

CHAPTER 8

DIGITAL ARCHIVES





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WHAT IS DIGITIZATION?

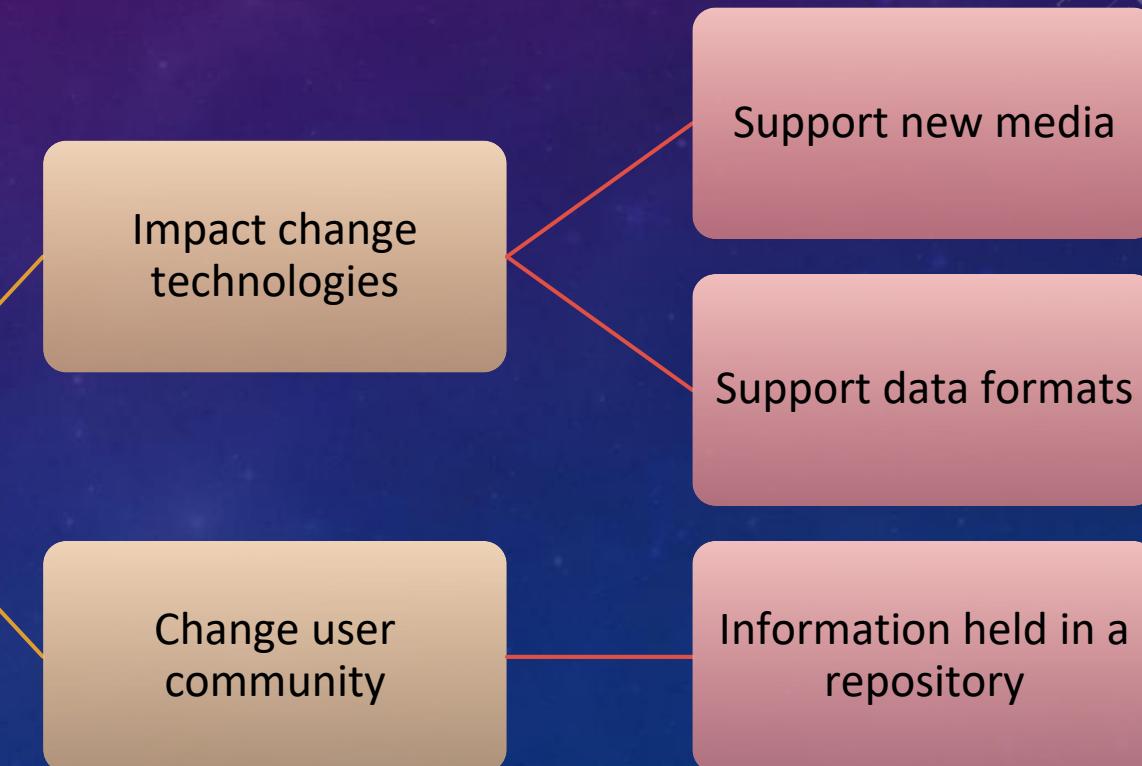
- Digitization is the **process of converting information**, such as text, photographs, audio and video files, into digital format.
- Digitization allows for the preservation of the content of the material by **creating an accessible surrogate**, putting **less strain on the original**.
- Digital objects are then **maintained in a digital repository** that offers a convenient way to store, manage, access and preserve these surrogates.



1.0 WHAT IS DIGITAL ARCHIVES?

- A **digital archives** is a repository that stores one or more collections of digital information objects with the intention of providing **long-term access** to the information.

refers to a period of time which is long enough to be concerned about



- Archivists required to make ‘born digital’ records publicly available through an online interface (what archivists collect is born digitally, must be preserved digitally too)
- The content and format of born-digital materials cover a broad spectrum:

Type Of Material	Sample Analog Formats	Sample Digital Formats
Architectural records	Blueprints, elevations, renderings	CAD files
Audio recordings	Tapes, LPs, wax cylinders	CDs, digital sound files
Correspondence	Letters	Email, word processing files, social media
Data	Lab notebooks, logbooks, ledgers	Spreadsheets, databases
Institutional records	Typed or printed documents	Word processing files, PDFs, databases
Manuscripts	Handwritten or typed documents, diaries	Word processing files, Facebook posts, blogs
Moving images	Film, video	DVDs, digital video files
Organizational publications	Brochures, newsletters, reports	Websites, desktop publishing files
Photographs	Film-based media such as prints, negatives, slides	Digital image files, Flickr, Instagram photos

- Digital archives can be a sophisticated, multi-tiered storage system or simply a drive on someone’s home computer. The objects can be selected examples, or digital surrogates of all the materials in an archival collection or series; graphic images and electronic transcriptions of text.



1.1 WHY WE DIGITIZE?

1) To preserve the original archives

- improved preservation of the materials by reducing handling of the originals.

2) To make the archives more accessible

- the purpose of preserving the digital archives is to ensure that it remains accessible to the public, continuity of the digital archives is fundamental; needs to be preserved and made accessible

3) The acquisition or capture of digital content

- many archives collections have lasting value and significance, and therefore constitute a heritage that should be protected and preserved for current and future generations

4) As security in the event of loss of archives

- archives collections are at risk of being lost due to a number of factors; there is an urgent need for action to protect the archives

1.2 BENEFITS OF DIGITAL ARCHIVES

1) Speedy access & retrieval of information (accessibility)

- reduces the time needed to access a document

2) Large capacity of storage

- Cost savings due to reduced overheads for storage

3) Security through digital signature & watermark

- qualified signature using a secure signature creation device

4) Preserving the original archives

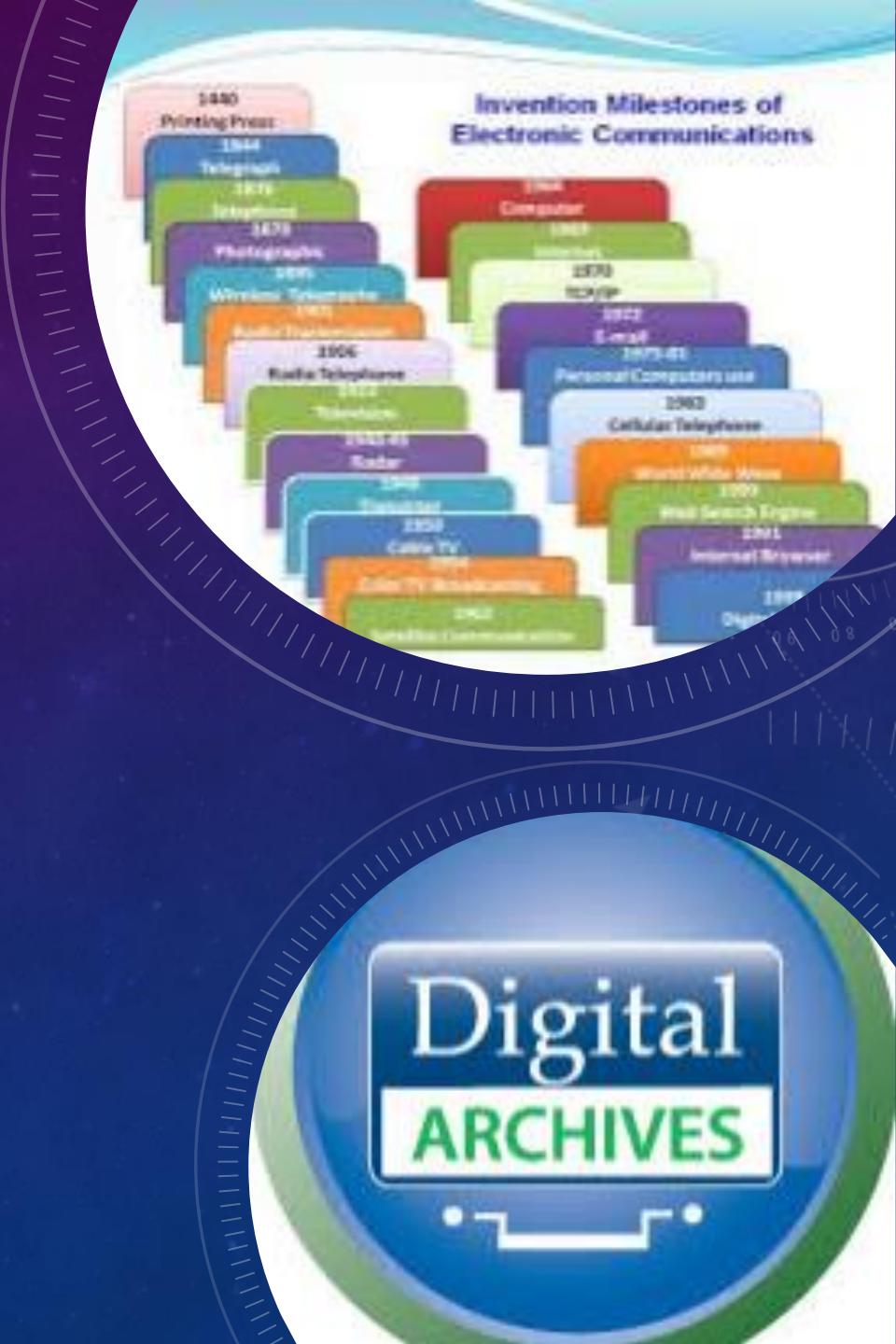
- to protect historical documents from deterioration by using archival quality material and optimum environmental conditions for storage

5) Convenience to access outside the archives via Internet

- easy to access and use anywhere and everywhere



- 6) Reduce manpower in managing original archives**
- Cost savings due to reduced overheads for storage, searching and handling of paper documents
- 7) Savings in space and equipment**
- Less space requirements for physical document storage
- 8) Instance in updating versions & metadata**
- Metadata have its own unique structure that can easily create simple metadata schema to fit your repository's resources and needs.
- 9) Multiple simultaneous access by multiple users**
- multiple users can log in to the same websites/database simultaneously



1.3 STRENGTH & WEAKNESSES DIGITIZATION

STRENGTH	EXPLANATION
Accessibility	offers a convenient way to store, manage, access and preserve these surrogates
Security	Protected and secure; servers and backup computer systems
Preserving original archives	allows for the preservation of the content of the material by creating an accessible surrogate, putting less strain on the original
Integration	Better integration with business information systems, achieve greater efficiency, productivity and consistency
Reduce space	Save space; no matter how large or small, will be able to digitize their entire collection.

WEAKNESSES	EXPLANATION
Longevity digital media	need to consider longevity issues early on in the process of digitization
Dependence	long-term sustainability of the hardware and software needed
Storage for preservation	practical approaches to creating metadata for large collections
Staff neglect to change	must educate administrators and staff about the importance and benefits of transferring material to the repository
Unsuitable for digitizing	some materials may not be fit for digitization or even worth the effort
Electricity failure	Electricity failure to access the system
Network breakdown to access the system	The server is usually a third-party service provider, who charges a fee based on bandwidth, capacity, or number of users.
Lack of IT expertise to develop system	technology specialists who manage systems and services in areas such as repository design, hardware and software management, digitization, and website development
High cost of hardware & system maintenance	Software and hardware technologies require ongoing attention due to continuous and rapid advancements

2.0 BASIC CONCEPT OF DIGITAL ARCHIVES?

- The concept of digital archives is to **incorporates all the required digital recordkeeping, archiving and preservation processes** required to ensure the authenticity and longevity of digital records.
- Digital archiving aims to preserve the digital document and its content, according to three criteria's:
 - i. The document must be preserved in its **physical and intellectual aspects**
 - ii. The document must be preserved for a **long time period**
 - iii. The document must always be **accessible** and understandable
- Guidelines are very important in any process for digitization works as a working tool for planning digitization projects. **Elements in developing digitization projects:**
 - i. Planning
 - ii. Organizational structure
 - iii. Collecting Scope
 - iv. Personnel
 - v. Space in archives
 - vi. Budgetary Planning

Elements	Fundamental Questions
1) Planning	<ul style="list-style-type: none">▪ It involves with fundamental questions of policy and purpose.<ul style="list-style-type: none">- Why has the archives been established?- What is it intended to accomplish?▪ A clear mission statement or statement of purpose for the archives
2) Organizational structure	<ul style="list-style-type: none">▪ Where will the archives be placed?▪ Who will it report to and what position does that office have within the organization?▪ By what authority will the archives be established?
3) Collecting Scope	<ul style="list-style-type: none">▪ What kinds of records documenting what kinds of people and activities will the archives collect?▪ What subject areas will be the special purview of this archives, thereby distinguishing it from others?
4) Personnel	<ul style="list-style-type: none">▪ How many and what kinds of people will make up the staff?▪ What educational background will they need▪ What will be their particular responsibilities be within the archives▪ What specific tasks will they perform?

Elements	Fundamental Questions
4) Space in archives	<p>The archivists also must plan for the space the archives will occupy and for the facilities and equipment it will contain.</p> <ul style="list-style-type: none">▪ Is space being specially constructed for the archives or is existing space being renovated?▪ What special considerations need to be taken into account to make that space suitable for use as an archives?▪ How will the areas for staff, for user and for collections be differentiated from one another so as to take maximum advantage of the fixed limits?▪ What kinds of equipment and supplies will be required?
5) Budgetary Planning	<p>Arranging space and buying equipment naturally cost money and therefore archivist must include budgetary planning.</p> <ul style="list-style-type: none">▪ Where will the archives get the funds it needs to carry out its activities?▪ Will funding come entirely from the parent organization or will it also be necessary to rely on outside support?▪ How will the archives apportion its resources internally?▪ What percentage of the budget will be needed for salaries, equipment, security and physical preservation needs and other activities?

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Thank
You