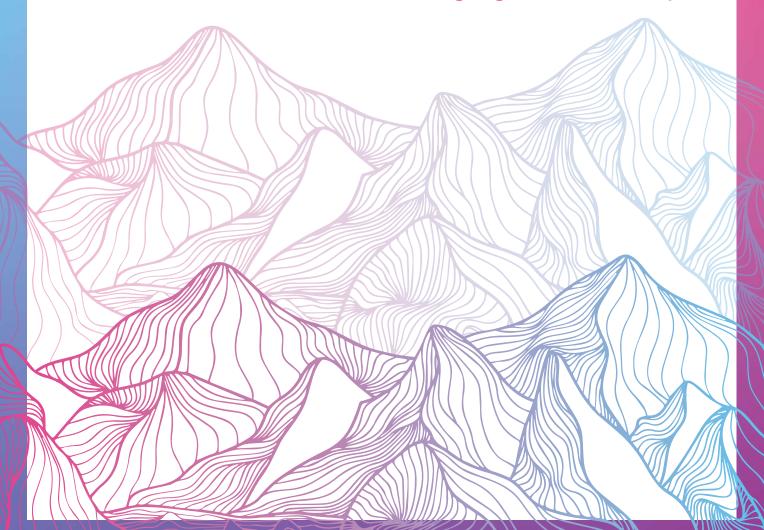






The Sustainability Test

A Self-Assessment Tool for Evaluating Digital Sustainability



About Sustaining Digital Heritage

This publication is produced in the framework of Sustaining Digital Heritage (SDH), an ICCROM-led capacity development initiative that offers training, tools and a self-sustaining network to ensure the long-term preservation and access to digital heritage content, as well as support its creative reuse. The programme will develop cross-sectorial partnerships to further amplify the cascading effects of capacity building activities. The overall aim is to enhance the potential of heritage to connect people, bridge divides, spark creativity and promote development.

Published by the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), Via di San Michele 13, 00153 Rome, Italy.

©ICCROM 2022 ISBN 978-92-9077-323-8

Co-Creation

Concept & lead author	Kara Van Malssen, Managing Director of			
	Consulting, AVP, United States			
Editor & research	Kelly Hazejager, Consultant, Sustaining			
	Digital Heritage, ICCROM			
Information Design	Christopher Malapitan			
Coordination	Aparna Tandon, Senior Programme Leader,			
	Sustaining Digital Heritage, Programmes			
	Unit, ICCROM			
	Rahel Mikael Wolde, Programmes Assistant,			
	Programmes Unit, ICCROM			
	Mohona Chakraburtty, Programme Assistant, FAR, ICCROM			



This publication is available in Open Access under the Attribution-Non-Commercial-Share Alike 4.0 International (CC BY-NC-SA 4.0) license (https://creativecommons.org/licenses/bync-sa/4.0). By using the content of this publication, the users agree to be bound by the terms of use of any future ICCROM Open Access Repository. The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of ICCROM concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. The ideas and opinions expressed in this publication are those of the authors; they are not necessarily those of ICCROM and do not commit the Organization.

Foreword

Sustaining Digital Heritage: heritage professionals as change agents

Being active in the sector for over two decades now, I never cease to be amazed by the creativity, agility and passion of the people that work in these magnificent mission-driven cultural heritage institutions. They are always looking how to align services with the ever-changing needs of the user groups they cater for, whilst also looking after the long-term preservation of collections and looking for ways to collect with others to further their impact on society following their public missions.

Similar to other economic sectors, the cultural heritage sector is constantly evolving. The extent to which institutions are able to help facilitate the triple transition (Green, Digital and Social) societies need to make will determine their position as change agents for a sustainable and resilient future. Also, as expressed in the new museum definition by ICOM, fostering diversity and sustainability should always be key components of organisational strategies. Having a position as change agent is both exciting and challenging. It requires curators, educators, marketing professionals, policy makers, cataloguers, IT staffers and other heritage professionals to invest in acquiring new skill sets and actively seek new partnerships with public and private entities. As well as working closely with and alongside communities of users. It also requires sufficient and stable resources to be made available for institutions to carry out their work.

Against this background, ICCROM's Sustaining Digital Heritage (SDH) initiative has been launched to give heritage professionals the opportunity to up-skill themselves, inspire others and consider their work through the lens of its societal impact potential. The initiative is based on insights gathered from talking to practitioners in the field, not only on what topics are most crucial to cover but also on how to deliver the capacity development. As a result, SDH facilitates peer-to-peer knowledge sharing as well as providing training and the development of cross-sectoral partnerships. This self-assessment will help heritage professionals to identify opportunities for growth and to develop a vision for their digital heritage.

The Netherlands Institute for Sound & Vision is excited to be part of the initiative. We look forward to engaging with heritage professionals from across the globe. To reflect on our position in society, to inspire each other and also to grow together.

Johan Oomen

Manager Research and Heritage Services Netherlands Institute for Sound & Vision







Contents

Introduction 05						
Self-	Self-Assessment					
iiiii	Adopt a Service Mindset	09				
	Right-Size Operations	22				
(B)+)	Deliver Value	34				
	Demonstrate Impact	45				
Bringing it All Together						
Gloss	Glossary					

Introduction

Sustaining digital heritage requires developing and managing programmes that can ensure its long-term preservation and accessibility. ICCROM's Sustaining Digital Heritage (SDH) initiative aims to develop capacities for this through offering training, knowledge sharing and building cross-sectoral partnerships. One of the primary goals of the SDH initiative is to foster a self-sustaining network of digital heritage leaders and communities.

This tool is based on the findings of the research carried out as part of "The Digital Imperative: Envisioning the Path to Sustaining Our Collective Digital Heritage," which helped identify an integrated model that connects knowledge and expertise from different fields for developing capacities at various levels.

A sustainable digital heritage programme is one that is built strategically, by establishing clear priorities, aligning priorities with operations, delivering value, and demonstrating impact over time. This approach can be considered a sustainability flywheel, as demonstrated in the diagram below. Each component of the sustainability cycle weaves together to build an evolving loop. The sustainability flywheel therefore captures that our work with digital heritage must be continuous and cyclical, building momentum, scope, and scale over time. Heritage professionals cannot and should not try to save, manage and provide access to everything simultaneously. Knowing where and how to devote attention is a critical skill needed in the digital age.

The sustainability flywheel is based on the methods and mindsets of human-centred design. The sustainability journey starts with empathizing, which means establishing an in-depth understanding of the people your organization serves along with their needs. Then you must establish priorities and build solutions that will deliver the value and impact that your stakeholders are looking for.

This institutional scan is a tool for self-assessment, intended to familiarize you with the model and help you identify where you are in your sustainability journey. By reflecting on where you are today, where you want to go, and the gap between here and there, you can begin to chart a course forward that sets you up for short term wins and long-term thinking.



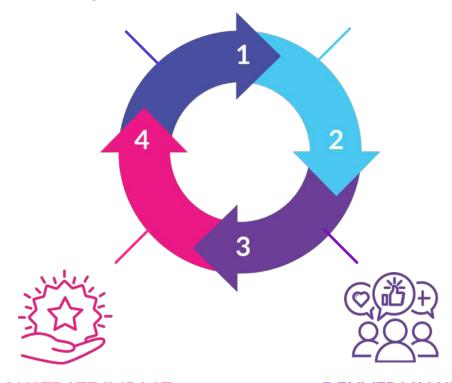
ADOPT A SERVICE MINDSET

Learn what is important to stakeholders and users in order to build responsive digital services



RIGHT-SIZE DIGITAL OPERATIONS

Ensure digital creation and collection can be managed and preserved effectively with the available resources



DEMONSTRATE IMPACT

Garner support by showcasing successful impact on audiences and stakeholders

DELIVER VALUE

Engage with audiences in ways that are meaningful, useful and impactful

The Sustainability Flywheel

How to use this tool

Estimated time needed to complete this assessment 4-5 hours

The sustainability test will be accompanied in future by SDH training opportunities and key resources. Completing this tool will help the SDH team to tailor training to your institutional context.

This tool can be used anytime you need to pause and reassess your digital sustainability. It can be used before you start planning a project, after you complete a project, before submitting a request for funding, or at any other key moment.

This survey should be used by organizations managing digital collections with the goal of ensuring this content is available over the long-term. This assessment can be completed by one person, but preferrably by a small team.

The results can be used by your team to help you plan your next steps, to communicate needs to your leadership or other influencing decision-makers, to set annual priorities, to choose a project to work on, to plan a project, or to create a funding request, and more.

Since this is only going to be used by your team, we encourage you to think critically about your answers and be honest with yourselves when you respond. This will yield the most accurate results and help you identify where you focus your energy.

Each section of the self-assessment will start by prompting you to reflect on the problems you face in your work with digital heritage and which you want to solve. There are also several exercises throughout the self-assessment which are intended to help you work through a particular question, but will not contribute to your score. In some sections you will be asked to answer statements with "yes," "no," or "don't know." At the end of each question, you will be asked to write down the total number of Yes responses, and you will add this up for your score for each flywheel section. Your score will be accompanied by possible actions that you could take to help address the gaps in your road to digital sustainability. At the end of the tool, your total score can be used to create a plan of action.

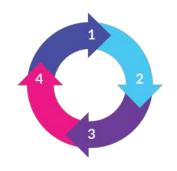






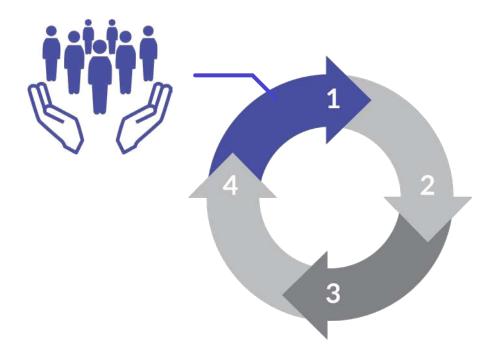


Self-Assessment





1. ADOPT A SERVICE MINDSET











Digital heritage content is created by people for the benefit of people. The same goes for collecting, preserving, and making this content available. These activities are undertaken on behalf of people. To ensure we are collecting, managing, and providing the right kind of access, start with a fundamental question: "Who do you serve and, what do you offer them?" The answer to the questions below will guide your decisions and help you put energy and resources into the most impactful activities.

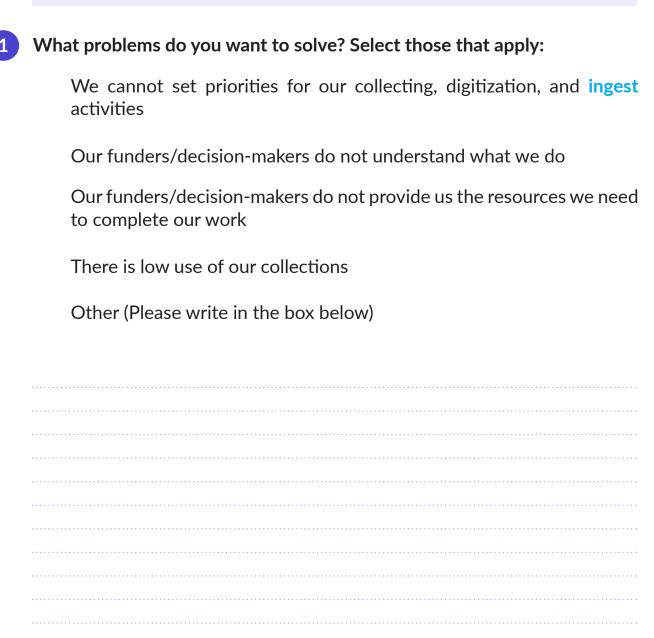
This section will ask you to think about your primary stakeholders, both users and decision-makers, how you prioritize these groups, and how you think about serving them.

For example, if you are a small regional museum, you might think of your primary stakeholders as local residents, students, educators (users), and the local government (an influencing decision-maker) as well as your services to them in providing digital content to educate and inform.



REFLECT

Think about what problems you want to solve











ASSESS

Stakeholders: Who do you serve? What are their needs and goals?

Have you identified and prioritised your 3-5 top user groups? Are they clearly understood by all?



Yes



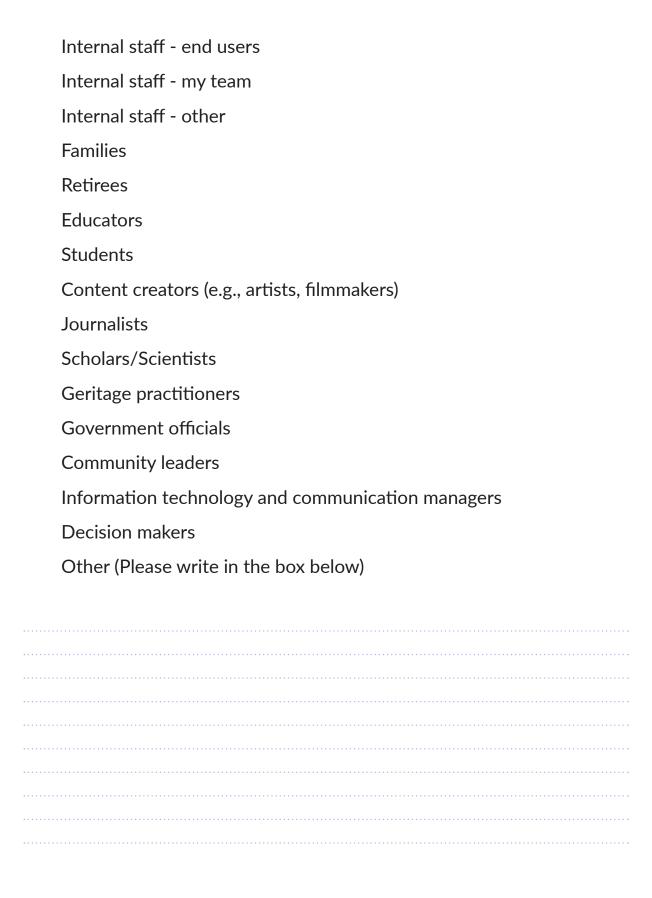
No



If you answered "Partially" or "No," ask your colleagues and spend time together preparing to do the following exercise.

















Briefly describe what are the needs and goals for the digital heritage you manage of the groups identified in Exercise 1.

For each group, complete a sentence using this structure: "As a [role] I need [something] so that [I can achieve a goal]."

For example: "As a history student I need trustworthy and freely accessible digitized primary source materials so that I can complete my thesis."









-		
	2	
V	J	١,
1		

Do you know the top 2–3 stakeholders who influence decision-making at your organization?



Yes

Partially

No



If you answered "Partially" or "No," ask your colleagues and spend time together preparing to do the following exercise.



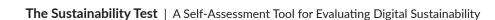


Exercise 3

Institutional leadership



•
Government (e.g., local, regional, national, international)
Granting agencies
Creators (e.g., researchers, artists)
Local communities (e.g., representatives, leaders)
Users
Other (Please write in the box below)





Exercise 4

Briefly describe the needs and goals for the digital heritage you manage of the groups identified in Exercise 3.

For each group, complete a sentence using this structure: "As a [role] I need [something] so that [I can achieve some goal]."

For example: "As a grant maker, I need to see that my investment is making the intended impact so that I can make a case to continue funding the initiative."











For these statements about your user and decision-maker stakeholder groups, answer "yes," "no," or "don't know." You will have to consider multiple groups in your responses.



Don't know No



a. We have engaged directly with each priority user group to understand their needs and goals for use of our digital assets or data



b. We engage on a recurring basis with each priority stakeholder group



c. We periodically re-evaluate which groups (e.g., users, decision-makers) are a priority



d. We can articulate our value proposition (what problems we solve/solutions we offer) to each group (e.g., users, decision-makers)

> Number of Yes responses: /4

Yes

Content: What do you have? What can you realistically offer?



Answer these statements about your data/content/assets with "yes," "no," or "don't know."

Don't know

a. We have a collection-level (or better, a subcollection or series level) inventory for everything in the collection



b. We have an item level (or better, a file-level) inventory for every object in the collection



- **c.** We know where all our assets are stored, and can easily find any given item in digital storage within a day
- **d.** We know what is on all of our digital storage locations
- **e.** We know the **intellectual property rights** to everything in the collection or can find out within a day if requested

Number of Yes responses: /5

Yes

No

Value proposition: What do stakeholders need, and how do you respond to those needs?





Answer these statements about how you respond to stakeholder needs with "yes," "no," or "don't know."

Don't

Nο know Yes

- **b.** We prioritize new collection activities, including born-digital collection digitisation and according to stakeholder needs and goals (in addition to other factors, like risk of loss)

a. We have prioritized our existing collections according to stakeholder needs and goals

c. We apply different approaches to curation (e.g., item level description vs. collection level description) to digital collections depending on stakeholders' needs

> Number of Yes responses: /3







VISION

Imagine and envision what the future looks like for your organisation.

|--|







Do you have a vision of what you will be able to accomplish once problems you identified in the Reflect section of 1. Adopt a Service of the section of 1.
Mindset (p9) are resolved? Who will be impacted, and what will their resperience be? Describe briefly.
experience be. Describe briefly.

SCORING

Please add up the number of Yeses in 1. Adopt a Service Mindset to get your score for this section of the tool.

Number of Yes responses: /12

iiiii







Low 0-4

A low score in this section most likely indicates that priorities have not been established. You are likely struggling in all aspects of digital heritage management as you are unable to make decisions and prioritize effort and resources. You likely do not have a clear picture of what content you have and what you can do it with. You are feeling stuck and overwhelmed and aren't sure how to move forward.



Possible Actions

- → Identify priority stakeholder groups and talk to them to learn more about their needs and goals, either in interviews or focus groups
- → Based on the outcomes of your engagement with stakeholders, work with your team to establish priorities for the next year
- Document what your offering is to your primary stakeholders
- Complete a high-level inventory of collections so you will know a little more about what you have

Medium 5-8

A mid-range score indicates you have done some work to set priorities but may need to do a little more. You may understand your users but not your decision-makers, or vice versa. You likely haven't yet translated priorities into actions. You may need to work on articulating and communicating your priorities, internally and externally. You may also need to do some additional work to better understand your existing collections so you can set priorities, manage operations, and deliver value.









Possible Actions

- → Engage with stakeholders you have not yet talked to in order to learn more about their needs and goals
- Confirm priority stakeholders for the next year with key decisionmakers
- → Document and share your service offering with primary stakeholders
- Add additional detail to the inventory you have, particularly regarding what rights you have to collections or where that information is known
- → Learn about human-centred design and design thinking

High 9-12

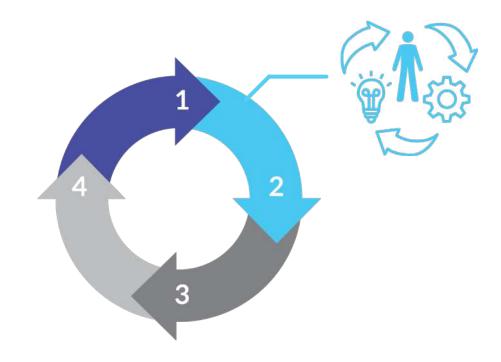
You have done the foundational work to be positioned to run an effective operation, deliver value, and demonstrate impact to sustain your digital heritage programme. As a result, you know who you serve, what they need, and what you offer them. You can use this knowledge to set priorities and make clear decisions. The following actions will sustain your efforts in the long-run.



Possible Actions

- Document and share your priority stakeholders and collections
- → Document and share your service offering with priority stakeholders; what problems do you solve for them, and what do you offer them?
- → Learn more about human-centred design and Lean development

2. RIGHT-SIZE OPERATIONS

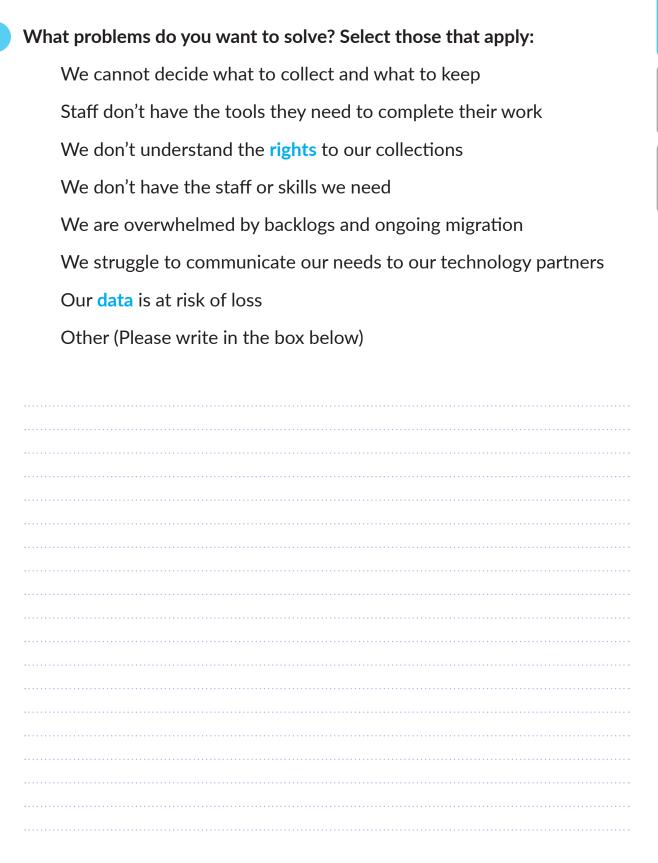


The primary objectives of a collection management and preservation programme is to ensure content stability, availability, and quality over time. But heritage organizations can only do so much with limited resources. Right-sizing operations means optimizing the resources you have to ensure you can meet these objectives on behalf of your priority users and stakeholders and preserve the opportunity to do more later. In this section, we will explore how you ensure content stability, availability, and quality by prioritizing operational practices and actions.



REFLECT

Think about what problems you want to solve











ASSESS

Policy: Do you have the mechanisms that enable you to prioritize and achieve service goals?

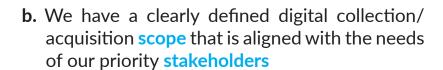
Answer these statements about your policies with "yes," "no," or "don't know."

Don't

know Yes No



a. We have a clear and documented understanding of what type of content, how much of it, and in what form our organization should acquire or create (e.g., collection policy, digitization policy)



- **c.** We have a clearly defined digitization scope that is aligned with the needs of our priority stakeholders
- d. We have clearly defined, documented, and communicated the scope of our services to our priority stakeholders
- e. We have submission requirements (e.g., format and metadata requirements) defined for ingest into our digital systems

Number of Yes responses: /5



Roles & Responsibilities: Have you defined what roles and responsibilities are needed to enable stability, availability, and quality of content?









Answer these statements about roles and responsibilities with "yes," "no," or "don't know." Do you have roles and responsibilities defined for the following:

Yes No know

- **a.** Strategic and tactical decision-making for the digital program
- **b.** Creation of collection and selection policies
- **c.** Creation/maintenance of shared quality standards for digital asset creation (e.g., digitization standards)
- **d.** Creation/maintenance of shared quality standards for metadata (e.g., metadata fields, taxonomies)
- e. Creation of digital assets (e.g., digitisation)
- **f.** Ingest of digital assets
- g. Creation of metadata
- **h.** Management and configuration of technologies (e.g., product management, tech support)
- Quality control and assurance (e.g., checking to ensure that metadata and digital assets meet quality specifications)
- **j. Customer success** (e.g., outreach, training, reference services for users)

Number of Yes responses: /10

Standards: Do you have standards defined to ensure quality of content?





Answer these statements about your internal standards with "yes," "no," or "don't know."

Don't know

No

a. We have designed our metadata so that it will answer the most common questions that our priority users have about the content based on our understanding of their needs, as discussed in Section 1



- **b.** We have taxonomies defined that are designed to ensure consistency and quality of data
- **c.** We have data creation/cataloguing guidelines that are designed to ensure consistency and quality of data
- d. We have digitization and digital asset creation guidelines that are designed to ensure consistency, quality, and longevity of content
- e. We periodically evaluate and update our standards to ensure they continue to meet user needs

Number of Yes responses: /5

Yes





Technology: Are technologies in place to support staff and maintain content?



Answer these statements about your technologies with "yes," "no," or "don't know."

Don't

Yes No know

- a. The software we use to manage digital assets and metadata meets the majority of our functional needs
- **b.** The management software we have meets our performance expectations most of the time
- c. The management software we have supports our priority content types
- d. Our management software has been configured to allow users (staff or external users) to complete their tasks efficiently and effectively
- **e.** The management software we have can scale as our needs grow
- f. We can maintain the technology we have ourselves, or we have sufficient support services for our technology from a partner/ vendor
- g. Our storage infrastructure is stable and reliable
- **h.** We have at least one static backup of all content (files + metadata/database)
- i. Our backups are in a geographically separate location from our primary data storage

/9 Number of Yes responses:





Staffing: Are the right people in place to deliver services and maintain content?



6

Answer these statements about your staffing with "yes," "no," or "don't know."

Don't know

No

- **a.** We have sufficient staff to manage operations in accordance with our goals for service delivery to our priority stakeholders
- **b.** Our staff have the skills needed to manage operations in accordance with our goals for service delivery to our priority **stakeholders**
- **c.** We have a professional development program to train new staff and help existing staff learn and grow

Number of Yes responses: /3

Yes







Process: Do you have processes defined for your primary operation functions, and are they designed for stability, availability, and quality?









Answer these statements about your processes with "yes," "no," or "don't know."

Yes No know

- **a.** Content acquisition in everyday operations (e.g., acquiring new collections)
- **b.** Content creation (e.g., digitization, digital asset production)
- **c.** Content **ingest** (e.g., file and **metadata** ingest into a DAMS)
- **d.** Quality control (e.g., review of files, metadata for conformance to specifications)
- **e.** Review and approval of usage requests (e.g., rights clearance, other usage approval)
- **f.** Data flows between systems

Number of Yes responses: /6

VISION

Imagine and envision what the future looks like for your organisation.

Desci	ribe brie	efly.							
• • • • • • • • • • • • • • • • • • • •						• • • • • • • • • • • • • • • • • • • •	 		
•••••							 		
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •	 		• • • • • • • • • • • • • • • • • • • •
• • • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	 • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••
						• • • • • • • • • • • • • • • • • • • •	 		
• • • • • • • • • • • • • • • • • • • •							 		
• • • • • • • • • • • • • • • • • • • •							 		
• • • • • • • • • • • • • • • • • • • •						• • • • • • • • • • • • • • • • • • • •	 		
• • • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •				 	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •









SCORING

Please add up the number of Yeses in 2. Right-Size Operations to get your score for this section of the tool.

Number of Yes responses: /38







Low 0-11

A low score in this section indicates that you have either not set priorities (see Section 1) or not translated priorities into your operations and actions. You likely don't have clarity on policies, roles and responsibilities, and internal standards, which makes it hard to build processes, find and train staff, communicate to technology partners, and use technology effectively. You are likely overwhelmed by backlogs and a lot of unknowns.



Possible Actions

- Create informal guiding policies that align with priorities
- List out roles and responsibilities needed, and work with your team to identify who does what and where you have gaps
- Identify where lack of standardization is negatively affecting you most, and create a first draft of an internal standard (using industry standards and best practices where available)
- Identify where data clean-up is needed to improve quality, and create clear clean-up instructions that can be completed by an intern or trainee
- Document one new process each quarter

Medium 12-24

A medium score indicates that you have some good foundations but need to build on them. You may have resolved some questions around policies, roles and responsibilities, and internal standards, but you still have some outstanding. You may not be able to articulate technology needs and are struggling to find the right tools and then build processes around these.





Possible Actions

- Work with leadership to formalize policies that align with priorities
- Establish a governance team that meets on a regular basis to discuss standards, processes, and goals
- Create a first draft of internal standards for all needed areas
- Create an ongoing data clean-up programme that can be continuously completed by interns and trainees
- Make a list of all the issues you are having with your technology and describe what you cannot do because of these
- Document one new process each month

High 25-38

A high score indicates you have done significant work to operationalize and manage resources effectively. You have clear roles and responsibilities, staff to fill most of these roles, and processes that are routinely followed. You have a good working relationship with technology partners. Your data might not be perfect, but you have a path for continuous improvement.





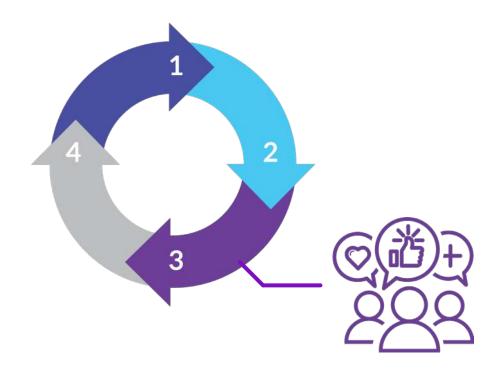






- Formalize your governance group into strategic, tactical, and operational responsibilities. Identify domain stewards who can lead standardization and data quality for different types of data/digital assets
- Find any gaps where processes or standards need improvement, and work with governance team members to update these
- Learn best practices for documenting technical and functional requirements (e.g., learn about business analysis and/or agile) in order to articulate needs to technology partners
- Learn more about digital storage and digital asset management to further improve your ability to implement technical solutions for digital collections management

3. DELIVER VALUE



The work that heritage organizations do to collect, conserve, and make digital content available is only meaningful if it creates value for **users** today and in the future. To do that effectively, it is important to engage directly with users to understand their goals and requirements for interacting with and using content and to learn how well you are serving them today. Once you understand these requirements better, respond by providing users with ways of using content that meet requirements and continually measure and find ways to improve. In this section we will evaluate the question, "How do you create and deliver value to **stakeholders**?"



REFLECT

Think about what problems you want to solve.

1	What problems do you want to solve? Select those that apply:
	Users don't trust our data because quality is poor
	Users are frustrated because they can't find what they need
	We are unable to innovate and create value
	We don't know how to create ethical open access
	Other (Please write in the box below)



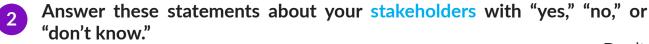






ASSESS

Understanding & Empathy: Do you understand your stakeholders' requirements?



Don't Yes No know

- a. We have engaged directly with each priority user groups (see 1. Adopt a Service Mindset) to understand what content is most important to them
- **b.** We have engaged directly with each priority user groups to understand how they would like to use and interact with our digital collections
- **c.** We understand the gaps between our current offerings and our users' needs and expectations
- **d.** We can describe (in 1–2 paragraphs) what each of your priority user groups need to be able to do in order to complete their goals that use our digital collections/services

Number of Yes responses: /4







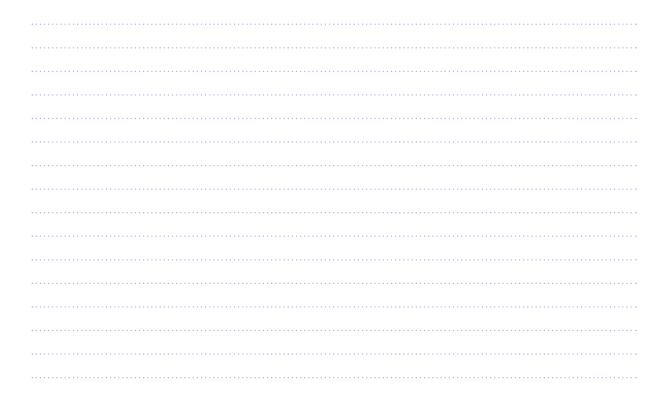




Create 2–3 personas with accompanying usage scenarios that describe your priority user groups and how they want to interact with your content or services. NOTE: Personas should only be created based on information you have gathered from real people. If you have not yet engaged with your priority user groups directly, stop and do that first. Read more about creating personas here.

Give each of your personas the following:

- a. A name and a picture
- **b.** Relevant demographic information (e.g., like age, location, education, lifestyle)
- c. Summary of needs and goals
- **d.** Summary of frustrations
- e. Summary of tasks and expected outcomes
- **f.** Skills, tech savviness, and common channels for interaction
- **g.** 1–2 paragraph usage scenario (story) in which this person uses the service











•
• •
• •
• •
٠.
• •

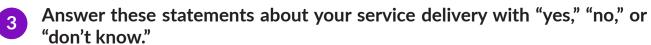








Deliver: How do you meet priority user requirements?



Don't know

Nο

- **a.** We test changes to our services or new service ideas with users before fully launching
- **b.** We are delivering content/services to each priority stakeholder group in a way that meets their needs
- **c.** We have active and effective outreach and communications to each target stakeholder group.
- **d.** Our digital content is organized and presented in a way that enables users to find what they are looking for
- **e.** Our digital content is described/tagged/catalogued in a way that enables users to effectively use content

Number of Yes responses: /5

Yes









Measure: How do you ensure quality user experience?



Answer these statements about your measurement approaches with "yes," "no," or "don't know."

Don't

Yes No know

a. We are regularly measuring user engagement with our collections for all priority user groups



b. We periodically test our services with priority stakeholder groups to see how well they are performing and to gauge satisfaction



- **c.** We have mechanisms to gather feedback on an ongoing basis (e.g., feedback forms, surveys).
- **d.** We evaluate and prioritize feedback from users
- **e.** We use prioritized feedback to improve our services

Number of Yes responses: /5

VISION

Imagine and envision what the future looks like for your organisation.

5	Do you have a vision of what you will be able to accomplish once the problems you identified in the Reflect section of 3. Deliver Value (p35) are resolved? Who will be impacted, and what will their new experience be? Describe briefly.









SCORING

Please add up the number of Yeses in 3. Deliver Value to get your score for this section of the tool.

Number of Yes responses: /14

Low 0-4

A low score in this area may be an indication that you have unhappy users or that you are not reaching as many people as you would like. You likely have not spent time working with stakeholders to understand how to create a user experience that best meets their needs. This may be related to lack of identification and prioritization of stakeholders in 1. Adopt a Service Mindset. Users' needs do not figure into your decision making, and you are not gathering feedback from them on a regular basis.



Possible Actions

- → Interview 3–5 people who represent one of your user groups
- Create draft personas for each priority user group
- → Document 2–3 changes you would like to make to better serve these users









Medium 5-9

A medium score shows that you have done some good foundational work in this area. Keep the momentum going by creating a project to interview users, document their needs, and create prioritized requirements for improvement to your service offerings.











- → Interview 3–5 people who represent each user group
- Create complete personas for each priority user group
- → Document 2–3 changes you would like to make to better serve these users, and prioritize these
- → Identify mechanisms for gathering regular feedback from users. Implement one of these
- Create an initial outreach and communication plan (e.g., regular social media posts, website updates)
- → Learn about the basics of marketing and user research

High 10-14

You have talked to your users and know what improvements they would like to see. You have implemented ways of testing and gathering feedback. Now, you need to systematize these practices, making them routine, and instilling user needs and user experience into your culture of decisionmaking.





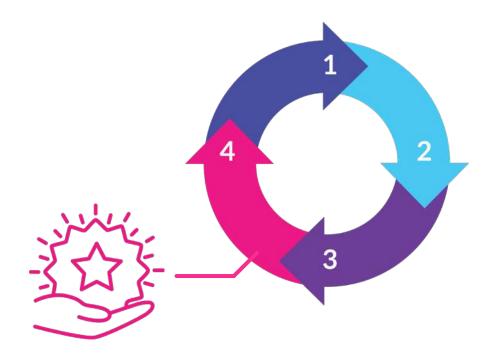




Possible Actions

- Create a plan for regular user engagement to understand opportunities for improvement
- → Conduct periodic user testing to see where users are struggling with your current offering, and identify areas of improvement
- → Implement a prioritized running backlog of changes and updates you can make to better serve users that have resulted directly from user engagement, user testing, and ongoing feedback
- Formalize outreach and communication plans to reach priority users
- → Deep dive into marketing, market research, and user research

4. DEMONSTRATE IMPACT



Digital heritage programmes typically grow and are sustained through the support of **stakeholders** such as governments and funding agencies. Garnering support is most effectively achieved when these stakeholders can see that their investment has had a positive impact, and even better when the impact aligns with those stakeholders' goals and priorities (see **1. Adopt a Service Mindset**). In this section we will evaluate the question, "How do you track and demonstrate impact to gain ongoing stakeholder support?"



REFLECT

Think about what problems you want to solve.

What problems do you want to solve? Select those that apply from the following:

We do not have the funds we need

Our funders/decision-makers do not understand what we do

Our funders/decision-makers are exploitative

We are not effective at advocating for our work

Other (Please write in the box below)



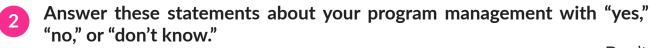






ASSESS

Program management: Are you creating measurable goals and tracking progress toward these?



Don't Yes No know

- **a.** We know what changes we would like to see and have measured the current state so that we can later measure progress (e.g., baseline return on investment measurement for time saved, users reached)
- **b.** We understand decision-maker priorities and have established measurable goals for our digital program that align these (e.g., key performance indicators)
- **c.** We have milestones for each goal (e.g., date of service launch)
- **d.** We have a roadmap (stage and dates) for reaching milestones
- **e.** We have a way to track tasks toward meeting milestones (e.g., task tracking tools, spreadsheets).
- **f.** We measure progress toward our goals
- **g.** We have a way to track and report on progress toward measurable goals
- **h.** We are or are planning to measure ROI against previously documented baseline measures

Number of Yes responses: /8









Measure & demonstrate: Are you communicating impact?



Answer these statements about your reporting and communication with "yes," "no," or "don't know."

Don't know

No

a. We are routinely reporting progress toward our goals to key decision-makers



b. Decision-makers are provided reports or other evidence that demonstrate how we have delivered value to priority users or other impact



c. We have identified the resources we need to meet goals (see 2. Right-Size Operations) and have communicated these needs to decisionmakers



d. We have a documented plan for how additional resources would benefit the overall program and help us further progress toward goals

> Number of Yes responses: /4

Yes

VISION

Imagine and envision what the future looks like for your organisation.

4	Do you have a vision of what you will be able to accomplish once the problems you identified in the Reflect section of 4. Demonstrate Impact (p46) are resolved? Who will be impacted, and what will their new experience be? Describe briefly:









SCORING

Please add up the number of Yeses in 4. Demonstrate Impact to get your score for this section of the tool.

Number of Yes responses: /12

Low 0-4

You are struggling to communicate with decision-makers. You have not set clear goals and therefore can't easily articulate to important funders or leaders what you want to achieve and what you need to get there. You are often frustrated that decision-makers don't understand your needs and don't seem to support your work. You may have too many influencers and aren't sure which voices to listen to, or a strong influencer is overpowering you and you are not sure how to work with them.



Possible Actions

- → If you haven't already (see 1. Adopt a Service Mindset), talk directly to decision-makers other influencing stakeholders to understand their priorities
- Set 1-2 simple goals for the year
- → Share your goals with decision-makers and use their feedback to refine these goals
- Create 1 monthly milestone that will help you reach your goal
- → Share your progress toward your goal with decision-makers on a regular basis, and gather feedback from them on how to improve your communications









Medium 5-8

A medium score means you have done some work to establish goals, and hopefully these are aligned with your decision-makers' priorities. You have started to think about the work it will take to achieve these goals but could use a little more structure to help you get there. You likely need to work on how you communicate progress to decision-makers so that they can understand the impact your work is having on the things that you mutually care about.









Possible Actions

- Identify 3-5 goals you want to accomplish for the year
- Create a list of all the activities you will need to do to reach those goals
- Map the activities out on a timeline
- Assign responsibilities for each activity
- → Share your progress toward your goals with decision-makers on a regular basis with a focus on demonstrating impact
- Learn the basics of program and project management

High 9-12

You are doing great work in this area. You have established a program, are setting goals, assigning responsibility, and tracking progress toward them. You have good lines of communication with decision-makers and are able to demonstrate progress and impact to them. They understand what your future goals are and are willing to help you find the resources for these.





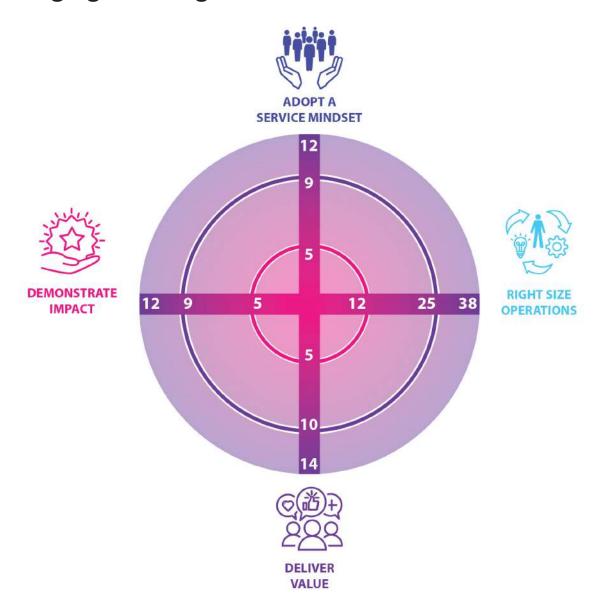






- → Measure the current baseline for each ROI metric you would like to improve. For example, if you want to reduce the time it takes for staff to digitize an object, measure how long it takes today. Then set benchmarks for improvements you would like to see (e.g., today it takes 2 days, would like to reduce this to 1/2 day)
- → For each of your goals, establish a set of measurable key performance indicators that you want to reach (e.g., inventory 90% collections, increase number of visitors per month by 25%)
- Implement project management software to help track goals, milestones, and tasks
- → Dig deeper into program and project management, learn about product management. Learn about objectives and key results (OKRs) and how to use this method to set and track progress toward your goals
- Share your progress toward your goals with decision-makers on a regular basis with a focus on demonstrating impact
- → For each new goal, document what resources will be required and the costs associated with those resources, and incorporate this into new requests

Bringing it All Together



How to use this diagram

This diagram is a visual representation of the results of your Self-Assessment. To use this diagram, plot your score [number of Yeses] from each section of the flywheel model onto the relevant axis with a mark. If your score is on the lower end for a flywheel section, the mark will be closer towards the centre of the diagram. Please note that the range is much larger for the section 'Right-Size Operations' because there were more assessment questions in this section.

Seeing your results from each section of the flywheel model in relation to each other can help you identify priorities for your plan of action.









Sample Results

Here's an example of a small institutional archive and their results from completing the self-assessment.

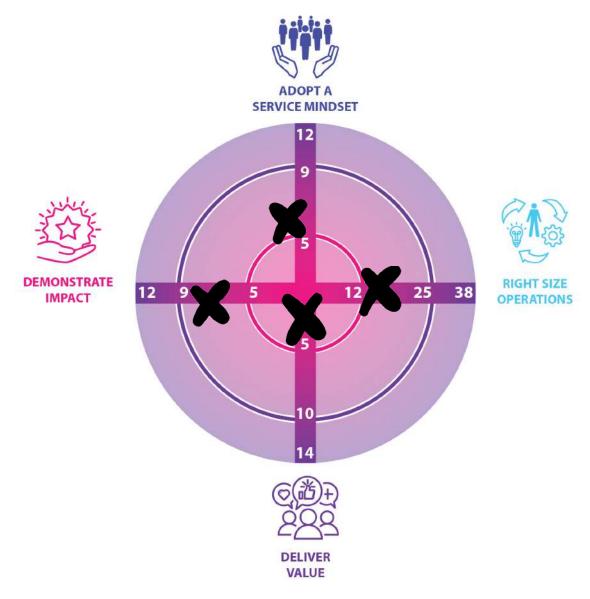
This diagram shows that this institution received an overall low-to-medium score, showing that their digital operations are vulnerable to institutional change, shocks and stresses. By way of a remedial action, the management of this archive may identify actions that they could take at a relatively low cost. For example, by conducting interviews with researchers who use institutional documents in their work to find out more about their needs, this institution would be able to not only tailor to those needs, but also add value to their document delivery service by providing desired **metadata**. This could further multiply impacts and benefits by increasing the outreach of the institution and making the services provided by the archive more visible.











Plan for Action

This next section is intended to help you create a plan for action. The table below is organized into the four sections of the flywheel model. The first column identifies a goal or task you should aim to complete. Based on your responses to the questions above, determine what action you might need to take to accomplish this goal. Example actions are provided in the second column, and you can also find ideas from the sample actions in the scoring sections above. If you feel that you have already achieved this goal, make a note of that too, with an indication of when you will next revisit that task. Remember: priorities, users, and needs change all the time. Revisit each of these tasks annually to ensure you are able to respond and deliver value accordingly throughout changing times.











1: Establish a Service Mindset

Goal	Example Action	Proposed Action
We have identified and prioritized our user groups	Work with my team to identify top 3 user groups	
We understand and have documented our priority users' needs and goals	Interview representatives from top 3 user groups	
We have identified and prioritized our influencing stakeholders	Work with my team to identify top 3 influencing stakeholders	

We understand and have documented our influencing stakeholders' needs and goals	Interview top 3 influencing stakeholders	
We have documented a value proposition that describes what we offer to priority stakeholders to help them meet their goals	Draft a value proposition statement and ask for feedback from stakeholders	
Our holdings/ collections are inventoried at a basic level, at high quality (complete, consistent, usable)	Evaluate the completeness, consistency, and usability of our data	
Our digitization and collecting activities are prioritized according to user needs	Draft digitization priorities list to share with decision-makers	
Our holdings/ collections are curated according to users' information needs	Interview users about what information they need in order to effectively use our collections	











2: Right-Size Operations

Goal	Example Action	Proposed Action
Our policies are aligned with our priorities	Draft a collection/ acquisition policy that reflects our priorities	
Our roles and responsibilities are defined and understood by all	Document roles and do a workshop with my team to align responsibilities	
Our standards are selected and applied in order to ensure quality and future-proofed digital assets and data	Review our metadata/ cataloguing standards and update as needed	
Our technologies meet our functional and technical requirements	Identify, document, and prioritize functionality needed, then review this with our IT department	
We have sufficient staff with the right skills needed to complete our priority work	Identify gaps in our current staffing and skills	
Our processes are efficient and documented so that they can be easily taught	Write documentation for processes that do not exist	











3: Deliver Value

Goal	Example Action	Proposed Action
We have engaged directly with our users and understand what they need from our services and digital collections	Interview representatives of priority stakeholder groups to understand how they would like to interact with our collections	
We have created personas and accompanying usage scenarios for our priority user groups	Use data collected during user interviews to build user personas	
We test our services with users so we know if their needs are being met	Conduct usability testing with 5–7 testers that represent our priority user groups	
We are gathering feedback on a regular basis	Create and distribute a survey asking users how well our current services meet their needs and expectations	
We are setting priorities for improvement based on user feedback	Establish a recurring meeting with our team to prioritize improvements gathered from user feedback	











4: Demonstrate Impact

Goal	Example Action	Proposed Action
We have established success metrics	Draft measurable goals and review with our influencing stakeholders	
We have established and documented our goals, aligned with priority user needs, for the upcoming 6 months	Meet with my team to document our goals	
We have a roadmap with milestones that describes each stage of our journey to our goals	Document the steps that it will take to reach our goals and assign due dates for these activities	
We report our progress toward our goals to our influencing stakeholders	Establish a quarterly review meeting with our leadership	
We can describe what additional resources are needed and how these would be utilized to help us move efforts forward	Create a budget for our upcoming projects	









Glossary

Copyright (also intellectual property rights)

Copyright (or author's right) is a legal term used to describe the rights that creators have over their literary and artistic works. Works covered by copyright range from books, music, paintings, sculpture, and films to computer programs, databases, advertisements, maps, and technical drawings. There are two types of rights under copyright: economic rights, which allow the rights owner to derive financial reward from the use of their works by others; and moral rights, which protect the non-economic interests of the author.

Source: https://www.wipo.int/copyright/en/ **Permanent link:** https://perma.cc/Y2FD-3U9X









Customer Success

Customer success is a method for ensuring customers reach their desired outcomes when using an organization's product or service.

Source: https://www.gartner.com/en/sales/glossary/customer-success#:~:text=Customer%20success%20is%20a%20method,or%20

services%20and%20customer%20support **Permanent link:** https://perma.cc/43J9-VVNJ

Digital assets/data/digital materials

Different terms are often used interchangeably.

"Digital materials" is a broad term encompassing digital surrogates created as a result of converting analogue materials to digital form (digitisation) and "born digital" for which there has never been and is never intended to be an analogue equivalent, and digital records.

Source: https://www.dpconline.org/handbook/glossary

Permanent link: https://perma.cc/TSE3-6WAF

"Data" is a reinterpretable representation of information in a formalized manner suitable for communication, interpretation, or processing. Examples of data include a sequence of bits, a table of numbers, the characters on a page, the recording of sounds made by a person speaking, and metadata.

Source: https://www.lib.umn.edu/about/dp/glossary

Permanent link: https://perma.cc/PX7U-7P4K

See also "digital assets" https://cdlib.org/resources/technologists/glossary-of-digital-library-terms/

And "digital content" https://www.lib.umn.edu/about/dp/glossary

Digital Heritage

Digital heritage is made up of the creative expressions, cultural practices, as well as documents and records of heritage that are all captured, disseminated, preserved, and accessed over time digitally.

Source: https://www.iccrom.org/news/what-your-digital-heritage

See also:

UNESCO's concept of digital heritage https://perma.cc/4WTC-JZ86 And from the European Commission https://perma.cc/KS8Z-8DE7









Digitisation

The process of creating digital files by scanning or otherwise converting analogue materials. The resulting digital copy, or digital surrogate, would then be classed as digital material and then subject to the same broad challenges involved in preserving access to it as "born digital" materials.

Source: https://www.dpconline.org/handbook/glossary

Permanent link: https://perma.cc/TSE3-6WAF

Ingest

Ingest is the set of processes in the OAIS model responsible for accepting information submitted by producers and preparing it for inclusion in the archival store.

Source: https://www.dpconline.org/docs/technology-watch-

reports/1359-dpctw14-02/file

Permanent link: https://perma.cc/DUR7-93HE

KPI

Key Performance Indicators (KPIs) are the critical (key) indicators of progress toward an intended result. KPIs provide a focus for strategic and operational improvement, create an analytical basis for decision making and help focus attention on what matters most. This includes setting targets and tracking progress against that target.

Source: https://kpi.org/KPI-Basics

Permanent link: https://perma.cc/2W9P-QNPJ

Long-Term

A period of time long enough for there to be concern about the impacts of changing technologies, including support for new media and data formats, and of a changing designated community, on the information being held in an OAIS. This period extends into the indefinite future.

Source: https://www.lib.umn.edu/about/dp/glossary

Permanent link: https://perma.cc/PX7U-7P4K

Metadata

Structured information about an object, a collection of objects, or a constituent part of an object such as an individual content file. Digital objects that do not have sufficient metadata or become irrevocably separated from their metadata are at greater risk of being lost or destroyed. Ephemeral, highly transient digital objects will often not require more than descriptive metadata. However, digital objects that are intended to endure for long periods of time require metadata that will support long-term preservation.

Source: https://cdlib.org/resources/technologists/glossary-of-digital-

library-terms/

Permanent link: https://perma.cc/SSS7-B7PX

ROI

Measuring 'return on investment' can help to demonstrate whether an activity has been successful and if it's worth doing again. Establishing what 'worked' means however, especially for cultural organisations, often involves thinking beyond a return in money or financial investment to also include cultural and social returns or investments.

Source: https://www.culturehive.co.uk/resources/take-a-look-at-return-

on-investment-roi/

Permanent link: https://perma.cc/V9K5-9PLX

See also: https://perma.cc/D2XG-3Y83









Scope

The scope is simply all the work that needs to be done in order to achieve a project's objectives. In other words, the scope involves the process of identifying and documenting specific project goals, outcomes, milestones, tasks, costs, and timeline dates specific to the project objectives.

Source: https://www.greycampus.com/blog/project-management/steps-

involved-in-defining-project-scope

Permanent link: https://perma.cc/4BSA-3RKU

Stakeholders

Stakeholders are the people who have a direct or indirect interest, or who affect or are affected

by, the implementation and outcome of activities related to the heritage in question in the digital domain. Typically, they include individuals and representatives of communities, institutions and/or organizations and agencies invested in and engaged with the project area. (International Union for Conservation of Nature, n.d.; IFRC, 2010, pp. 16-17).

See also: IFRC, 2010: https://perma.cc/3Q8E-EU7M

IUCN, n.d.: https://perma.cc/EG6K-E3TQ

Sustainable Development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. United Nations World Commission on Environment and Development, 1987.

Source: http://www.un-documents.net/our-common-future.pdf

Permanent link: https://perma.cc/U3SD-AKMZ

For another definition, see https://www.sustain.ucla.edu/what-is-sustainability/

Permanent link: https://perma.cc/F4TT-N228

And see our report where we share the outcomes of discussing "sustainability" with heritage professionals around the world. https://www.iccrom.org/sites/default/files/2021-12/en_0_sustainingdigitalheritage-findingsreport_iccrom_2021.pdf









User

Sometimes used interchangeably with "audience," "visitor," or "consumer." A user is anyone who needs, uses, or benefits from the data resources held by an archive or institution.

Source: https://www.lib.umn.edu/about/dp/glossary

Permanent link: https://perma.cc/PX7U-7P4K

Value Proposition

Value propositions capture the jobs, pains and gains that matter most to your users/customers, and sets out to achieve those that will make a difference for your user/customer.

Source: Value Proposition Design: How to Create Products and Services Customers Want,

by Alexander Osterwalder, Yves Pigneur, Gregory Bernarda, and Alan Smith, 2014

To see an example of how to do such an exercise, see the following link. **Source:** https://www.strategyzer.com/canvas/value-proposition-canvas **Permanent link:** https://perma.cc/3A3K-8ZXH









