Information Management Advice 66 - Classification Scheme Considerations

Introduction

Virtually any records classification scheme works by organising corporate business records into a hierarchy of categories and subcategories. The purpose of a classification scheme is to support resource discovery and retrieval. If I go looking for apples in a supermarket, I know that I am likely to find other fruit nearby. Similarly, if I go looking for press releases in my EDRMS system, I may be interested in also finding speeches and other corporate communications items related to my subject area of interest.

ISO 15489, the globally recognised standard for the design of records management systems, prescribes the development of records classification systems based on "an analysis of business activities." Organisations create, use and retain records as support for their business functions. It makes sense to organise, access and manage those records in accordance with the same functions. A functional classification system meets that need by categorising records according to the hierarchy of business functions and activities which they support.

Usability

Grouping related things together might seem like a simple thing to do. In reality, what seems like a natural relationship to one person, might not seem so to the next. For example:

- If I'm responsible for safety in an agency, I might want incident reports close to the relevant regulations;
- If I'm responsible for plant maintenance, I might want the same incident reports close to the relevant documentation and manuals for the machinery affected.

Often when developing classification schemes we sort things logically into 'like' items, instead of understanding what 'relatedness' means to end users in the course of their everyday work. This can end up forcing people to go to lots of different places to gather the information they need, instead of finding them all close to each other, ready for the work they support.

Understanding end users and their patterns of information use, and building intuitive structures (where possible) is the only way to address this. Note that ingrained user habits will sometimes compete against the accepted rules of consistency and predictability when building classification structures. There may need to be a trade-off, with exceptions (and the reasons for them) clearly documented. Business units or users may compete for ownership of a particular type of document that each perceive as belonging to them (and thus needing to be located under 'their' function) because it is required as part of their business process, as in the safety example above. User agreement - or disagreement - during stakeholder consultation will unearth these conflicts.

A further complication is the need for agencies to classify information for retention purposes. This process groups records series largely by type, and assigns retention periods in accordance with not only business need, but also legislative and regulatory requirements. This linear approach is frequently at odds with the end user perspective of grouping all related information into the one folder – the 'big bucket' argument. Users left to their own devices will typically structure information based on content, with a main top level folder and various sub-folders.
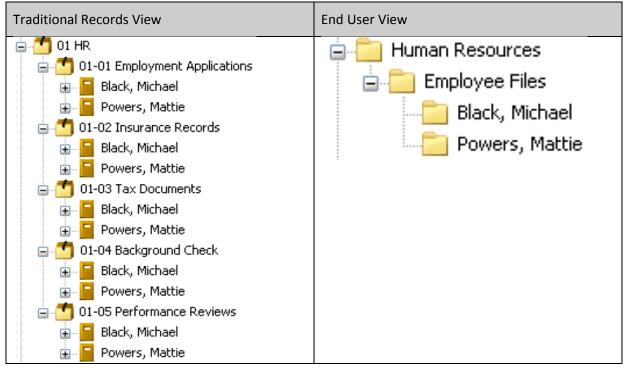
Examples where this may be problematic in terms of mapping records management retention include:

- Project management - project managers prefer to group records by phases, or stages, of a project
- Case file management - a variety of records related to an individual or issue
- Grant management - a variety of records relating to a specific entity (the grant)
- Employee files, where timesheets, training and development, leave, disciplinary, and recruitment records may all be mixed.

To illustrate an example of this conflict visually, consider the following diagram:

Figure 1. File structures – Records vs End user views

Traditional Records View	End User View
01 HR 　01-01 Employment Applications 　　Black, Michael 　　Powers, Mattie 　01-02 Insurance Records 　　Black, Michael 　　Powers, Mattie 　01-03 Tax Documents 　　Black, Michael 　　Powers, Mattie 　01-04 Background Check 　　Black, Michael 　　Powers, Mattie 　01-05 Performance Reviews 　　Black, Michael 　　Powers, Mattie	Human Resources 　Employee Files 　　Black, Michael 　　Powers, Mattie

As illustrated in the above table, HR end users will tend to find it more intuitive if all documents related to the employee are located in a single folder, however the requirements for the records' retention may be very different. In this example, the trade-off of managing records to suit the end user's natural style may be that the agency keeps records for much longer than required. In a 'big bucket' folder approach, the longest retention applicable to any of the folder's contents must subsequently be applied to the entire folder. While this approach may be considered easy at the beginning, big buckets tend to become notoriously unmanageable as information volumes increase over time, particularly where multiple business units may be sharing folders.

The above scenario is not limited to the HR department, and as indicated previously there are likely many opportunities across agencies where similar conflicts may arise due to competing business requirements. Whilst many agencies may not recognise the immediate problems associated with keeping everything longer than required, over time this approach will impact usability in other ways. These include:

- increased storage capacity needs,
- degraded system performance as low value information accrues unnecessarily,
- excessive search results are returned

In addition, compliance issues may be raised. Consider trying to meet the requirements of an authorised Retention and Disposal Schedule if appropriate retention classes cannot be applied to individual records. How will this affect reporting to TAHO, and the ongoing management of the agency's Register of Records Destroyed? Where electronic disposition is employed, (and a report extract from the system is utilised for the register entry) individual records

may be listed with the 'wrong' retention class/disposal action, because of being managed as part of a folder that required the application of a different retention class. Strategies to address this may include manual intervention/ editing of data when compiling the Register of Records destroyed, assuming resources allow. For many, identifying such issues from the outset, and building capacity into the classification structure to manage them appropriately, reduces any such administrative burden when the time comes for disposal. The balance must be struck between usability and functionality – particularly where the current EDRMS configuration does not offer multiple 'views', as discussed in the next section.

A high level of stakeholder engagement and business ownership is critical to the successful development of a classification structure that will meet everyone's needs. Introducing a new enterprise-wide information classification scheme is a significant change management project in itself, and will require ongoing communication, training and support of staff on the one hand, and ongoing management of the tool itself as it evolves over time as business needs change.

System Functionality

Another key consideration that will influence classification structure design, is the functionality provided by any existing information systems available for use. Whether your main electronic records repository is primarily a document management system, an electronic content management system or a fully-fledged electronic document and records management system, will impact the features and functionality available. Decisions to deploy full client or web browser versions of software to end users may also affect the availability of certain functionality.

Some software systems support multiple layers or views of classification structures – one specifically for the records team and another for end users. This is done in an attempt to tackle the problem illustrated in Figure 1. For example, Laserfiche markets a software system called 'Transparent Records Management'[1]. Whilst this approach may work for smaller agencies with less complex requirements, or conversely agencies that have appropriate resources to administer the ongoing management requirements, there will still likely be competition amongst business units over the 'right' location where shared information resources are concerned. These points will need to be identified, and invariably best fit decisions made, as part of functional business analysis.

There are alternative ways of grouping related records that have been split out over multiple functions and activities. For example, the records management software product TRIM uses a virtual folders function to group folders that may be physically located in disparate areas of the classification scheme. Note that inevitably where multiple views are supported, there will be a trade-off between perceived end user support/increased usability, against the effort required for increased system administration and ongoing management.

Some systems provide tools that enable easy retrieval for end users by allowing them to manage their own classification structures, separately from the corporate structure. Two examples of this feature include TRIM's 'User label' function, and SharePoint 2010's social tagging functionality.

Consider the TRIM screenshot over the page. On the right you see part of the structure of the corporate classification scheme. Functions can be expanded to access the activities, and then the folders (containing records) underneath. The User label function is available from the left hand column of the screen.

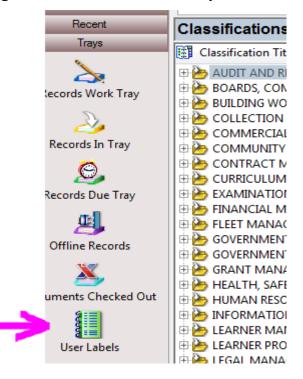[1] http://www.laserfiche.com/en-us/Business/Transparent-Records-Management

Figure 2. TRIM screenshot - Corporate Classification scheme

Using User Labels in TRIM, an end user can create their own mini filing system and group frequently used folders in a structure more natural to the way they perceive relationships between the items.

Note this does not impact in any way on the corporate structure, the view is limited to the individual using it.

Figure 3. TRIM screenshot – User label categorisation

"Favourites" is another feature many systems offer. This allows users to bookmark regularly accessed folders and records without having to remember their location in the corporate structure, and thereby reducing the effort (mouse clicks) required to retrieve.

Different systems also have different methods; recommended configuration; and levels of flexibility in the way they manage and display information to the end user. For example, some systems present a single file plan view of the repository so users can browse classifications, review relevant activities, and identify records relevant to their role. TRIM is one example. Other systems may present multiple views or indexes – e.g. Technology One's ECM system. This particular system supports the ability to remove particular records series from the central file plan – workers compensation files for example – and create a new 'index' specifically for managing these record types in an entirely

separate part of the system. This practice enables greater flexibility in terms of file structure and layout, however needs to be balanced out against increased administrative requirements.

Navigation tools and User Support

Another important consideration for information classification designers, are the navigation tools that will be provided. These may be impacted to some extent by available features and functionality within the chosen system, and is closely linked to usability. As a new classification structure is required to meet the needs of multiple users and business units, it is unlikely to appear intuitive to all users. Therefore, it is necessary to provide clear guidance to end users until they become familiar with the terms and intended functionality.

Early engagement of business units from the beginning of the project, and integration of familiar terminology where appropriate will assist users to identify more readily with the structure provided. This is not a magic bullet, however, and users will need targeted training and support. The provision of tools to support training and ongoing navigation of the structure will also be required. This may take the form of 'quick cards' providing a list of:

- each of the functions and activities and their associated scope notes or definitions
- related examples
- possible synonyms or similar terms, which take the place of preferred and non-preferred terms from a Thesaurus

This information can often be integrated into the structure of the system itself. For example, TRIM uses the notes field to include scope notes at the function and activity levels within a classification scheme. This is accessed via:

- selecting 'notes' from the menu tool bar
- right mouse click on a function or activity term in the classification scheme.

Technology One's ECM allows for additional fields to be built into an index structure for the specific purpose of maintaining function, activity and subject descriptors or scope notes. These can be selected as:

- part of the default display on-screen, or
- hidden and made available by either a right mouse click option or mouse-over pop up message box (web browser).

Where the same or similar activities are featured in other parts of the structure, it is useful to include 'see' references.

Security and Access

Unlike network drives, which are typically organisationally structured to assist with the need to maintain security and access requirements, electronic recordkeeping systems are far more flexible in terms of their rights management models. Folders do not need to be grouped according to department ownership in order to maintain access control. This can be configured by assigning rights and permissions to roles (or profiles), with individual user accounts then associated to a particular role. Alternatively, individual user access may be configured down to the folder level or at the document level, depending on the functionality offered by the system.

The concept of shared folders may cause concerns related to information sensitivity, sometimes unduly. This is frequently another reason why records managers encounter resistance to any proposal that a classification scheme not be tied to department or unit ownership. It is vital that senior executive endorse a more open approach to information management, and encourage information sharing between units, departments, government agencies and potentially the public, where appropriate. Of course, this is not intended to suggest 'open slather', as there will always be the need to protect certain kinds of information. An agency's information asset register and information

sensitivity assessments will help to highlight areas that need to be managed more securely in line with legislative and business requirements (review TAHO's Advices 34 and 39 for more information).

Generally speaking, the classification structure used for records management will not mirror the information security models, as there will be less focus on organisation hierarchy with a functional approach. Appropriate security and access should be determined by analysis and appraisal of the records series, and business rules developed for the acceptable management of these records. Undertaking an information sensitivity assessment may indicate a requirement for certain sections of the classification scheme to be accessible only to particular groups (e.g. HR). However, it is more likely that individual folders or even particular document types (e.g. commercial in confidence proposals) will have security and access restrictions applied at their respective levels.

General Classification Scheme tips

DO NOT *Build a records classification scheme which mirrors your corporate organisational chart at a single point in time.*

DO *Use the organisational chart as a final checklist to ensure that your data gathering and class design address everyone's functions, activities and records, irrespective of who is responsible for them at a given point in time.*

If an effective classification is based on a hierarchy of business functions and activities, it might seem logical to start with the organisational structure of the agency given that the Human Resource functions are performed by the Human Resources unit, the financial functions by Finance, etc.

However, developing a classification scheme that reflects the organisational chart is a bad idea:

- Users will expect it to stay that way
- It will require significant monitoring and administration to revise the records classification each time an organisational unit is merged, split or renamed
- It will be difficult to manage records which were classified and stored under the old organisational category
- With every group expecting to find their own section in the classification structure, more generic or common business activities will need to be repeated across every group (e.g. recruitment, compliance, operational planning, meetings, etc)
- The result is a bloated, repetitive information retrieval tool which is perpetually out of date, frustrating even the most basic day to day efforts at finding required information.

Those areas which are responsible for activities that extend across multiple business areas (or new staff) who may need to search multiple areas of the system to get an overall picture of the agency's environment.

In contrast, a purely functional classification scheme:

- identifies and describes business activities **independent** of the departments, divisions and business units responsible for them
- is named and described using more neutral language, with care taken to avoid echoing the names of business units in function and activity titles
- is more robust in the face of ongoing organisational change
- ensures that a given category can be used by multiple groups across the organisation

DO NOT *Develop and apply functional categories based on the subject matter discussed in the content of records*

DO *Classify records based on the activity being performed by the creator when the record was made or received*

Functional classification focuses on the business functions, activities and transactions that lead to records being made or received in the first place. Records are defined as the concrete outcome of an actual activity. This can be lost if we attempt to describe the things that records are 'about'. Even if a record discusses or describes specific business processes, transactions and decisions associated with a given function, the function of the record itself (the 'intended purpose' or 'intent') may be altogether different.

To illustrate, consider a contract for information technology support services. The intent of the contract record is to execute a legal agreement between two parties. A possible classification category for this record might be identified as Contract Administration. The fact that the agreement is 'about' IT support does **not** mean it is a record of the IT support function. In contrast, a service log or request ticket **is** a record of the IT support function because they are generated to provide information and evidence for IT support activities.

DO NOT *Classify records based on document types. This is especially important for very generic document types, such as correspondence or reports. These can support any business function and may have varying retention requirements.*

DO *Describe the scope of functional record categories, providing examples of the type of documents which provide evidentiary support for the business activity concerned. Classification training and user documentation should emphasize that these examples are illustrative rather than all inclusive.*

Authorised Retention and Disposal Schedules (RDS) of agencies' functional records identify and prescribe minimum retention periods based on business, legislative and regulatory requirements, and in the case of permanent records, long term cultural and heritage value to the community.

Accurate mapping of classification schemes to authorised Retention and Disposal Schedules within systems will be made more difficult to achieve, if the required analysis has not been initially undertaken to identify information and records according to the Functions | Activities | Transactions unique to the business. The inability to destroy records at the appropriate time will impact reporting, quality assurance, decision-making and business intelligence, system performance, maintenance and capacity to manage the system. Additionally, unauthorised destruction of records may occur, increasing operational risk.

Development of concise scope notes assists in helping the end user to navigate the structure, whether at file or document level. Business areas can provide examples of the record types relevant to the activities identified.

DO NOT *Create classification categories so broad that they prevent the classification assisting in records retrieval, retention, and other key RM processes.*

DO *Break broad corporate functions (e.g. Financial Management) into distinct activities (e.g. budgeting, accounts payable processing, tax filing). Where appropriate, factor retention and other RM decisions into separate categories or transactions.*

Where a classification scheme is introduced that is mandated by the agency for use there will be a period of adjustment for end users. This is particularly true where multiple business units or outposts of agency are represented. Engagement with business units as part of the stakeholder consultation process will help to identify preferred terminology that can be adapted for use. Where multiple interests must be served and general consensus cannot be reached, some systems allow hidden search terms or synonyms to be included. This may help to get everyone headed in the right direction.

Clear cut classification structures also assist records staff when undertaking quality assurance monitoring. Rather than faced with the insurmountable task of reviewing vaguely titled folders full of 'miscellaneous' documents of varying retentions, consistent naming conventions and classification tools will help identify misfiled documents, and appropriate application of retention classes and associated triggers.

Other Issues for consideration

Additional business decisions that will need to be made regarding the introduction of classification tools include:

- Purchase of 'off-the-shelf' products vs business specific
    - Resources available such as internal skill sets, backfilling staff, etc
    - Suitability/applicability to business environment of commercial products and associated administrative burden of manipulating to suit business
- Externally developed (consultants) vs in-house development
    - Resources available such as internal skillsets, backfilling staff, etc
    - Time constraints
- When will actual information classification take place?
    - at what point in the process, eg upon receipt or creation, post-action, etc?
    - may differ depending on content
- Staged approach – what content or information systems will or should be included in the classification scheme deployment? What are the organisational priorities (risk-based evaluation) - short term? Long term?
    - EDRMS
    - Paper-based systems
    - Network drives
    - Intranet (WCM, SharePoint etc)
    - Line of business systems
- The capacity of current systems to support information classification structures
    - Current systems
    - Future development
    - Inclusion in requirements documentation for future systems
- Automated vs manual classification such as forms recognition, profiling, etc
    - Capacity for automation by system
    - Capacity for automation by record type
    - Resource requirements such as workflow, skill sets, business process mapping, software, etc

Related Reading

Implementing information security classification in EDRMS (2013: Advice 34)

Change Management - Preparing for Change (2014: Advice 55)

Information Classification tools (2014: Advice 6)

Further Advice

For more detailed advice, please contact:

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- AIIM Checklist Successful taxonomy: Nine Keys to Success 2013, Carl Weise, www.aiim.org
- 7 tips for Developing and Applying a functional classification scheme, Datafile, www.datafile.com.au

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This document has been security classified using the Tasmanian Government Information Security classification standard as PUBLIC and will be managed according to the requirements of the Tasmanian Government Information Security Policy.

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State Archivist