arkivum

Bringing archived data to life

PRODUCING A BUSINESS CASE FOR DIGITAL PRESERVATION AND LONG-TERM ACCESS

Contents

Are you struggling to communicate the value of a digital preservation solution?

Are you writing a business case for a digital preservation solution? Or planning to do so? If you're struggling to give shape to your plans and ideas, you're not alone.

Even the most seasoned professional can struggle to make the case for investing in specialist IT systems. And with digital preservation and archiving solutions being in the early adopter phase, the 'nothing to something' nature of the proposition can be especially challenging. Digital preservation is often confused with simple storage or a repository thus others in the organization may think the organization already has this capability and they will need some help understanding the difference. Relatively few professionals in your network will be able to share their experiences with you. You may find yourself as one of the first in your community who will implement such a system but there are others also taking the lead on making the case and rolling out digital preservation programs and systems.

As experts in this area, we understand that many IT and departmental managers will have little or no awareness of digital preservation. So some sections of your business case will have to educate decision-makers as well as sell your vision to them.

Although you yourself may be familiar with digital preservation arguments – such as the ease of reading a book written a century ago compared with difficulties in accessing a video file from the 1990s or materials on a website it's unwise to assume that others share your understanding. It's down to you to communicate the value of digital preservation in long-range financial and strategic terms, which is quite a responsibility.

This guide is designed to help you to produce a business case, from your early preparation work – such as defining the scope and engaging stakeholders – through to the writing stage. It should help you articulate the value of digital archiving and preservation and put everything in place to create a winning bid.
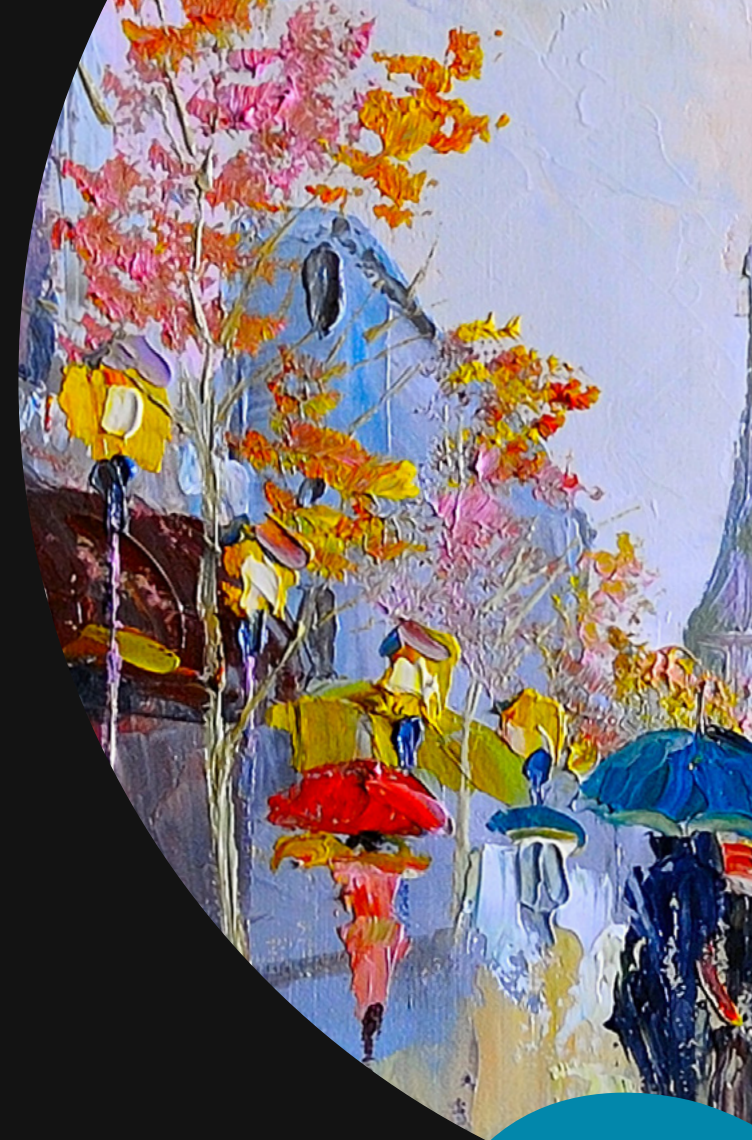
Why Digital Preservation Really Matters

Collection and record driven organizations such as museums and libraries are faced with a daunting challenge – to preserve both digitized content and born-digital assets for what is likely to be hundreds of years.
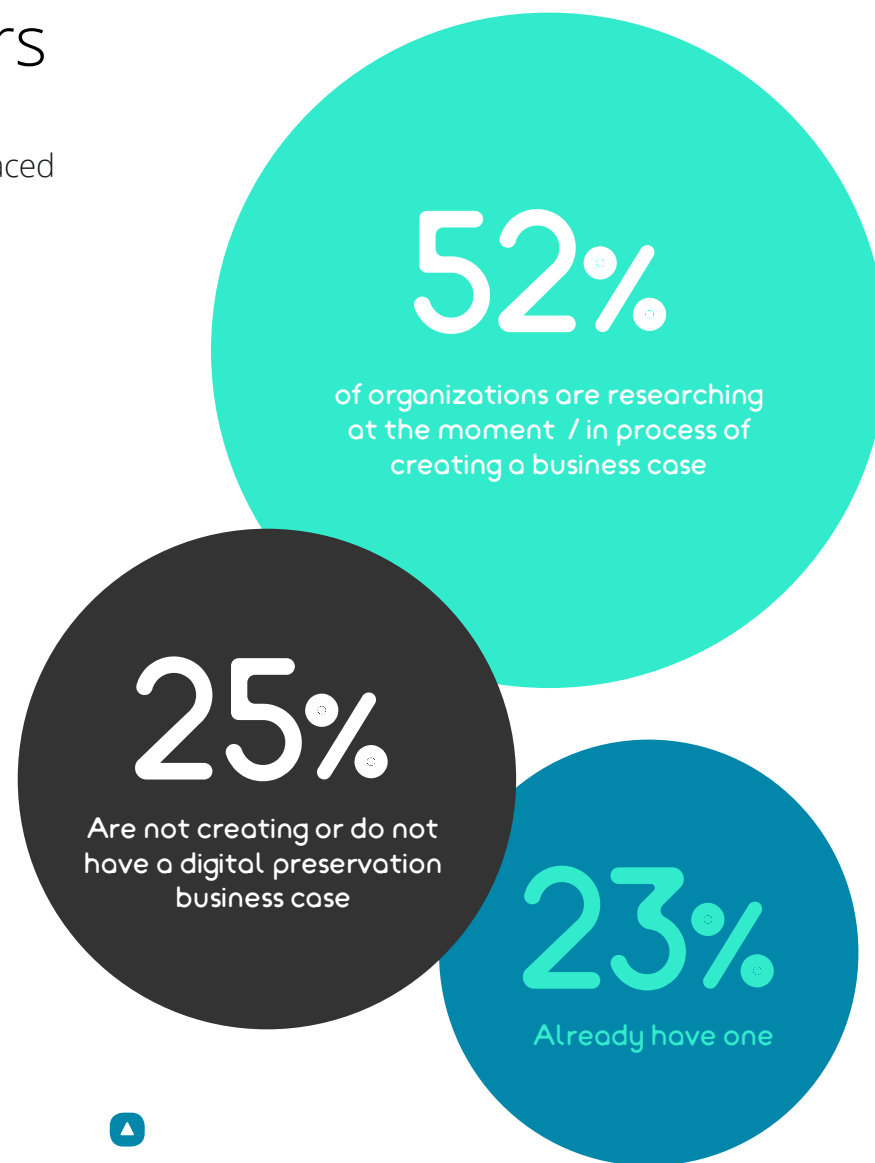
It's a very different set of challenges from the more physical measures, such as temperature control and protection from moisture and acidity required for print-based archives.

Today's preservation challenges are more about longevity of format and security – making sure that data assets remain available for as long as they are needed.

So what is the value of digital preservation?

This section provides a useful checklist of drivers that will help you build a compelling business case for digital preservation, organized into these five key areas:

- Preservation and access.
- Cost efficiencies.
- Culture and community.
- Reputation and profile.
- Regulatory and legal compliance.

52%
of organizations are researching at the moment / in process of creating a business case

25%
Are not creating or do not have a digital preservation business case

23%
Already have one

Stats taken from Arkivum Digital Preservation Webinar Questionnaire

Preservation and Access

These are the broad benefits of data preservation that you should apply to your own project:

- Support the transition to our digital-first world – with an online archive strategy and robust preservation infrastructure.
- Safeguard our most valuable digital assets – Taking urgent action to preserve valuable digital resources and avoid the catastrophic disruption of data loss.
- Manage access to information – Opening up digital access, but at the same time controlling it carefully according to user profiles.
- Promote success across the organization – Storing data and information, to help with research or learning and to support new initiatives.
- Support evidence-based decision-making – Driving improvements in policy and planning by giving leaders and managers access to up-to-date data in one place.

Images from the ITMA collection.
Photograph of dancer
© Danny Diamond

When we spoke to Arkivum we were impressed by the longevity by which they could guarantee secure access to our unique and valuable data. The ability to handle unlimited data volumes means we are confident that Arkivum provides a solution that not only fulfils our needs right now but can grow with us as our data requirements continue to grow

Archivist, The Jaguar Daimler Heritage Trust

Cost Efficiencies

By embedding efficient digital-first processes, organizations realize cost efficiencies in these areas:

Operational Time Savings

- Save staff time taken to find information and disseminate it to the right people – In particularly drastic scenarios, people have to travel to other sites to view physical items held in remote locations. Also, consider the more routine problem of staff members waiting up to a week for information they need to do their jobs.
- Save staff time taken to duplicate work on assets that already exist.
- Re-purpose, update or add value to existing assets, rather than creating from scratch.
- Save archival staff time involved in managing a print-based archive – One organization was spending 6,000 hours per annum on data management.
- Provide a great customer experience through more efficient means of service and support.

Savings on Data and Information Management

- Make cost savings on data storage by using more efficient external archival storage solutions. Internal storage costs are rising by 30% annually, according to industry estimates.
- Integrate disparate datasets, and manage them efficiently as a combined entity.
- Make savings on physical space by moving from paper to digital storage.
- Minimize the risk of litigation costs, by instilling best practice in digital preservation.
- Make savings on the number of copies held locally – by using an external archiving service that offers 100% data integrity.

Income Generation

- Achieve funding to safeguard digitized collections.
- Develop online revenue streams and digital services, monetizing collections with sales of prints, for example.
- Support R&D grant applications with evidence of good digital management.

One organization was spending

6,000

hours per annum on data management.

Culture and Community

Safeguarding local and cultural assets delivers clear benefits to the communities you serve, whether they be local, national or international:

- Preserve records of permanent historical value for future generations.
- Widen awareness of cultural assets and collections.
- Support research and education by transforming access to assets and collections.
- Make it easier for content owners to deposit valuable data for preservation.

Regulatory and Legal Compliance

Regulators are becoming more stringent, issuing punitive fines, and worse:

- Meet legal and regulatory responsibilities in critical areas, such as data protection and freedom of information.
- Establish and disseminate good practice in digital preservation to all areas of the organization.

© Irish Traditional Music Archive - Taisce Cheol Dúchais Éireann

Reputation and Profile

A high quality data preservation solution will raise the profile of your collections and protect your organization from the reputational damage of cyber attacks:

- Improve organizational prestige and profile at local, sectoral or national level.
- Support institutional excellence through a systematic approach to digital preservation.
- Demonstrate innovation – Be seen as an organization at the forefront of digital preservation.
- Broaden awareness of your collections and records.
- Insulate the organization from the reputational damage of data breaches and cyber attacks.
- Maintain your standard of service to end users and provide public access to digital records of interest to them.

The Cost and the Risks of Doing Nothing

A benefit-driven business case, drawing on the checklists in section two, is the only way to succeed. But today's sponsors, like most executives, can be highly sensitive to risk, and your business case should address this.

By outlining a 'doing nothing' scenario, which should include 'doing the minimum', you are giving stakeholders a baseline from which they can assess the solution you're proposing and should highlight the risks of the incumbent arrangement. A makeshift internal storage solution will fail to deliver the robust digital preservation solution your organization needs.

Opportunity Cost

The opportunity cost of a paper-based or sub-optimal archiving system forms an important part of the case for a data archiving and preservation solution. An obvious and direct example of opportunity cost is the revenue your organization could be missing out on by failing to monetize its archived resources.

Non-Compliance Risks

Non-compliance in many sectors is subject to increasing fines from powerful regulators. This is particularly true in highly-regulated markets such as pharmaceuticals, but even organizations like museums may face punishing fines with GDPR and other data regulations.

Without a robust data preservation solution, your organization is vulnerable to the complexity and shifts in data regulation, and to the risk of non-compliance, which can ultimately wreak havoc on reputation.

Data Loss

Organizations that fail to put in place a data preservation solution run the very real risk of data loss. Fire, theft or mere accidents – scenarios such as data stored in a bag of hard drives in the office cupboard – can and do happen to organizations such as yours. If not that, then the ever-present threat of a cyber attack is something every organization needs to mitigate. **Almost half of UK companies** were hit by a cyber attack or data breach over a recent 12 month period. One UK university managed to recover the 60 archival collections it lost in one such incident, but at considerable cost to the institution. There was some corrupted data, and all meta-data was irretrievably lost.

Financial Loss

The user experience of leading websites such as Amazon has elevated the expectations we all have as customers of online services. Real-time availability of data and information on high-performing applications is not negotiable without putting your user base and reputation on the line. Research organizations also face the risk of funding losses without putting suitable systems in place or demonstrating compliance with the regulations.

40 GB

Storage required for 1 minute of film digitised at 60fps in RAW format

Guaranteeing the long term integrity of our digital assets is an absolutely crucial part of the Archives and Access Project – this archival heritage is extremely valuable to Tate's future, and the future of British and international art history. We cannot afford to have them compromised in any way.

Digital Preservation Manager at Tate

Preparing Your Business Case

This section will take you through the key stages and areas you need to consider as you prepare your business case. Before you start, are there any previous digital preservation projects you need to be aware of? If they have not been successful, then make sure you factor in any lessons learned into your own business case and project plans. And look for any infrastructure or internal expertise that you can make use of.

4,000

The number of reels of 16mm film that The Andy Warhol Foundation for the Visual Arts has donated to MoMA.

Empire. 1964. 16mm film. Andy Warhol.
© 2016 Andy Warhol Foundation for the Visual Arts / Artists Rights Society (ARS), New York

Scope

By the time you start writing your data preservation and archiving business case, your high-level objectives – the goals you want to meet and the problems you need to solve – should be clear. The **Digital Preservation Coalition (DPC)** recommends setting out the scope very early in the business case, relating it to your problems and goals in a clear way. Failure to define your scope will mean problems later on, especially when working out costs. That said, as you engage stakeholders and maybe potential suppliers, for example, you might revisit and refine your scope. Try to keep 'scope creep' to a minimum though.

In setting the boundaries of your business case, the DPC suggests drafting 'in-scope' and 'out-of-scope' lists. These can even be included in the business case itself, to provide clarity, possibly in an abbreviated form. Significant 'out of scope' items can be supported with explanatory notes on how you propose to address them elsewhere.

By scope, we are not only referring to objectives; we should also specify the time period involved. Is it a pilot project, for example, or a longer-term program encapsulating all your collections?

Stakeholder Engagement

With any business case, identifying the key decision-maker and budget-holder is crucial. You will need to compose your central arguments and shape your proposal around those individual people, their capabilities and their responsibilities. So if the person who will ultimately approve your business case is a finance manager, then your proposal should be highly precise in the costs it outlines and may have to explain technical details that you yourself take for granted. If the business case approver is a digital champion, then your proposal can be more visionary at a technological level. The key stakeholder you identify will have a direct bearing on the form that your business case document eventually takes, in terms of format, structure, tone and level of detail.

Stakeholder engagement isn't just something you do in the background to help your business case succeed. It should also be a section in your business case document, outlining the key areas of need and how your proposal meets them.

Identifying Stakeholders

Identifying the primary stakeholders will require an understanding of your organization and its structure. The first question you should ask yourself is – why is it important to safeguard data? And then you should consider to whom it matters most.

If you haven't already got one in place, then identify a champion on the senior management team, and discuss your plans with them informally, as the DPC advises. The constructive feedback you receive will help shape your case. It's a good idea to support this engagement by scanning the organization's strategy and any relevant operational plans and policies.

Who else in the organization needs to be involved?

- Senior Management Team – They will need reassurance that resourcing is secure and that the project will deliver cost savings and time efficiencies.
- Operational Staff – They will be looking for a solution that is fit for purpose and easy to use, so they can get optimal value from the collection.
- IT – They will want responsibility for valuable assets to be given to an expert provider they can trust and work with easily and effectively.
- Users – They will value instant access to resources whenever they need them.
- Partners – As well as access, they will want a degree of control over data, and reassurance that any risks are identified and managed.

A stakeholder analysis exercise will help you to identify who else to involve, and you will need to address their expectations of the project and its outcomes in your business case and priorities.

Jaguar Print Collage
© Jaguar Heritage Trust Archive

Engaging Primary Stakeholders

You should engage directly with all the stakeholders you identify, asking them:

• Why they care about data preservation and archiving.

• What the project will cost them in terms of time, cost and resourcing.

• How the solution will impact their area of responsibility.

This can be presented in a clear, tabular form in your business case document. A surprising number of business cases fail to consider every stakeholder from every angle.

All your engagement activities should be about justifying your plans and then refining them as you uncover their perspective and experiences. You should be prepared to engage your stakeholders in a variety of ways. We've seen successful stakeholder engagement in the form of workshops and round tables, whatever suits your stakeholders best. Any commitments and endorsements from valued stakeholders at this stage should be referenced explicitly in your business case.

It may not run completely smoothly; there may be conflict. The resourcing involved in the project may be unacceptable to some managers, for example, or there may be a feeling that the funding could be better spent elsewhere. It is better to discover that at this stage though, and tailor your plans to anticipate any opposition – with a GANTT chart that pre-empts resourcing concerns, for example – than to end up with a failed business case that lost its credibility by ignoring potential obstacles.

Getting the Timing Right

You could write a compelling business case, and your stakeholders may well buy into the solution and agree with your arguments. But what if they turn around and ask – why now?

Getting the timing right for data archiving and preservation can be trickier than it seems. The status quo can be strangely comforting, even for some forward-thinking stakeholders. Here are some questions that will help you present your business case at the right time for your organization:

The Compelling Event

Behind a successful digital preservation business case there is often a compelling event.

What a compelling event is will depend on your organization, but successful instances include failing software solutions, an office relocation or refurbishment, and a real-life horror story that has caught the attention of stakeholders, involving the loss of precious archive assets due to a disaster, a cyber attack or, most commonly, human error.

Other examples might include:

- A new funding round or opportunity.
- Evidence of regulatory non-compliance that may incur a severe penalty.
- A clear risk of information loss, such as data stored in an office cupboard, or a paper archive in a location that is vulnerable to flooding.

You may not always have any of these, but if you can engineer a realistic compelling event to drive your business case, then that will create the natural sense of urgency to do something rather than nothing.

When do organizations aim to have a digital preservation solution in place?

50%
ASAP/By the end of the year

40%
by next year

10%
In 3 or more years
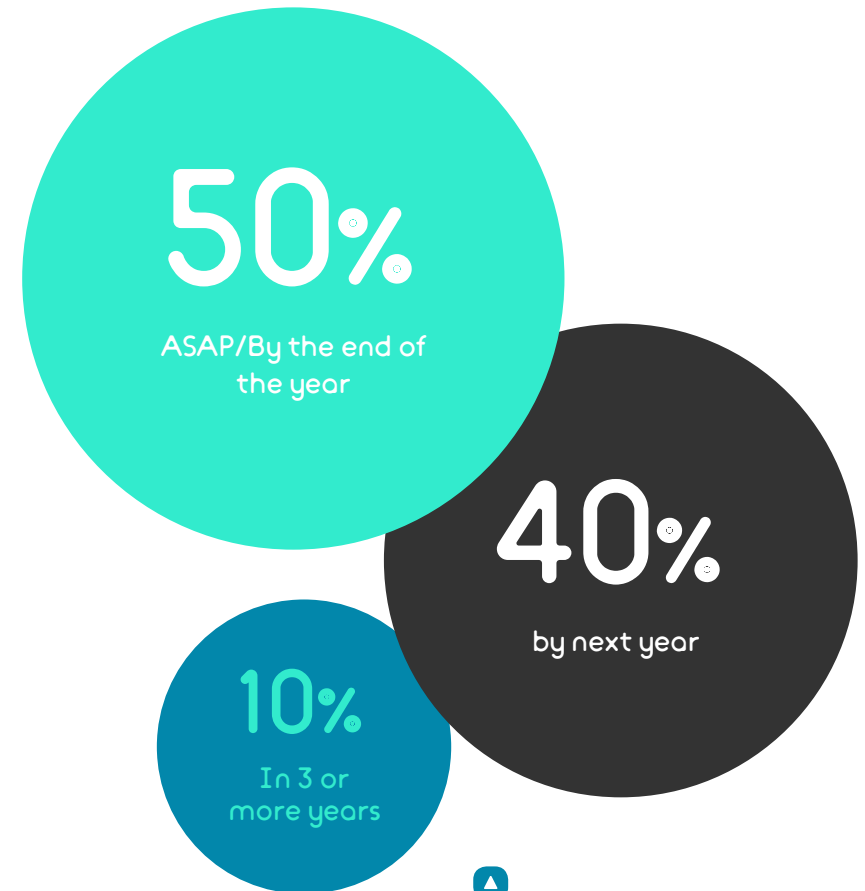
Stats taken from Arkivum Digital Preservation Webinar Questionnaire
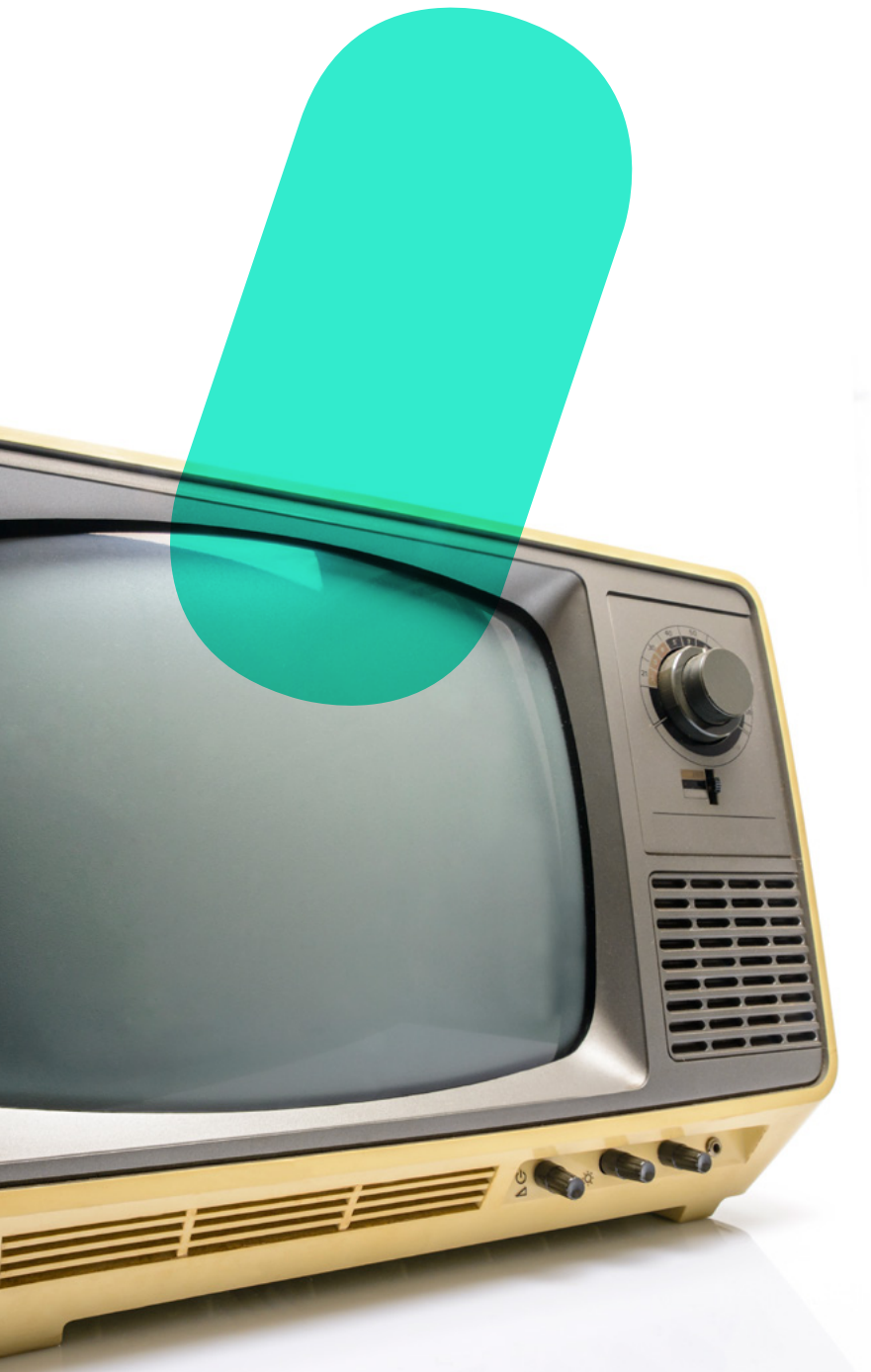
Organizational Planning and Budget Cycles

You should time the publication or presentation of your business case in line with organizational planning and budget cycles. You can then prepare your stakeholders for submission. This may involve refining the format to adhere to internal planning and budgetary standards.

Is Your Organization Waiting for the Perfect Solution?

In areas such as digital preservation, where full solutions are in the early adopter phase, waiting for full technological maturation can seem to make sense. But does it really?

Your organization will be waiting a long, long time for the perfect solution to appear – and this section highlights the risks involved in 'making do' with your current arrangements.

Today's software solutions are upgraded on a regular and incremental basis, meaning that you can start safeguarding your archival assets right now, and should 'perfection' come along, you are perfectly positioned to realize the benefits straight away.

What If It Really Isn't the Right Time?

In certain circumstances, delaying the submission of your business case may be the right approach, for now at least. You may not be ideally positioned in the planning and budget cycle, for example, or a key stakeholder may have left the organization.

If this is the case, then you need to maintain momentum in a constructive way, to avoid jeopardizing your migration to digital preservation. DPC advises using the intervening period to build momentum, by engaging with stakeholders and strengthening your case with the latest evidence. Support this with a robust communication plan.

Another helpful approach is to keep a record of the measures you're having to take to maintain the archive, without a solution in place. If you don't have metrics for the time taken to follow manual processes, then this is a great time to gather them. So you can strengthen your business case as well as keep your stakeholders interest. But make sure you've set a clear date on when to move forward, or you really will lose momentum.

Taking a Phased Approach to Digital Preservation

If you're preparing a business case for data preservation, then it's likely that you have a vision that is transformational. However realities can soon bite in terms of budgeting and resourcing, as we've already discussed. It's also important not to overwhelm your stakeholders. Data preservation and archiving projects can become unwieldy, and what we call 'action paralysis' can set in, with too many people or departments involved in an unfamiliar initiative. The risk of ending up back in 'do nothing' territory is all too real at this point.

In our experience, a phased approach is the best way to avoid this problem, safeguarding data and widening access in a controlled but effective way. This makes the business case look much more feasible and manageable to the stakeholder. If that means starting with a very small area of your overall archive, then you have at least made a start in protecting your data, complying with regulations and widening access.

By presenting digital preservation as a phased programme, you are giving stakeholders reassurance that review points are in place, that the approach can be refined as experience accumulates. At the same time you're managing the risk of doing nothing by working on the solution actively.

How to Phase Your Data Preservation Project

What that looks like will depend on the specifics of your organization. But however you decide to define your phases, you should start with either a champion department, or an area where the pain is particularly acute – where a data breach has already happened, for example. In other words, start by working with the people who already 'get it', whether that's a team or a particular collection of data. And then phase two might prioritize high risk data.

Another approach that is gaining traction is to take a feature-led approach. So phase one in this project might involve securing the data, making sure it's checked and encrypted, and replicating it across multiple locations. Then in phase two you can turn your attention to file format preservation, for example. And phase three can be a fuller roll-out.

Early Engagement with Potential Suppliers

Your potential suppliers have already accumulated a great deal of experience of data preservation projects – particularly valuable with early adopter solutions. They may be able to point you to similar organizations that have live data preservation solutions in place, and even arrange site visits for you.

They can also provide information for your business case. Ask them for resources such as feature sheets, videos and even product demonstrations. And start talking to us at an early stage. We can even facilitate a half-day brainstorming workshop with your stakeholders. Don't worry about not having budget secured – this is a new area so it's less likely that you'll have the funding in place at this stage.

Archived documents
© Jaguar Heritage Trust Archive

Formal Tenders or Requests for Proposals (RFPs)

If you need to go through a formal tender process, be careful about the weighting you give to the cost of the solution compared with the features, benefits and outcomes it delivers. What matters most are your problems and goals. Make sure your tender is not designed to get the cheapest supplier, but instead opens the way for a fully fit-for-purpose solution.

Framework agreements can also simplify the PQQ (Pre-Qualification Questionnaire) stage of a formal tender. They provide organizations in sectors such as local government, higher education and certain industries with a list of accredited suppliers. This can provide internal reassurance, and make it easier for you to work productively with your procurement department. Framework agreements remove a lot of the risk, and bureaucracy, involved in procuring solutions from a new supplier.

After a well-considered RFP process, we are pleased to select Arkivum PERPETUA as our long-term data archiving solution. The solution's functionality and scalability offered great appeal and fits our long-term data archiving strategy very well, while moving the University closer toward a trusted digital repository status. We're excited to be partnering with Arkivum, and look forward to bringing our archived content to life.

Leslie Reynolds, Interim Dean of the Libraries, University of Colorado Boulder

What Will Your Business Case Look Like?

Once you're ready to produce your business case, you need to decide on the best format for the specifics of your organization and project. The likelihood is that you will have to write a formal proposal of some type, even if you have engaged extensively with stakeholders, in ways we've suggested, up to this point.

The journey your business case takes once you've drafted has a bearing on what it should look like. Is it a document that you will have to submit to a board or a committee? Or are you applying to an external funder?

Some formats will be specific to a project management methodology of framework – such as the PID (Project Initiation Document). Others, such as the RFP (Request for Proposal) are required for a formal tender process. Even if the format is prescribed, though, it's worth finding out how flexible that format is – to give yourself every chance of optimizing your argument within those constraints.

To structure your proposal, follow this checklist to make sure you have included sections that your stakeholders expect to see:

- Executive summary – Including a high-level summary of recommendations
- Introduction – Background information, objectives and problem statement
- Business drivers and anticipated benefits – Targeting the appropriate stakeholder type
- Fully quantified cost-benefit analysis
- Project overview
- Solution description, with options if applicable
- Timeline
- Budget
- Success criteria
- Recommendations.

Data Archiving and Preservation – The Arkivum Solution

Our data archiving and preservation solutions deliver benefits in these areas:

- Safeguarding – Highest standards of data protection
- Usability – Accessible, usable and exploitable data
- Compliance – Seamless compliance with sector-specific regulations
- Data sovereignty – Total control of data storage location at all times
- Complete data life-cycle management - Managed service of modular product offering
- Integration - integrates with your existing work-flows and tools for better collaboration.

3

The minimum number of copies of each digital file that Arkivum PERPETUA stores to provide the 100% integrity guarantee.

First draft of the lyrics to Born to Run. Handwritten by Bruce Springsteen. 1974.

© Sotheby's

Arkivum PERPETUA

Arkivum PERPETUA is an end-to-end digital preservation and archiving safeguarding solution, built from the ground up to address the unique requirements and challenges of the heritage, library and higher education sectors.

Arkivum PERPETUA is a modular solution which allows organizations to select the capabilities and features suitable for your current needs and add others as requirements evolve. Arkivum PERPETUA scales from entry level to large collections, providing long-term preservation for valuable digital assets and helping you deliver superior customer service.

To meet the highest levels of digital preservation and access requirements, Arkivum PERPETUA includes tools that provide description and access meta-data management capabilities. This functionality is tightly integrated into the Arkivum PERPETUA solution to make content more discoverable and available over any digital channel.

Arkivum PERPETUA safeguards digital preservation, future accessibility and usability, by automating processes such as:

- File-format identification and normalization.
- Meta-data creation.
- Packaging for long-term archiving.

Arkivum PERPETUA is designed to ensure that your digital files remain accessible and usable into the long term, and comes with a 100% data integrity guarantee. The solution can be extended through a number of supported integrations to provide additional features and benefits, such as public or private access, search and discovery.

About Arkivum

Arkivum is the trusted software and service provider for managing your data securely for the long-term. We deliver solutions that help organizations to:

- Safeguard and preserve their most valuable digital content to the highest level.
- Comply with the intense regulations governing digital records management.
- Handle growing data volumes while making archived data usable and accessible.

Arkivum provides a safe, secure, compliant and accessible digital archiving solution, for both structured and unstructured data, with storage in the most appropriate location, and integrated with other business systems. Arkivum solutions bring archived data to life by opening up the vast, often untapped value of archived repositories. We offer a unique 100% data integrity guarantee and built-in escrow service.

Since 2012 Arkivum has been serving more than 120 organizations worldwide across regulated industries and has ISO 27001 certification. Our clients value our end-to-end managed service and simple solutions that meet complex challenges.