  
or  
Ina MEDIAPRO  
Centre Pierre Sabbagh  
83-85, rue de Patay  
75013 Paris  
Tel: 33 1 44 23 12 12  
Fax: 33 1 44 23 11 12

NEWS  
Have you seen the new version of Ina MEDIAPRO?  
More content, more inspired, more foresight!  
Ina MEDIAPRO V2

**IN FIGURES**

- 410,000 hours of television
- 265,000 hours of radio
- 500 theme-based collections
- 7,000,000 documentary notes available in French and English
- 11,000 accredited professionals, one-third of whom are based outside France

INA

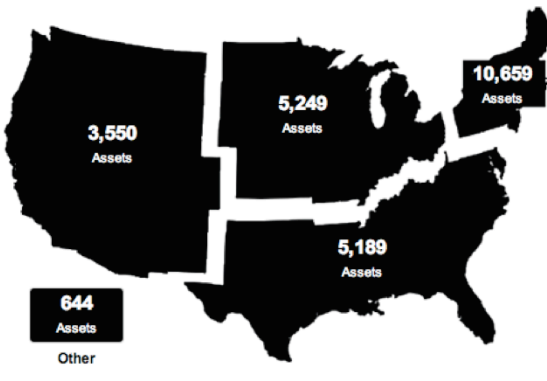


Sound & Vision

18,032 hrs digitized 45% of 40K hrs 972 hrs at Crawford

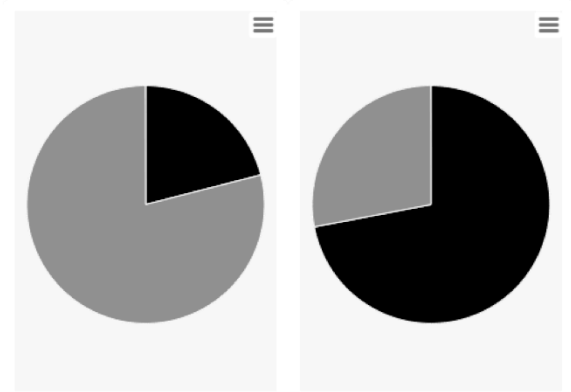
REGIONS

Total Digitized Assets Total Hours







SCHEDULED VS. DIGITIZED

Radio & TV All Formats



The American Archive

▣

	<b>100.000</b> carriers <i>registered</i>
	<b>14.572</b> carriers <i>digitised</i>
	<b>157 TB</b> in our <i>archive system</i>
	<b>2.681</b> Items available for <i>education</i>



VIAA



□

## Preserving our history in the digital age

Indiana University is home to more than three million pieces of invaluable audio and video recordings, film collections, and materials. Amassed over nearly 200 years, these treasures chart the evolution of music, film, academics, and cultural diversity.

We are at risk of losing them.



During the 2013 State of the University address, President Michael A. McRobbie unveiled the Media Digitization and

### MDPI in the news

MDPI team member nominated for 2014 Grammy

And Indiana University have all embarked upon mass digitization projects with reasons ranging from revenue generation through licensing of content, to supporting education, to protecting what is seen as important cultural heritage.

The Atlantic SHOP >

THE PARTY OF CLIQUE

*The Atlantic*

POLITICS BUSINESS TECH ENTERTAINMENT HEALTH EDUCATION SEX

JUST IN Blackwater's Guilt

'I Was Not Taught About Consent'  
By Conor Friedersdorf

The Lost Art of Letter Writing  
By Shannon Chamberlain

THE BIG BANG THEORY | 16 OCT 2014

## CBS LAUNCHING STAND-ALONE STREAMING SERVICE; SHOWTIME LIKELY TO FOLLOW

103 NCIS: Bazinga.

BY MATT FOWLER → A day after HBO announced their upcoming stand-alone streaming service, CBS Corporation has announced the launch of CBS All Access - a new digital subscription video on demand and Nielsen-measured live streaming service for the CBS Television Network.

For \$5.99 per month, CBS All Access will offer subscribers thousands of episodes from the current season, previous seasons and classic shows on demand, as well as the ability to stream local CBS Television stations live in 14 of the largest U.S. markets at launch.

CBS All Access is available beginning today at CBS.com and on mobile devices through the CBS App for iOS and Android. The service allows fans to watch more programming online and on mobile devices, while introducing yet another monetization window for the Company's industry-leading content. CBS All Access will be available on other major connected devices in the coming months.

## HBO Go-It-Alone: There Goes the Cable Bundle?

Cable TV has the money. Internet TV has the momentum. HBO thinks it can have both.

DEREK THOMPSON | OCT 15 2014, 12:23 PM ET



On the commercial front, we see On-Demand and Over the Top or OTT driving interest in new and old programming alike. HBO and CBS announced within a day of each other last week that they were decoupling from cable networks offering direct access to their on demand or OTT platforms. WWE has digitized 10's of thousands of hours of their collections and have recently launched their own OTT network.

□



These examples offer inspiration as well as demonstrating the perceived and real value to be derived from AV collections. However, with the recognition of this value, an understanding of the troubling state of affairs for AV collections generally speaking, and acknowledgement of the fact that there is a finite window within which to act, it becomes clear that the challenge ahead is tremendous.

To help navigate this challenge it is helpful to turn to a 2010 report titled Sustainable Economics for a Digital Planet.

▫

“it is often economically justified to make a small current investment that in effect **purchases the option to make a choice sometime in the future.**”

--Blue Ribbon Task Force: Sustainable Economics for a Digital Planet (2010)  
Page 37

One important concept discussed throughout this report is the concept of *maintaining the option*. That we don't have to make a choice to preserve something forever or never. Forever is not a concept that anyone has an easy time with and particularly not those charged with budgeting and decision making. Instead we can think about providing the minimal amount necessary to simply *maintain the option* –

□

**“Another misleading perception about digital preservation investments is that ...choices are binary: either we implement intensive preservation...immediately and forever; or we do nothing”**

--Blue Ribbon Task Force: Sustainable Economics for a Digital Planet (2010)  
Page 99

and we can think in periods of 5 or 10 years, with each period being an opportunity to assess and decide whether or not we want to do nothing, do the minimal amount necessary to maintain the option to decide again later, or to do much more than the minimum for the collection, in part or in whole.

On the flip side if we do nothing and let the window close then we lose our option to ever make any decisions about that content in the future. It doesn't matter how important the content is, how much money we're willing to spend. We've simply lost it. Permanently.

□

“Commitments made today are not commitments for all time. But **actions must be taken today to ensure flexibility in the future**”

--Blue Ribbon Task Force: Sustainable Economics for a Digital Planet (2010)  
Page 5

It is imperative to avoid the paralysis that strikes when people think about very large things in black and white terms. It's not forever or never. It's not all or nothing. However, what we do require is immediacy because we are up against a wall. We have to start acting immediately.

□

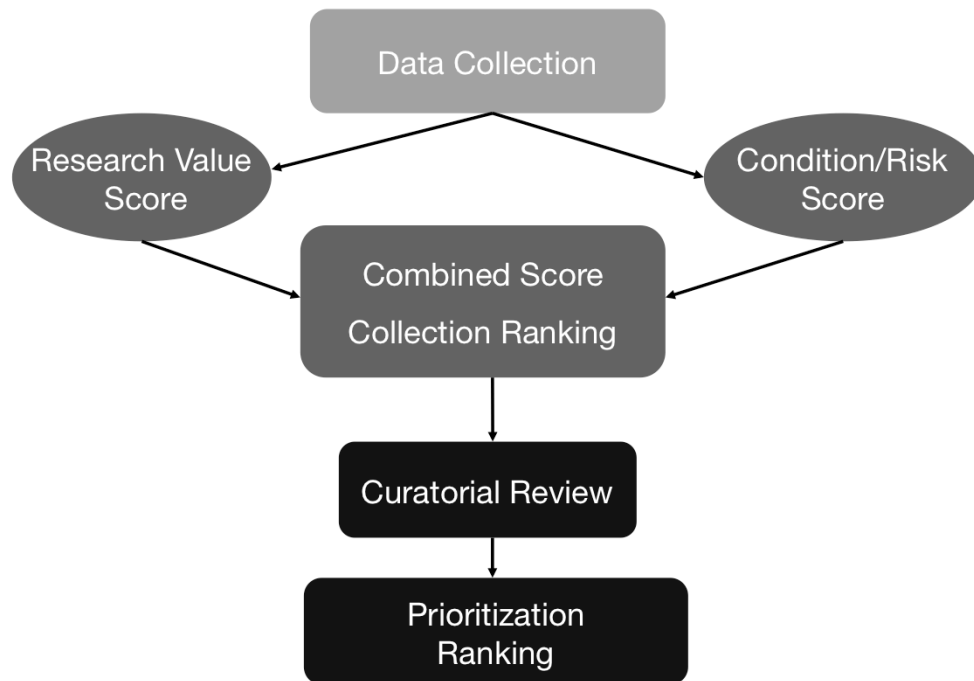


## Meeting the Challenge of Media Preservation: Strategies and Solutions

 INDIANA UNIVERSITY  
BLOOMINGTON

Underlying all of this is the issue of prioritization, which Indiana University talks about in an articulate and significant way in these two reports. Additionally these reports provide an amazing amount of information and critical analysis that serve as important reference points. Prioritization and the need to make informed selections is a core tenet of IU's work.

□



This is a slide from Mike Casey, Director of Media Preservation Services at Indiana University, giving a high level overview of their methodology for prioritization which has been incorporated into applications called MediaSCORE and MediaRIVERS.



INDIANA UNIVERSITY | MediaSCORE + MediaRIVERS Log Out

Assess Report Settings

**CREATE UNIT** Search all records

FILTER BY: RESET

Text:  Date:  Date Type:  to  Status:  Any Status

Score Type:  MediaSCORE From  To  Storage Location:  Any Storage Location

Hide Filter

Unit	Created	Created By	Updated On	Updated By	Duration
African American Arts Institute	2012-06-11	Patrick Feaster	2012-06-14	Patrick Feaster	28 hrs
Anthropology, Department of	2013-03-26	Josephine McRobbie	2013-03-26	Josephine McRobbie	85 hrs
Archives of African American Music and Culture	2012-06-11	Patrick Feaster	2014-04-03	Patrick Feaster	2857 hrs
Archives of Traditional Music	2012-06-11	Patrick Feaster	2012-06-11	Patrick Feaster	21374 hrs
Astronomy, Department of	2013-01-14	Patrick Feaster	2013-03-26	Josephine McRobbie	24 hrs
Black Film Center/Archive	2013-02-12	Josephine McRobbie	2013-02-12	Josephine McRobbie	1008 hrs
Center for Disability Information and Referral	2012-11-15	Patrick Feaster	2014-04-14	Patrick Feaster	386 hrs
Center for the Study of History and Memory	2012-10-08	Jason Groth	2012-10-08	Patrick Feaster	724 hrs
Central Eurasian Studies, Department of	2013-03-21	Patrick Feaster	2013-03-26	Josephine McRobbie	60 hrs
Cook Music Library	2012-07-12	Patrick Feaster	2012-07-12	Patrick Feaster	1209 hrs
Elizabeth Sage Historic Costume Collection	2013-06-26	Jason Groth	2014-03-18	Patrick Feaster	153 hrs
Indiana University Art Museum	2013-03-29	Josephine McRobbie	2013-03-29	Josephine McRobbie	81 hrs
Law Library	2012-11-12	Jason Groth	2014-03-18	Patrick Feaster	573 hrs
Lilly Library	2012-06-11	Patrick Feaster	2012-06-14	Patrick Feaster	2319 hrs

Which will be released as open source by the end of this year.

▪



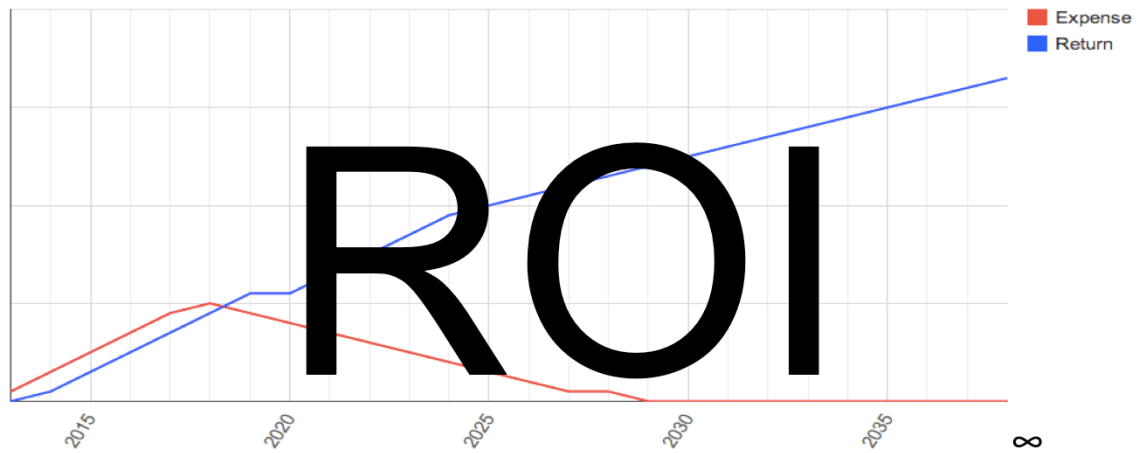
Regardless, an effort like this takes resources and a point where efforts to preserve content in archives often falls short is within the higher levels of organizations where that question comes up once again...

□



“If I give you the funding your asking for to digitize and preserve our legacy AV collections

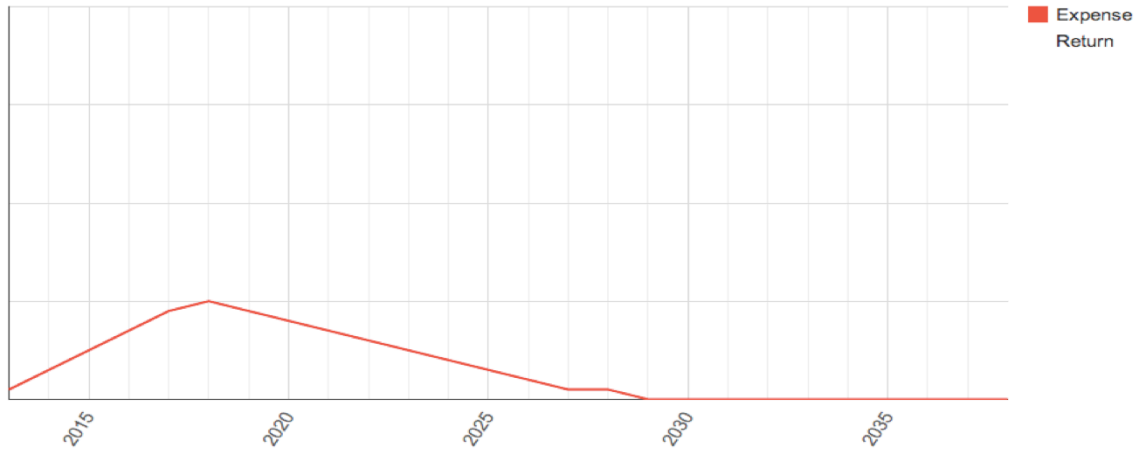
□



what will be our return on investment?"

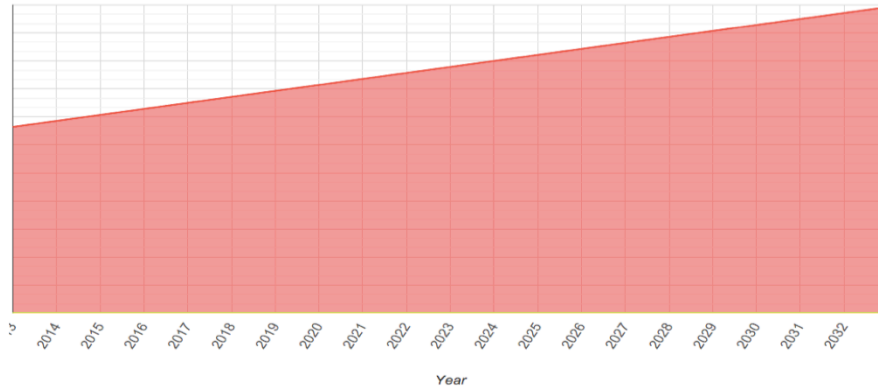
It's not that ROI is bad in and of itself, but if it is the only metric we use it fails to provide an accurate assessment. It fails to speak to the benefits and value derived from the effort, including support of mission and the effectiveness and quality of serving "clients". Not only this but

□



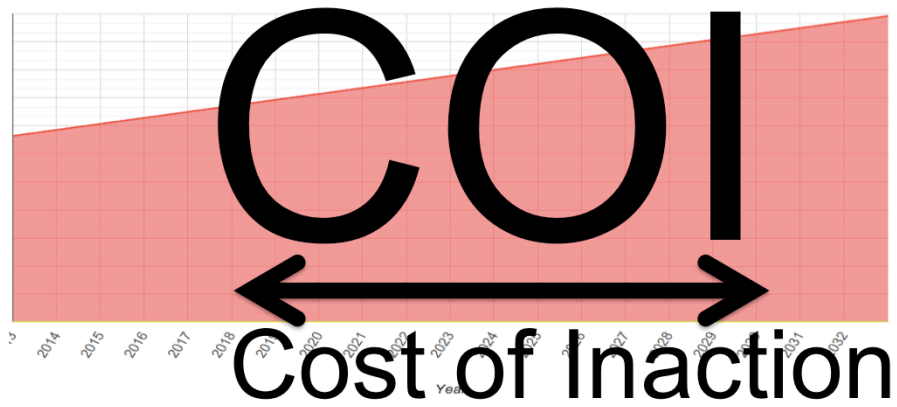
The real expense graph doesn't look like this where the expenses begin at \$0 before digitization begins. It looks like....

□



this. Notice that the line doesn't start at 0 and it doesn't ascend and then descend. The reality is that investment started years ago. Investments in collections don't start today with digitization and they don't go away once digitization is done. Collections have had investments in staff, facilities, management, administration, moves, rehousing, consulting, assessments, production or acquisition in some cases, and more. Organizations will continue to manage physical collections for some time after digitization is done. So it is critical to recognize the investment made to date, and the ongoing investment made for physical collections in addition to the cost of digitization, storage, and more.

□



Once we come to the understanding that we've invested significant resources in our legacy physical collections, that there is limited window within which to act, and if we don't act that we lose our investment the question of return on investment becomes less relevant and the question about the Cost of Inaction becomes much more relevant.

▫

“When future conditions are particularly uncertain ... it is often economically justified to make a small current investment that in effect **purchases the option to make a choice sometime in the future.**”

--Blue Ribbon Task Force: Sustainable Economics for a Digital Planet (2010)  
Page 37

People often mistake the COI calculator as an argument to digitize everything. This is not what it is. It is a tool that aims to enable action by quantifying the issues in both financial and intellectual terms in order to inform decision making. Neither is it about bringing a robust preservation and access infrastructure to bear for everything that is prioritized. As the Blue Ribbon Task Force report emphasizes, it is about maintaining the option to make a decision in the future.





Level 4: Repair your data

Level 3: Monitor your data

Level 2: Know your data

Level 1: Protect your data

For instance, referencing the National Digital Stewardship Alliance Levels of Digital Preservation, offering a Level 1 environment is much more obtainable and does maintain the option to make decisions about how to allocate resources for preservation and access at a later date. Doing nothing leads to permanent loss and all options are taken away.

# COST OF INACTION CALCULATOR



You've invested time and money to preserve the physical objects in your media collection.



However, over time audiovisual materials will become unusable due to decay and obsolescence.



The only way to save your collection is to reformat through digitization.



The cost of digitization may be great, but the cost of inaction may be even greater.

[ANALYZE YOUR COLLECTION »](#)

Use our calculator to analyze your Cost of Inaction

There is a cost of inaction and the COI calculator aims to help quantify what that is. I will give an overview and some examples of how to use the calculator.

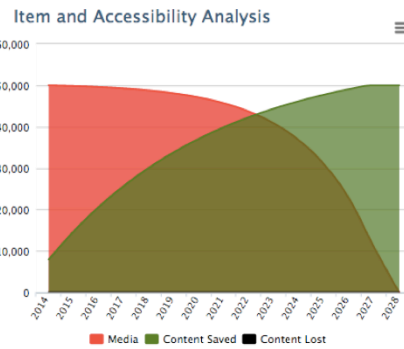
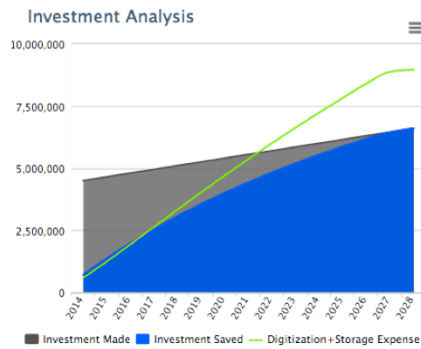
**The Cost of Inaction Calculator**    The Acme Story    Analyze Your Collection    Log In / Sign Up

---

**Enter your collection details**    Save    Get Link

Last year for magnetic media?	Number of objects in collection?	Collection's audio-video percentage?	Investment to date for media?	Annual cost per media item moving forward?	Digitization cost per
2028	50,000	50% Video 50% Audio	\$4,500,000	\$3	\$60

Year you will start digitizing items?	Annual digitization	Storage service?	Annual decrease in cost of storage?	Annual increase in cost of digitization?
2014	\$475,000	Amazon -	15%	16%

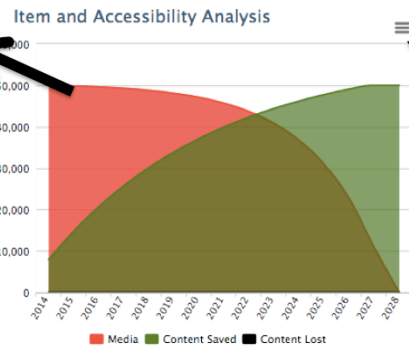
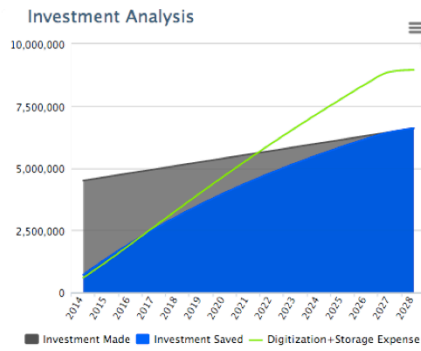


To begin you enter in details about your collections and some other basic planning information and review the outcomes

**The Cost of Inaction Calculator**    The Acme Story    Analyze Your Collection    Log In / Sign Up

**Enter your collection details**    Save    Get Link

Last year for magnetic media? <b>2028</b>	Number of objects in collection? <b>50,000</b>	Collection's audio-video percentage? 50% Video 50% Audio	Investment to date for media? <b>\$4,500,000</b>	Annual cost per media item moving forward? <b>\$3</b>	Digitization cost per <b>\$60</b>
Year you will start digitizing items? <b>2014</b>	Annual digitization <b>\$475,000</b>	Storage service? <b>Amazon -</b>	Annual decrease in cost of storage? <b>15%</b>	Annual increase in cost of digitization? <b>16%</b>	



Export the charts

### Key Findings

Investment saved per \$1 of expense    Return    Investment Lost    Content Lost

**\$0.74**    **73.75%**    **\$0**    **0**



Export to CSV

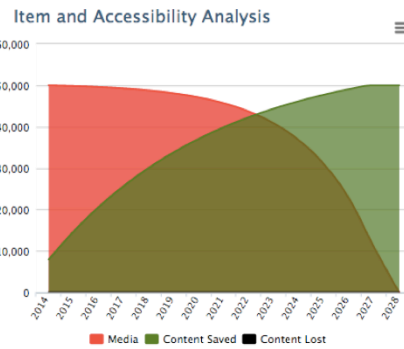
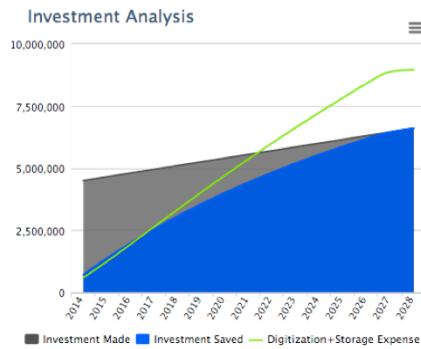
Year	Media	Content Saved	Excess Items Digitized	Investment Made	Content Lost	Investment Lost	Investment Saved	Digitization Expense	Storage Expense	Digitization + Storage Expense	Investment Saved per \$1 of expense	Quality of Selection
2014	50,000	7,917	7,747	\$4,500,000	0	\$3,787,500	\$712,500	\$475,000	\$113,993	\$588,993	\$1.21	100.00%
2015	49,831	14,741	6,583	\$4,650,000	0	\$3,279,052	\$1,370,948	\$950,000	\$294,417	\$1,244,417	\$1.10	99.66%
2016	49,599	20,625	5,540	\$4,800,000	0	\$2,820,024	\$1,979,976	\$1,425,000	\$508,984	\$1,933,984	\$1.02	99.18%
2017	49,246	25,697	4,583	\$4,950,000	0	\$2,406,034	\$2,543,966	\$1,900,000	\$736,216	\$2,636,216	\$0.97	98.49%
2018	48,756	30,069	3,676	\$5,100,000	0	\$2,032,969	\$3,067,031	\$2,375,000	\$962,228	\$3,337,228	\$0.92	97.51%
2019	48,060	33,838	2,778	\$5,250,000	0	\$1,696,993	\$3,553,007	\$2,850,000	\$1,178,419	\$4,028,419	\$0.88	96.12%
2020	47,068	37,067	1,838	\$5,400,000	0	\$1,394,551	\$4,005,449	\$3,325,000	\$1,379,828	\$4,704,828	\$0.85	94.14%
2021	45,657	39,889	791	\$5,550,000	0	\$1,122,361	\$4,427,639	\$3,800,000	\$1,563,955	\$5,363,955	\$0.83	91.31%
2022	43,647	42,303	0	\$5,700,000	0	\$877,409	\$4,822,591	\$4,275,000	\$1,729,938	\$6,004,938	\$0.80	87.29%
2023	40,785	44,385	0	\$5,850,000	0	\$656,939	\$5,193,061	\$4,750,000	\$1,877,967	\$6,627,967	\$0.78	81.57%
2024	36,711	46,180	0	\$6,000,000	0	\$458,434	\$5,541,566	\$5,225,000	\$2,008,878	\$7,233,878	\$0.77	73.42%
2025	30,910	47,727	0	\$6,150,000	0	\$279,608	\$5,870,392	\$5,700,000	\$2,123,880	\$7,823,880	\$0.75	61.82%
2026	22,651	49,060	0	\$6,300,000	0	\$118,386	\$6,181,614	\$6,175,000	\$2,224,364	\$8,399,364	\$0.74	45.30%
2027	10,892	50,000	0	\$6,450,000	0	\$0	\$6,450,000	\$6,563,180	\$2,311,411	\$8,874,591	\$0.73	21.78%
2028	0	50,000	0	\$6,600,000	0	\$0	\$6,600,000	\$6,563,180	\$2,385,401	\$8,948,581	\$0.74	0.00%

And the reporting as csv

**The Cost of Inaction Calculator**    The Acme Story    Analyze Your Collection    [Log In / Sign Up](#)

**Enter your collection details**    [Save](#)    [Get Link](#)

Last year for magnetic media? <b>2028</b>	Number of objects in collection? <b>50,000</b>	Collection's audio-video percentage? 50% Video 50% Audio	Investment to date for media? <b>\$4,500,000</b>	Annual cost per media item moving forward? <b>\$3</b>	Digitization cost per <b>\$60</b>
Year you will start digitizing items? <b>2014</b>	Annual digitization <b>\$475,000</b>	Storage service? <b>Amazon -</b>	Annual decrease in cost of storage? <b>15%</b>	Annual increase in cost of digitization? <b>16%</b>	



Sign up for an account to save multiple projects to do comparative analysis of different scenarios

The Cost of Inaction Calculator    The Acme Story    Analyze Your Collection    Log In / Sign Up

Enter your collection details

Save    Get Link

Last year for magnetic media? **2028**

Number of objects in collection? **50,000**

Collection's audio-video percentage? **50% Video** / **50% Audio**

Investment to date for media? **\$4,500,000**

Annual cost per media item moving forward? **\$3**

Digitization cost per **\$60**

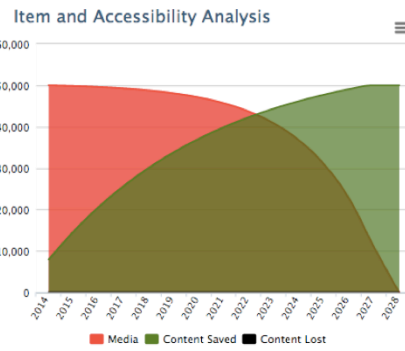
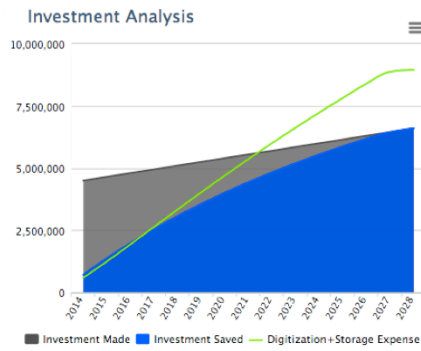
Year you will start digitizing items? **2014**

Annual digitization **\$475,000**

Storage service? **Amazon -**

Annual decrease in cost of storage? **15%**

Annual increase in cost of digitization? **16%**



And signing up for an account allows you to share with others.

## COLLECTION DETAIL PARAMETERS

This is the section where the user enters the details for a particular scenario. Multiple scenarios can be saved in order to perform comparative analysis of various possible paths.

**Last year of magnetic media:**

The year that we will lose physical AV materials to obsolescence and degradation, meaning that it will be too costly to digitize at scale with sufficient quality. Expert consensus places this between 2023 and 2028.

**Number of objects in collection**

This is the number of audiovisual items in the collection under review. Depending on the analysis you would like to perform, this may be all items in your collection regardless of priority for preservation, or it may be only the items that have been prioritized for preservation. As long as the other questions are answered with this same collection of materials in mind then everything should align accordingly.

**Collection's audio-video percentage:**

To calculate storage costs we need to estimate how much data is being stored. We first do this by identifying the Collection's audio-video percentage. After this, the following assumptions are used:

Target formats for video: Preservation Master - Uncompressed, 10-bit, standard definition file; Mezzanine - 25Mbps file; Access copy - 5Mbps file. Average length of video item: 1 hour Size of all target formats for each video item: 121.1 GB

Target formats for audio: Preservation Master - Uncompressed 24-bit, 96kHz file; Mezzanine - Uncompressed 24-bit, 96kHz file; Access copy - 256kbps file Average length of audio item: 1 hour Size of all target formats for each audio item: 4.11 GB [Top](#)

The number of items digitized are multiplied by the appropriate storage numbers in order to arrive at the total storage required in a given year. This is then multiplied by the underlying numbers in the "Storage service" and "Annual decrease in cost of storage" parameters in order to arrive at a storage cost.

**Investment to date for media:**

Every organization that has a collection of media has invested in that media from the point of acquisition to the present. For a collecting institution these costs could include acquisition costs, curatorial staff, administrative and management staff, archivist and preservation staff, processing, description, reformatting, rehousing, moving, equipment, furniture, real estate, HVAC, software and hardware systems, provision of access, and more. For production oriented organizations you could include the cost of production and post production. Some organizations may choose to delve deeply into this in a great level of detail. Others may wish to take a simpler path by assigning a percentage of capital and operational expenses to audiovisual materials. Whatever method of calculation makes sense, a value for the investment made to date in physical audiovisual collections should be assigned here. One consideration when using a "Number of objects in the collection" that only represents items that are prioritized for preservation is whether or not to burden them fully with the cost to maintain all items over time. If the intent in collecting all of the materials was to ultimately produce the results represented by digitizing the items prioritized for preservation then it is arguable that the cost for making that happen included all of the collection activities and costs leading up to that.

There is also a detailed help page



How was the cost for Amazon storage calculated?

To start we used the following assumptions regarding target formats for digitization and the average length of audiovisual items:

Video:

- Preservation master: Uncompressed, 10-bit, standard definition file, totaling 105GB/hr
- Mezzanine: 25Mbps file, totaling 14GB/hr
- Access copy: 5Mbps file, totaling 2.1GB/hr
- Average length of video item: 1 hour
- Size of all target formats for each video item: 121.1 GB

Audio:

- Preservation master: Uncompressed 24-bit, 96kHz file, totaling 2GB/hr
- Mezzanine - Uncompressed 24-bit, 96kHz file, totaling 2GB/hr
- Access copy - 256kbps file, totaling .11GB/hr
- Average length of audio item: 1 hour
- Size of all target formats for each audio item: 4.11 GB

For Amazon we assumed that all preservation masters would be stored on Glacier and all Mezzanine and Access copies would be stored on S3. We then ran several scenarios using the Amazon pricing calculators (<http://calculator.s3.amazonaws.com/index.html> - with \*FREE USAGE TIER: New Customers get free usage tier for first 12 months\* unchecked). The assumptions and results can be seen in the table below. Top

<b>Base Scenario:</b>	<b>Date:</b>
50,000 hours 50% video and 50% audio	4/9/2014
<b>Total Items/Hours</b>	<b>50,000</b>
<b>Percentage of Audio</b>	<b>50.00%</b>

	Video	Audio	Combined	25% lower	6% lower	100% more
Hours	25,000	25,000	50,000	12,500	3,125	100,000
PM on Glacier GB	2,625,000	50,000	2,675,000	668,750	167,188	5,350,000
Mezz and AC on S3 GB	402,500	52,750	455,250	113,813	28,453	910,500

S3 Settings						
S3 PUT/COPY/POST/LIST Requests	500,000	500,000	1,000,000	250,000	62,500	2,000,000
S3 GET and Other Requests	500,000	500,000	1,000,000	250,000	62,500	2,000,000
S3 data retrieved per month - percentage of total content in S3	5%	5%	5%	5%	5%	5%
S3 data retrieved per month	20,125	2,638	22,763	5,691	1,423	45,525

Glacier Settings						
Glacier UPLOAD and RETRIEVAL requests per month	500,000	500,000	1,000,000	250,000	62,500	2,000,000

and a FAQ page where we try to disclose as much information as possible, showing the storage cost calculations here.

□

63,050 UNDIGITIZED, PRESERVATION WORTHY PHYSICAL AV ITEMS

Let's look at an example of a hypothetical organization using the Cost of Inaction Calculator:

An organization has 100,000 physical AV items, of which they prioritize 63,050 for preservation. Most of this content lives on formats for which there are no players or expertise within the organization, rendering the content itself inaccessible. Most of the labeling and metadata consists of whatever information is on the label, making discovery difficult.

▫

63,050 UNDIGITIZED, PRESERVATION WORTHY PHYSICAL AV ITEMS

40% VIDEO / 60% AUDIO

40% of their collection is video and the other 60% is audio.

▫

63,050 UNDIGITIZED, PRESERVATION WORTHY PHYSICAL AV ITEMS

40% VIDEO / 60% AUDIO

\$11M SPENT TO DATE BY ARCHIVE

They have determined that the archive has invested \$11M to date in caring for their collection. This does not include production expense.

▫

63,050 UNDIGITIZED, PRESERVATION WORTHY PHYSICAL AV ITEMS

40% VIDEO / 60% AUDIO

\$11M SPENT TO DATE BY ARCHIVE

\$2 PER ITEM PER YEAR MOVING FORWARD

They also estimate that they will spend approximately \$2 per year, per physical AV item moving forward.

□

63,050 UNDIGITIZED, PRESERVATION WORTHY PHYSICAL AV ITEMS

40% VIDEO / 60% AUDIO

\$11M SPENT TO DATE BY ARCHIVE

\$2 PER ITEM PER YEAR MOVING FORWARD

\$60 PER ITEM FOR DIGITIZATION

The latest estimates they have received for digitization tell them that the average cost of digitization per item is \$60.

# 3 SCENARIOS

**\$300k Scenario: Being given a budget of \$300k per year, beginning in 2014**

---

**100% Scenario: Digitizing 100% of the 63050 items, beginning in 2014**

---

**Timeline Implication Scenario: Implications of starting in 2014, 2017 and 2020**

---

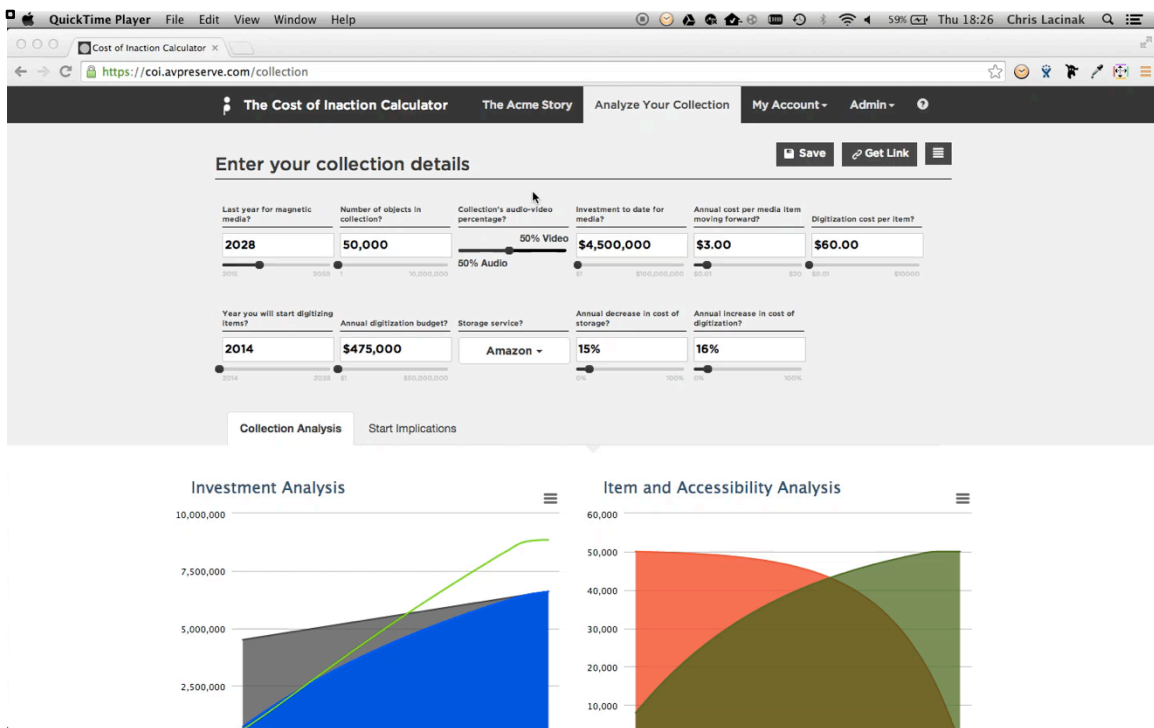
They have been asked by their leadership to prepare and compare 3 different scenarios, reporting on the implications of:

Being given a budget of \$300k per year, beginning in 2014

Digitizing 100% of the 63050 items, beginning in 2014

The implications of starting in 2014 vs starting in 2017 or 2020.

Let's start with the \$300k per year scenario.



All the parameters that were laid out on the previous slide make up the top row of parameters.

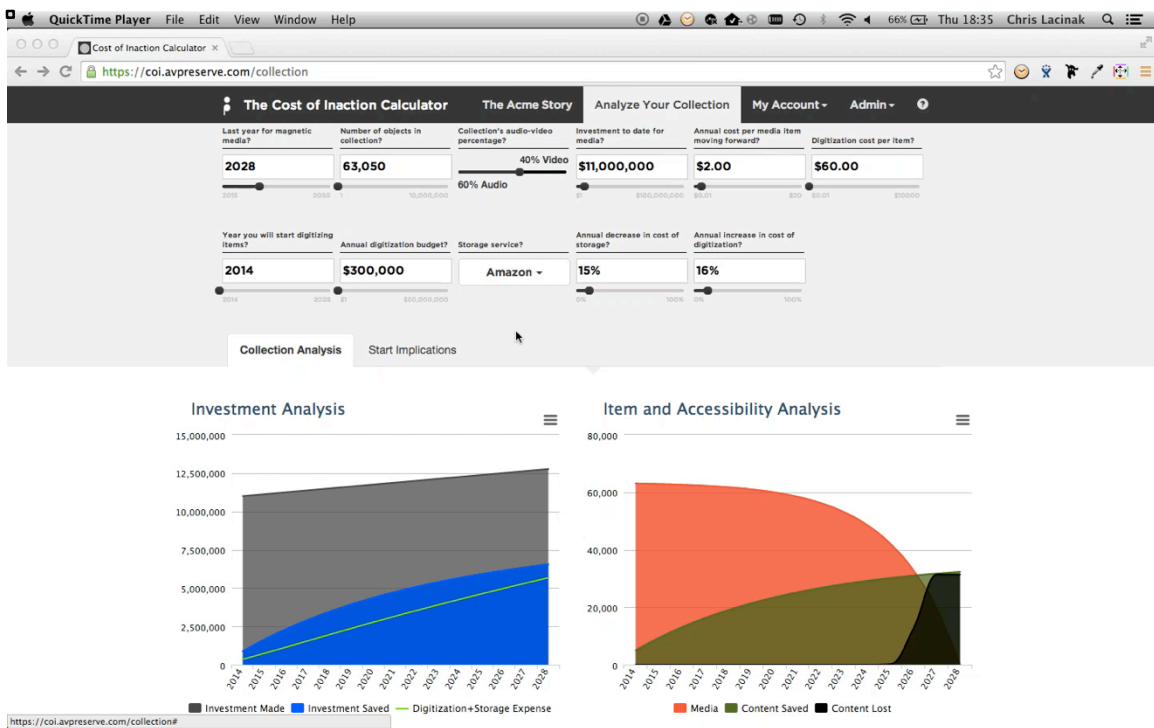
Beginning on the bottom row, they will start digitizing in 2014, their budget will be \$300k per year.

Storage: We use Amazon here, not because we're suggesting that this is what people should (or shouldn't) use but because it's a common widely used reference point. The cost for Amazon is \$0.22 per GB per year in this particular case. See the help menu to see how this was arrived at. If you have your own internal storage or use an alternative to Amazon you can select other and enter the cost per GB per year.

Annual decrease in the cost of storage: This was being cut in half every 18 months for many years, but this trend has been upset in more recent year. To be conservative we will only assume an annual decrease in cost of storage of 15%.

Annual increase in cost of digitization? As obsolescence increases, maintaining and operating legacy machines will become more expensive. We are currently at a place where the cost of digitization is at an all time low. We believe this price will begin to rise again soon and will continue rising. We will select 15% for the annual increase.





With these parameters now assigned values, we can use the calculator to evaluate the possible outcomes.

Looking at the investment analysis, you see that with the figures I have entered into the calculator, I will save just over \$6.5M of the investment in my collections over the next 14 years if I spend \$300k per year on digitization. More significantly, if I subtract investment saved (blue) from total investment made (grey) I see that I stand to lose \$6.2M of my investment in the collection.

What's going on is, if you look at the item and accessibility analysis, with the same data we entered, I'm going to lose 31,338 items (the black curve on the far right) in 14 years due to obsolescence or degradation if I spend only \$300k per year and start in 2014. Because my digitization pace will not out run the pace of obsolescence (the red line showing the loss of physical media regardless of the action taken). With this projection, I'll save 32,338 of my 63,050 object collection.

QuickTime Player File Edit View Window Help

Cost of Inaction Calculator x

https://coi.avpreserve.com/collection

The Cost of Inaction Calculator The Acme Story Analyze Your Collection My Account - Admin -

Investment saved per \$1 of expense: **\$1.15** Return: **115.41%** Investment Lost: **\$6,218,168** Content Lost: **31,338**

Export to CSV

Year	Media	Content Saved	Excess Items Digitized	Investment Made	Content Lost	Investment Lost	Investment Saved	Digitization Expense	Storage Expense	Digitization + Storage Expense	Investment Saved per \$1 of expense	Quality of Selection
2014	63,050	5,000	4,826	\$11,000,000	0	\$10,127,676	\$872,324	\$300,000	\$55,997	\$355,997	\$2.45	100.00%
2015	62,876	9,310	4,060	\$11,126,100	0	\$9,483,153	\$1,642,947	\$600,000	\$144,626	\$744,626	\$2.21	99.72%
2016	62,625	13,026	3,356	\$11,252,200	0	\$8,927,490	\$2,324,710	\$900,000	\$250,027	\$1,150,027	\$2.02	99.33%
2017	62,265	16,229	2,687	\$11,378,300	0	\$8,449,457	\$2,928,843	\$1,200,000	\$361,650	\$1,561,650	\$1.88	98.76%
2018	61,749	18,991	2,020	\$11,504,400	0	\$8,039,230	\$3,465,170	\$1,500,000	\$472,673	\$1,972,673	\$1.76	97.94%
2019	61,007	21,371	1,315	\$11,630,500	0	\$7,688,218	\$3,942,282	\$1,800,000	\$578,872	\$2,378,872	\$1.66	96.76%
2020	59,942	23,424	522	\$11,756,600	0	\$7,388,910	\$4,367,690	\$2,100,000	\$677,809	\$2,777,809	\$1.57	95.07%
2021	58,412	25,193	0	\$11,882,700	0	\$7,134,741	\$4,747,959	\$2,400,000	\$768,257	\$3,168,257	\$1.50	92.64%
2022	56,215	26,718	0	\$12,008,800	0	\$6,919,973	\$5,088,827	\$2,700,000	\$849,793	\$3,549,793	\$1.43	89.16%
2023	53,061	28,033	0	\$12,134,900	0	\$6,739,591	\$5,395,309	\$3,000,000	\$922,508	\$3,922,508	\$1.38	84.16%
2024	48,531	29,166	0	\$12,261,000	0	\$6,589,216	\$5,671,784	\$3,300,000	\$986,816	\$4,286,816	\$1.32	76.97%
2025	42,025	30,143	0	\$12,387,100	224	\$6,465,021	\$5,922,079	\$3,600,000	\$1,043,308	\$4,643,308	\$1.28	66.65%
2026	32,682	30,986	0	\$12,513,200	12,798	\$6,363,665	\$6,149,535	\$3,900,000	\$1,092,668	\$4,992,668	\$1.23	51.84%
2027	19,266	31,712	0	\$12,639,300	31,338	\$6,282,229	\$6,357,071	\$4,200,000	\$1,135,608	\$5,335,608	\$1.19	30.56%
2028	0	32,338	0	\$12,765,400	31,338	\$6,218,168	\$6,547,232	\$4,500,000	\$1,172,827	\$5,672,827	\$1.15	0.00%

To answer the question regarding the “implications of starting in 2014 vs starting in 2017 or 2020 we can look to the start implications tab here. This tab answers 4 primary questions.

1. If I start digitizing in year x, how much will I need to spend per year to digitize all items that have not been permanently lost already?
2. If I start digitizing in year x, how much more money will I spend than if I start digitizing in year y?
3. If I start digitizing in year x, how much more investment will I lose than if I start digitizing in year y?
4. If I start digitizing in year x, how many more items will I lose than if I start digitizing in year y?

# \$300K SCENARIO

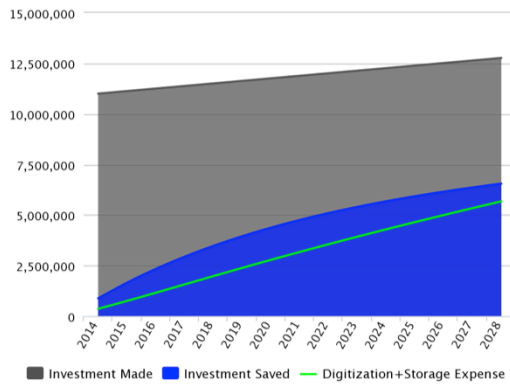
Digitization + Storage Expense: \$5.6M

Investment saved per \$1 of Expense: \$1.15

Investment Saved: \$6.5M

Investment Lost: \$6.2M

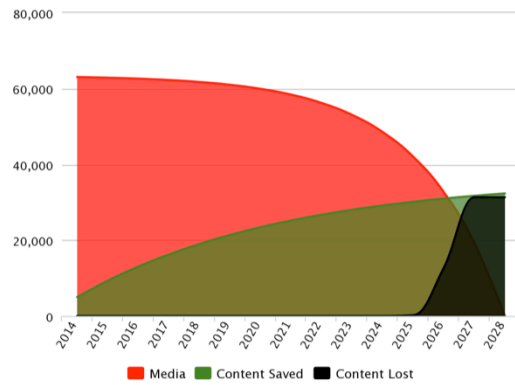
Investment Analysis



Content Saved: 31,712

Content Lost: 31,338

Item and Accessibility Analysis



Having used the COI Calculator this organization can now put together a presentation in response to the requests. They use key data points in addition to the exported charts to put this together.

# 100% SCENARIO

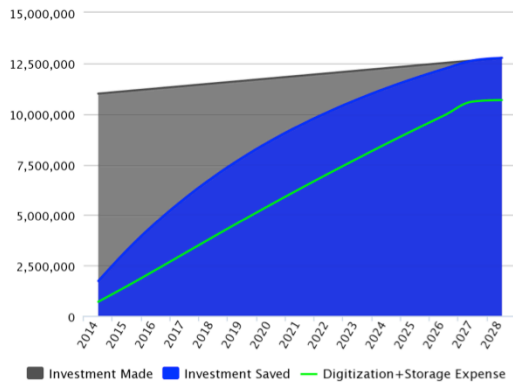
Digitization + Storage Expense: \$10.68M

Investment saved per \$1 of Expense: \$1.20

Investment Saved: \$12.76M

Investment Lost: \$0

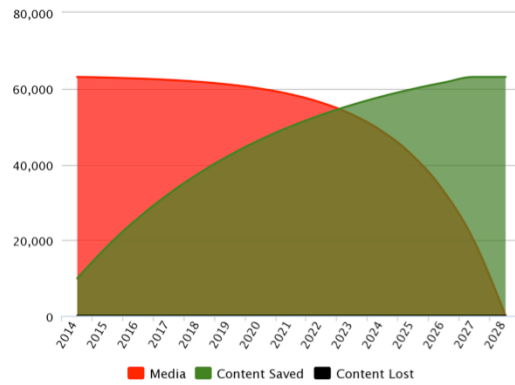
Investment Analysis



Content Saved: 63,050

Content Lost: 0

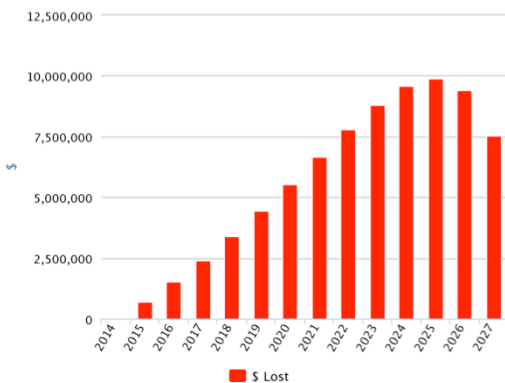
Item and Accessibility Analysis



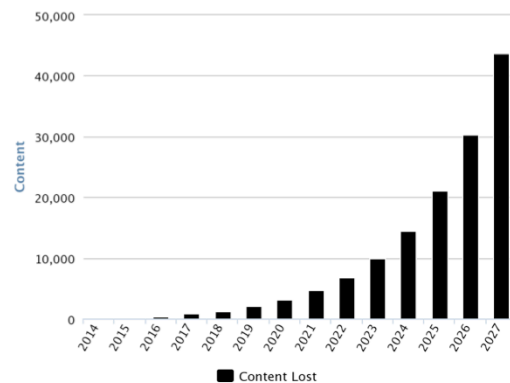
# START IMPLICATIONS

Year	Annual Digitization Budget	Spent + Lost Difference	Content Lost
2014	\$596,469	\$0	0
2017	\$999,685	\$2,409,483	785
2020	\$1,739,092	\$5,547,418	3,108

Additional Money Spent/Lost by Starting Later



Additional Content Lost by Starting Later



This shows the implications of starting in 2014 to 2017 and 2020, assuming that they digitize everything that is not lost by the time they start.

In looking at the additional money lost/spent graph we see that it is fairly linear. However it starts to go down after 2025. This decrease is because regardless of how much money you have to spend the content won't be there to digitize.

Now let's reflect for a moment on the difference between the impact of this set of data as compared to...

□

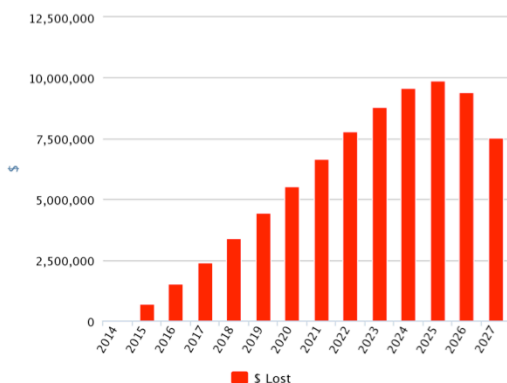
Income	
Donations & Endowments	\$ 1,000,000
Services	\$ 1,000,000
<b>Total Income</b>	<b>\$ 2,000,000</b>
Expenses	
Conferences & Meetings	\$ 125,000
Cultural Heritage	Lost
Equipment	\$ 200,000
Insurance	\$ 50,000
Professional Services	\$ 125,000
Real Estate	\$ 400,000
Salaries	\$ 700,000
Utilities	\$ 150,000
<b>Total Expense</b>	<b>#VALUE!</b>
<b>Net Income</b>	<b>#VALUE!</b>

This...

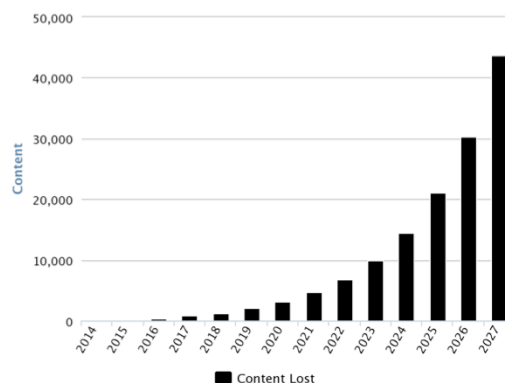
# START IMPLICATIONS

Year	Annual Digitization Budget	Spent + Lost Difference	Content Lost
2014	\$596,469	\$0	0
2017	\$999,685	\$2,409,483	785
2020	\$1,739,092	\$5,547,418	3,108

Additional Money Spent/Lost by Starting Later



Additional Content Lost by Starting Later



Coupling these financials with our traditional arguments as well as additional considerations makes for a well rounded and effective argument. What other considerations?

□



For instance, I would argue that there is no meaningful access to over 90% of content in audiovisual collections today. This represents missed opportunities on many fronts. These...



## List of rediscovered films

From Wikipedia, the free encyclopedia



NASA reacquires original Moon landing footage  
Tapes discovered in Oz, agency confirms

This is a list of rediscovered films that, once thought lost, have since been discovered.

Contents	[hide]
1	Silent era
1.1	1890s
1.2	1900s
1.3	1910s
1.4	1920s
2	Sound era
2.1	1930s
2.2	1940s
2.3	1950s
2.4	1960s
2.5	1970s
2.6	1980s
2.7	1990s
3	See also
4	References
5	External links



### A 1973 Bowie performance thought lost is aired

January 18, 2013 18:53

Paul McCartney news RSS Feed

### Rare Paul McCartney recording found on lost tape

*Discovery captures Beatle performing 1964 Peter And Gordon hit 'A World Without Love'*

## theguardian

News | US | World | Sports | Comment | Culture | Business

Culture > Film > Metropolis

### Missing scenes from Fritz Lang's Metropolis turn up after 80 years

Are not success stories. These are evidence of the work that we have to do.

□

OTHER

CONSIDER

RATIONS

Lack of access &  
discoverability

Impact to Reputation

The impact to reputation of letting collections and content be lost is potentially extremely damaging to an organization. If you are a university, can you imagine being responsible for the loss of a tremendous amount of content in your care? Or a commercial company that is responsible for the lost opportunities associated with losing content? The damage to the organizations and the damage to the perception of archives as a trusted source of authentic content.

□

# OTHER CONSIDERATIONS


Lack of access & discoverability


Impact to Reputation


Direct vs. Indirect monetization


While direct monetization is not a viable model for most organizations, indirect monetization is a very real consideration. Within universities, special collections have become the jewel in the crown and is a major contributor to recruit faculty and students, get the attention of internal and external funders, and generally obtain resources. For broadcasters, while not all content may not generate big revenue, filling out the back catalog is important for their linear and non-linear channels.

# COST OF INACTION CALCULATOR

 You've invested time and money to preserve the physical objects in your media collection.

 However, over time audiovisual materials will become unusable due to decay and obsolescence.

 The only way to save your collection is to reformat through digitization.

 The cost of digitization may be great, but the cost of inaction may be even greater.

Use our calculator to analyze your Cost of Inaction

[coi.avpreserve.com](http://coi.avpreserve.com)

Back to the Cost of Inaction, it has been a missing link in the discussion and analysis surrounding the funding of audiovisual digitization and preservation efforts. Quantifying the financial and intellectual loss helps think about the implications in terms that do fit into a spreadsheet. Recognizing and being able to articulate this concept helps bridge a gap between caretakers and administrators and offers an effective financial metric that is a meaningful addition to historical arguments based on cultural and intellectual significance. Adding this data point—COI—to ROI provides a 360 degree perspective, looking both at past investment and the return on savings of that investment with future expense, while recognizing that the window of possible return is limited based on the obsolescence and degradation of audiovisual media. There is a cost of inaction, and every organization should come to an understanding of that cost in the formation of a digitization and preservation strategy in order to help make well-informed decisions.

Find the calculator along with helpful information on how to use it at [coi.avpreserve.com](http://coi.avpreserve.com). We would love to hear how you're using it as well as any other feedback you may have.

Most importantly, use it as soon as possible in support of funding the preservation of your priority collections.

▪ **FIAT**  **IFTA** 2014 World Conference

 **COST OF INACTION  
CALCULATOR**

Chris Lacinak  
**AVPreserve**  
chris@avpreserve.com  
@avpreserve

Thank you.