

## Novice to Know-How Module Text

### Course 1: Introduction to Digital Preservation

# Module 2: What is Digital Preservation?

The development of this course was funded by The National Archives (UK) as part of the "Plugged In, Powered Up" digital capacity building strategy.

## 1. What is Digital Preservation?

In the previous module we started thinking about why digital preservation is important and looked at some of the benefits it can bring. In this module we start to define what digital preservation is at a high level.

## 2. Digital Preservation is...

"the series of managed activities necessary to ensure continued access to digital materials for as long as necessary." This is the definition from **The Digital Preservation Handbook**. Breaking this down further, we are talking about

**Managed Activities** - This tells us that digital preservation requires a variety of things to be done, and that we need to be proactive and systematic about how we approach those tasks and issues. Also, digital preservation is an ongoing process and not a one-off.

**Continued Access** - The ultimate aim of digital preservation is maintaining access (and we can infer that without digital preservation, continued access is by no means guaranteed.)

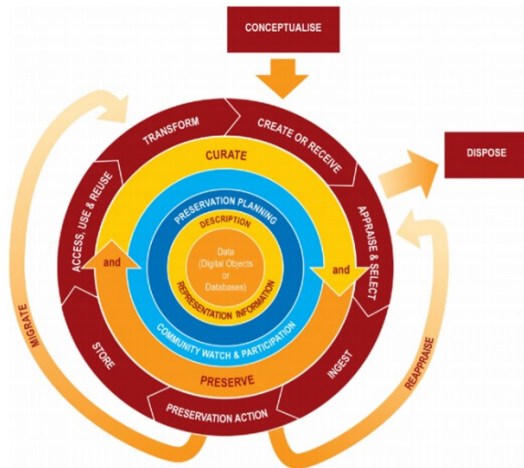
**Digital Materials** – It is somewhat obvious but we need to keep in mind that we are talking about preserving 'digital materials', although we will be using the term 'digital content' in this course.

**As Long as Necessary** - A reminder that we should be aiming to preserve the digital content for 'as long as necessary'. The length of time will depend on your organizational context. It may be a few years in line with regulatory requirements, it may mean in perpetuity, or it may require information to be deleted when it is no longer in active use. So, retention and disposal are important issues to consider.

### 3. Models for Digital Preservation.

If you are starting to work on digital preservation, it is worthwhile becoming familiar with some of the main models. Click on each of the diagrams to learn more.

### 4. Digital Curation Centre Lifecycle Model.



The DCC Lifecycle model provides a graphical, high-level overview of the stages required for successful preservation of digital content from initial creation or receipt through an iterative preservation cycle, with a particular focus on research data.

The lifecycle can help with planning your preservation processes, making sure they are comprehensive. It is also worth noting that it is an ideal, rather than a proscriptive model, meaning solutions can be developed over time.

DCC Lifecycle Model - <http://www.dcc.ac.uk/resources/curation-lifecycle-model>

### 5. The Digital Preservation Management Model.

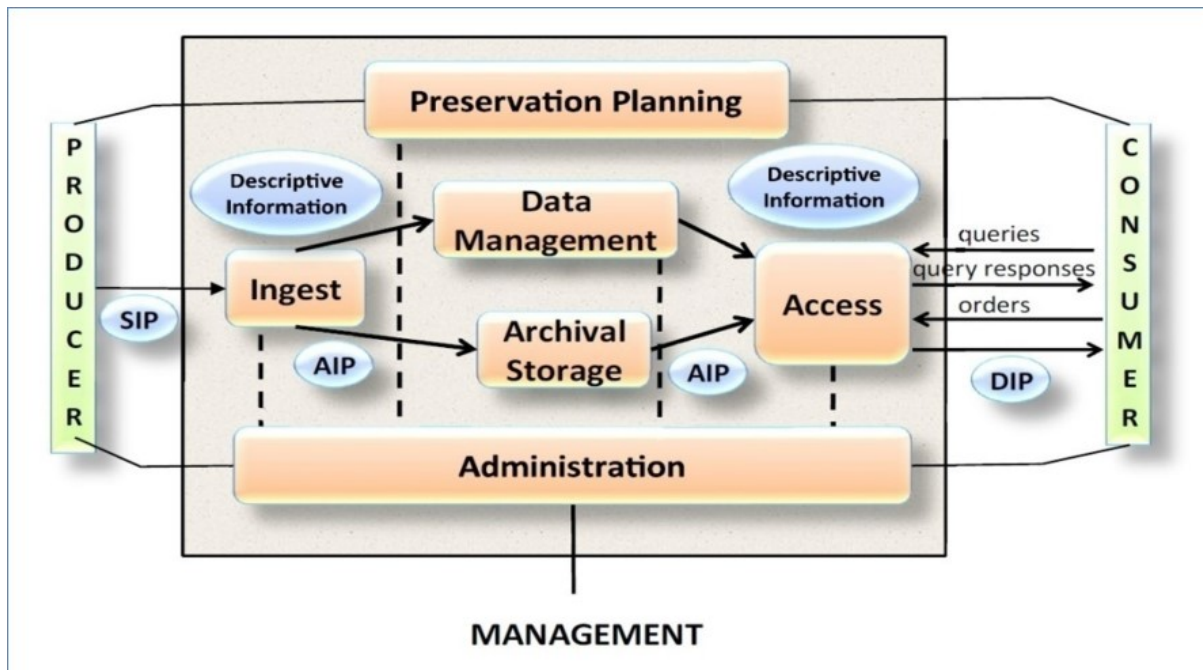
The Digital Preservation Management Model (DPM) is a foundational organizational maturity model for digital preservation.

It sets out the three main areas of work required for successful digital preservation activities, represented as the 3 legs of a stool. It also identifies five stages of organizational responses to the issues faced.

It is a great model to use when starting in digital preservation due to its clarity and focus. We will examine it in more detail later in this module.

DPM Model - <https://dpworkshop.org/>

## 6. OAIS Model.

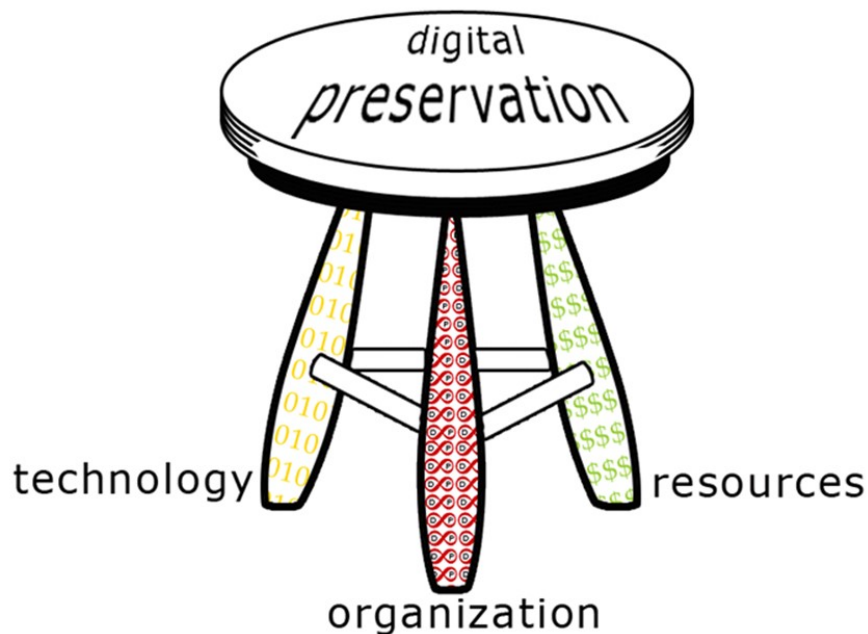


OAIS is a high-level reference model for digital preservation that has been adopted as an international standard (ISO 14721).

It is a large and detailed standard, that describes a combination of people and systems for preservation and includes a functional model, an information model, and an environmental model. It does not aim to describe a particular implementation, but rather an intellectual structure.

OAIS Model - <https://public.ccsds.org/pubs/650x0m2.pdf>

## 7. More on the DPM Model (1).



As we discovered on the previous page, the three legs of the model are:

- Organization
- Technology
- Resources

Each heading represents a number of issues and activities that should be addressed for successful digital preservation.

### Organization

- Policy
- Strategy
- Procedures
- Risks & Benefits
- Staffing

### Technology

- Storage and Back-Up
- Repository Systems
- Tools
- Security

### Resources

- Business Planning
- Costs

- Funding
- Sustainability
- Staff skills

## 8. More on the DPM Model (2).

As well as identifying the key areas where activity is required, the model also describes five levels of organizational response:

1. **Acknowledge:** Understanding that digital preservation is a local concern;
2. **Act:** Initiating digital preservation projects;
3. **Consolidate:** Segueing from projects to programs;
4. **Institutionalize:** Incorporating the larger environment; and
5. **Externalize:** Embracing inter-institutional collaboration and dependency.

The five levels can aid with planning for the development of your digital preservation program and processes. They will help you identify where you are on your digital preservation journey, as well as being useful for advocacy, elucidating for management where the organization stands at present.

## 9. Risks and Digital Preservation.

When starting out in digital preservation it is important to appreciate the key role risk management can play in planning and processes. At a fundamental level all digital preservation actions are responses to potential risks to the digital content.

Therefore, carrying out a risk analysis for our digital collections can be a useful endeavor. It can identify what content is most at risk and why. This can then guide planning and resource allocation.

As well as the many generic risk management guides that exist there are a number of resources specific to digital preservation including the tools DRAMBORA and SPOT, and guidance from The National Archives (UK). Links to these are included in the course resources.

## 10. Digital Preservation is Not:

When you first start working on Digital Preservation you will likely be faced with a number of common misconceptions.

Therefore, it is important to know what these might be and how to counter them. Click on the four boxes to the right to find out more.

**A Technical Problem** - Digital Preservation is also a cultural issue. The biggest changes required to be successful are often cultural ones. As such there are many tasks and activities beyond just sorting out the technology needed.

We have already seen this reflected in the 3-Legged Stool model, which tells us organizational and resourcing issues are as important as technical.

**Just Storage or Digitization** - Many people mistake the digitization process with digital preservation or think that a managed approach to storage is all that is required.

Both of these activities can be important parts of the bigger picture, but digital preservation encompasses a broad range of activities that must be undertaken proactively.

**An Easy Fix with a Single Solution** - Digital preservation is not just procuring a repository system and then all our problems are fixed. Although it is always tempting to pursue this option!

If you do purchase a system there will be work in managing the contract, in processing digital content for transfer into the repository systems, as well as a need for continuous improvement and the ability to be able to respond to changes in technology and user needs.

**Not Just a Fashionable Trend** - It should be a managed process of continuing change for all organizations and individuals. Digital preservation should ideally be embedded in everything we do.

Aligning your digital preservation activities with your organization's mission and aims will help with this process. Allowing you to demonstrate the importance of digital preservation.

## 11. Some Starting Advice.

Starting out in digital preservation can seem intimidating! Click on the boxes to the left to find some advice to help you get started and plan for your work.

### **Organizational Alignment**

Always consider digital preservation in alignment with your wider organizational context, this will help you advocate for resources, set aims, make plans and ultimately make integrating digital preservation into your organization's activities easier.

### **No One-Size-Fits-All**

There is no one-size-fits-all solution to digital preservation (no matter what a salesperson might tell you!) If you ask any digital preservation practitioner a question about how to do something, their answer will almost always start with "It depends..." The approach you take will be context dependent, so make sure to develop the policies, workflows and more that are right for you. A smaller archive might build workflows from freely available tools, whereas a larger organization might procure a full repository system with all the bells and whistles.

### **Good vs Best Practice**

It is useful to think of 'good practice' rather than 'best practice'. Digital preservation is still a relatively young discipline as, we have already established, there is no silver bullet that will sort the problem for you. So, do not try to aim for 'best', aim for 'good enough'.

### **Start Small**

Digital preservation does not have to happen all at once, set incremental goals that are achievable, and build over time. Start by testing out a useful tool or reading some case studies and other organization's policies to see what they are doing.

## 12. What is Next?

In this module we have started to answer the question 'What is (and is not) Digital Preservation?' In the next module we will delve a little deeper into what is involved.

To allow us to approach this in a structured way we are going to look at digital preservation through the lens of the DPC's Rapid Assessment Model (DPC RAM). It is a maturity model that supports continuous improvement, allowing organizations to set goals and benchmark their progress without requiring a particular approach to be used.