

Code: JLT 05113

Name: Introduction to Records Management

PRINCIPLES AND THEORIES GOVERNING RECORDS AND RECORDS
MANAGEMENT

THE PRINCIPLE OF *RESPECT DES FONDS*

Originally a French term, *respect des fonds* is often defined simply as ‘respect for the creator of the records.’ The principle of respect des fonds consists of two related concepts: provenance and original order. Provenance refers to the ‘office of origin’ of the records; original order.

Respect des fonds: Respect for the creator of the records or archives, involving the maintenance of provenance and original order.

- **Provenance:**

- the organisation or individual that created or received maintained and used records while they were still current.

The records of separate agencies or organisations must be managed separately, even if the agencies in question were involved with similar activities or were managed by the same people. Do not combine the records of two agencies or organisations. Similarly, the private records of individuals must not be integrated, even if the individuals were related or experienced the same events.

The principal of provenance emphasizes the conceptual rather than the physical characteristics of records. As we have seen, it is the ‘evidential’ nature of records, rather than their physical format, that distinguishes them from other kinds of information. Provenance also provides the basis for retrieving information from records. Knowing who created or used a record, and where, when and why, provides the key to retrieval rather than format, subject matter or content of the records

- **Original order:**

- the order in which documents were created, arranged and maintained by the office of origin.

Records must be maintained according to their 'original order': that is according to the filing, classification and retrieval methods established by the organisation as part of an efficient records management programme. Records offices and records centres must create, maintain and store records according to logical and well-structured records management procedures. Archival institutions must not change the original order in which records were received, as that order reflects the way in which the records were created and used.

If registry systems cease to function adequately, there is a grave danger that, as records build up in storage rooms, cupboards or hallways, information about their creating agency and original order may be lost. This is one of the reasons records management is so important in ensuring the preservation of a valuable, identifiable record. In order to ensure records retain their administrative use and archival value, records and archives managers must be significantly involved with the record-creating process itself, rather than be passive recipients of records that may no longer be authentic or reliable.

Records and archives managers must be involved from the beginning. For example, it is no use designing a classification scheme that does not match the business processes that give rise to the records to be classified. Records and archives management must be concerned with all the processes relating to records throughout their existence.

RECORDS LIFE CYCLE

The life-cycle concept of the record is an analogy from the life of a biological organism, which is born, lives and dies. In the same way, a record is created, is used for so long as it has continuing value and is then disposed of by destruction or by transfer to an archival institution. The lifecycle of records is divided into three phases namely: - current phase, semi-current phase and non-current phase.

Current phase

Every organization creates and receives records. After they have been captured, records are regularly used for the conduct of the current business of an organization or individuals.

The following are the features of records in current phase:-

- Records are kept at Registry
- Records are used in day to day activities
- Always have primary value
- Records are managed by RMA's

Semi-current phase:

Records are required only infrequently in the conduct of current business. Also known as semi-active records. Semi-current records will normally be maintained in a records centre or other offsite intermediate storage pending their ultimate disposal.

Features of records in semi-current phase:-

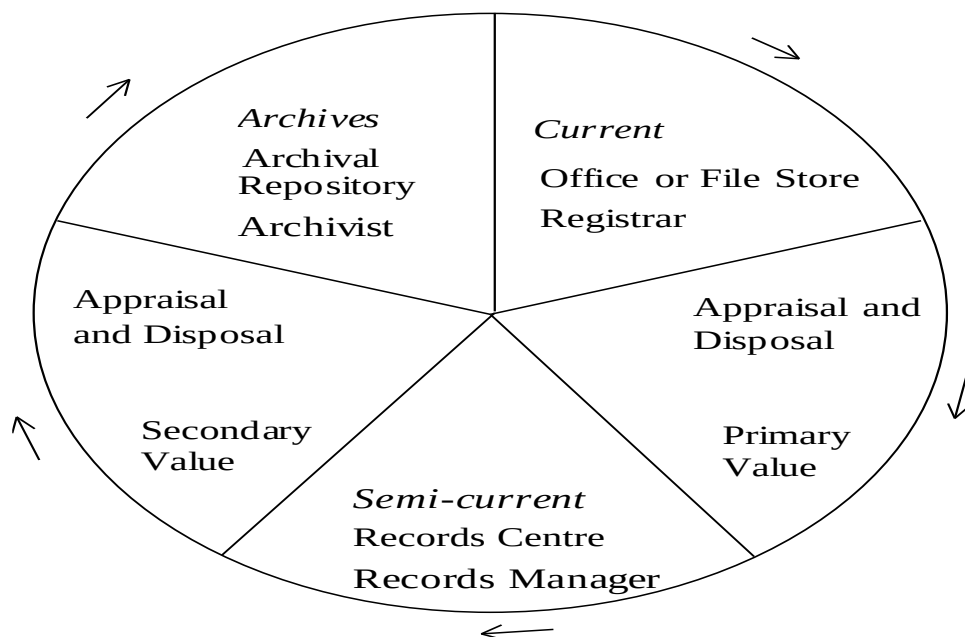
- Records are kept in low-cost storage area (Record centre)
- Records are infrequently used
- Appraisal and Disposal activities is done
- Records are managed by Records Centre Staffs (RMA's)

Non-current phase:

In non-current phase, records are no longer needed for the conduct of current business and are therefore destroyed unless they have a continuing value for other purposes, which merits their preservation as archives in an archival institution. In this phase records are well known as archives. Features of records in non-current phase:-

- They are kept in Archival Institution
- They are no longer used in current business transaction.
- Always have secondary value
- They are managed by Archivist

The diagram bellow shows the records lifecycle.



Importance of records life cycle

- Help the records managers to have a clear perspective of managing records as a continuous process whereby each stage complement the other
- Helps records managers to make prior decisions whether to create records or not by making judgment of the values of the records and information that is present
- Helps records managers to make retention scheduling of records at the right time and appropriately
- Helps the records managers to understand in advance in what media the records could be created
- Recognize the values of records in each stage of its lifecycle

RECORDS CONTINUUM MODEL

Continuum concept

The life-cycle principle recognises that records are created, used, maintained then disposed of, either by destruction as obsolete or by preservation as archives for their ongoing value. The continuum concept suggests that four actions continue or recur throughout the life of a record: identification of records; intellectual control of them; provision of access to them; and physical control of them.

Continuum concept: A consistent and coherent process of records management throughout the life of records, from the development of record-keeping systems through the creation and preservation of records, to their retention and use as archives.

According to the continuum concept, the distinction between records management and archives management need not be rigidly maintained.

Four Actions of Records Care

Process	Records Mgt Actions	Archives Mgt Actions
1. Identification and Acquisition	Creation Or Receipt	Selection Or Acquisition
2. Intellectual Control	Classification Within A Logical System	Arrangement and Description
3. Access	Maintenance and Use	Reference And Use
4. Physical Control	Disposal by Destruction or Transfer as Archives	Preservation

From this principle a unified model has been developed. The model reflects the pattern of a continuum. Four actions continue or recur throughout the life of a record and cut across the traditional boundary between records management and archival administration. These are

- ✓ the creation or acquisition of the record
- ✓ its placement within a logical, documented system that governs its arrangement and facilitates its retrieval throughout its life
- ✓ its appraisal for continuing value, recorded in a disposal schedule and given effect at the due time by appropriate disposal action
- ✓ its maintenance and use, that is, whether it is maintained in the creating office, a records office, a records centre or an archival repository, and whether the use is by its creator or a successor in function or by a third party, such as a researcher or other member of the public.

The division of activities between records managers and archivists can be artificial; records care should follow a continuum approach. This division of activities into records management and archival phases, with the consequent division of responsibility between the records manager (or registrar) and the archivist, is seen by some as artificial and restrictive. The several stages are not really seen as distinct and separate. Consider the following tasks, for example.

- ✓ Acquisition in the archives phase is the mirror image of disposal in the records management phase.
- ✓ Reference and use in the archives phase are essentially the same tasks as maintenance and use in the records management phase.
- ✓ Arrangement and description in the archives phase is vitally dependent on classification in the records management phase.

The continuum approach means the end of the traditional demarcation between the functions of the records manager (or registrar) and the archivist. A person responsible for care of records at a particular phase in their life cycle will certainly need specific knowledge and expertise. However, input will be needed from others who have been or will be responsible for records at other phases of the life cycle. The registrar, records manager, records centre manager and archivist will all still perform their own duties, but their work will be undertaken within an integrated structure, with no rigid boundaries to limit professional collaboration and development.

This collaboration between records and archives managers is most successful if the archival institution can be restructured to serve as a records and archives institution, responsible for all aspects of records care throughout the life cycle. A records and archives institution would establish a new records service for the whole of the government, corporation or organization that would include staff working in records offices (registries), records centres and archival repositories. It would also develop an appropriate scheme of service and job descriptions for

all records staff, and it would develop training schemes to prepare staff at all the necessary levels to provide efficient records services throughout the life cycle.

Where records management and archival activities are not integrated, records managers and archivists find that they are often duplicating each other's work or, worse, undoing or redoing tasks that could have been completed more efficiently had the two phases been considered part of a unified whole.

DIFFERENCES BETWEEN RECORDS LIFECYCLE AND RECORDS CONTINUUM MODEL

Records life cycle	Records continuum model
Records pass through distinct stages and they are timely based	No distinct stages and no time bases sequenced
Strict demarcation of responsibilities	Integration of the responsibilities and accountabilities
Centralized archives custody approach or archives as a place	Distributed archival custody
Appraisal is done at every stage of the records life.	Appraisal is done much earlier in the process, preferably at design stage.

LEVELS OF ARRANGEMENT AND DESCRIPTION

Another key principle to understand when dealing with records and archives is the concept of levels of arrangement and description.

Arrangement:

- The whole process of analysing the organisation of sets of archives, **whereby their provenance and original order are understood** and the archives are **set into groups, series and items** in an order that preserves and reflects that understanding.
- Archives are organized into levels **according to the principles of provenance and original order**. The arrangement of archives is governed by the key principle of *respect des fonds*. ***This principle requires that archives must be kept together according to the agency responsible for their creation or accumulation and in the original order established during their use as current records.***

Description:

- The process of capturing, organizing, and **recording information in order to identify, manage, locate and explain archives** and the contexts and records systems that produced them.
- It is the process of **representing archival materials on paper, in order to facilitate their use by researchers. Descriptions should not be complex or lengthy histories.**
- **They are only snapshots (quick picture) of the records and their creators, in order to explain their origins, purpose and overall content, and to help users find the information they wish to use.**

Arrangement and description are two integrated practices designed to make records and archives physically and intellectually available for use. When arranging records or archives, the institution must recognise the internationally accepted principles of respect des fonds, or respect for provenance and original order, as discussed above.

Archival institutions in particular must be sure to respect the original arrangement of records and ensure their descriptions reflect that arrangement, because they have to make records available and understandable to people who were not involved with the creation or original use of the records. Archival institutions, therefore, must not only make the materials available; they must also provide information about the content and context of the archives in their care. Records and archives can be arranged and described according to hierarchical levels

Central to the activities of arrangement and description is the understanding that records can be arranged and described according to levels. These levels place records into categories according to hierarchy, allowing records to be managed as groups rather than individual items. The terms used to distinguish the different levels of records and archives can be confusing. For example, in addition to 'item', terms that have been used to refer to an assembly of related documents include file, unit, piece, file unit or unit of handling. And 'item' may also be used to refer to the single documents that make up such an assembly. For the purpose of clarity, the following terms, with their definitions, will be used in this study programme.

APPRAISAL, RETENTION AND DISPOSITION OF RECORDS

Appraisal Of Records and Procedures Of Appraisal Of Records

Appraisal: The process of determining the value of records for further use, for whatever purpose, and the length of time for which that value will continue. Also known as evaluation, review or selection.

Continuing utility: The finite usefulness that records may have for the continuance of business or as evidence thereof.

Enduring value: The indefinite value that records may have for any purpose and that justifies their preservation as archives

Appraisal, which is sometimes called ‘evaluation’ or ‘selection’, has two purposes.

First, appraisal involves deciding what records need to be kept and for how long in order to allow the organisation to continue its work. This is known as appraisal for ‘continuing utility’.

Second, appraisal involves deciding what records merit permanent preservation as archives because they have an enduring value for purposes other than those for which they were created, such as historical research. This is known as appraisal for ‘enduring value’

RECORDS APPRAISAL AND DISPOSAL

The appraisal and disposal of records is essential to the sustainability of a quality Records Management programme. Preserving valuable records and destroying obsolete ones ensures that only necessary records are retained and saves the organisation time and money. It should be noted that, the purpose of appraisal remains the same for all records no matter their medium.

Appraisal involves determining what records exist or will be created; who creates them and why; how they relate to the organisation’s business functions; and how, when and by whom they are used, and then deciding which records have enduring value and which can be removed once their immediate usefulness is at an end.

The information below focuses on an appraisal exercise for records, but the steps should also be used when carrying out appraisal in order to develop a retention and disposal schedule.

WHEN TO APPRAISE?

Traditionally, paper records are appraised long after they had been created, used and stored. Indeed, it was common to wait 30 to 50 years or more after records were created before deciding whether or not to retain them permanently. Fortunately, paper-based records are

‘neglect tolerant’ and can, within reason, withstand the environmental dangers associated with storage, such as fluctuating temperature and humidity, damage from dust or vermin and excessive light levels, for limited periods.

Electronic records are unlikely to survive neglect, and it is not possible to wait decades before deciding what to keep and what to destroy. The technology used to create the records may become obsolete in one or two years, if not sooner, and so it is imperative that decisions be made about which electronic records should be kept at the time they are created, if not before. Ideally, therefore, appraisal and disposal activities should be built into the normal practice of records management, becoming as routine a procedure as possible.

However, it is often necessary to carry out a one-time appraisal exercise for a select group of records or for all the records in the organisation, either to clear up a backlog of records or to lay the groundwork for the creation of a formal electronic records management programme.

In general, however, it is agreed that, **micro-appraisal** of individual folders and documents is no longer a reasonable approach. There are simply too many records and the risk of loss is too great to allow the time required to carry out such minute analysis. Instead, the best method for appraisal of records – both paper and electronic – in a modern office environment is a **macro-appraisal approach**, based on an analysis of the functions and activities of the creating agency, a process called ‘**functional appraisal**.’

Functional appraisal involves assessing the enduring value of records by determining the functions of the body to be documented, identifying who created records in order to carry out those functions and then selecting the records that provide the most complete and concise documentation of those functions. Functional appraisal is currently considered the best way to appraise large volumes of records, no matter the medium in which they were created, in a way that minimises potential bias and encourages the preservation of those records that provide the most complete and concise picture of significant organisational functions.

WHO IS RESPONSIBLE FOR APPRAISAL?

Developing clearly defined responsibilities for appraisal and disposal activities is essential to ensuring successful records management, no matter the form of the records. Traditionally, appraisal and disposal activities were divided, with the records manager determining the time frame for semi-active retention and the archivist determining the final disposal.

Generally, it is practical for the records manager, archivist, information technology specialist and records creator to work as a team, in order to bring a range of expertise to the process of deciding which records need to be kept and which can be destroyed.

- ✓ The records creator brings knowledge of the day-to-day use of records and their importance to the organisation's business.
- ✓ The information technology specialist can advise on changes to electronic systems and best practices in IT operations.
- ✓ The records manager supports the ongoing evidential and informational needs of the organisation and can balance the user's needs for records against the resources available in order to make solid judgements about records retention.
- ✓ Archivists have the long-term management of the records in mind and are responsible for ensuring authentic and reliable records remain accessible over the long term.
- ✓ Lawyers, auditors, compliance specialists and other subject experts can also contribute important insights during the process of appraisal.

These stakeholders – along with any other appropriate representatives of the organisation – should be involved in any appraisal exercise, and their different responsibilities and areas of authority should be clearly defined and formalised in appraisal policies. The archivist may be the primary appraisal specialist, but he or she should draw on the expertise of others in the organisation throughout the process.

DOCUMENTING APPRAISAL AND DISPOSAL

No matter who undertakes appraisal and disposal work, documenting all decisions and actions is essential to ensure the organisation remains answerable for its actions and to guarantee that detailed information is available about all work performed.

Documentation provides audit trails for important decisions, which render governments accountable to the citizens they serve. As well, future records professionals may need to revisit appraisal decisions, and documentation is essential to reconstruct the reasoning and logic used in making disposal decisions.

Documentation of appraisal and disposal actions can also be valuable for other purposes, such as the creation of archival descriptions and finding aids, and the development or revisions of records classification schemes. Documentation also provides analysis and information related

to the authenticity and preservation of electronic records that may be critical for their long-term care.

To clarify the different types of documentation that may be created, special mention is made throughout on the different types of documentation that can be generated as part of an accountable and transparent appraisal process

STEPS FOR DOING APPRAISAL

Appraisal Step 2: Conducting Research

Any appraisal decision must be based on solid information and research. A critical first step is to gather and analyse as much information as possible about the records' context of creation and use, as well as information about the records themselves. Information about the juridical, organisational and procedural contexts of the records can be gathered by referring to materials such as procedure manuals, mission statements, business process rules, annual reports, websites, legislation, and other publications.

Information about the technological context of records is also critical for good appraisal decisions. It may be easier to gather information about the records when they are still 'live' in the system, as system manuals and user guides are more likely to be available from the record creators.

The appraiser may also gather information by interviewing staff members who create and use the records as part of their work. Interviews would help to identify what tasks people perform, the extent of their responsibility and authority, the kind of records they create and use and the relative value they place on different types of documentation.

During research, additional information can be gathered by examining the records within the electronic system, and by witnessing and recording the interaction of office workers with the electronic systems used to create and hold records.

A technical analysis involves identifying the elements or components making up the records and the hardware and software environment, documenting the way in which the records are organised and assessing how records are stored and for how long. As well as providing useful information for appraisal, the technical analysis also lays the foundation for the development of the technical documentation that will be needed later, to understand what threats affected the records and what security was in place to protect them from those threats, and support wider access to and use of the records.

Documentation from Step 2

- i. A compilation of all contextual information gathered from the records creator and from outside sources.
- ii. A technical analysis.
- iii. Notes, transcriptions or audio / video recordings of interviews with staff.

Appraisal Step 3: Determining Value

The appraisal team uses the information and research gathered in Step 2 to determine the value of the records throughout the life cycle: in the active, semi-active and inactive phases, in order to determine how long the records should be retained. Once the value of the records is assessed, those precise retention periods can be assigned and a retention and disposal schedule can be developed, using the records classification scheme as the basis.

Documentation from Step 3

- i. A technical analysis detailing the components of the records and the controls needed to ensure that records will not be tampered with or otherwise altered. The technical analysis also includes analysis of the formats of the records and identifies possible preservation and / or access formats.
- ii. A list of the types of hardware and software needed to access and view the records.
- iii. Information about the archival institution's ability to preserve records, such as annual work budgets, staff profiles, equipment lists, information from upper management and similar documentation.

Appraisal Step 4: Making an Appraisal Decision

After assessing the value of the records being appraised, at the point when they are being considered for transfer a decision needs to be made either to preserve the records or destroy them. The options are as follows:

- i. If the records are no longer found to have enduring value, they will be destroyed.
- ii. If the records are found to have enduring value, if it is reasonable to assume that they are authentic and if long-term preservation is feasible, the record will be preserved.
- iii. If the records are found to have enduring value, but there is some question of whether or not they are authentic, or if preserving the records will require extraordinary

efforts or expenditures, the appraisal decision must be made through a case-by-case analysis.

In the last situation, the archivist may determine that it is appropriate not to preserve the records, given the resources required to ensure their protection. On the other hand, the archivist may determine that the records should be retained because, for example, legislation requires that the records be preserved for the long term. Protecting the records may be necessary, even though the actual preservation mechanisms are not yet in place.

Documentation from Step 4

The archivist must specifically identify, in writing,

- i. which records must be transferred
- ii. which records and other components must be disposed of.

Appraisal Step 5: Implementing the Decision

All of the work performed as part of Steps 1, 2,3, and 4 will aid the person responsible for implementing the disposal decisions, which is best carried out for series of records, not for individual folders or files. Implementation involves three actions: retaining records with continuing utility, destroying unwanted records and transferring (preserving) valuable records.

Destroying Records

If records have been appraised as having no long-term enduring value, then they may be destroyed at the end of their life. For paper records, destruction means to physically destroy the record, by shredding, burning or otherwise obliterating the records' medium.

While the technology available in different organisations will vary, the general principle of destruction remains the same: every attempt should be made to ensure that data cannot be recovered by reasonable efforts. The security or sensitivity of the information should be used to determine what constitutes 'reasonable.' The only exception is the documentation generated by the destruction process itself; that documentation – which should include a description of the records destroyed and the means by which they were destroyed – should be retained as evidence of the act of destruction.

The usual steps involved in destroying records are as listed below.

- i. Identify records that have no enduring value.

- ii. Confirm that the records are going to be destroyed or otherwise disposed of according to the formal agreement between the preserver and the records creator.
- iii. If the records are to be destroyed, destroy them completely.
- iv. Analyse the steps taken to ensure compliance with all requirements.
- v. Complete the destruction report and submit it to the appropriate authorities within the organisation

Transferring Records

If records are appraised as having long-term enduring value, then the records will be transferred to the chosen archival facility, whether that is a separate archival institution or a permanent storage facility within the organisation.

The transfer report should also include the following information:

- i. a list of the records selected for transfer
- ii. information about the records' native format(s)
- iii. a description of the preservation and / or access formats used
- iv. information about how the records were copied and reformatted.

In general, the steps in the transfer process are as follows.

- i. Identify records that have enduring value and will be transferred to the archival institution.
- ii. Determine the format in which those records will be transferred: options include the native format, another preservation format or an access format.
- iii. Copy and, if necessary, reformat the records to be transferred.
- iv. Prepare transfer documentation, including a detailed list of records to be transferred; information about file formats used; and any technical documentation needed to support access and preservation.
- v. Transfer records and documentation to archival custody.
- vi. Confirm the successful transfer of records.
- vii. Delete the records from the source system.

Documentation from Step 5

- i. Destruction report.
- ii. Transfer report

Appraisal Step 6: Monitoring Appraisal Decisions

As should be clear throughout this unit, it is vitally important that archivists and other records professionals be involved in the development and implementation of records systems as well as in the appraisal of records. Appraised records should be monitored for the following situations.

- i. Unexpected changes in business processes can affect how records are used by action officers.
- ii. Minor changes in the software and hardware environment made after the system has been implemented may affect authenticity or alter preservation options.
- iii. Major changes to the software and hardware environment may place records at risk of loss or damage.

In addition, it is not possible to demonstrate the authenticity of records or assess the potential for preservation before the records have been created. Consequently, monitoring operations may lead not only to small changes in appraisal documentation, but also, sometimes, to more significant changes in the overall appraisal decision.

Documentation from Step 6

- i. Amendments or additions to any of the documentation generated in Steps 1 to 5, such as the appraisal report, technical analysis, terms and conditions of transfer, records retention and disposal schedule or other reports.
- ii. If needed, documentation that provides a rationalisation for a new appraisal, such as when major changes to the technological environment have rendered the prior appraisal work inaccurate. This documentation would form the background for new appraisal reports.

RETENTION OF RECORDS

Retention: The function of preserving and maintaining records for continuing use. This may be done in the agency of origin, in a records centre or in an archival institution.

Retention period: The length of time, as provided for by legislation, regulation or administrative procedure or based upon an estimate of the frequency of continuing use, that

records should be retained in an office or records centre before they are transferred to an archival institution or otherwise disposed of.

Records retention is a practice by which organizations maintain confidential records for set lengths of time, and then employ a system of actions to either redirect, store or dispose of them. Records can be considered evidence of a decision or transaction that took place within your business operations, and should be kept as long as required—or for as short a period as necessary—by regulatory, legal or business governance.

The record lifecycle encompasses the following phases: the creation, distribution, active storage, inactive storage and retention, disposition and archiving of an organization's records.

Records retention is driven by a system of policies, scheduling and infrastructure that enable administrators to comply with governing regulations, laws and business best practices.

Major Components Of A Successful Records Retention Strategy:

A retention schedule

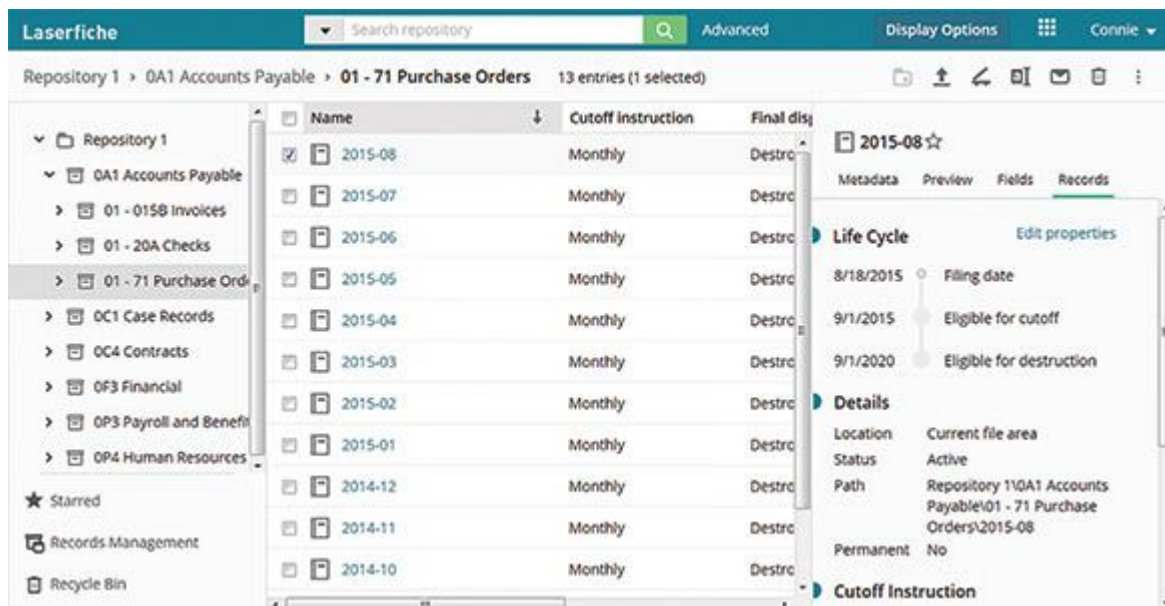
A retention schedule is a system of classification that standardizes the different types of records your organization manages and how long they need to be kept. A successful retention schedule is routinely updated to ensure that rules for records retention included in the schedule comply with all laws and regulations which pertain to them.

Code	Document	Retention Period	Retention Medium
24-10a	Admission. Applicants who are offered a place, but do not attend.	Retain current academic year + 1 year, then archive	Electronic
24-10b	Admission. Applicants who are offered a place, accept & enroll	Retain for 6 years after graduation or withdrawal. Then accession to "Academic Registry"	Electronic
28-32b	Unit Evaluation Reports	Retain 3 years after current academic year is complete, then archive	Electronic
10-16c	Academic Appeals	Retain 6 years after last action, then accession to "Academic Registry"	Electronic

Here is a simplified example of a retention schedule for a higher education institution, which includes the codes, document types, retention periods and mediums of the records in question.

Retention policies

Records retention policies govern the classification, storage, preservation and destruction of all records in an organization. These policies help to ensure that important records are not mishandled, and that temporary records are discarded promptly in an effort to reduce risk and keep the records management system clean, coordinated and secure.



Powerful records management systems enable organizations to monitor records throughout their lifecycle, specifying when a record was originally filed and when it will be eligible for destruction.

Records infrastructure

Records are only as good as they are accessible. The records your organization maintains should be easy to search, retrieve and update at all times. Whether preparing for an audit, accessing client information, or making changes to important documents, having a centralized, organized, digital records management system in place ensures that your retention schedule and policies are easily and consistently followed.

Records retention is a necessary part of a successful records management practice, supported by a system of rules, regulations and organization the helps businesses run smarter.

DISPOSITION OF RECORDS

Disposal is the action taken as a consequence of appraisal decisions

Disposal: The actions taken with regard to records as a consequence of their appraisal and the expiration of their retention periods. Note: Disposal is not synonymous with destruction, though that may be an option. Disposal is also known, especially in North America, as disposition.

The product of the appraisal function is the disposal schedule

Disposal schedule: The control document recording appraisal decisions and prescribing disposal action. Also known as disposal list, disposition schedule, records schedule, retention schedule, retention and disposal (or disposition) schedule or transfer schedule

The appraisal and disposal of records are two distinct activities, but they are inextricably linked. They need not be undertaken together; indeed they are usually separated by a prescribed period of retention.

NOTE: However, appraisal that is not followed in due course by disposal is pointless; and disposal without prior appraisal is an unsound practice and may even be unlawful.

The aim of appraisal and disposal is to ensure that records are either destroyed or transferred to an archival institution at the right time, as a result of the systematic implementation of decisions made concerning the continuing utility and enduring value of the records.

THE PRESERVATION OF RECORDS

Meaning of Record Preservation

Preservation: refers to the set of activities that aims to **prolong the life** of a record and information material, and/or **enhance its value**, or **improve access to it**, the activities that reduce or prevent damage to extend the life expectancy of record and information resources. From record management perspective, preservation may be viewed as the totality of processes and operations involved in the **protection** of records, information resources and archives against **damage or deterioration**. **Activities that reduce or prevent damage to extend the life expectancy of** records, information resources and archives.

The aim of preservation is to prolong the usable life of useful information in two ways.

First, **preventive preservation** seeks to reduce risks of **damage** and to slow down the rate of **deterioration**. This aim is usually accomplished by selecting good quality materials, providing suitable storage environments and safe handling procedures.

Secondly, **prescriptive preservation** is a means of identifying and **treating** or **copying** damaged materials to **restore useful access** to the information.

- i. **Maintenance:** The daily care of records and archives, particularly in the current and semi-current records environment, when they are housed in offices or records centres; maintenance ensures the general protection of records against environmental hazards or other physical dangers.
- ii. **Examination:** The preliminary procedure taken to determine the original materials and structure of an item and to determine the extent of its deterioration, alteration or loss.
- iii. **Conservation:** The intrusive protection of archival material, by the minimal physical and chemical treatments necessary to resist further deterioration, which will not adversely affect the integrity of the original.
- iv. **Restoration:** The repair of an item when aesthetics and reproduction of the original appearance is more important than the preservation of the integrity of the item.
Restoration is not generally viewed as an archival activity.

Preservation encompasses the activities which prolong the usable life of archival records.

Preservation activities are designed to minimize the physical and chemical deterioration of records and to prevent the loss of informational content. These activities include providing a

stable environment for records of all media types, using safe handling and storage methods, duplicating unstable materials (e.g. nitrate film, thermofax) to a stable media, copying potentially fragile materials into a usable format (e.g. microfilming or digitization), storing records in housings made from stable materials (for example, document boxes made from "acid-free" paperboard), repairing documents to maintain their original format, establishing a pest control program and instituting a disaster recovery plan which includes plans for emergency preparedness and response.

METHODS USED IN PRESERVATION OF RECORDS

- i. Lamination:** Make paper stronger by layering sheets of clear plastic over the paper
- ii. Reprography:** Duplicating printed matter by microfilming, photocopying, microphotography
- iii. Digitization:** Convert some information resources which are not electronic into digital form.
- iv. Restoration (Repair):** e.g. Binding books.
- v. Technological preservation**

This strategy aims at preserving the software and hardware environment that was used to access the resources when it was created.

vi. Emulation

Emulation is the process of using one computer device or software program to imitate the behaviors of another device or program, thereby obtaining the same results when accessing or using digital objects. Emulation strategies use software or hardware –called the emulator – to recreate the functionality of obsolete technical environments on modern computer platforms. During emulation the bits of data are replicated and are not exactly as they originally were

Emulation is an approach which keeps the source digital object in its original data format but recreates some or all of the processes (for instance, the hardware configuration or software applications such as operating systems), enabling the performance to be recreated on current computers. Emulation requires programs

(emulators) that translate code and instructions from one computing environment so that it can properly be performed in another.

An example of emulation is writing a program for a Macintosh operating system to run on a Linux operating system.

vii. Migration

Is the act of moving data or records in electronic form from one hardware or software configuration to another

Is the transfer of electronic information so that it remains compatible with current technology storage and retrieval methodologies

It must be possible to export records to other systems without the loss of information.

Migration can be in a form of software, Data, hardware and technology.

a. Software migration

is the migration to newer versions of operating systems and software applications

b. Data Migration

Data migration is the process of converting a digital object from one data format to another, for example from Word v8.0 to Adobe's Portable Document Format (PDF).

It involves change in the configuration of the underlying data, without change in the intellectual content.

c. Hardware migration.

Refers to switching to a new server vendor or just upgrading to newer models, the last thing you have time for is manually reinstalling and reconfiguring them.

Move workloads from old servers to new ones, instead of rebuilding them

All too often, upgrading your server hardware means that you must rebuild and configure the entire workload on new hardware

The main aim of archivists to use migration is to ensure accessibility of a digital record when the software it depends on becomes obsolete (outdated).

d. Technology migration

It refers to switching to a different technology. This happens when the organization has outgrown its current systems or needs capabilities they can't deliver. E,g from typewriter to a computer.

viii. Encapsulation

The other preservation strategy is encapsulation which involves the grouping together of resources and whatever is necessary to maintain access to it.

This can include metadata, software viewers, and discrete files forming the digital resource. In contrast to the migration approach, the encapsulation approach helps to retain the record in its original form.

ix. Refreshing

This is an important method of digital preservation to achieve longevity, involves periodically moving data from one physical storage medium to another storage medium in order to avoid physical decay or obsolescence.

e.g. from an older CD-ROM to a new CD-ROM or from a 100MB zip disk to a 750 MB zip disk.

x. Replication:

Is a set of technologies for copying and distributing data and database objects from one database to another and then synchronizing between databases and maintain consistency.

Through this it is possible to distribute data to different locations and remote or mobile users over the local and wide area networks, dial up connections, wireless connections and intern Replication:

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xi. Backup

The process of copying a computer file or collection of files to a second medium, usually on a magnetic tape or external hard drive so that the data are safe in case the original file is damaged or lost.

The resulting copy is also called a backup. Backup copies are usually stored on devices that can be removed from the computer and kept separately from the originals.

Backing up your data can mean simply burning a CD or DVD with a copy of essential files. Backing essential files up can also be done with a flash or jump drive

QUESTION:

Explain the importance of record preservation