Contents

Figures

UNIT 2.2

DEVELOPING A BUSINESS CASE FOR IMPROVED ELECTRONIC RECORDS MANAGEMENT

Developing any new programme in a government agency or business office requires approval and funding. To obtain this approval and funding, senior management needs to understand why such a programme is necessary. Because the success of any electronic records management system, programme or project depends so greatly on senior management support, the records professional needs to develop a strong business case for the new initiative. The business case should argue convincingly that the proposed action is required; therefore the business case needs to be based on solid research, including the findings of a needs assessment or scoping study. The business case must also explain the benefits of, and drawbacks to, the proposed project.

Records managers can play a significant role in developing a business case for any information management system, either by taking the lead or by participating actively in the research and development of the study. In particular, their role is to articulate the required record-keeping requirements for any electronic system, no matter its primary purpose. For example, if a government believes it should develop a new computer system for processing payroll, the records manager should be involved in the planning from the very beginning, as there are significant record-keeping requirements for managing the documentation associated with paying government employees. Ideally, records managers will involve themselves in planning any new information-related projects as much as possible, even if they are not primarily responsible for the project in question.

This unit examines the steps involved in developing a business case. The nature and purpose of a business case is explained, and the key steps in the development of a business case are examined in detail. Examples are provided to illustrate the points raised. This unit focuses specifically on developing a business case for the implementation of a new or upgraded electronic records management programme, whether for paper or electronic systems. However, the principles presented are the same no matter what the project. A business case is equally important whether the goal is to acquire new staff members, amend the agency's mandate or expand physical space and resources.

More information about selecting software for electronic records management is included later in this module.

The Purpose of a Business Case

A business case outlines all the implications for the organisation if it chooses to proceed with any proposed project. The objective of the business case is to obtain organisational commitment for the proposal: the business case is an argument for positive action. The commitment must be real and sustained; it is not enough to present a business case for a new programme only to have senior management recommend more studies or reports. Therefore, the case must be accurate, thorough, detailed and convincing.

Business cases are highly individualised documents. No one agency can take a business case developed by another government or agency and present that to senior management and argue that the same conditions apply. The findings of every business case will vary greatly according to the organisational context. Still, much can be learned from the experiences of other organisations that have gone through the process of developing business cases, especially in order to plan and implement electronic records management systems. It is well worthwhile investigating to see if any case studies are available and whether any work undertaken by others might be reused or modified for the organisation's specific purposes.

Business cases need to be presented in a clear and well-structured manner, in order to make them easy to understand. The following key information should be included in a business case arguing for the development of new or expanded electronic records management programmes or systems.

- The status of current programmes or systems and a discussion of how well they are, or are not, serving the organisation's needs.
- A risk-benefit analysis, which outlines the positives and negatives of proceeding or not proceeding with a new approach and whether urgent action is required.
- A summary of the key reasons for moving forward with a new approach.
- If an electronic records management system is recommended, a proposal for how to design the new system, including an indication of whether technical specialists such as computer programmers or information management consultants will be required.
- Possible requirements for new or changed facilities, equipment or supplies, including telecommunications systems, power supplies or climate-controlled environments.
- An estimate of the number of people who might be involved in the development or implementation of the new programme or system.
- A summary of the proposed financial resources required to develop the new programme or system.
- A draft project plan, including a plan for managing the project itself and any recommendations about how to address any necessary or inevitable changes in the organisation's structure or operations.

- A set of options for action, from no action to the ideal scenario for development, with proposed timeframes for the implementation of each option.
- A specific recommendation for action, taken from the options outlined and based on the findings presented in the business case.
- Sustainability of the changes proposed in terms of the ongoing effect on organisational budgets and staff.

A sample introduction to a business case is presented in Figure 2 below. This sample, which addresses the implementation of an electronic records management system, illustrates how to explain the purpose of the document and how to outline its structure and content.

There are usually seven steps in the development of a business case, as listed below.

- Step 1: conducting a needs assessment
- Step 2: examining options for action
- Step 3: identifying a preferred solution
- Step 4: outlining the benefits
- Step 5: examining costs
- Step 6: presenting a conclusion
- Step 7: including annexes.

These steps are described in detail below.

Figure 2: Sample Business Case Introduction

This is the business case for the implementation of an integrated electronic records management system within *[the organisation].* The proposed project supports section *[X]* of the Corporate Business Plan – the creation of an information management structure to support all of *[the organisation's]* business activities.

Outline the contents of the business case.

Whenever records are created or used by an electronic system, records management requirements should be incorporated into the system design. Records management requirements include generic requirements – such as the requirement for 'full and accurate' records as outlined in the International Records Management Standard ISO 15489 – and specific requirements such as the need to create accurate and reliable documentation for specific business processes.

Identify the justification for proposing a new system, including external conditions such as standards and organisational requirements such as changes in legislation, policies, or events.

This business case is the product of an investigation into *[the organisation's]* records management systems arising from the introduction of Freedom of Information and the requirement to comply with the Code of Practice under section 46 of that legislation *[…or arising from the introduction of the International Standard on Records Management, ISO 15489…..etc].*

Link the business case to any existing plans or policies that relate to records and information management.

This document examines the following aspects of the business reasons for considering the introduction of electronic records management:

- an assessment of the current records management situation
- reasons for proceeding with electronic records management
- options for action
- requirements for effective electronic records management
- costs of the proposed project
- benefits of the introduction of electronic records management
- how the proposed project will be managed.

The development of this business case has been guided by *[indicate the agencies authorising the process]* good practice guidelines and in accordance with the organisation's overall business practices.

Indicate the authority for developing the business case.

Step 1: Conducting a Needs Assessment

A needs assessment, also called a scoping study, is designed to gather sufficient information to enable management to determine whether or not to proceed with implementing a new records programme or upgrading an existing one. A needs assessment provides the context of the business case: it explains why it is necessary to consider change. A needs assessment allows readers to judge what benefits will result from changing existing practices by explaining the strengths and weaknesses of the current structure.

Needs assessments or scoping studies can be conducted internally by staff within the agency or they can be conducted by external consultants. Usually, both internal and external resources are used. In addition to involving staff throughout the office, many organisations often involve experts in records and information management, computer systems and business processes, who work together to conduct the research and develop the business case.

When determining how detailed the needs assessment should be, it is necessary to consider whether the readers of the business case will be familiar with the current situation in the agency or whether they understand, and support, the need for robust records and information management programmes. If the organisation's senior management is supportive of records management, they may be well aware of the issues associated with – and strengths and weaknesses of – existing processes or systems. It will not be necessary to tell them why they need to consider a new approach; they will very likely be more interested in how to develop the new programme, including what resources may be required and the impact of the change on the organisation's operations.

On the other hand, if senior managers are not interested in or supportive of records management, the business case will need to explain in much more detail why effective and efficient records care is so important. The records professional will need to play a major role in writing a case that argues convincingly not only what should be done and how but also why it should be done.

In the needs assessment, the records professional should answer the following questions. One set of questions relates to the role and profile of records management in the organisation; the other set of questions relates to the types of records and information being created.

The Status of Records Management

- What is the role of a records management unit in the corporate structure? Is it recognised as a specific corporate programme or is it combined with other services and not seen as a separate and important area of responsibility? Is the records manager's responsibility for managing digital records generally recognised and accepted throughout the organisation?
- Are records in all formats (paper, film, electronic) included as part of the records manager's responsibilities? Does the records manager have responsibility for records throughout their life cycle?
- Does the records professional have adequate access to the senior management team within the organisation?
- Does the records management unit have any organisational or administrative connections with other parts of the organisation that perform similar functions, such as agencies responsible for managing freedom of information requests, providing information technology services, reference libraries or resource centres, audit agencies, legal services or archival programmes?

- Does the organisation have a records management policy, and if so, how is it implemented: centrally through a records management office, or decentralised throughout the organisation?
- What are the standards against which records management performance is measured?
- Has the agency employed a qualified records manager or someone with formal responsibility for the management of the organisation's records?
- Are regular reports on records management in the organisation made and submitted to management? If so, what is reported? Does management respond to requests for action included in those reports?
- What records management training initiatives and awareness programmes are in place for records professionals and for staff throughout the organisation?

The Nature of Records and Information

- What systems are currently in place for capturing information in the organisation (paper filing, classification scheme, local area network, databases, email and other records)?
- How is electronic and paper information stored and maintained?
- What measures are in place to protect sensitive information?
- What policies and procedures are in place for the appraisal and disposal of records and information?
- What plans (if any) are in place to ensure the long-term preservation of and access to electronic information?
- To what extent are records covered in the organisation's disaster recovery or business continuity plan?

Much of the information for an assessment of the current situation may already be available. Recent records surveys may contain valuable information, and using up-to-date research will save repeat investigations. It may also be useful to include in the assessment other relevant documents or links to such documents, such as

- the organisation's records management policy statement (if any)
- its disaster recovery plan
- reference to records management standards (for example ISO 15489, the international standard on records management)
- any internal information audits or other reports conducted into records issues
- any risk assessments or cost-benefit analyses that may have been conducted in the recent past.

If the organisation does not have any of these resources at hand, the business case should mention the need for the organisation to develop such materials in order to adhere to recommended standards and best practices, such as ISO 15489 or relevant legislation or policies.

Interviewing Staff

When conducting the needs assessment, it is important to develop a set of key questions to use when interviewing staff about records issues. These questions will ensure the study is thorough and focused. Core questions should be supported by supplementary questions that are designed to gather the evidence about which senior management will be most interested.

For example, when examining the status of records policies in the organisation, the key question might be whether or not the organisation has a records management policy in place. Supplementary questions would expand on that answer and might include the following.

- How is the policy distributed or made known to the staff of the organisation?
- How often is the policy reviewed/updated?
- Does the policy address the care of records in all formats?
- How is the policy implemented?
- How is implementation measured?

Other Research

Depending on how much detail is needed to explain the records management environment to senior management, the needs assessment might also include a business systems analysis, organisational review, records survey or other assessment. Conducting a detailed records survey is a time-consuming but valuable process, since the results will form the benchmark for practice in the future. Therefore, the records professional should strive to obtain support for as thorough an investigation as possible, especially if no such analysis has been done in the past.

Often, in fact, the centre piece of a business case is a records survey that identifies precisely the nature and scope of records in the organisation, the effectiveness of their storage and use and any hard or soft costs associated with efficient or, more often, inefficient record-keeping practices. Therefore, the information on conducting records surveys provided later in this module will be of particular value when considering how much research to conduct in anticipation of the development of a business case.

When producing the final business case, it is preferable to include such reports as annexes to the business case and refer to them in the narrative. Senior managers do not have the time or inclination to read long reports and so it is critical to the success of the business case not to weigh it down with too much information. Another issue to consider when determining how much detail to include is whether readers will understand technical or professional information and whether they need to see this information in the text itself. Often it is best to provide only a broad outline of technical information and be prepared to answer questions later.

The needs assessment must be closely tied to the organisation’s vision, mission and strategic objectives. Only if it links to the organisation’s goals will the assessment determine the extent to which the organisation’s records are supporting or hindering the achievement of those strategic objectives.

The steps involved in conducting a records survey are examined later in this module.

Step 2: Examining Options for Action

Readers of the business case are bound to ask why the organisation should go ahead with any changes proposed. Why should the agency establish or upgrade its records management programme? What are the consequences of not implementing a new approach? How much risk is the organisation facing by staying with the status quo?

Part of the purpose of a business case is to examine all options for action, from taking no action to undertaking an interim solution to implementing a particular system. The options at different ends of the spectrum are outlined below.

Do Nothing

The needs assessment should form the basis for any decision about whether to change systems or leave the situation as it is. The needs assessment will be based on the facts, but the records professional may want to argue some points more forcefully. For instance, even if one of the options for action is to do nothing, which can be an appealing option if the organisation has limited resources, the records professional needs to emphasise the internal and external factors that may be important in forcing change.

For example, many organisations have adopted a plan to modernise their operations. They may have set targets for delivering services online, managing records electronically, providing greater access to information and protecting individual rights, including the right to privacy, in an electronic environment. Many governments and other public agencies are also committed to improving the quality of their services to customers and stakeholders. What will be the effect on the organisation if it continues to manage its information in the same way as now, even though it wishes to move forward with sophisticated electronic information programmes? How will one agency work with other agencies, if those other groups are introducing electronic systems that surpass the capacity of the agency in question? Will the agency thrive or suffer if it remains the same when other offices are moving forward?

The discussion of options for action – and particularly the consideration of doing nothing – can include advice on the consequences of not staying on top of current developments in automation and electronic information management.

Adopt an Interim Solution

Another option might be to introduce a phased approach to change. For example, the organisation could decide to modify the current information technology infrastructure in order to implement an electronic document management system that manages current records, but it may decide to defer the installation of those computer features that address the disposal of records. There may be a sense that time and money can be saved by implementing a partial solution and expanding the system later.

The records manager needs to be prepared to explain whether he or she believes that a phased approach will work or whether an interim solution could present more problems than benefits. The argument in favour of interim solutions or phased approaches is often based on the need to allow working practices to evolve gradually. The legitimacy of that argument will depend on the nature of the organisation. Some agencies can accommodate significant change, even though senior management may not believe its staff members can cope. The records professional arguing a business case needs to be prepared to discuss and, if necessary, refute any argument for an interim solution, especially if it will lead to more complications than improvements.

Implement a Complete Solution

At the other end of the spectrum might be the option of creating an elaborate and sophisticated new enterprise-wide electronic information management system or completely revised records management programme. It can be useful to explain briefly the issues involved with choosing this more advanced solution, even if only to demonstrate that less complex approaches may be more appropriate in the short term.

Step 3: Identify a Preferred Solution

At this point in the business case, the desired solution should be articulated clearly, whether it is one of the actions already articulated or a compromise that balances the strengths of different approaches. Once the records professional has summarised the desired approach, the next parts of the business case will outline the issues involved in implementing that solution.

If the records manager is not confident that senior managers and decision makers will accept the proposed solution, he or she needs to think carefully about whether or not to proceed with elaborating on the business case in any more detail. It might be better to have senior managers review the options presented and indicate their own preference, after which the records manager can develop a more specific proposal for action based on the solution most likely to be chosen, even if it is not the one that he or she would like to see adopted.

Identifying Programme Requirements

Assuming the recommendation for action is to implement a new electronic records management programme or expand an existing one, the next step in the development of a business case is to identify the administrative, technical, financial and other requirements for that new system. Important requirements include the following:

- The organisation needs to accept the validity of an electronic document as an official corporate record.
- The new programme or systems need to be developed so that they maintain and preserve electronic records as reliable and authentic evidence of business actions or decisions.
- The organisation needs to build into any new records management programme a classification scheme that organises files and folders into logical groupings.

- The organisation needs to define the metadata to be captured from the records and it needs to ensure any systems implemented can capture that metadata adequately.
- The programme needs to manage the ongoing and systematic retention and disposal of records.
- The programme needs to allow for the efficient and effective location of and retrieval of records.
- The organisation needs to install security and access controls to protect the safety of the records and ensure that any requirements to provide public access or protect personal privacy are followed.
- The organisation needs to establish an integrated (records management, information technology management and business management) steering or advisory committee or other governance structure to provide oversight for the records programme).
- The organisation should consider the implementation of a vital records and disaster preparedness or emergency plan.

Step 4: Outlining the Benefits

Step 4 is probably the most important part of developing the business case. Most decision makers considering new projects will be balancing benefits against costs. This part of the business case provides an explanation of how the expected benefits will outweigh the expected investment and the expected risks.

In general, the benefits of an improved electronic records management programme may include

- improved staff performance may occur through time saved searching for records
- more accurate retrieval of information
- stricter adherence to access and privacy requirements for information management
- reduced staff costs for filing and managing paper records
- Reduced storage costs for keeping records with no continuing value.

Below is a brief overview of some of the key benefits – including financial benefits, benefits to stakeholders, and benefits to overall business – that can result from improved electronic records management.

Financial Benefits

Financial benefits are those improvements that can be measured in actual economic terms (such as savings in licence fees for superseded computer systems that have been replaced) or that can be calculated as monetary value (such as savings in staff time). Indeed, the better use of staff time is often a large part of the financial justification for developing or improving electronic records management programmes. Sometimes, however, the time saved by implementing improved records management processes ends up being diverted to other work, at which point the benefit is not just financial

but has a wider benefit to the organisation. It is important also to remember that the introduction of a new electronic records management programme requires a great deal of staff involvement; the savings in time and effort in records care are not necessarily immediate.

Following are some examples of financial benefits of effective electronic records management.

- Time saved filing information because it is no longer necessary to print out documents, find the correct file, insert the documents in the file and index them.
- Time saved retrieving information because less time required to search for files, to wait for access to files that are being used by somebody else or to photocopy documents from files.
- Time saved redoing work because documents can now be found quickly and easily.
- Space saved because fewer desks, filing cabinets and cupboards are needed or because fewer records need to be kept in intermediate storage (such as through a records storage company).
- Resources saved, because there is less need for computers, software, hardware, filing cabinets, or other equipment or consumables such as paper, file covers, printer cartridges and other stationery items.
- The rate of server-based file storage growth is reduced and the volume of files stored on servers becomes more manageable.

Financial savings are usually very important to senior managers, who can easily be convinced of the value of electronic records management as a cost-savings tool. However, financial savings may not be a good motivator in some offices. Sometimes, for instance, staff may fear that their own budgets may be cut as a result of changes in operations, and they may resist the idea.

Stakeholder Benefits

Essentially, stakeholder benefits are benefits experienced by people, such as: staff within the office, senior managers, users of the services of the organisation, subsidiary companies, other government departments or the public in general. The greatest beneficiaries of improved records management are usually the employees who get to use the new, more effective office systems.

The benefits to staff can be measured by staff surveys, which pose questions about such issues as ease of filing, efficient retrieval of records or effectiveness in responding to queries or requests for information. It is difficult to measure stakeholder benefits precisely, but some examples of actual staff benefits may include

- better quality work resulting in improved morale
- better access to information, resulting in improved work performance
- increased opportunities for more flexible work patterns, such as working from home or job sharing.

Business Benefits

Business benefits are closely related to stakeholder benefits, but business benefits can usually be linked more closely to the organisation's corporate business plans and key performance indicators. When examining the kinds of business benefits that may come from improved information management, it is best to focus on benefits to the office workers themselves, rather than to consider only organisation-wide benefits. In this way the benefits provide a focal point for staff to evaluate the extent to which the use of coordinated electronic records management programmes or systems may improve actual operations.

Business benefits may include the following.

- Improved access by all appropriate staff to documents in electronic filing systems.
- Effective maintenance and updating of electronic records through web-enabled or distributed and decentralised computer systems.
- Improved ability to share documents with colleagues.
- Increased flexibility when accessing and using records, such as access outside normal hours, enabling staff to respond more effectively and quickly to business requirements.
- Greater usability of records because the computer system allows for searching under several parameters (such as keyword, author, date or type of record).
- Improved security, through the creation of backup copies of vital records and the protection of records in a secure electronic environment.
- Improved accountability through the creation and preservation of records as reliable and authentic evidence.
- Reduced work loads because of improved awareness of and use of information created elsewhere. (Of course, time savings in one area does not mean staff will not be given new tasks in other areas; achieving sustained reductions in work loads cannot be achieved simply through changing software systems.)
- Improved retention of organisational knowledge when staff leave or retire.
- More effective organisational planning, through better management of and access to information.

Assessing Potential Benefits

What is the best way to identify the potential benefits of a new electronic records management programme or any initiative being examined in a business case? Researching benefits can be a labour-intensive exercise. However, the end result may not only be a sense of the value of this particular project but a greater awareness throughout the organisation of the importance of effective electronic records management.

As mentioned, research may include conducting surveys, carrying out one-on-one or small group interviews, sending out requests for input, reviewing previous studies and background information and holding workshops. One of the benefits of conducting

workshops with groups of staff throughout the appropriate offices within the agency is that involving people in the research process can encourage them to become enthusiastic about and involved with the new initiative. They may see the potential for improved performance and become strong supporters of the project.

Examining the benefits of an electronic records management programme involves not just identifying a variety of possible improvements. Rather, researching and assessing possible benefits includes

- agreeing on the benefits that will be measured
- drawing up a benefits register, as shown in the example below
- determining who is responsible for measuring the benefit
- ensuring that stakeholders are aware of and committed to effective delivery of the benefits.

A benefits register identifies specific potential benefits and indicates how they will be measured, including specific information on how the benefit should be measured (the metrics); how critical the benefit may be to organisational operations (such as on a scale of 1-5, with 1 as essential and 5 as optional); and how often the item will be measured to assess the benefit achieved. A sample extract from a benefits register is shown in Figure 3 below.

Figure 3: Sample Extract from a Benefits Register

No.	Benefit	Description	Critical level (1-5)	Metric	Expected outcome	Measurement Baseline	Measurement interval	Person responsible
1	**Information retrieval time**	Time spent searching for and retrieving required information from the ERM system	2	Survey users on the average time spent retrieving required information	Decrease	1) from current paper system 2) from ERM system as soon as implemented	Project end	
2	**Reduction in storage space**	Reduction of filing of paper on paper files and folders, and space required to store files	2	1) Track accommodation space used 2) Track accommodation costs 3) Track number of file covers issued	Decrease	From information about use of space, accom-modation costs, and number file covers as given at the beginning of the project	Yearly	
3	**Improvement in business processes**	Current business procedures and improvements in time and quality	3	Conduct a stakeholder survey	Less time on procedural work; better decision making	From status indicated in initial functional analysis	Yearly	

Step 5: Examining Costs

By now, the business case will include a description of the context for electronic records management, an assessment of the current record keeping situation in the organisation and an explanation of the rationale for and nature of electronic records management programmes. The case will also include a description of the organisational framework needed to undertake the proposed project and the benefits that are likely to be realised from the introduction of a new approach. All these factors now need to be brought together and the actual cost of implementing the new programme needs to be articulated.

Most senior managers will be interested in the 'bottom line' costs, and many managers base their decision about the viability of the project in large part on the economics of the proposal. It hardly needs to be stated that the analysis of the costs of the enterprise must be accurate and the rationale for those expenditures clearly justifiable.

Presenting readers with a mass of figures can confuse them, detracting them from focusing on the arguments presented in the business case itself. It is better to provide a broad outline or summary of the costs, with detailed figures presented in an annex. Many organisations may have their own template for presenting costs in a business case. If not, the framework shown in Figure 4 offers an example of one way in which financial information may be presented, with the summary of costs separated from the breakdown.

Figure 4: Sample Chart for a Summary of Costs

Description	**Year 1 $**	**Year 2 $**	**Total $**
Planning and Implementation of Computerised ERM System			
Procurement and project support (consultancy)			
Hardware and software			
Technical support			
Administration			
Implementation			
Running costs (including licences)			
User costs			
Migration			
SUB-TOTAL			
Business and Culture Change			
Development/revision of policies			
Change management			
Training			
Communications			
SUB-TOTAL			
TOTAL			

Figure 4: Sample Chart for a Summary of Costs (cont.)

Item	Includes
Procurement costs	• costs associated with meeting government or organisational requirements for procurement
Project support costs	• management • consultancy
Hardware acquisition and installation costs	• server • index server • scanners • systems back up • computer upgrades • installation • operations training
Software acquisition and installation costs	• ERM system • scanning • back up • operating system • email interface
Technical support costs	• ICT staff • consultants or contractors • operational training
Administration costs	• training • office support • project team
Implementation costs	• network • services • accommodation • policies and standards • design and analysis • development • testing • piloting • change management • roll out
Running and operations costs	• accommodation services • network • maintenance of hardware and software • licences • consumables (paper, disks, tapes and so on) • staffing
User costs	• training: ERM scanning, records management support groups and so on • lost time through training on new systems and so on
Migration costs	• data migration (paper and electronic) • costs of restoring, repairing or recreating lost or corrupted data

When gathering information about these costs, a great deal of research information will be created, in both paper and electronic form. All of this information needs to be kept at least for the lifetime of the project, in order to justify any figures put forward in the business case and to allow for comparisons over time between the original anticipated costs and the actual expenses incurred. And it must be recognised that projects can last for many years, especially those involving the installation of new software systems. Good record keeping during the development of a business case and during the actual implementation of the project is essential to ensuring accountability and effectiveness.

Conducting a cost-benefit analysis is a relatively simple technique for deciding whether it is economical to change existing operations or systems. A cost-benefit analysis involves adding up the value of the benefits that have been identified (although that identification may not be easy or exact in many cases, especially for intangible benefits) and subtracting from the total the costs of the proposed course of action. When forecasting costs for a project, however, it can be very difficult to predict intangible benefits and costs, such as savings in time or resources. Therefore, it is common to calculate project costs based on actual financial expenses only, not on imprecise estimates of abstract items.

Step 6: Presenting a Conclusion

It is always useful to have a formal conclusion to the business case. The conclusion brings together key points and, as briefly as possible, summarises the main arguments presented in the case. A sample concluding paragraph might read as follows:

> The implementation of an electronic records management system offers a significant opportunity for *[the organisation*]. As well as modernising the organisation's approach to the management of information generally, the new system will promote the better and easier accessibility of information, enabling *[the organisation]* to undertake its work more efficiently and to meet all its legislative and regulatory requirements.

Much of the information in the conclusion can also be used as part of an Executive Summary, presented at the beginning of the case, which also summarises the key findings and arguments.

Step 7: Including Annexes

As mentioned earlier, people reading business cases – especially senior managers – will not want to be confronted with masses of detail. That specific information does need to be included in the business case as evidence, however. The best place for such detail is as part of an annex to the report. Annexes provide an easy way for the reader to examine details without being forced to wade through vast quantities of information before they can see the argument being presented.

Annexes in a business case might include

- descriptions of the qualities and functionality of typical ERM software systems
- detailed technical requirements for new computer applications to support records management
- detailed information about possible benefits or drawbacks
- additional information about costs
- summaries of surveys, interview responses or other research data gathered.

In the end, a well-constructed business case will include the following information.

- A needs assessment identifying the status of current operations and discussing how well they are serving organisational needs.
- A risk analysis, indicating the hazards of proceeding or not proceeding with a new programme, along with an indication of any urgency required for action.
- A cost-benefit analysis, assessing the financial or other costs associated with possible change and the hard and soft costs of remaining with the status quo.
- If a new electronic records management system is required, a proposal for systems design and architecture including technical requirements.
- Possible requirements for new or changed facilities, equipment or supplies.
- An estimate of the number of people who might be involved in the development or implementation of the system.
- A summary of the proposed technical, financial and personnel resources required to develop the new approach.
- A draft project plan, including a plan for managing organisational change.
- A set of options for action, with proposed schedules for the implementation of each option.
- A final recommendation for action, based on the analysis presented.

As mentioned, a business case may be supported by information gathered through a records survey; therefore, the next unit looks specifically at the tasks involved with conducting a records survey.

UNIT 2.3

CONDUCTING A RECORDS SURVEY

A records survey is a systematic analysis of all the records – either paper, electronic or both – created and used in a particular organisation or department within that organisation. A records survey can help an organisation to take control of its existing records, ideally in order to bring them into a more structured records management environment. A survey can also be used as the basis for developing a classification scheme and retention and disposal schedule, and it can provide the background information needed to determine the information needs and requirements of the organisation. A survey can also be used to keep track of changes in information systems over time and to plan business continuity and disaster recovery plans.

Ideally, a records professional will oversee the execution of a records survey, so that all relevant records-related information is gathered. But it is useful to encourage participation from representatives of the different business units during any survey of the records they hold, including carrying out the actual survey if necessary.

This unit examines the different types of surveys that can be executed and the different steps involved in the process of conducting a records survey. It also looks at related activities including carrying out a business process analysis and participating in surveys of information technology resources.

Options for Conducting a Survey

There are two main choices for conducting a records survey: physical surveys and on-site inspections or interviews and questionnaires. A physical survey is more reliable, since the records manager can oversee the process directly, and it is the approach to choose when gathering accurate and detailed information is critical. A survey by interview or questionnaire can accumulate a great deal of information quickly, but it is dependent on the ability of individuals to answer questions accurately and thoroughly. Although a well-developed questionnaire can increase the quality and quantity of responses, in-person surveys allow the records manager to assess record-keeping practices and systems in more detail.

Preparing for a Survey

Before any records survey is carried out, background research should be conducted and a plan developed to clarify the nature and purpose of the survey and the time frame involved. All key staff should be informed of the purpose of the survey and when it will be carried out in their area. Background information that might prove valuable includes:

- copies of any previous surveys or studies
- information about any offsite storage, commercial IT backup systems or other records services that may affect the quantity and type of records identified
- inventories of equipment and supplies, particularly anything related to information technology (more information on IT surveys is included later)
- any records-related policies, procedures, manuals, guides or other materials offering instructions on records creation, use, storage and preservation
- copies of any existing classification schemes, retention schedules, file lists or other information about records.

A structured survey form should be developed to ensure that important information is collected and nothing obvious is overlooked. Figure 5 below provides a list of the types of information that should be gathered during a records survey.

Conducting a Physical Survey

To conduct an onsite survey, the records professional needs to visit all the business areas in question, meet with staff to discuss their records practices and needs and physically inspect all storage equipment. During the survey, it is important to carry out the following steps.

- Locate and inspect every physical storage location in the area, including cabinets, shelves, attics, basements, closets, desks and boxes.
- Inspect all the records and information discovered – at least at an overview level – to confirm the general volume and nature of records being created and used.
- Ask staff if they use disks, USB drives to store their own files, and if they transport files from their office to their home or other locations to work on them. Try to get a sense of the volume of records being transported and whether staff are using common storage devices such as network drives or if they are establishing their own personal electronic records habits.
- Try to establish the relationship between paper and electronic records. For instance, is there any relationship between the copy of a letter filed in a paper file and the electronic copy found in a computer? The ease with which both copies can be retrieved is also a major reason for introducing an electronic records management system.
- Document all information gathered, using a pre-established checklist if possible to ensure accuracy and consistency in the research. (See Figure 5 as a guide.)

Note that a records survey and a records inventory are not the same. A records survey often identifies broad series or classes of records – assuming the records are organised enough to allow that identification – whereas a records inventory will provide a much more detailed analysis of specific types and quantities of records. A records inventory helps reveal shortcomings in filing systems and can be the basis for changes to retention and disposal schedules. However, even a broad records survey will provide useful data for assessing the state of records care and recommending changes, even if a more in-depth study cannot be conducted at the same time.

Conducting Interviews and Distributing Questionnaires

If conducting interviews, be sure to meet with those people in the business area who create and manage records, ask them to complete the questionnaire or sit with them to work through the questions in person. People should be encouraged to be as thorough as possible, to complete the questionnaires in a timely fashion and to contact the records manager if they have any questions or concerns. The records professional needs to monitor the distribution of questionnaires and keep track of all areas surveyed so that any gaps are identified quickly and easily. Suggestions for information to include in a survey are shown in Figure 5 below.

Figure 5: Information to Capture in a Records Survey

No.	Information to Capture in a Records Survey
1	Name or title of the records class or series (or name of the unit responsible for their creation or accumulation and use).
2	Earliest date of the records or when system first deployed.
3	Whether or not historical data were uploaded into the system at any time.
4	Latest (most recent) date of the records.
5	The quantity or volume of files (linear metres of shelving for paper records; megabytes of storage for electronic records) and any information on measured or estimated rates of storage growth.
6	Existence of any index, list or other identification of the records and how the records are organised.
7	The business function performed that leads to the creation or use of these records.
8	The names and titles of each official who creates, uses and/or manages the records.
9	The reason the records are created and used.
10	Whether the records are still being created and added to or whether they are closed and no longer used.
11	The length of time the officials in the area need the records for business purposes.
12	Any legislation that affects the length of time records are kept or how they are used.
13	Where in the organisation the records are stored (physically or in computer systems).
14	How the location of records is tracked while they are out of the filing system or in use by different officials.
15	Whether access to the records is or should be restricted and why.
16	Whether the records are considered vital to the core operations of the organisation.
17	The security measures in place to protect records.
18	Whether the records contain sensitive or confidential information, and what type of information.
19	Whether the records contain personal information that might identify specific individuals.
20	Whether copies of records are kept elsewhere, and where.
21	Whether and how records relate to other records within the organisation.

Analysing Survey Results

It is important to analyse all survey results promptly, before the information becomes obsolete and no longer reliable. Aside from supporting decisions about implementing new or improved records management systems, the survey results can help the organisation decide whether or not to restructure existing records operations. For example, the following actions could be taken and apply to both electronic and paper records.

- Destroy valueless records that are no longer needed and are taking up space.
- Move records that are not needed regularly to storage and could be managed in a less-expensive storage location.
- Empty, rearrange or reuse filing equipment to maximise the use of space.
- Identify any records that are sensitive, personal, vital, confidential or otherwise require special care and attention.
- Identify any security or preservation concerns that need to be addressed in order to protect records in the immediate future.

Using the Survey to Create Baseline Measurements

The results of a survey can generate some hard factual data about the volume of, use of, or type of records or other items. This information can be used to create a baseline of concrete information that can be used later when assessing whether or not any new initiative – such as an electronic records management system – has been effective.

Figure 6: Baseline Measurements

Baseline Measurement	Initial Value of Data	Subsequent Value of Data
• The volume or quantity of records filed in existing manual and electronic systems	• To assess the volume of records in the organisation's offices and determine their condition and security	• To determine if physical or electronic space is used more effectively with a new system in place
• The number or percentage of users filing records into existing manual or electronic systems	• To determine the level of use of existing records management systems	• To determine use of and compliance with the new system
• The number or percentage of records available to anyone in the organisation	• To determine the level of openness of record-keeping systems and the ease with which records and information can be accessed	• To determine if access to information and records has improved with a new system in place
• The number or percentage of users regularly locating and retrieving records from the system	• To determine the level of awareness among staff of the value of or existence of records as information assets and resources • To determine the ease of access to records using existing search and retrieval mechanisms	• To assess the level of comfort with and support for the new system • To determine if the level of use of records and information has increased or decreased • To determine if new search and retrieval mechanisms are more effective

Figure 6 shows examples of some baseline measurements that might be taken as part of a records survey. This information can be used to argue the need for change and, later, to assess the quality of a new ERM initiative.

Conducting a Business Process Analysis

Often surveying records identifies problems with the actual business processes used. For instance, if a survey reveals that five copies of a form are completed and retained

indefinitely, it may be necessary to restructure the business process so that only the minimum number of copies of the form is created. Similarly, if multiple copies of minutes and agendas are circulated electronically, and everyone in the organisation keeps a copy in his or her own computer storage system, the volume of electronic records kept far exceeds the value of having all those different copies.

One of the great benefits of electronic records management software systems is that they provide a centralised filing system that everyone in a particular business area can access as part of their daily work. If minutes and agendas are filed in the ERMS and people are notified that they can read the documents by accessing the system, only one version of the documents needs to be kept, by the official record holder; everyone who used to receive the records for information purposes only can now read the documents by accessing the centralised filing system.

In order to create those effective record-keeping processes, it is necessary to follow up a records survey with an analysis of the business processes involved. The subject of business process analysis is addressed in great detail in a separate module produced by the International Records Management Trust as part of the *Management of Public Sector Records* training programme, so this brief overview is intended only as an introduction to the concept.

Business process analysis is the process of systematically and objectively gathering information about business systems and analysing that information in order to clarify the purpose and scope of the business performed, the actions taken to achieve the end result and the records created and used as part of the business process. In other words, business systems analysis involves examining the component parts of an organisation, in order to gain information about how the organisation functions and the relationships between various tasks, jobs, people, structures and other elements.

Conducting a business process analysis involves the following steps.

- Analyse the organisation's business processes. Identify inputs, outputs, activities, tasks and records and information. A records survey is one part of the business process analysis.
- Assess the records created as a result of the business process. Are the records created effective and useful? Are there gaps or overlaps in record keeping? Are there legislative or regulatory requirements that dictate what records must be created and how they must be used and managed?
- Analyse the technological processes of record creation. Determine the technologies used to create and manage records as part of the business process and assess if they offer the most effective way to access and use valuable business information.
- Determine any changes to the organisational structure, business processes, records or other products identified during the business process analysis. Can fewer records be created? Can the methods for dissemination or retention be improved? Can new technologies enhance the ways in which records support business activities?

Business process analysis often reveals a number of organisational problems that need to be addressed, including the following.

- Record-keeping requirements do not support business processes and the records sysem does not serve the needs of the organisation.
- The organisational mission, functions and structure do not fit with its environment; in other words, the organisation may need to reorient itself in order to support the achievement of the organisation's mission, strategic objectives and service delivery targets.
- The organisation's mission is not clearly defined, or the organisation's functions and structure do not support its mission.
- Business processes do not support organisational functions, or business processes are poorly structured and are not performing adequately.

Once the business process analysis has been conducted and the results evaluated, the findings may be incorporated into the development of a business case for restructuring records systems. Equally, the results may lead to the reorganisation of business processes, the implementation of new record-keeping systems or the reorganisation of staffing structures. These options are discussed in more detail in other resources, particularly, as mentioned, in the MPSR training modules on analysing business systems and restructuring records operations.

> For more information on business systems analysis, records restructuring and other topics related to organisational change, see the MPSR Training Programme Modules on the International Records Management Trust website at www.irmt.org.

Participating in Information Technology Surveys

While the records professional is not always directly involved in acquiring and managing information technology systems, he or she should be as involved as possible in any decisions and actions that affect records and record keeping. Thus, the records professional should work closely with the IT department whenever any inventory of information technology is being conducted. Ideally, the records professional will be an active participant in the inventory, focusing specifically on identifying records generated using the systems identified.

This IT inventory is different from a records survey, discussed above. But the records professional needs to reconcile the information gathered about technology with the information in hand about records, so close cooperation is important. Figure 7 outlines the different steps involved in conducting an inventory of computer equipment and resources. The figure specifically identifies the specific records-related issues to be considered.

Figure 7: Steps in an Inventory of IT and Records

No.	Step	IT Issues	Records
1	Schedule the inventory	Inventories should be conducted regularly – at least annually – and are best conducted at a quiet time, such as over a weekend, when it is possible to complete the work without interruptions.	
2	Prepare a list of everything to include in the inventory	The IT inventory will include computers, printers, scanners, plotters, handheld devices, other peripherals and any other technology used in the organisation. It is useful to create spreadsheets or data entry forms to capture the information. Plotting out a formal structure for data capture ensures nothing is missed. The inventory form should separate out information about, for example: computer, monitor, keyboard, mouse, printers and RAM and CPU capacity. Model and serial numbers should be recorded.	Close attention should be paid to any records generated by technology identified. Are people using handheld personal digital assistants (PDAs) to send and receive messages, which need to be treated as records? A survey identifying specific records will have been conducted as a separate exercise, but information should be gathered about the volume of records held on computers and the formats used: word processing, spreadsheets, databases, email and so on.
3	Perform the inventory	The inventory should include a count of all computers and other devices; particular attention should be paid to software used, including the version(s) on each machine and the status of any subscription or license and other information about the currency of the software, confirmation that the organisation has appropriate rights and permissions and if any licences have expired.	Particular attention should be paid to the existence of multiple versions of software, such as older and newer versions of word processing software, and to any variations throughout the organisation in who is using which software to create records.
4	Remove inappropriate software	The organisation should only allow the use of approved and current software or other systems, so any items in violation should be removed. It may be necessary to review invoices, receipts or purchase orders to confirm that items are the property of the organisation.	It is critical at this stage to protect any records or information created using unapproved software or systems. Before any systems are removed, the records need to be protected, if they have ongoing value; it may be necessary to transfer them to another computer system and then migrate them to an acceptable format. Complete records need to be kept of all steps taken; if a great number of records are discovered, then it may be best to isolate them and establish a formal process for preservation or transfer, so that nothing is lost through hasty action.
5	Upgrade systems	If any systems are out of date or need to be upgraded, this work should be done for all technology throughout the organisation, so that all employees are working within the same information framework.	Particular attention should be paid to the question of access to records: if software is upgraded, older records may need to be saved using the new technology, or they may need to be removed and stored as part of a preservation programme. The records professional needs to understand the scope and nature of changes in order to establish a plan for action.

This unit has considered different ways of gathering information about the creation, use and maintenance of records in an organisation. Once an organisation decided that it wants to move forward with improved electronic records management, it may decide to undertake a specific project in order to implement new systems, select new software or enhance existing practices. The next unit examines the steps involved in planning an electronic records management project.

UNIT 2.4

PLANNING AN ELECTRONIC RECORDS MANAGEMENT PROJECT

Ideally, a business case for developing or upgrading an electronic records management system, or for undertaking any other ERM project, will be successful, and the records professional will be given the authority to proceed with a formal project. That project may be to install a new electronic record-keeping system, to upgrade electronic records management operations or to implement a comprehensive paper and electronic records management programme. Whatever the purpose of the project, good planning is critical to ensuring the effort is successful, that the project is run in a cost-effective manner and that the end product is useful to the agency and to all stakeholders.

Once a project has been identified but before it begins, it is essential to determine how it will be executed. Will the work be performed by one person or by a project team? The size and scope of the organisation, and the urgency or complexity of the project, will usually be determining factors. Anyone involved with the project will need particular skills and knowledge, including

- expertise in records management principles and procedures
- expertise in, or access to expertise in, information technology
- strong interpersonal skills (especially if interviewing staff is a key requirement).

Resources required for the project will include one or more of the following:

- time
- staff
- corporate plans and other organisational documents
- access to file servers
- information on electronic records management systems (requirements, previous studies, undertakings in similar organisations and so on).

And of course, complete senior management support is critical to success; ideally, the business case will have been received positively and the work of implementing new and improved records operations will be enhanced by positive input from all stakeholders within and outside of the organisation.

There are many methodologies available for developing and executing projects. A search on the Internet will provide a wealth of guidance on how to choose a particular methodology to suit the particular needs of an organisation, as well as information on the methodologies themselves.

> See *Additional Resources* for additional information about project management techniques and methodologies.

It is important to realise that technology offers only 20 percent of the solution to information and records management challenges; a successful electronic records management project requires much more than simply purchasing computers and installing them in offices throughout the organisation. This unit examines some of the many critical steps involved in planning a successful electronic records management.

This unit examines the steps involved in planning any kind of electronic records management project. Included in the unit is an examination of

- defining the aims and objectives of the project
- defining the project scope
- determining deliverables
- identifying project personnel
- establishing and maintaining communications
- ensuring quality control
- preparing project documentation
- establishing evaluation procedures.

Defining Aims and Objectives

The project's aims and objectives need to be defined at the very beginning. It is essential to consult with stakeholders in order to formulate a coherent set of aims and objectives, which must also support the organisation's information technology strategy and its overall vision and purpose. For example, the aims and objectives of a project to implement a new electronic records management system might be framed as follows.

Project Aims and Objectives

- To design and implement a corporate electronic records management system that supports *[the organisation's]* business plans and objectives.
- To ensure that the project is developed in accordance with, and meets the objectives of, e-government policy *[or similar policies]*.
- To ensure that the selected electronic records management system complies with relevant record keeping, information technology or other standards, such as *[ISO 15489, ISO 17799, PD 0008 and XML]*.

- To introduce new working practices for the management of the organisation's records and information.
- To manage the change processes required to implement the selected electronic records management system in an effective and sustainable manner.

Defining the Project Scope

Projects can quickly become unmanageable if their scope is defined too broadly, and they can be ineffective if their scope is too narrow. Defining the project scope involves assessing the feasibility and likelihood of successfully realising the broad project aims and objectives. It may be that only some of the overall aims can be achieved at one time, and the project scope might need to be narrowed down accordingly. On the other hand, it may be necessary to refine the broad project objectives so that they are more readily achievable, thus ensuring a greater likelihood of success.

The scope of a project to implement electronic records management, for instance, is likely to include the development of accompanying policies and procedures, which will almost certainly change as a result of the shift from a paper to an electronic environment. The project may also need to address closely related functions in the organisation, such as the administration of freedom of information legislation. The most important issue, however, is to ensure that the project focuses on the organisation's requirements. All electronic records management systems, almost by definition, are corporate-wide undertakings, and all project efforts must lead to enhancement in the entire organisation's operations, not just in change to one specific office or unit.

Determining Project Deliverables

The main deliverable in any electronic records management project is a fully functional electronic records management system. There will, of course, be several other deliverables, including some or all of the following:

- a new records management policy statement (as discussed in Unit 2.1)
- an appraisal policy and procedures for electronic records
- a set of procedures for the creation and management of corporate information
- a new training programme for all staff
- a new performance management scheme to measure the effectiveness of the new system
- a vital records and disaster planning programme or policy.

The success of the project will depend on articulating the intended deliverables clearly and staying focused on those planned outcomes and not becoming sidetracked by other 'nice to have but not essential' products.

Identifying Project Personnel

It is extremely unlikely that a project of this nature will be undertaken by one person (unless the organisation is extremely small). Even in a situation where resources are extremely limited, it is essential to bring together a team of people who have the requisite skills and knowledge to manage the project. The organisation's stakeholders should be strongly represented, including representatives of different business areas, people with technical expertise, and actual and potential users of the new system. The involvement of senior management will help ensure ongoing support for the initiative.

Moreover, when the scope of the project is likely to result in the redesign of business processes, wide-scale input and involvement is critical in order to reduce any resistance to necessary organisational changes. An effective project will be governed by a strong team, and it is important to establish a temporary organisational structure for the duration of the work. A typical project structure will consist of

- a project manager to run the project
- a steering committee to ensure the project objectives are met and resources are managed efficiently
- an administration team to oversee the actual work
- staff, contractors or consultants to carry out the day-to-day operations.

Each of the roles should be outlined in writing and agreed upon by all participants.

Of course, a formal and complex project management structure may be neither necessary nor possible. The execution of the project should suit the project's scope and objectives; the human, financial and other resources available; and the organisational context of the project.

Establishing and Maintaining Communications

Another essential part of planning is establishing and maintaining strong and regular communications. Too many projects falter because of a lack of communication between participants and/or stakeholders. As part of a communications plan, any necessary recipients of project updates or reports should be clearly identified, and a specific team member should be assigned responsibility for carrying out the agreed method(s) of communication.

Effective communications can take a variety of forms, including newsletters, intranets, meetings, etc. A communications plan can take the form of a simple table, such as shown in Figure 8 below.

Figure 8: Sample Communications Plan

Audience	Information conveyed	Responsibility	Frequency	Method
IT strategy team	• Progress on procurement • Risks and issues • Revisions to policy documents	Project manager	Every 3 months	Meetings and email
Management Board	• Progress	Project manager	Every 3 months	Highlight report
Internal staff	• Project scope and objectives • Training plans • Progress	Assigned project team member	Monthly	Intranet and newsletters

Ensuring Quality Control

The project should include a plan for ensuring quality control. The person generally responsible for ensuring the quality of deliverables would be the project manager. In a major undertaking like the implementation of an electronic records management system, quality control can be a major responsibility. The main deliverable – the system itself – will need to go through a strict testing programme. Changes resulting from the implementation of the new system, such as changes in how people do their jobs, create and use records, or share information, will need to be discussed with the project management board or steering committee; any major changes to office procedures should be formally approved before the systems requiring those changes are implemented. In addition, it may be valuable to identify a project assurance co-ordinator, who will be responsible for providing independent quality assurance.

Preparing Documentation

Project governance should be supported by the appropriate documentation, including the following records:

- project initiation document (PID)
- project plan
- risk register
- issues log
- reports.

Project Initiation Document

The key features of the overall project should all be described in detail in the project initiation document or PID. This document describes the project, provides any necessary background and defines the project's objectives, scope, deliverables,

resources and governance. The PID will also include information about such items as the communication and quality plans described above.

Project Plan

The project plan should break the project down into achievable pieces of work and show the timescales for each. An effective way of showing the project plan is the use of Gantt charts, such as the example shown in Figure 9. In the sample, schedules are provided for managing a communications plan, for example, with start and end dates, and information about progress achieved over time.

Risk Register

The risk register contains a description of the risks to the project that have been identified and proposals for managing them. The register should include a scheme for rating the degree of risk. An example of a risk register is shown in Figure 10. In the example shown, columns are used to describe the risk; indicate the potential impact and probability of negative consequences (based on a scale of 1 to 5, with 1 as the most serious and 5 as the least serious); the ability to control the risk (low, medium or high) the countermeasures that can be taken to mitigate the risk; and any contingency plans in place to address the risk. The register also indicates who is responsible for monitoring the risk and dealing with any situations that arise, along with necessary date and status information.

As appropriate, this risk register should be linked to the risk analysis discussed earlier in this module. There may be risks associated with the project or its outcomes that are directly related to overall risks and benefits of changed or improved records management programmes, and these different risks should all be taken into account when planning a records project of any kind.

Issues Log

The issues log is a record of all the issues that arise during the course of the project and the decisions made about how to act on them. An example of an issues log is shown in Figure 11. The issues log is intended to identify concerns that may not be defined as formal risks but still need to be addressed as work on the project continues. Sometimes an issue may be elevated to a risk.

Reports

The project manager and any other key personnel should prepare and distribute formal reports to stakeholders and other interested parties. Most of these reports will be specified in the communications plan, such as highlight reports, which are brief summaries of key information, or highlights, of project events over a certain time.

Figure 9: Sample Gantt Chart

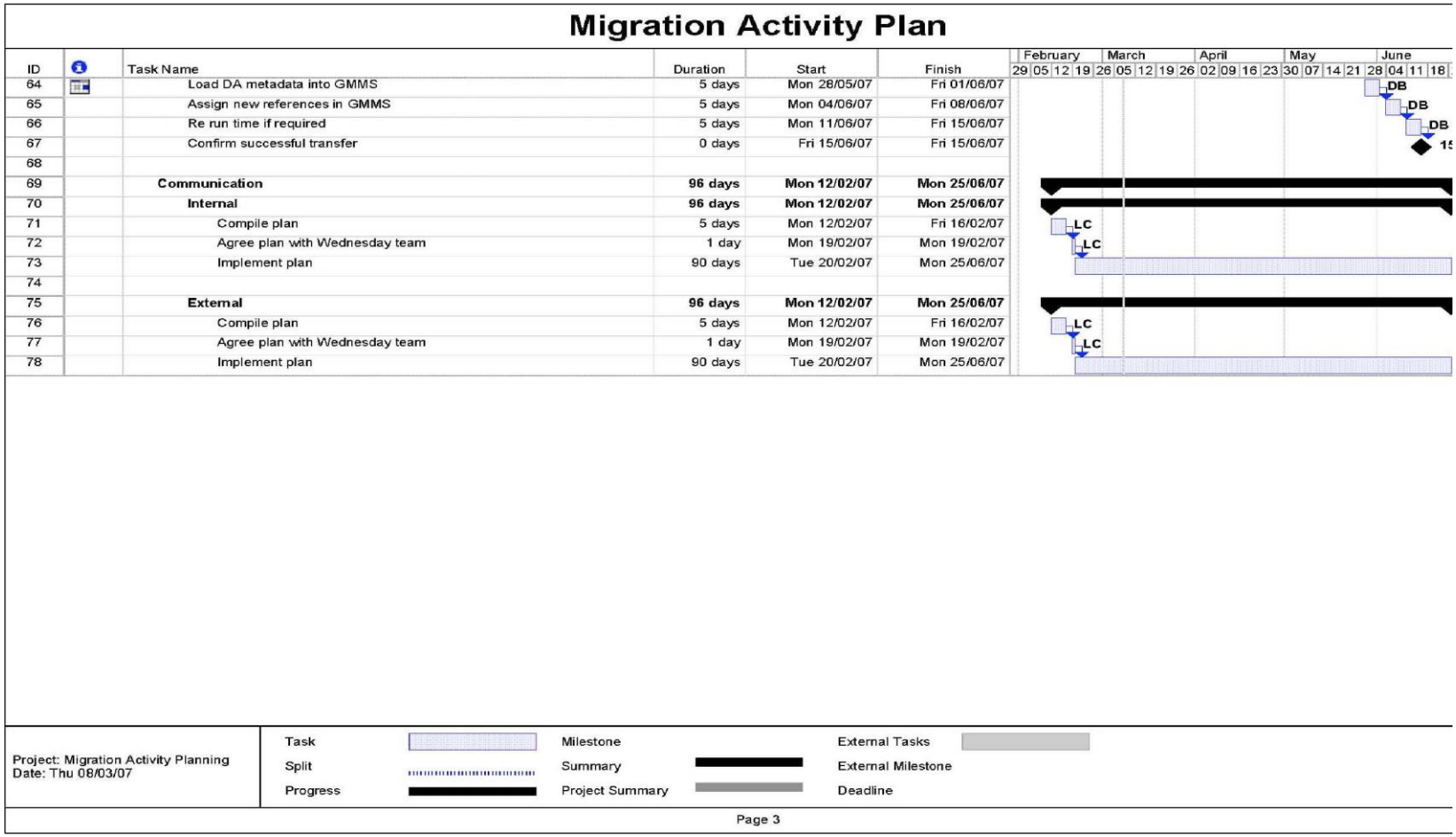


Figure 10: Sample Risk Register

No.	Description of risk	Potential impact (1-3)	Potential probability (1-3)	Ability to control (low-high)	Counter measures	Contingency plans	Owner	Date entered	Updated	Status
1	Lack of resources: budgets	2	3	medium	cost modelling resource planning budget planning	seek more funding, if necessary amend project scope and timetables	KS	29/5/07	15/1/08	open
2	Lack of resources: labour, skills, expertise	3	2	medium	cost modelling resource planning budget planning	seek more funding, if necessary amend project scope and timetables	KS	29/5/07	15/1/08	open
3	Lack of coordinated communications plan	4	4	medium	cost modelling resource planning budget planning	seek more funding, if necessary amend project scope and timetables	KS	29/5/07	22/1/08	open
4	No formal project manager	1	1	medium	cost modelling resource planning budget planning	seek more funding, if necessary amend project scope and timetables	KS	29/5/07	16/11/08	resolved

Figure 11: Sample Issues Log

No.	Description of issue	Priority (high, medium, low)	Owner	Actions	Date identified	Date last updated	Current status
1	How do we get departmental buy-in for the records management project?	Medium	MS	• Open Day held with positive feedback. • Communications sent to departments. • Advice posted on organisation's Intranet. • KS to speak to series of monthly departmental meetings. • Further workshops planned in coming twelve months.	9/11/07	3/1/08	Open
2	How do we get departmental buy-in for the records management project?	High	IP	• To be addressed by change management project. • IP appointed to represent stakeholders.	15/0/07	30/10/08	open

Establishing Evaluation Procedures

Any project plan should include instructions about how to evaluate and measure the work performed during the project and the outcomes and results achieved at the end of the project. As with all new systems and processes, a plan must be in place to support ongoing monitoring and auditing of both the project and how successfully the final products are being used. In many large projects, formal evaluations take place at specific times throughout the project schedule and precise performance indicators are used to measure achievements. For example, there might be evaluations at each design stage and at each rollout of the electronic records management system: these evaluations may assess whether all the actions to be performed by that date have been completed and whether the project remains on track to complete the aims and objectives identified.

As well, all projects ought to have a post-implementation review, often called a 'lessons learned' exercise. This post-project review focuses not only on whether the project achieved its objectives but also how the organisation might manage a similar, or any, project in future in order to achieve better results, save resources and time or otherwise improve performance.

An impact evaluation could also be conducted to evaluate the effect the new system will have on the efficiency and effectiveness of the organisation. Those who have provided support for the project will want to know if the new systems or procedures have resulted in service delivery improvements, cost savings or increased revenue.

Regular audits can be conducted to assess how the products – such as new electronic records management systems – are being used, where and how records are being captured and whether or not users are managing records according to the policies and procedures established. Regular reviews can ensure that problems are resolved in a timely fashion, and they provide an opportunity for records professionals to discuss related issues with staff members and address any concerns or questions right away.

A very effective device for evaluation can be a forum for stakeholders or for people in other organisations that have implemented similar initiatives. Workshops and meetings allow attendees to learn from others about how they designed and planned ERM systems. Participants can use the forum to share their positive and negative experiences and highlight any significant issues that have arisen during their implementation programme, in order to seek advice from others for the future or to warn others of possible pitfalls to avoid. Forums such as these often illustrate the common problems all organisations face when implementing new information management practices, including the importance of detailed planning, the difficulties of managing change in the organisation and the importance of ensuring timely and effective training for all people who may use the new systems.

This unit has considered the general principles involved with managing projects effectively. The next unit looks at the tasks involved with a specific electronic records management initiative: selecting electronic records management (ERMS) software.

UNIT 2.5

SELECTING AND IMPLEMENTING ERM SOFTWARE SYSTEMS

As discussed throughout this training programme, electronic records management combines core records management functions with computerised business processes or workflows to administer electronic and paper records. Traditionally, the process of electronic records management involved imaging or scanning paper documents into an electronic format so that the information could be shared and reused more easily. As the potential for managing electronic records has expanded, computer programs have been expanded to provide more and more services.

An electronic records management system or ERMS is a set of computer programs designed to track and store records, particularly but not exclusively electronic records. An ERMS is more than just an electronic filing cabinet: it can manage the tasks involved with creating and using documents; applying classification schemes and retention and disposal schedules; storing and retrieving records in central or remote locations; and protecting the confidentiality of sensitive information.

Many of today's electronic records management systems have their beginnings in the development of automated file management software programs designed to manage and track paper records. The original functions of these programs included: checking physical files in and out of storage facilities, documenting file structures and managing basic file classification schemes.

Over time, these programs evolved and new features were incorporated, including: scanning documents, managing work processes and workflows and copying electronic data (computer output) onto laser disks for storage. Eventually, these systems became more robust, as features such as collaboration tools, version controls and security mechanisms were added. Today, electronic document management is an industry worth more than US$1 billion a year, and the market continues to grow. 'Enterprise management' (or 'enterprise content management') is the new focus, as software is being developed to allow organisations to create, store, manage and transmit electronic information as part of normal office communications.

This unit looks at a number of issues involved with selecting and implementing electronic records management systems, including: establishing a project plan, determining business requirements, understanding functional requirements, choosing an ERM vendor, configuring and implementing the ERMS, monitoring the system, establishing training and communications mechanisms to ensure staff compliance

with the new system, and the importance of training, communications and senior management support to achieving success.

Establishing a Project Plan

Any computer implementation project needs to be planned from the beginning, and the project may involve many stakeholders from all areas of the organisation. Therefore it is important to identify project guidelines, goals, objectives and staff roles and responsibilities. As mentioned earlier in this module, any project needs a project manager, a steering group and a working committee. As well, the following groups may need to be involved in different components of the project.

- Records coordinators and key contacts in each department or business unit, who will ensure that specific information and support is available when needed.
- A software selection committee, which may consist of working group and steering committee members, who can assess the suitability of software and make the final selection for the organisation.
- A testing and implementation team, including as many people with information technology expertise as possible, as well as records professionals and users.

Establishing a sound and effective project team, and understanding the steps required to move from project planning to implementation, will facilitate the successful development of the ERMS.

Determining Business Requirements

The first step in selecting and implementing an electronic records management (ERM) system or application is to determine what exactly will be accomplished with the software. What will the ERMS do? Some of the many functions of an ERMS include

- scanning paper records and managing the electronic image
- tracking paper and electronic documents using a check in/check out function
- assigning classification codes to records
- assigning retention periods to records
- managing the receipt, storage, transfer and disposal of electronic records
- providing security and privacy for confidential records
- improving storage use and retrieval time.

In order to determine what exactly an ERMS will do, it is essential to have a clear understanding of the current records management environment and the expectations of the organisation’s users. Reviewing the existing records management programme is the first step in detecting any gaps or areas requiring change, which may impact the decision about which ERM application to choose. User expectations may also play a role in the decision process, as some people within the organisation may need to perform tasks or access records in particular ways. For instance, users in some offices,

such as land title offices or surveying and engineering departments, may require geographic information system (GIS) software so they can link records to specific physical locations. Others may need to search several databases or information resources at the same time (a process called 'federated searching') and so need software with powerful search capabilities.

Conducting an Organisational Survey

As discussed earlier in this module, surveys are extremely valuable tools for understanding the nature and scope of an organisation's operations. An organisational survey or analysis is a useful tool to gain a better understanding of the current records management program. The survey may begin with an analysis of work processes, which will help identify those records that are needed for different tasks, indicate when in the process they are created, and clarify how long they need to be kept and why. Identifying when records are created is important for knowing when a record should be captured and stored in the ERMS, and for knowing when and how it might be used. If such a survey was not conducted as part of the development of a business case, or if the situation has changed so that earlier findings may be out of date, a new survey may be necessary.

Understanding Functional Requirements

The next task in selecting and implementing an ERMS is determining functional requirements. As explained in other modules in this training programme, functional requirements are the actions a software program will perform in order to generate a desired result: they are the inputs and processes that lead to intended outputs. In order to manage electronic records effectively, what must an ERMS do?

Sometimes, the term 'business rules' is used instead of, or as well as, the term 'functional requirements.' In either case, the underlying task is to identify the controls needed to ensure a software system will complete the tasks it is intended to complete. Functional requirements or business rules are not technical specifications. Rather, they are designed to help the people developing and implementing computer systems to understand what the organisation needs to do in order to ensure the system can work effectively. Business rules are essential for defining the parameters of the project, so that anyone participating in the project understands what the organisation wants and so that there is an objective measure to confirm whether expectations have been met and services provided.

In 2008, the International Council on Archives (ICA) published *Principles and Functional Requirements for Records in Electronic Office Environments,* which is available on the ICA website at http://www.ica.org/en/node/38970. In this document, the ICA identifies four groups of functions that an ERMS must perform in order for it to comply with accepted international standards for quality records management: create, maintain, disseminate and administer. Within each of these clusters, the ERMS must be able to perform specific processes or actions, as outlined below.

Records Creation

Records creation includes: capturing the record itself, capturing any metadata associated with the record, identifying the record and categorising the record according to a classification scheme. The biggest challenge is to ensure that the ERMS can capture all the elements or components of an electronic record. As discussed in Module 1, electronic records can consist of many discrete elements or digital objects, and the ERMS must be able to preserve all of those elements so that they can be reconstructed at any time and an authentic and reliable replica of the original record can be made available for use.

An effective ERMS must be able to capture records created using any of the organisation's business systems and applications, including email, word processing, financial management, human resources management and so on. The software must also be able to capture the metadata for those records, as it existed at the 'point of capture,' so that information about the record's content, structure and content (or provenance) are preserved as it existed at the time the record was in active use.

Part of the metadata that needs to be preserved is a log entry or audit record documenting the actual process of capturing the record. This log entry should indicate whether the capture was successful or whether there were any problems in the process, which might result in changes to the record or to the metadata. As well, each record captured into the ERMS must be given a 'unique persistent identifier' or unique identification number, so that it can always be distinguished from other records. This identifier must be automatically generated by the ERMS; it should not be possible for anyone to override the system and change that number.

Prior to implementing any ERM system, the classification scheme must be developed; without the scheme, there would be computerised chaos in the ERM repository.

For more on functional classification, see Module 3.

Once the classification scheme has been developed, the ERMS should be constructed based on the categories identified. Then, the ERMS should allow users to modify the classification structure as needed, such as by

- adding new levels
- transferring records series into or out of the system
- making authorised changes to the scheme
- reclassifying records within the ERMS.

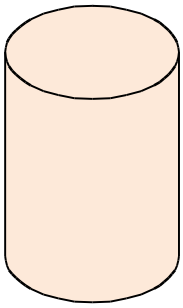
Other functions should be installed in the ERMS to ensure the classification scheme remains effective and accurate. For example, the following functionality should be in place.

- There should be an unlimited number of levels in the classification (unless otherwise specified by the administrator).

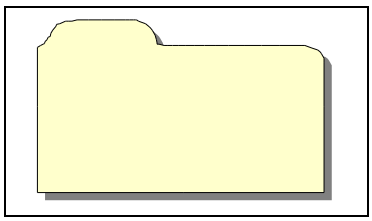
- Only authorised users should be allowed to create new classifications at the highest levels, such as the function and activity levels. Individual users may have the permission to create volumes under the lowest record series level.
- Capturing metadata should be automated whenever possible, so that information is inserted by the computer without additional input from records creators.
- Metadata should be linked between the higher level (parent) folders and lower level (child or subfolders).
- There should be more than one way to find records in the scheme: ideally, searches should be possible alphabetically, by number, by title of the document or by title of the file.
- There should be an unalterable audit log of events or actions taken within the ERMS so that the application remains auditable and the authenticity, integrity and reliability of the record and the ERMS are protected. The audit documentation must include, at the very least, the date and time of any change made and identification of the person making the change; this metadata must be persistently linked to the record as part of the guarantee of authenticity, reliability and integrity.

Normally, the classification scheme becomes the file folder structure used to file and store records in the ERMS. Generally, the folder structure will have three levels and usually no more than four. The top folder level should refer to the function and the next folder level to the activity. There may be another level for a sub-function or sub-activity, after which comes the records series level. It is at the records series level that the information or record is actually stored in the software. The illustration in Figure 12 below shows what a folder structure might look like in an ERMS.

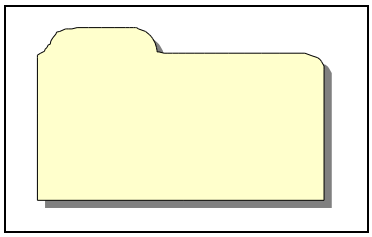
Figure 12: Folder Structure in an ERMS



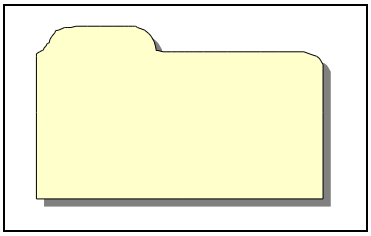
⇨**ERMS Storage Disk**



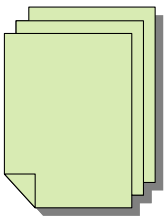
⇨**Function: Records Management**



⇨**Activity: Policy Development**



⇨**Series: Metadata**



⇨***Document: Policy on Metadata, August 27, 2008***

Records Maintenance

Records maintenance requires that the record in the ERMS should remain accessible and usable in its original, authentic form for as long as the organisation requires. Thus there must be an audit requirement in the ERMS that ensures that all information (metadata) about the record – such as when the record was captured, what software and operating system were used to create it, where it fits in the classification scheme, who has accessed and used the record over time, whether it has been transferred from one organisation to another and so on – should be linked to the record for as long as it remains in the ERMS.

Users should also have the option of adding extra metadata after the record has been captured. And all metadata should conform to recognised metadata standards such as the Dublin Core Metadata Initiative or *Model Requirements for the Management of Electronic Records (MoReq2)*.

See Module 1 for a discussion of metadata standards.

Records Dissemination

The ERMS needs to include functions that control access and monitor security, so that records stored in the system remain authentic and reliable. Ensuring access and security involves a combination of approaches. One is to establish permissions and access rights based upon a user's role in the organisation or his or her need to access and use certain records. Typically, this control over access is also linked to security classifications and controls.

For example, an employee working in Human Resources may have permission to view the electronic records of new applicants, but that employee may not have the right to see staff disciplinary files, which may be classified as confidential. The computer system needs to be able to distinguish between these two levels so that the user cannot gain access to records without appropriate authorisation.

Similarly, only a senior records manager or other administrator should be allowed to alter or delete a record in an ERMS or modify the classification scheme. The user of the ERMS should be allowed to access those records that he or she is authorised to see and not allowed to change any records once they have been filed as official documents in the system. These controls over access maintain the integrity of the records management processes and activities.

Another core function of the ERMS is to manage records according to established retention and disposal schedules, for periods ranging from one month to many years, and including both indefinite and permanent retention requirements. The ERMS must be able to apply scheduling requirements to any record series, to individual records within a series and to records in any medium. Automated functions may include tracking and reporting on retention periods, producing notifications about disposal actions required and documenting disposal actions taken. The disposal function

should not be managed automatically since the actual destruction of records must be performed by records professionals to ensure quality control and avoid any system problems that could result in the accidental deletion of the wrong documents.

The ERMS must also allow for manual overrides or freezes on disposal, in the event that records are needed to answer Freedom of Information (FOI) requests or if they must be held while legal holds or e-discovery exercises are underway. All disposal actions must be documented in an auditable form, with reports or logs generated regularly.

The ERMS must also allow the user to search for, retrieve and view the record. Both the record and its associated metadata must be searchable. Most ERMS are 'full-text' searchable, which means that the software can search any text based on keywords provided by the user. When considering which software to choose, one of the functions to consider is whether this search capacity should be simple or advanced. How complex will records searches be? Do users need to search by multiple criteria, such as name, date, keyword, type of document and so on? Do users need to be able to search more than one software system at a time, such an ERMS and a database and a financial management system? If so, it may be necessary to select an ERMS with advanced search functions. It may be that the organisation has particular information needs, and so another question is whether the metadata fields can be customised if required.

How will the user actually view the record? Will it be downloaded and displayed in a proprietary software application, such as Microsoft Word or Excel? If so, then the ERMS software must integrate seamlessly with the organisation's other software systems. As well, all aspects of the record must be displayed in the same way that they were captured into the ERMS, so the software must be able to store and reconstruct electronic documents consisting of multiple objects, such as textual information, images, hyperlinks, maps and so on.

Finally, the ERMS needs to accommodate the process of redaction, which is the process of masking some of the content of a record before making it available for use. For instance, if someone requests documents under Freedom of Information legislation, some of the information may be confidential. With paper records, the usual process is to make a photocopy of the document then black out those portions that must not be released and provide a copy of the redacted document to the requester. In an electronic environment, it is possible to 'black out' or edit portions of a digital document, but the software must allow for the preservation of the intact original and the redacted version, along with all metadata associated with the actions taken on both records, including date, time, name of the user performing the redaction and the reasons for the redaction.

ERMS Administration

Among the core ERMS functions are some important administrative requirements, related to the maintenance of the actual system. Key administrative functions include: backup and recovery; maintenance of user profiles; creation and modification of rules for managing the system and reporting on failures or problems; generating statistics;

and producing other administrative reports. Specifically, the administrator in charge of the ERMS must be able to

- change the configuration of the system parameters
- change the names of and permissions provided to users, including the administration of multiple roles and groups
- monitor usage of the system and storage space available
- report on disposal actions or access requests
- carry out any other regular and ad hoc reporting required.

Managing Hybrid Systems

Many ERMS allow for the management of electronic and physical (non-electronic) records, commonly referred to as a hybrid recordkeeping environment. The requirements for a hybrid records management system are different from a strictly physical records management system and from a purely electronic records management system. Within a hybrid environment, physical records cannot be captured into the ERMS; however, metadata still needs to be created to maintain the physical records and to provide cross references between the physical and electronic record. As well, the hybrid environment must accommodate functions related to access and security, retention and disposition, and control. And the ERMS must provide seamless search functionality to locate both electronic and physical records.

Choosing an ERMS Vendor

Before actually issuing a Request for Information (RFI) or Request for Proposal (RFP) for an ERMS, it is useful to prepare a checklist of needs and concerns, as identified through the analysis of functional requirements discussed above. It is also helpful to rate these functions in priority order, since not all systems will offer all the most desirable features.

It is also important to identify any restrictions on resources, space or technology that may affect the choice of vendor or system. For instance, if the organisation is working with older computer technology, it will need to decide if it can afford to upgrade its existing infrastructure in order to make best use of a complex ERMS or if it should consider acquiring a less sophisticated program that requires less complex computer technology.

The total financial cost of purchasing an ERMS involves more than just buying one software program. Other costs relate to: purchasing the necessary number of licenses or seats; paying annual support or help desk fees; accommodating more sophisticated search requirements; the staff time involved in preparing and entering data into the system; or having the vendor import existing records into the system once it is running.

It is also important to research existing vendors and understand more about their services and products, so that when a request for proposals goes out the organisation already has a sense of who might be submitting responses and who might be

considered a potential candidate. The list below includes some of the questions that need to be answered.

- Who are the key vendors who sell products relevant to the organisation's needs?
- Do these vendors specialise in a particular market and is that market related to the organisation's focus?
- What do their products do?
- What modules do they sell?
- Which vendors have sold the most products to similar organisations?
- Who sells the product in the local geographic area?
- What service do they provide once they have sold the product? What are the costs associated with service agreements?
- Are their systems compatible with other proprietary software systems (such as financial management systems or geographic information systems?)
- How can they connect existing (legacy) data or databases to the ERMS?

Some ERM applications require the purchase of additional modules or components in order to have certain functional requirements work properly. Be aware of any such costs when considering any software purchase.

Large companies may end up using a range of software applications, since the requirements of one department may differ significantly from the needs of another. When a department or business unit is determining which ERMS application to implement, it should also consider how that software will work within the larger organisation-wide, or 'enterprise-wide,' environment. For instance, if the organisation searching for an ERMS package has installed a large IBM infrastructure, there may be considerable pressure to choose a product that works within that same IBM infrastructure. Conversely, one specific business unit, such as a financial department, may prefer products that integrate more easily into existing financial management software packages, even if no one else in the organisation requires the same software compatibility. One of the issues to consider is whether or not the information technology department within the organisation is robust enough to manage multiple software products, and if the choice of one package or another will remain consistent with the organisation's strategic vision for computer development.

It is wise not to contact vendors until there is a clear understanding of the organisation's requirements and limitations. There are so many different options available that if the organisation is ambiguous about its needs and priorities, it could well end up with a product that does not meet its needs.

When communicating with vendors, it is important to make sure that the organisation and vendor are using the same definitions and terms. One of the most common miscommunications arises from the words 'archiving' and 'archives.' From a records professional's perspective, these terms refer to the actions taken by an archival institution to preserve a document that should be kept permanently and to the institution that houses those archival materials and makes them available for use.

Electronic records management software vendors use these terms very differently. To them, 'archiving' is the process of putting an electronic record into a digital repository until such time as the record has met its disposal requirements; the record will most likely be destroyed at some point in the future. The actions, processes and outcomes of 'archiving' are quite different for records professionals and software vendors. But if the different parties are using the same term differently, the expectations of each person or group involved in the initiative will not be met.

When preparing to assess RFPs, it is useful to develop a checklist of questions that should be answered by potential vendors. The answers will help the organisation determine which vendor may offer the most appropriate products for its needs. A checklist may include the questions identified in Figure 13 below.

Figure 13: Sample Checklist for Considering ERMS Vendors

Business Requirements
What are the various document and records management features of the software? Do they meet your organisation's needs?
What is the workflow functionality (in other words, how effectively can you computerise the business processes involved in creating, using, saving and protecting electronic records)?
How user friendly is the software?
Technical Architecture
What operating systems or platform(s) does the software run on? Can your organisation acquire those systems?
How scalable is the system (in other words, how much can the system expand if needed)?
How easily can the software integrate with other computer systems?
What technical security controls are in place and are they adequate for your organisation?
How much network capacity is required for the system to operate properly (in other words, can you acquire the broadband speed required to make best use of the software)?
What configuration is required to set up the network (for instance, how many servers might be needed, and what computer storage space is required)?
Costs
What are the anticipated software costs, in terms of purchase and installation?
What are the anticipated maintenance and service costs and obligations?
What are the anticipated hardware costs?
What upgrades are included in the support package, and what are the anticipated costs?

Figure 13: Sample Checklist for Considering ERMS Vendors (cont.)

Viability
What is the financial viability of the vendor (has the company been around for a long time; has it had any difficulty remaining operational)?
What is the vendor's track record for delivery on service?
What is the vendor's market position and strengths?
Does the vendor use products it has developed itself or does it use third-party solutions; how sustainable is its relationship with any third-party providers?
What is the vendor's vision for its future? Do its priorities for development meet your needs for ongoing support for the software and systems in question?
Service and Support
What types of service are provided (such as onsite, telephone or online)?
How quickly and easily is service delivered?
How often and in what fashion are patches and upgrades sent out (such as downloadable through the Internet, distributed on CD or available only through onsite technical support)?
How user friendly is the online help service, in terms of available times, clarity of instructions provided or understanding of your own organisation's requirements?

The Request for Information/Proposal Process

The Request for Information or Request for Proposals process involves circulating a request to software vendors asking them to indicate if they have an interest in providing the required software system to the organisation. The request is usually sent out as broadly as possible, but it may be that an organisation targets specific suppliers if it knows that they offer potentially suitable products.

A Request for Information is less formal than a Request for Proposals. Typically, an RFI asks for expressions of interest from potential vendors and asks them to send along some information about their products and their company. The vendors submit a response, after which the organisation creates a shortlist of the top choices based upon the vendors' qualifications; the organisation can then ask the chosen vendors to submit an RFP. An RFP asks for a formal bid from vendors, indicating what price they will charge to provide which services or products.

Thus, an RFI may simply state that 'X organisation wishes to implement a software system that will perform the following functions...' and ask for qualified vendors to reply. An RFP, on the other hand, will outline the detailed specifications of the ERMS project, its goals, time frame and any other pertinent information. An RFP may be issued only to those vendors with appropriate credentials who replied to the RFI, or it may be distributed widely, even if an RFI was already circulated.

There is usually little or no ongoing communication with vendors who submit an RFI unless they are asked to submit an RFP. Once all the RFPs have been reviewed, another shortlist is developed, usually of no more than four or five vendors, who are asked to make a presentation and demonstration of their product and participate in

onsite interviews at the offices of the organisation seeking the software. Following the presentations, the vendors are ranked and the organisation selects the most appropriate product.

Developing an RFP

The more precise, concise and clear the RFP, the greater the likelihood that the organisation will receive high-quality responses from vendors. A clear request is easier for the vendor to answer and easier for the organisation to assess, resulting in a faster and more effective evaluation process. In addition, clearly outlining what the software product must do to perform adequately will make the assessment much more straightforward. Furthermore, a well-written RFP helps to control any 'scope creep': unexpected changes in time frames, requirements or costs.

A well-structured RFP should not only outline the specific requirements for the software but should also identify

- detailed information about the nature and status of the organisation's records management programme
- existing technical and business environments (what kind of computer equipment is in place, what staff levels exist and so on)
- essential and optional requirements for the ERMS solution
- information about the selection criteria to be used for choosing a vendor
- any conditions on purchases, such as whether a trial period for testing is expected
- prospective legal arrangements with the vendor, such as ownership and copyright
- expectations of the vendor's services, such as whether the vendor must supply certain technology or equipment
- time frames and deadlines for the project.

Technological Requirements

No matter which software solution is chosen, it has to fit within the organisation's technological architecture and operate seamlessly with the other software products already in use. The organisation's IT department or advisor should be asked to provide details about the technology in use in the organisation, and these technical specifications need to be incorporated into the RFP. Technical information will relate to

- the network environment (the names and types of routers, hubs, switches and network connections)
- the number of computer work stations in the organisation
- the operating system in use (such as Windows 2000, XP Professional, Vista and so on)
- the number of computer servers and their configuration
- the names of different database programs in use and their purpose
- current programming languages presently in use

- any technology standards or requirements in place
- the level and nature of Internet connectivity and use
- the name of the email application currently in use.

Assessing Vendors

Each vendor should be assessed independently of all other competitors. In other words, each response received to an RFP should be judged on its own merits, through an analysis of how well the vendor's products meet the organisation's core requirements. Only after each vendor has been assessed individually for the core functions and qualities of its ERMS product, then the test scores can be compared against those for the other bidders. It is rare for one vendor to dominate the scoring with exceptionally high or low results. Therefore, it is necessary next to conduct a risk assessment to consider other strengths and weaknesses of each vendor, such as cost, level and type of service, availability, ability to meet the time frame and deadlines set and so on.

The information shown in Figure 14 illustrates how to map an organisation's business requirements and functionality against the results from an RFP, so that the organisation can assess the vendor's qualifications objectively, against stated needs, not against other submissions. This figure offers only a small portion of all the issues that would be considered in a full analysis of proposals.

When assessing vendors, it can be very helpful to contact other clients for references or reviews. The companies should be happy to provide references, but it is useful to ask them for a list of as many clients as possible, so that any review is not limited to a handful of institutions.

When the organisation is close to selecting a successful vendor, one more issue needs to be addressed. If at all possible, the organisation should ask the vendor to have the computer code for the ERMS placed in escrow, which means that it is put in trust with a third party. That way, in the event that the vendor goes out of business or no longer supports the product, the organisation can access the code in order to continue to maintain the system.

Questions such as these are often included in the technical specifications section of the RFP; however, it is a good idea to go over these issues again when vendors are demonstrating their ERM products and confirm them formally in any final agreement.

Figure 14: Sample Analysis of Vendor Responses to Organisational Requirements

Requirements	**Priority**	**Vendor Response: Ability to Meet Requirements**			
	(from low to high)	*Supported by the product*	*Supported by an external application*	*Requires customisation*	*Not supported by the product*
Compliant with MoReq standards	high				
Integrates with Microsoft XP operating system	medium				
Integrates with Lotus Notes email software	medium				
Generates user reports and use statistics	medium				
Automatically tracks and reports on system usage and file movement	high				
Generates file lists and action reports	high				
Training and self-help guidance is provided	medium				
Automatic backups can be configured	medium				
Can import all documents from legacy electronic filing system with complete metadata	low				
Allows for access controls and passwords at different levels of security	high				

Configuring and Implementing the ERMS

Nearly all ERM applications must be configured prior to implementation. Because the software cannot be installed 'right out of the box' as it were, an information technologist will need to tailor the application to meet the organisation's own needs and operations. The configuration process includes

- specifying the metadata elements to be used in the software application
- setting up the records classification structure
- creating any thesauri or index of standardised terms to be used
- creating retention and disposal rules and linking those rules to the appropriate folder in the classification structure
- setting up security and permission rules for access to the electronic records
- entering end user and administrator information (IDs, passwords, rights, roles and so on)
- initiating the process of logging into the system through a 'single-sign-on' login window
- setting up pre-determined workflow processes and alerts.

Once the configuration has been completed, the system needs to be tested in a controlled environment. This testing is essential in order to identify any immediate problems with the configuration or with software compatibility. Ideally, the software will be installed and tested on a separate computer server called a 'development server.' By testing the software separately, any compatibility issues or other technical problems can be resolved before the ERMS is brought into 'live' use, at which time it will be transferred onto what is called a 'production server.'

It is also valuable to have a small group of users test the software as part of a pilot project, which allows them to apply classification schemes, test retention schedules and practice moving electronic records into and out of the ERMS. Any difficulties they encounter can be addressed before the system is launched officially.

During the pilot phase, an implementation plan should be finalised, outlining how the ERMS will be rolled out across the organisation. The implementation process will be different depending on the organisation involved; it may even vary among different business units within one organisation. Sometimes it is best to implement the system in all departments or units simultaneously, and sometimes it is best to focus on getting the software operational in selected units first before moving onto the next units.

During the pilot phase and for a period after the initial roll out, user feedback should be gathered on a regular basis. Input from office staff will provide important information about how easily people can use the system, any inconsistencies in procedures (such as problems with the standardisation of data entry or the completion of user – generated metadata) or any other issues or problems that might have been missed during development and configuration. Any follow-up evaluation should also include an analysis of administrative requirements, including electronic storage space and computer processing speed. The vendor should assist in resolving any outstanding issues.

Monitoring the System

As with all new systems and processes, it is important to establish procedures for monitoring and auditing the system on an ongoing basis. Any ERMS must be monitored on a regular basis until it is replaced. Regular monitoring serves the following important functions.

- It ensures that the system is operating at its optimal capacity.
- It detects any failures in backup and restoration of data and records.
- It maintains and enhances security, especially the operation of firewalls (computer devices or programs that prevent unauthorised access to computers).
- It ensures that compatibility issues are resolved whenever new software or hardware is added.
- It tracks the volume of records captured into the ERMS.
- It indicates when additional computer storage is required.
- It highlights any breaches in the access or security mechanisms.

Regular audits also assess how well and often the ERMS is being used, whether or not users are capturing records according to the appropriate classifications, and whether users are bypassing the ERMS and thereby not complying with records management policies and procedures.

Achieving Success

As more and more organisations adopt electronic records management infrastructures, managing the process of organisational change becomes more and more important to achieving success. Those organisations that have been successful in implementing ERMS have established programmes for managing changes in policies and procedures, standards and guidelines, business processes, technology and staff capacity.

Following are some key tips for ensuring a successful ERMS project:

- Senior management support is critical.
- A clear vision and strategy for ERMS development is also critical.
- Technology is only 20 percent of the cost of the solution.
- ERMS changes how people work, so addressing change management is essential.
- Business processes and ways of working may have to be changed, or else computer systems will be no more effective than before.
- Strong and effective electronic records policies and procedures must be in place.
- An up-to-date and comprehensive classification scheme and an effective retention schedule also need to be in place.
- Regular monitoring and auditing is essential to ongoing maintenance of the system.

- Implementation requires a team approach.
- Ongoing training and support is vital.

Training and Communications

Regardless of the implementation plan chosen, initial user training must take place either immediately before or immediately after the system is implemented. If there is too much lag time between the training and the roll out, staff might forget how to use the software application or they will use it improperly, minimising the positive benefits of the product.

The level of training required will vary depending on which users are being trained and what level of involvement they may have with the ERMs. *Managers* will need training themselves, and they will also need to know that their staff members are trained in the use of the system. *Information technology* staff will need training on how to integrate the software into the current technology environment, how to manage the software and hardware and how to configure and upgrade systems as required. *Records managers* will need training on the non-technical aspects of administering the system, including updating classification schemes; adding and removing users and defining user permissions; generating reports; and monitoring use of the software. *Users* of the systems will need to be trained on how to create and capture records, how to search for information and how to ensure their actions comply with records management requirements.

Different types of courses and different delivery methods will be appropriate to these different user groups. Delivery methods may include: courses provided by the software vendor; courses provided by external consultants; courses designed to train staff to continue in-house training programmes; and actual in-house courses delivered by qualified employees.

These courses may be provided through face-to-face sessions, web meetings or online self-directed training; the information may also be communicated through user guides and manuals and through information provided as part of help desk support services.

Also important to the success of an ERMS project is effective communication with staff, so that they are aware of the existence of and importance of new policies and procedures, changing roles and responsibilities, different ways of handling work processes and a new approach to records creation and use. A communication strategy, which provides answers to questions about the project, is an essential component of the overall ERMS project plan. An effective communications plan will address both the specific project and ongoing records management operations. Information may be disseminated through in-house newsletters; communications at management and team meetings; training programmes; new staff orientation packages; and staff manuals and codes of conduct.

It should be noted that an ERMS is only one potential solution to the challenge of managing electronic records. ERM systems are also usually procured by medium- to large-scale organisations, and many smaller organisations do not have the resources to consider acquiring very sophisticated systems. When considering the appropriate

course of action, it is important not to assume that the acquisition and installation of an ERMS is the only answer. Another option may be to introduce rules and procedures for the management of electronic records without using an ERMS. For example, rules and procedures can be developed for the management of electronic records such as emails, financial records or personnel records. Similarly, the folder system functionality within Microsoft Office and similar commercial software packages can be used to develop and implement basic electronic file classification systems that can be used widely throughout an organisation.

The next unit looks more closely at the issue of achieving success in electronic records management, focusing on issues of advocacy.

UNIT 2.6

ADVOCATING EFFECTIVE ELECTRONIC RECORDS MANAGEMENT

In 2000, it was estimated that over 55 percent of an organisation's records were stored electronically on single user storage media, such as a personal desktop computer, and not as part of a formal recordkeeping system.[1] As more and more people within every organisation are using computers, each employee will create and store electronic records in their own individual way, making it difficult to retrieve or protect electronic records. The need to advocate excellence in electronic records management is more important than ever considering the number of people within every organisation who create and manage electronic records.

Because of the special characteristics of electronic records, described below, it is even more important that organisations manage them effectively.

- Electronic records are more easily altered, manipulated or overwritten than paper records. Worse, it is extremely difficult to detect when electronic records have been altered. Effective management is essential to protecting the evidential value of electronic records as evidence.
- Electronic records are easily shared, transported and concealed using small portable storage devices such as compact discs and USB (universal serial bus) flash drives. It is much easier to duplicate, lose or misuse electronic records than paper records.
- Many software systems, such as those for electronic mail, operate independently of existing records classification systems. There may be no procedures in place for filing, retrieving or disposing of some types of electronic records, increasing the risk of loss, duplication and confusion.

Records professionals know the importance of managing those records so they are available as reliable and authentic evidence. But how does one sell the importance of quality records care to senior managers, records creators and those who manage active electronic records in government departments? Unfortunately, the topic of records management rarely generates much interest by records creators. They are often so busy that they do not have enough time in their day to complete any tasks that fall outside their immediate work responsibilities, which means that records-related tasks are not seen as a priority. Or they may believe that information technology is so efficient that there is no need to take further measures to manage

[1] P Lyman and H R Varian, 'How Much Information,' *Journal of Electronic Publishing* 6 (2). December 2000. Also available electronically at http://www.sims.berkeley.edu/how-much-info-2003.

records. In the worst situations, office employees may wilfully choose to ignore record-keeping requirements.

Overcoming these perceptions about records management may be the toughest challenge for the records professional. Electronic records management does not sell itself. Records professionals need to draw heavily on their knowledge, skills, experience and persistence to emphasise the importance of quality records management for the organisation. This unit examines the role of advocacy in supporting a strong records management programme. It examines the concept of advocacy and the various stages of a project at which records management advocacy can be useful. It also looks at two levels of advocacy: macro-level and micro-level, and considers how to clarify the message to be conveyed. Information is provided on some of the key messages about electronic records management that can be communicated through advocacy initiatives.

WHAT IS RECORDS MANAGEMENT ADVOCACY?

Records management advocacy is a set of programs, activities, training opportunities, tools, and communications that encourage best practices in records management. Advocacy also helps improve individual compliance with an organisation's records management rules and policies and promotes records management as an important and required organisational function.

The audience for records management advocacy includes information technology specialists, upper-level management and champions, governance experts, records creators, and the general public. Anyone who creates, uses, or is affected by records is a candidate for advocacy and outreach programmes.

Overcoming Misunderstandings

Records management advocacy is primarily about managing and overcoming inaccurate or incomplete assumptions or misunderstandings about how records can or should be managed within an organisation. In July 2000, the International Records Management Trust and the World Bank Group published a report that summarised some of these incorrect records-related assumptions and perceptions. These assumptions are listed in Figure 15 below. Conquering these and other misconceptions about records management best practices is one of the greatest challenges the records professional faces.

Figure 15: Assumptions and Realities of Records Management

Assumption	Reality
Records will be available to support programs and policies.	Records do exist, but frequently they are disorganised, incomplete and difficult to retrieve.
The management of records is not a professional function.	Given the size of government and the volume of paper and electronic information generated, it is essential to have specialists to manage structures and systems for controlling records as part of the wider regulatory framework.
Keeping records is not a significant problem because people will automatically want to keep records that document their actions and decisions.	Public servants who are involved in corruption and fraud or who fear for the security of their jobs are unlikely to want to keep records. Furthermore, in many institutions there are no structures in place to keep records efficiently.
Public servants know what information they need.	Public servants who are involved in corruption and fraud or who fear for the security of their jobs are unlikely to want to keep records. Furthermore, in many institutions there are no structures in place to keep records efficiently.
People use records for decision making.	As record systems have broken down, public servants have ceased to depend upon them as a reliable basis for decision making.
Computers do not create records, and even if they do, information technology staff members are able to manage them.	Computers do create records, whether they are printed out or maintained in an electronic environment. Systems managers are generally not concerned with long term evidentiary and access requirements. These issues fall within the remit of records professionals.
The problems created by chaotic paper systems can be solved by the application of technology.	If manual systems are chaotic, electronic systems will only compound the problem. Moreover, paper records will continue to exist even in a computerised environment, as data source and output documents, for some time to come.
Soon there will be no need for paper records because offices will be completely computerised.	The fully electronic office is not a reality even in industrialised countries. Until it can be demonstrated that there is a local infrastructure and capacity to protect electronic records in a static form over a suitably long period of time, governments must protect their evidentiary requirements through paper-based records as part of mixed media systems. Moreover, computers are the greatest cause of the proliferation of paper work in modern organisations.
Paper-based and electronic systems will be integrated.	Computerised systems generally operate separately from existing manual systems. Unless an interface is created between manual and electronic systems, it is likely that both will lack integrity.
Electronic record systems are secure, given the existence of backup procedures, disaster plans, and trained personnel.	Regular backup procedures are not always carried out, disaster plans (if they exist) tend to be inadequate, and storage facilities (particularly offsite locations) are often wholly inadequate.

Source: International Records Management Trust and World Bank Group, *Managing Records as the Basis for Effective Service Delivery and Public Accountability in Development: An Introduction to Core Principles for Staff of the World Bank and Its Partners,* pp. 10-11. See http://siteresources.worldbank.org/EXTARCHIVES/Resources/Core%20Principles.pdf.

OPPORTUNITIES FOR ADVOCACY

There are many times and opportunities for electronic records management advocacy. For examples, opportunities for advocacy can occur

- prior to the implementation of an electronic records system
- during the implementation and active use of the system
- after the system is deactivated or replaced by a new system.

Advocacy Prior to Implementation

Becoming involved in the design and implementation of electronic records management systems is one of the best ways that records professionals can advocate for the importance of electronic records management. Prior to the implementation of a new system, the records professional can advocate for actions and decisions that ensure, for example, that

- the electronic records management system captures records that the organisation requires to carry out its mandated responsibilities
- the system includes the correct retention and disposition information, should that functionality be available, so that records can be managed effectively through the life cycle
- the system ensures the authenticity of the records by designing access controls and other procedures to prevent the loss or corruption of records.

Advocacy at this early stage involves working closely with information technology specialists and others involved in the design and implementation of the system and explaining to them the importance of paying attention to record-keeping requirements. Information technology professionals may not understand the records issues associated with electronic information management systems.

Early involvement in any electronic records management or related information technology project can improve the quality and integrity of the agency's electronic records because the records professional can use the opportunity to contribute knowledge and ideas about effective records management, disposition and preservation. Early involvement also allows the records professional to monitor the operations of the system and be an active participant in future modifications.

Advocacy During and After Implementation

Electronic records management advocacy during and after electronic records system implementation involves working with records creators and system administrators to orient staff to the new system, raising awareness of the importance of effective records management in the process. The records professional can also monitor the appropriate use of the system, implement training programmes to instruct and guide records creators in the use of the system.

During the implementation of a new system, the records professional must provide information about how the system should fit into the agency's overall records

management strategy. The records manager must also address change management issues with staff, such as the need for employees to learn different tasks or take on increased responsibility for creating and filing records according to standard practice. Once the new system has been implemented, the records professional should also take the opportunity to monitor the use of the system to ensure that it is operating appropriately and that staff are adhering to established business procedures. Any time the records manager needs to visit employees to discuss their use of the system is an occasion to increase their awareness of the importance of quality records management; retraining and reorientation should be considered positive events, not negative ones.

Advocacy during Deactivation or Replacement

After an electronic records system is deactivated or replaced, electronic records management advocacy is critical to the preservation of the records held in the system. If the records professional is not actively involved in protecting those records, they could be lost or destroyed, especially if other staff members do not recognise the organisation's record-keeping requirements or do not see the relationship between the information technology tool as a storage device and the documentary evidence it contains.

Advocacy at this late stage of a system's life involves ensuring that information technology staff and records creators are able to assist in the final disposition of records. Often only the archivist will be concerned with protecting older records; other staff members will usually be more concerned about ensuring access to records that are active, used and needed to conduct business. If any records are going to be migrated to a new system, records professionals need to advocate for the proper documentation of the migration process and for the preservation of the integrity and authenticity of the records during migration.

TYPES OF ADVOCACY

Because all organisations are different, there is no one 'right' approach to records management advocacy. The records professional needs to understand in intimate detail the organisation's records management environment in order to formulate the most appropriate advocacy message. One of the first steps in developing an advocacy programme will be to review the organisation's written records management policies and procedures, electronic recordkeeping system documentation, and other information about the organisation's records management environment. Following this, the records professional should consider the different types of staff employed by the organisation, and try to understand their priorities, concerns and interests, in order to develop advocacy messages that will be meaningful to these different audiences.

As mentioned above, one of the characteristics of electronic records that makes advocacy so important is the fact that almost all staff will have access to a computer in the office and therefore will have the ability to create and store electronic records. For this reason, it may be useful to structure the advocacy message at two distinct

levels: the macro-level – advocacy presented to large groups of people with different responsibilities, who need to understand the role of records management for the success of the organisation as a whole – and the micro-level – advocacy presented to people who need to understand the importance of quality records management for themselves as individuals working at their own desktop computers.

Macro-level Advocacy

Advocacy at the macro-level communicates information about records management policy, basic staff responsibilities for records care, important records-oriented issues within the organisation and the goals of records management. Usually, macro-level advocacy messages are directed to large groups of people who may have different work roles and responsibilities. Macro-level advocacy activities may take place as part of

- new staff induction training
- group learning and collaborative training events
- all-staff retreats or strategy meetings
- outreach events (such as with staff, members of the public, history groups and others).

Macro-level advocacy activities might include

- records management videos or audio messages
- information pamphlets
- records-related web pages on the organisation's Intranet sites
- open house events for staff or others to visit the archives and records management facility.

Micro-level Advocacy

Micro-level advocacy focuses on providing information about specific records management details, such as rules or procedures, to those people who require detailed information for their own work. Micro-level advocacy messages can be embedded within records management training and orientation sessions, where specific records-related rules and procedures are described in detail for specifically defined audiences. Micro-level advocacy may include

- records management refresher courses
- one-on-one records management coaching
- technical skills training with electronic records management tools
- role-based training
- annual work performance evaluations.

In the ideal situation, each staff member within the organisation will encounter both macro-level and micro-level records management advocacy.

WHAT IS THE MESSAGE?

As mentioned, the most appropriate records management advocacy message to deliver will vary depending on the specific nature and culture of each organisation. However, it is possible to outline the basic message that any records professional would want to convey; this message can be adapted for use in a variety of different organisational environments.

It is sometimes useful to present negative messages in an effort to raise awareness of the importance of good records management. For example, stories of fraud, corruption, lost records, court cases and other unfortunate situations can shake people's confidence in records and information systems, prompting them to improve their approaches to records care. However, sometimes negative stories are not useful, especially if the stories convey situations that the organisation cannot or will not address.

For example, it is not always useful to try to scare people with the threat of earthquakes or floods; such extreme emergencies, while unquestionably a threat to life, safety, and property, do not happen often enough in most parts of the world to prompt action, particularly if the measures required to combat natural disasters are expensive, time-consuming and complicated. It can be more effective to focus on more realistic scenarios, such as the hazard of losing a court case because records cannot be produced or the risk of violating privacy and confidentiality through poor management of electronic records. Whenever possible, it is helpful to draw on real examples – both positive and negative – from within the organisation. By researching situations where the organisation was either negatively affected or gained considerably, the records professional can make the issue more relevant to members of staff, who can then relate the situations to their own work environment more easily.

The Importance of Quality Electronic Records Management

Records management is important for *all* records created in *all* types of media and formats, including hardcopy media such as paper, and electronic media such as compact disks and hard drives. An organisation needs to maintain records management practices that meet or exceed accepted standards in order to deliver programs and services and also to support future activities and decisions. Good records management practices also ensure transparency of actions, and ensure the accountability of the organisation to employees, citizens and outside stakeholders.

Good records management practices also support the development of policies, and reliable and authentic records are essential to the protection of an organisation and its employees in the event of litigation. Ultimately, records are the foundation for corporate memory; they are the organisation's primary knowledge asset and need to be valued just as much as the organisation's other tangible assets, including staff, buildings, equipment and financial resources.

The Benefits of Good Electronic Records Management

Good records management can offer the following positive benefits.

- Activities in the organisation can be completed in an efficient manner when information and records can be found easily and quickly.
- Policies and procedures can be based on good information and on lessons learned in the past, which are documented in the organisation's records.
- Government services can be offered to all citizens in a consistent and equitable manner.
- Legislative and regulatory requirements for information, documentation and other organisational obligations can be met because records and information are easily accessible.
- Requests for information from auditors can be fulfilled without large expenditures of time and money.
- The business of the organisation can continue with little interruption if there is a natural or human-caused disaster.
- The business performed within any specific unit of the organisation can continue with little interruption in the event of staff turnover because documentation related to specific duties can be easily found and passed on.
- The rights of employees and citizens can be proven and assured through access to important records.
- Documentary evidence will be available and admissable in court, protecting the organisation and ensuring the rights of employees and citizens.
- Fraud can be identified and proven since records are well managed throughout their life.
- The history and memory of the organisation can be preserved for future generations, ensuring a rich documentary heritage on which to build and sustain the culture and identity of the organisation, the people or the nation as a whole.

See *Additional Resources* to find information about professional associations and groups that offer guidance on advocacy.

The next unit looks at the challenge of supporting staff members throughout the organisation through the changes that take place when systems are restructured.

UNIT 2.7

MANAGING ORGANISATIONAL CHANGE

Electronic records management projects inevitably result in changes in organisational responsibilities, policies and procedures. The ability of the organisation to manage these changes will often determine the success of the implementation process. While there are several theories about how to deal with organisational change, the underlying constant is that change deals with people – real people, who have their own hopes, fears, needs and aspirations. Any attempt to foster change in an organisation, whether as a result of records management initiatives or other projects, needs to take into account the fact that the people who are at the other end of the new system will interpret situations and opportunities through the filter of their own experiences and aspirations.

Change is a difficult but important process of 'selling' people on a new way to work. Change needs to be understood and managed in such a way that people can cope effectively with it. Since change can be unsettling, those responsible for managing the process need to provide a balanced, calm and settled approach, that demonstrates support for staff members as they learn new ways to do their jobs. People need to be empowered to find their own solutions and responses, with facilitation and support from managers.

Five key principles affect how people address the change management process.

1 Different people react differently to change.
2 Everyone has fundamental needs that have to be met.
3 Change usually involves a loss of something.
4 Fears have to be dealt with.
5 Expectations need to be managed.

There are two main ways of promoting the acceptance of change: communication and training. This unit examines these two ways of supporting organisational change. It also looks at how to monitor the success of the change management process.

CHANGE MANAGEMENT SKILLS

Anyone responsible for managing change in an organisation needs to develop certain skills, in order to be effective. These skills are highlighted in Figure 16 below.

Figure 16: Change Management Skills

People skills	People skills include communication and interpersonal skills, which are important since managing change is predominantly about managing people. An effective change manager will take into account user perceptions and expectations, striving to see the situation through the eyes of the users and staff affected by the new system.
Political skills	It is probably stating the obvious that all organisations are very political. Managers of change can do little to change the political environment but they can increase their awareness of the politics and culture of the agency, being sure to use the information not to criticise but to find effective ways to support necessary organisational change.
Analytical skills	It is not enough to make assumptions or guesses about either the organisation or the project. Effective change managers need to be able to analyse situations, from financial statements to staffing structures to policy requirements, in order to ensure that their actions serve the change process well. In-depth analysis of any situation usually results in conclusions that are difficult to argue against; well-researched and well-analysed recommendations are implemented more smoothly than poorly thought out decisions.
System skills	The change manager involved with electronic records management programmes must be familiar with those systems and technologies. This does not mean that the individual needs to be a technical expert; rather, what is needed is an appreciation of the role and purpose of electronic records management, how it fits in with records and information management generally and how it relates to the wider scope of electronic information and communications management.
Business skills	The change manager must know the business of the organisation, not just the core business but also any support functions that may not be considered immediately during the process of change. One of the drawbacks of involving consultants in change management is that they often do not understand in detail the business of the organisation and so they cannot take unique approaches into account when recommending actions.

COMMUNICATION

Regular communications with all staff members, including both formal and informal communications, are essential to ensure that information about organisational change is disseminated effectively and comprehensively. In the absence of effective communication, there is a risk that people will end up misinformed or unaware of events; they might then start complaining with each other, based on incorrect information, and the end result could be a growing lack of support for the initiative.

Communication goes both ways, and it is important not to impose, or be seen to impose, change without listening to the concerns of staff. Sometimes, of course, staff will simply be unhappy with the situation, and the overall organisational vision may not match their personal desires. Still, the records professional, along with others involved with the change management process, needs to work in a supportive and

collaborative manner to bring people ‘on board’ and, as necessary, change approaches or actions to address legitimate and important problems.

Individual face-to-face communication is by far the best way of promoting the acceptance of change, but other methods work well too. Implementation workshops can be a very effective way of helping staff members understand and commit to new procedures. Staff surveys are also a good way of gathering and assessing issues, so that people’s concerns can be addressed directly as part of the change management process. The organisation’s Intranet or other computer system, departmental or team meetings, new staff orientation sessions, newsletters and other staff functions all present opportunities for communication and information sharing.

TRAINING

As any new project is completed, such as the development of a new electronic records management system, training for all users will be an important part of the implementation process. Both on-time training initiatives and ongoing training programmes will be developed to ensure the system is well used and effectively maintained. Both types of training are valuable opportunities for managing the process of change.

Levels of Training

Normally, any type of records-related training, but especially training in electronic records management, should be pitched at three levels:

- senior managers: those responsible for corporate strategy and policy
- other users including line managers
- records liaison staff.

Training for Senior Managers

Senior managers need to be trained to understand and use any new systems, but they also have to ensure that their own employees are trained. They may also have to make decisions about implementation strategies, priorities for action or resource allocation. Therefore, senior staff need to acquire an understanding of the wider issues involved with the introduction of any new system, such as an electronic records management system. When dealing with a major change in operational activities, senior managers also need to champion the system so that it will achieve better buy-in from the areas within the agency for which they are responsible.

Support from senior management is vital to the success of any new initiative. To support effective change, senior staff should be brought into the implementation process at an early stage and they should be kept informed of and involved in the progress of the project. Information might be communicated through information presentations – lasting only fifteen minutes or so – at management board meetings or similar gatherings. The important action is to keep the issue in question, such as the implementation of a new electronic records management system, firmly on the governance agenda.

Training for Other Users

Users of any new system need to understand basic records management principles and practices, not just how to make a software program work. Without an awareness of the purpose and value of quality records management, they are unlikely to become enthusiastic users of any new system. So, for example, if a new electronic records management system is being installed, all users need to understand the following:

- the nature and structure of the file plan
- the importance of good filing practices (such as the use of naming conventions)
- basic records maintenance procedures, including disposal scheduling in an electronic environment and the use of email systems
- how to make the software work for them
- where to go for information or help about any aspect of records management.

Technical training on new or upgraded systems often occurs at two levels – one level for an introduction to the system and another level for deeper orientation or to learn about some of the less common or less used aspects of the new system.

User manuals form an important part of the training package, especially if the new system requires technical knowledge, but user manuals are also important advocacy tools. If they are well written, clear, supportive, and informative they can help engage users in the process of records management and raise awareness of the value of working within the organisation for the shared goal of effective information management.

Training for Records Staff

Records managers will often require training at a much more detailed level than others in the organisation. For example, they will need to know how to operate and configure the new system and they may need to know how to

- configure the classification scheme to meet specific user/department needs
- add new record series and related retention periods
- add new users and define user permissions
- generate relevant reports
- monitor use of the system.

Whenever possible, records staff in different areas of the organisation should be involved in advocacy and awareness raising; a network of well-trained and enthusiastic records personnel can enhance the implementation of any new system or programme and work with other staff not only to answer procedural questions but also to encourage support for and active use of records management procedures and tools.

Organising Training Sessions

Effective advocacy depends in large part on efficiency and effectiveness. Organising training sessions may seem a mundane procedural task, but – like a theatrical performance – a training session is an opportunity to ‘sell’ the records management initiative and to convince people within the organisation of the value of accepting the

changes resulting from the new programme. Training sessions must be well organised, smoothly executed, and thoroughly evaluated. When planning a training programme, consider the following steps, which will ensure the efficient delivery of sessions and, consequently, will enhance the perception of records management as a positive and welcome change for the organisation.

1 Plan sessions well in advance and let all staff know the proposed schedule so that they can accommodate training into their busy schedules.

2 Allow multiple training opportunities so that staff who cannot make one or another session can still participate in the training programme.

3 Use a variety of training techniques, such as checklists, instructions, hands-on practice, discussion, and other methods, so that staff are interested in and remain engaged in the learning process.

4 Do not try to convey too much information at once; break up training sessions into small units so that people can learn a set of skills and practice them before learning more.

5 Repeat key messages information in all training or advocacy initiatives so that people will remember important information.

6 Gather, assess and use feedback from all advocacy and training initiatives, to improve the training and awareness raising process and also to ensure that staff are understanding the information being conveyed.

7 Ensure staff can practice the skills they have learned right away; therefore, do not offer training until the system is ready to be used.

8 Use experts as appropriate; qualified individuals – especially qualified trainers – are skilled at conveying important information and may be better messengers because of their expertise.

9 Ensure user manuals are easily available, clear, well-written and sufficiently detailed to allow staff to use them without intervention from records professionals.

MEASURING CHANGE

Even after a new programme, such as an electronic records management system, has been implemented and introduced, management of that programme remains an active and dynamic process. Therefore, monitoring the success of the programme and the effect on the organisation is ongoing. Regular monitoring, evaluation, and performance measurement is important to determining the success of any initiative and to assessing when and how changes or improvements might need to be made.

For instance, it might be useful to survey users of the system at a particular date, sometime after the implementation of the system, to gather feedback on the value of the system to staff. How is it contributing to people's abilities to undertake their duties? Has it improved their motivation or changed their level of job satisfaction?

What changes would they like to see made in the short or long term? Figure 17 below offers some questions that might be included in a user survey.

Another way to measure change is to develop and monitor performance indicators, as discussed earlier in this module. For example, it may be useful to measure the time taken to retrieve a document and to determine if the time has increased or decreased with the implementation of a new records management programme, system or approach. To conduct such performance measurements, the first task is to take measurements before any changes are made: these are called baseline measurements. Then the same process can be measured once the new system is in place, and it is hoped that improvements will be seen in efficiency or time savings. The data can be gathered and reviewed regularly to maintain an ongoing assessment of the value of, or the need for changes to, the new system.

Because in every instance baseline measurements would need to be taken before the system is implemented, an essential part of the process of planning and managing electronic records management is to consider what actions might take place in the future, so that baseline measurements can be captured at the very beginning.

It is also useful to document the process of undertaking any organisational change – such as implementing a new electronic records management system, establishing an advocacy initiative or developing a records management policy. The written assessment, whether it is a formal report, a memorandum, or notes to file, will provide valuable information and insights into the experience. This information may be critically important in the future, when the time comes to reassess the organisation's records management operations and perhaps consider a new initiative.

Figure 17: Sample User Survey Questions

Use of the ERM system

1 How long have you been using the ERM system?
2 Do you access the system remotely?
3 How do you rank yourself as a user? (accomplished, comfortable, reluctant, hesitant, non-user)
4 Why do you use/not use the ERM system?

Records management methods

5 How many emails do you receive each day?
6 Do you file emails in the ERM system?
7 Do you file more or less now than before the implementation of the ERM system?
8 Does your filing take more or less time now than before the implementation of the ERM system?
9 Can you retrieve information now more or less easily than before the implementation of the ERM system?
10 Do you scan paper documents into the system?
11 What impact has the ERM system had on the way you work?

User views of the system

12 What do you think are the two most useful functions of the ERM system?
13 What do you think are the two least useful functions of the ERM system?
14 What do you think of the appearance and design and usability of the ERM system?
15 Which areas of the ERM system do you think you need to know more about?

Views about support for the system

16 Does your management team encourage use of the ERM system?
17 Who would you contact first if you had a problem with the ERM system?
18 How often have you used the IT Helpdesk to solve a system problem?
19 If you have raised a problem with the ERM system:
  19A Was it resolved satisfactorily?
  19B Was the speed of response satisfactory?

Any other comments

Managing change is critical to success in establishing and maintaining effective electronic records management systems. This unit has examined two of the most important methods for managing change: ensuring effective, two-way communications and implementing formal and informal training opportunities to raise awareness and improve capacity in relation to electronic records care. Measuring change is essential to ensuring that communications and training are successful.

ANNEX

ERMS SOFTWARE PACKAGES

This annex provides a brief overview of some better-known ERMS software programs and packages.[2] This overview is intended *only* to give readers a sense of the types of software available and is not to be considered an endorsement of any particular program. Readers should also recognise that this information inevitably becomes out of date almost as soon as it is available; readers should consult the websites provided and review the references provided in *Additional Resources* for guidance about where to look for additional advice.

According to various research studies, the market leaders in enterprise content management in 2005 were EMC, IBM, Open Text, Hummingbird, Stellant and FileNet. In 2007, the market leaders were EMC, IBM, Open Text and Oracle. Some organisations were no longer on the list of market leaders not because they ceased to be viable but because the companies were acquired by other companies. For example, Hummingbird was acquired by Open Text; Stellant was taken over by Oracle; and FileNet was taken over by IBM.

Below is a short summary of the best-known proprietary (commercial) ERMS software programs as well as a short list of some non-proprietary (open source) systems, listed in alphabetical order.

Proprietary Systems

Documentum

- An enterprise content management platform owned by EMC Corporation.
- Founded in 1990; developed its EDMS product in 1993.
- Became a publicly listed company in 1996 and launched its web application in 1998.
- In 2000, produced a native web application; in 2002, launched a unified enterprise content management platform for managing a range of content types in a shared repository.
- In 2003, acquired by EMC.
- Since 2001, expanded into records management, digital asset management, imaging and collaboration.

[2] The authors of this annex are Christine Ardern and Lori Podolsky Nordland.

For more information, see the company's website at http://www.documentum.com/.

FileNet

- A content management and document imaging system originally developed in 1982.
- Acquired by IBM in 2006.

For more information, see the IBM website at http://www-01.ibm.com/software/data/content-management/.

Hummingbird

- An enterprise content management solution.
- Founded in 1984 as a consulting business.
- Since 1995, expanded operations to include capabilities such as terminal emulation, business intelligence and imaging technology.
- By 2005, included such customers as IBM, NASA, Morgan Stanly, Boeing and the Government of Canada.
- In October 2006, acquired by Open Text for almost half a billion US dollars.

For more information, see the company's website at http://connectivity.hummingbird.com/home/connectivity.html.

Meridio

- A private company founded in 2001.
- Develops enterprise document and records management software exclusively for Microsoft.

For more information, see the company's website at http://www.meridio.com/.

Microsoft Office SharePoint Server 2007

- A total concept suite of products to manage electronic records in a collaborative environment.
- New server program that is part of the 2007 Microsoft Office Suite.

> For more information, see the company's website at http://office.microsoft.com/en-ca/sharepointserver/default.aspx?ofcresset=1.

Open Text

- Originated from a computer science project carried out between 1984 and 1989 at a Canadian University; the project sought to develop search technology that would allow quick indexing and retrieval of information.
- Incorporated in 1991.
- As of 1995, began acquiring other systems in order to add to its capabilities: systems include business process management, web content management, online meeting and collaboration and regulatory compliance.
- The flagship product is called Livelink.
- In October 2006, acquired Hummingbird.
- Now working on a new flagship product.

> For more information, see the company's website at http://www.opentext.com/.

Oracle - Stellent

- Began as a software development company that provided content management systems with its flagship product, known as Universal Content Management.
- In November 2006, was acquired by Oracle.
- The product is now known as Oracle Universal Content Management.

> For more information, see the company's website at http://www.oracle.com/stellent/index.html.

Tower Software

- Began in 1985 as a records management software company.
- In 1998, introduced electronic document and records management software named TRIM Captura.
- In 2002, released TRIM Context.
- In 2004, started offering enterprise content management solutions.
- In 2008, Hewlett Packard acquired Tower Software and now maintains the TRIM products.

> For more information, see the company's website at http://www.towersoft.com/ or at http://h18006.www1.hp.com/products/software/im/governance_ediscovery/trim/index.html.

Vignette

- Began in the early 1990s.
- Is currently a suite of content management, portal, collaboration, document management and records management products.
- Its portal management application has been used by the websites of organisations such as Nokia, Time-Warner and Lexmark.

> For more information, see the company's website at http://www.vignette.com/.

Open Source Systems

Alfresco

- An open source document management system that is interoperable with Microsoft Office.
- Utilises a Unix-based operating system.
- Founded in 2005 by John Newton, co-founder of Documentum, and John Powell, former chief operations officer of Business Objects.
- In 2006, expanded its document management capabilities to include web content.

> For more information, see the official website at http://www.alfresco.com/.

KnowledgeTree

- An open source document management system used by corporations, government institutions as well as small- and medium-sized businesses.
- Allows organisations to customize and integrate their document management system with their existing infrastructure.

> For more information, see the official website at http://www.knowledgetree.com/.

Mambo

- An open source software for creating and managing websites.

> For more information, see the official website at http://www.mamboserver.com/.

Plone

- A ready-to-use open source content management system that supports the management of web content and other information resources.

> For more information, see the official website at http://plone.org/.