Strategies for Documenting Government Business: the DIRKS Manual

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STRATEGIES FOR DOCUMENTING GOVERNMENT BUSINESS: THE DIRKS MANUAL

Strategies for Documenting Government Business: The DIRKS Manual is concerned with building more efficient and accountable business practices through the design and encouragement of good recordkeeping. At the heart of the manual is a best practice methodology for the design and implementation of recordkeeping systems (the 'DIRKS' methodology).

Use the information provided below about the contents of this manual to identify the sections most relevant to your needs.

In this manual

Understand the DIRKS Manual and its uses:

Introducing the DIRKS Methodology

Understand how to follow pathways through the manual based on your desired outcomes:

Doing a DIRKS project

Obtain comprehensive and detailed information on performing each of the steps in the DIRKS methodology:

Step by step through the DIRKS Methodology

Access templates, case studies and other practical information to obtain general guidance on improving records management practices:

Tools and tips to improve recordkeeping practices

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1. Introducing the DIRKS Methodology

What is DIRKS?

DIRKS is an acronym that stands for 'designing and implementing recordkeeping systems'. DIRKS is about building more efficient and accountable business practices through the design and encouragement of good recordkeeping across an organisation.

The DIRKS methodology:

is a means of building good recordkeeping into your organisation, through the design and implementation of recordkeeping systems.

What is recordkeeping?

Recordkeeping is the making and maintaining of complete, accurate, reliable evidence of business transactions.

Why is recordkeeping important?

Good business requires good recordkeeping. In competitive business environments and strict accountability structures, it is vital that organisations have the evidence and information they need to drive and support their business operations.

1.1 Recordkeeping systems

1.1.1 What are recordkeeping systems?

Recordkeeping systems are business information systems capable of:

- capturing
- maintaining and
- providing access

to records over time.

Recordkeeping systems are knowledgeable systems.

Recordkeeping systems do not just have to manage records - they can perform other business functions as well. Having the capacity to capture, maintain and provide access to records is however crucial.

1.1.2 Components of recordkeeping systems

Recordkeeping systems are not simply software applications designed to manage records. They are an organised collections of:

- people
- policies
- procedures
- tools
- technology
- ongoing supporting education, and
- maintenance.

In combination, these combinations enable organisational business to be adequately documented.

Tip: Definition of 'tools'

Tools in a recordkeeping system are recordkeeping instruments - disposal schedules, thesauri, access and security classification schemes etc - designed to help you manage and control your records through time.

This manual contains guidance on creating and implementing these tools - see Commencing a DIRKS Project for advice.

1.1.3 Benefits of recordkeeping systems

Recordkeeping systems that are based on a sound understanding of an organisation's business environment, legal needs and organisational requirements provide substantial benefits.

Recordkeeping systems:

- support better performance of business activities and better decision making throughout organisations
- enable organisations to comply with legislative and regulatory requirements
- protect the interests of organisations and the rights of their employees, clients and citizens
- provide protection and support in litigation, including the better management of risks associated with the existence or lack of evidence of organisational activity
- support consistency, continuity, efficiency and productivity in service delivery, program management and administration
- produce dynamic, valuable information that can be fed back into business processes to continually improve, automate and facilitate these processes
- avoid the retention and clutter of ephemeral records, or the loss or inadvertent destruction of significant records, and
- enable management of records as an asset and information resource, rather than a liability[1].

Tip: Demonstrate tangible business benefits

Using arguments that demonstrate tangible business benefits that can be obtained through better recordkeeping, may help to convince management and other staff about the importance of ensuring your organisation has the recordkeeping systems it needs to sustain its business activity.

See Obtain senior management support for further guidance on demonstrating the business benefits that can come through recordkeeping.

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[1] This list is derived in part from Standards Australia, Australian Standard AS 4390-1996, Records Management, Part 2: Responsibilities, Foreword, 3

Many business information systems need to be recordkeeping systems

You will have many business information systems across your organisation. Many of these systems will be used for information purposes only and these types of systems should not be the focus of your DIRKS initiatives.

Other business information systems, however, will be used to transact organisational business. They will conduct significant transactions and your organisation will need a definitive record of these transactions. If your organisation needs to keep a record of its activities, it needs to ensure that the business systems that support these activities are capable of creating and keeping records.

Tip: Business systems can function as recordkeeping systems

It is important to ensure that relevant business information systems are able to perform a dual role in your organisation. They have to meet your specific business requirements, but must also be able to function as recordkeeping systems - systems that are capable of producing and maintaining the information your organisation requires to sustain its business activities.

In many organisations, business information systems that conduct significant business are not able to perform as recordkeeping systems. They have been introduced on an ad hoc basis, or without consideration of recordkeeping issues, and as a consequence do not manage, preserve and make accessible evidence of business operations.

Through not having recordkeeping systems, organisations can:

- place themselves at significant risk
- incur unnecessary expenditure, and
- deny themselves access to significant organisational information.

Example: Systems often do not include recordkeeping

Organisations are increasingly doing business online, in accordance with government-wide initiatives. Many of the systems that are being developed include interfaces that allow clients to conduct business with government electronically. Often recordkeeping is a neglected component of these systems. Systems are designed to allow easy access to government services and to meet client needs, but frequently the recordkeeping requirements that should be incorporated into the systems are not accommodated.

As a result the systems may transact business, but they do not document or keep adequate records of this business.

The DIRKS methodology is a means of ensuring that business information systems are recordkeeping systems where appropriate or necessary.

DIRKS Builds Recordkeeping Systems

The DIRKS methodology helps you to transform business information systems that should be managing evidence of their operations into recordkeeping systems.

To operate effectively, recordkeeping systems have to meet a defined set of characteristics. These characteristics are summarised here to provide an overview of the types of qualities your recordkeeping systems should possess. These characteristics are revisited in Step D –

and , the sections of the methodology where you focus on transforming relevant business information systems into recordkeeping systems.

1.1.4 Characteristics of Recordkeeping Systems

Recordkeeping systems should possess the following characteristics, in order to produce and maintain authoritative records:

The characteristic of...	Means that systems should...
Reliability	- routinely capture all records - organise records appropriately - provide adequate information about the records within them - provide ready access to records and make records of system operation
Integrity	prevent unauthorised access, destruction, alteration or removal of records
Compliance	be managed in compliance with all requirements that apply to the business documented within them
Comprehensiveness	manage all records resulting from the business activities that are documented or managed by the system
Fixity	store records in ways that mean they cannot be tampered with, deleted inappropriately or altered
Accessibility	allow records to be shared as information resources across a work space, business unit or organisation[2]

1.1.5 Functionality of Recordkeeping Systems

In addition to having these characteristics, recordkeeping systems must be capable of performing a range of standard recordkeeping functions.

The function of...	Means that systems should be capable of...
Registration	capturing records by assigning them unique identities and attributing brief descriptive information to them, such as a title and date
Classification	arranging records into categories based on the business activities they document, as a means of facilitating record control, retrieval, disposal and access
Indexing	establishing access points to facilitate record retrieval
Access and security	assigning and implementing rights or restrictions that

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[2] Many of these requirements are derived from AS ISO 15489.1-2002, Records Management - Part 1: General, Clause 8.2

The function of...	Means that systems should be capable of...
monitoring	protect records against unauthorised or inappropriate use or access
Tracking	• monitoring record use to ensure no inappropriate use occurs and an auditable record of use is maintained
Disposal	• utilising disposal authorities, linking disposal periods to records, triggering any required disposal actions, reviewing any history of use to confirm or amend disposal status and maintaining an auditable record of disposal (retention, destruction or transfer) actions
Storage	• appropriately maintaining records in consideration of their form, use and value for as long as they are legally required
Searching, retrieval and rendering	• making records available as corporate information resources • identifying and presenting records in response to user search requests and, where appropriate, enabling records to be printed on request
Reporting	• generating any reports deemed necessary by the organisation

1.1.6 Additional requirements

Recordkeeping systems should be capable of:

Managing records in any form

This involves:

- managing electronic records, scanned images, voice files, video clips, digital plans, databases, information from other applications etc.
- managing electronic signatures and encrypted records, where appropriate

Some systems may only be required to manage records in one format, while others will need to be capable of managing multiple formats

Integration with electronic applications

This involves:

- integration with applications used for transaction of business (office utilities, e-mail, websites, database applications, workflow, etc)[3]

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[3] This range of functions and additional requirements is drawn from recordkeeping best practice and *Functional Requirements for Electronic Recordkeeping*, Department of Public Works and *Services Request for Tender No ITS 2323 for the Supply of Records and Information Management Systems* (March 2001) and the European Commission's *Model Requirements for the Management of Electronic Records,* March 2001

Tip: Don't underestimate the importance of system useability

When you are designing and implementing recordkeeping systems and considering the functionality they should possess, it is important to consider the overall useability of the system. Many systems with recordkeeping capacities have great strength in relation to record creation and capture, but do not necessarily enable the search paths or retrieval flexibility that may be required by system users. Recordkeeping systems have to be useable and it's important not to overlook this key requirement.

What these qualities provide

Developing systems that meet these criteria provides you with recordkeeping systems. These systems provide the structures and controls within which:

- accurate
- accountable and
- information-rich

records are created and maintained.

1.2   DIRKS Methodology and Manual

This section introduces the DIRKS methodology and manual. It outlines the specific steps involved in the DIRKS methodology and explains where the methodology has come from. It also discusses the methodology's flexibility and how it can be implemented in a variety of ways.

It describes the range of projects you can undertake using the DIRKS methodology and explains means by which you can implement DIRKS in your organisation. It also discusses how DIRKS can be used to help your organisation comply with specific requirements issued under the State Records Act 1998.

1.2.1 What is the DIRKS Methodology?

The DIRKS methodology is a structured process for designing and implementing recordkeeping systems.

DIRKS is not new. It is based on traditional system design methodologies, but has been adapted to meet recordkeeping objectives. DIRKS provides a structure for many of the traditional operations you and your organisation have always conducted. It is not a new and daunting approach - it is a methodology based on traditional principles that is designed to help you achieve meaningful and applicable outcomes.

The DIRKS methodology

provides a comprehensive approach to system design that will help you to develop systems with adequate recordkeeping functionality that are specific to and that meet your particular business needs.

The DIRKS methodology is outlined in Australian Standard, AS ISO 15489-2002, Records Management. It was originally detailed in the precursor to this standard, Australian Standard, AS 4390-1996, Records Management.

Steps in the DIRKS Methodology

DIRKS is comprised of eight steps:

- Step A - Preliminary investigation
- Step B - Analysis of business activity
- Step C - Identification of recordkeeping requirements
- Step D - Assessment of existing systems
- Step E - Identification of strategies for recordkeeping
- Step F - Design of a recordkeeping system
- Step G - Implementation of a recordkeeping system
- Step H - Post implementation review

Tip: DIRKS does not have to be implemented in a linear way

Although the steps are called A, B, C etc, you may choose to start with Step B – Analysis of business activity move on to Step C – Identification of recordkeeping requirements and then jump to Step F – Design of a recordkeeping system. Or you may have a very specific need that you are seeking advice on and therefore only use one section of the manual. Remember that DIRKS is meant to be a very flexible process.

For further guidance on its flexibility, see Tools and tips to improve recordkeeping practices to assist you with the DIRKS methodology to identify a range of different ways in which the manual can be used to help improve recordkeeping in your organisation.

Tip: Work through DIRKS steps concurrently

Depending on the nature of your project, it can also make sense to work through some of the steps concurrently, rather than thinking of them as self contained, fixed points in a process. For example, you may complete a lot of *your* Step C – Identification of recordkeeping requirements research during the course of your work on Step A – Preliminary investigation and Step B – Analysis of business activity.

Summary of the steps in the DIRKS methodology

The following table provides a summary of the activities involved in each step of the DIRKS methodology.

In...	You...
Step A: *Preliminary investigation*	• collect information in order to identify the legal and structural characteristics of your organisation • obtain an understanding of the factors that influence your organisation's need to create and maintain records • establish an awareness of your organisation's business activities, technological infrastructure, major stakeholders and recordkeeping risks
Step B: *Analysis of business activity*	• identify and document your organisation's • business functions • activities and • transactions • determine how, when and where these are performed
Step C: *Identification of*	• examine legal, business and other sources to identify the

In...	You...
recordkeeping requirements	requirements for evidence and information (called'recordkeeping requirements') for your business
Step D: *Assessment of existing systems*	• assess the systems currently used to perform business operations in your organisation • identify where these systems are not meeting your recordkeeping requirements
Step E: *Identification of strategies for recordkeeping*	• determine strategies to enable your systems to meet recordkeeping requirements • choose strategies that fit with the culture and environment of your organisation
Step F: *Design of a recordkeeping system*	• design recordkeeping systems that incorporate your chosen strategies
Step G: *Implementation of a recordkeeping system*	• ensure that all components of the new / redesigned systems function according to your requirements • educate staff about new systems • roll out technology • convert legacy data • manage change
Step H: *Post implementation review*	• gather information on the effectiveness of the recordkeeping system • survey or interview staff about the system • rectify any problems identified

1.2.2 The DIRKS Manual

The DIRKS methodology is a clear and simple statement contained in the Australian Standard on Records Management, AS ISO 15489.

The DIRKS Manual is a product developed by State Records to explain in a significant amount of detail how public offices can implement the methodology, in order to improve their recordkeeping practices.

In the DIRKS Manual, each of the eight steps outlined in the DIRKS methodology is explained in detail, and ways in which they can be employed to improve recordkeeping are explored.

Evolution of the DIRKS Manual

Development of the DIRKS Manual was first initiated by the then Archives Authority of New South Wales as part of its Electronic Recordkeeping Project, shortly after the release of Australian Standard AS 4390-1996, Records Management.

Development of the manual became a joint partnership in 1998, when State Records and the National Archives of Australia worked together to produce a draft Manual for Designing and Implementing Recordkeeping Systems, which was published in February 2000.

In 2001, the National Archives reviewed the manual to create a Commonwealth specific version called DIRKS: A strategic approach to managing business information.

State Records has now also reviewed the manual to produce this version which is broadly applicable across a range of public and private sector organisations, but which has been specifically tailored to meet the needs of the NSW public sector. It draws on all earlier

versions, as well as a range of other sources, to create a useful product to assist in the design and implementation of recordkeeping systems.

Audience for this manual

The primary audiences for this manual are chief information officers, information technology managers, records managers, business managers and any other organisational staff who wish to ensure that the government business they are responsible for is adequately documented and maintained for as long as required to meet business needs.

What can you do with the DIRKS methodology?

The primary purpose of DIRKS is to design and implement recordkeeping systems. Because of this broad focus, the manual can support a range of different outcomes.

Build better recordkeeping

This might include:

- ensuring the creation and capture of records
- managing your vital records appropriately
- managing records access and security
- improving business processes and systems
- developing new systems with adequate recordkeeping functionality
- facilitating the purchase and implementation of off-the-shelf records management software
- ensuring records are kept of outsourced functions

Develop recordkeeping tools

This might include:

- creating and implementing a keyword thesaurus
- creating and implementing a retention and disposal authority
- specifying and applying recordkeeping metadata

Obtain general support and guidance

You may find that DIRKS can be used to support a range of other business outcomes in your organisation, in addition to the projects outlined above.

In its implementation, DIRKS can be whatever you want it to be. You can use the guidance in this manual to support a multi-million dollar exercise or a quiet afternoon's worth of reflection.

Tip: DIRKS should not be a 'one-off' event

This manual is not designed as a 'special event' tool for public offices. It has been designed as a means of everyday support, as a reference tool you can dip into for a range of different purposes. It can certainly be used for large scale projects designed to restructure technology and processes in your organisation, but the likelihood is that you will not have the resources or organisational commitment for these types of projects regularly.

Instead it is more likely that you'll be confronted by a range of different scenarios, that DIRKS will be able to offer you assistance with. For example, you may have to:

- develop a retention and disposal authority
- develop a records management policy

- comment on the recordkeeping requirements that apply to a new business system that is to be designed in-house
- develop a training program to encourage people to better manage their email, or
- contribute to your organisation's implementation of ISO 9000-2000, Quality Management.

Throughout this manual there is guidance on achieving these objectives and more. See Tools and tips to improve recordkeeping practices for other outcomes this manual can help you to achieve.

Achieve compliance with the State Records Act

The DIRKS process is not a mandatory requirement under the State Records Act 1998. It is rather a tool that can help you improve recordkeeping in your organisation. This is an outcome that can contribute significantly to business efficiency and accountability.

Implementing aspects of this manual can however help you to achieve compliance with many of State Records' mandatory requirements. See DIRKS and the State Records Act for more guidance on this issue.

Build skills and knowledge

DIRKS can be a challenging process, but its results can be incredibly rewarding, organisationally and personally.

Depending on the nature of your DIRKS project, people working through DIRKS will gain an excellent understanding of organisational business, both in terms of its requirements and how it is conducted. They will gain experience in broad stakeholder consultation, become adept at listening to and responding to user requirements and will have concrete experience of change management. They will also have an excellent understanding of records management requirements and how these should be implemented to best meet organisational needs.

1.3   Commencing a DIRKS Project

This section examines the different issues you need to consider when embarking on a project to improve recordkeeping in your organisation. It identifies:

- methods by which you can scope your project and determine what is attainable
- the importance of senior management support and means of attaining this
- the need for project planning
- the people you may need in a DIRKS project team, and
- the importance of change management.

1.3.1 Measure risk

Measuring the risks faced by your organisation as a result of poor recordkeeping is a useful way to commence your DIRKS project. Risk management is a theme that runs through this manual.

Risk management is 'the culture processes and structures that are directed towards the effective management of potential opportunities and adverse effects[4]'.

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[4] Australian Standard, AS/NZS 4360-1999, *Risk Management.*

DIRKS projects can be targeted and employed in your organisation based on the results of a risk assessment. For example, undertaking risk assessments may help your organisation to realise that recordkeeping is crucial to areas of your business that are subject to high degrees of risk and litigation. Other areas may have minimal amounts of risk associated with recordkeeping. You could therefore commence your DIRKS work in the areas that are subject to high degrees of risk and build good recordkeeping systems that will help you to manage and minimise this risk.

Tip: All organisational systems do not have to be DIRKSed

Remember that not all business systems or processes in your organisation may need to be subject to the DIRKS methodology. Choosing which business areas to target with your DIRKS analysis should be a risk based decision.

If you are measuring risk to help you determine where the DIRKS methodology can best be applied in your organisation use the results of your assessment for a variety of purposes. For example, if you believe your organisation faces significant risks as a result of its current recordkeeping practices, your risks assessment results may make persuasive arguments for senior management and other staff and convince them to give support to your project.

1.3.2 Determine the scope of your project

Determine what it is that your DIRKS project needs to achieve. This objective will determine the scope of your project and the extent of the research you will need to undertake.

Are you seeking to build recordkeeping into an existing business information system? Are you wanting to build recordkeeping into a new business information system? Do you want to obtain disposal coverage for your organisation? Knowing what you want to achieve will help you to decide whether you have to do research into:

- all areas of your organisation's operations
- a range of specific business activities, or
- one discrete area of business.

Example: Proceed according to your scope

If you want to improve or develop a specific system, you will need to analyse the business performed by this system and the requirements that come from this business. Your research is likely to be focussed on one specific area.

If you want to develop an organisation-wide tool such as a retention and disposal authority, your assessment may need to cover your whole organisation to ensure that records generated by all areas of your operations are covered.

1.3.3 Obtain senior management support

A key component of successfully undertaking a DIRKS project is having senior management support for your initiative. This support will help to provide you with the staffing and financial resources you will need for your project and will also help you to obtain broader interest in and support for your project across the organisation.

It can, however, be difficult to convince senior management to allocate time to the consideration of records management issues, let alone fund the development of a new recordkeeping system.

If you are having difficulty communicating the importance of your recordkeeping project to your organisation, you may choose to compile documentation which:

- demonstrates the interrelationship between recordkeeping and other strategic or politically important projects your organisation is undertaking.

Tip: Highlight interrelationships with other initiatives

Many IT, e-commerce, digitisation and knowledge or privacy management initiatives need to consider recordkeeping within their scope in order to be effective. Highlighting this, and the risks that may be faced if recordkeeping issues are not addressed may be useful for obtaining high level support for your project.

- promotes the organisational efficiencies, in terms of staff time and financial benefits, that can be achieved through the implementation of a coordinated and effective recordkeeping system. Such efficiencies could include improved information retrieval, better availability of information to support business operations, and appropriate and timely record destruction.
- shows how good recordkeeping can directly contribute to business by facilitating customer management, improving customer service, facilitating competition etc.
- highlights the importance of good recordkeeping to corporate governance requirements.

Step A – Preliminary investigation discusses the development of business cases as a means of obtaining appropriate funding for your project. Developing a business case to promote your project even before it begins may be a useful means of ensuring you have adequate financial and organisational support.

Tip: Use persuasive statistics

Martyn Christian, in a presentation called 'Using Content Management to realise a Competitive Advantage' at the KM World conference in May 2001 said that '75% of an organisation's information is contained in unstructured formats - documents, reports and images.'

If you are able to quantify the work you are doing and demonstrate the significant proportion of organisational knowledge that is contained in records, it can help management understand why they need to support your records management initiatives.

Tip: Develop a business case

Step A – Preliminary investigation discusses the development of business cases as a means of obtaining appropriate funding for your project. Developing a business case to promote your project even before it begins may be a useful means of ensuring you have adequate financial and organisational support.

1.3.4 Plan for what you want to achieve

Determine the specific objectives of your DIRKS project. Planning what you want to achieve will give you a model to follow during the course of your DIRKS project. Your planning documentation will change throughout your project, but it is important to establish and refine as you progress through.

Planning documentation can also be a means of selling your project to staff and management. Planning documentation can be in any form, depending on the requirements of your organisation or the nature of your project.

Example: Management plan

The Australian Broadcasting Authority, before it started its DIRKS project drafted planning documentation to identify exactly what it wanted to achieve. This was done as a means of gaining organisational support for the project. The officer coordinating this project said:

> *I found that I wanted to impress upon the organisation at the start what they could realistically expect from me in 6 months. I also wanted to start winning a support base of my own within the organisation and have a guide for prioritising my work. So I decided to do both a Management Plan and a Project Plan right at the start.*

> *The Management Plan fulfilled the role of a business case in some ways. It gave the background of the project, described the methodology and detailed the aims, resources and milestones of the project as I envisaged them at that stage. I circulated it to senior management as a bit of a sales pitch and made a presentation to them based on its contents. I reported against the project plan on a weekly basis, and against the management plan at the end of each DIRKS step.*

> *I did not stick to my plans entirely – in light of experience a number of things had to be revised and renegotiated. For example, I got involved in a number of other records-related issues the organisation was facing. However, it did give me a really good guide to ensure that I stayed on track and met deadlines. It did fulfil my other aim too, of exactly defining my role so people couldn't expect unrealistic things of me.*

The Management Plan from the Australian Broadcasting Authority is available as part of the Case studies provided to support DIRKS. If you use any part of this plan, please acknowledge the Australian Broadcasting Authority as the source.

1.3.5 Establish a project team

The nature of your DIRKS project, and the organisational resources that can be committed to it, will determine the number of people who will be involved in the project team.

Ideally DIRKS projects should be undertaken by recordkeeping and information management professionals with significant input from a range of other staff, whose make-up will depend on the size and nature of your organisation.

Tip: Consider attending a State Records' training course

If you are coordinating a DIRKS team, you may want to consider some formal training.

Twice a year, State Records runs a three day training course that is designed to help people implement the DIRKS methodology. The course, which is structured around the eight steps in the methodology, can be done as a block, or participants can choose to only do specific modules that relate directly to the project they are undertaking. It may be useful for staff members who are leading organisational DIRKS projects to undertake this training, before they commence their DIRKS initiative.

Use of internal staff or consultants

It should be decided before you begin your DIRKS project whether your project team will be comprised of:

- internal staff
- consultants to the organisation, or
- a combination of the above.

Anyone who undertakes DIRKS projects will require a good knowledge of how the organisation functions and the business it undertakes. Staff of the organisation may already have much of this information or know where to access it. If consultants are undertaking a DIRKS project on your behalf, you will need to provide them with adequate background material to ensure they are able to quickly obtain an understanding of how your organisation operates and the requirements it is subject to.

Use of IT staff

If your project will require the development of technological solutions for recordkeeping, it is important at the outset to include IT staff, system and network analysts and/or data administrators in your project team. You may have these staff internally or your organisation may choose to employ IT consultants to build the technical component of your recordkeeping system.

It is important that there is good communication between you and the IT staff working on your DIRKS project. The better the understanding between you and the IT staff, the better the systems that you will develop.

Tip: Be realistic with people

Let people who are part of your project team know what they are in for. Be honest about the situation and the work you will require them to do. Make sure they're aware too of the benefits your project will bring to them directly in their specific role and the benefits it will bring to the organisation as a whole.

IT staff may be able to help you to better understand the technical issues or concerns you come across in the course of your system assessments. IT staff may also be able to suggest useful technical solutions to problems you identify.

In return, you will be able to provide some valuable advice to IT staff during the course of your work together. Records and IT areas are working to resolve many similar issues and joint work is therefore of significant benefit to both parties.

Tip: Develop initial training for the people you have chosen as part of your DIRKS team

Provide members of your team, be they internal or contract staff, with a good understanding of your project and its desired outcomes.

Try to tailor the training you develop to the concerns and understandings of the people you will be working with on this project. For example, if you believe that your DIRKS project will involve detailed technical redesign of systems, tailor your consultation specifically to your IT staff, to try to ensure that you all share an understanding of the project and its desired outcomes from the start.

Use of legal and auditing staff

Internal legal and audit staff have a significant understanding of the legal and best practice requirements that affect your organisation. Establishing liaisons with these staff and including them on your project team could facilitate your analysis of legal and best practice requirements. It will also help to ensure that legal and best practice requirements are built into any recordkeeping systems you develop as part of your DIRKS project.

Legal and audit staff may also be able to promote your project and its benefits to other staff of the organisation. As part of their brief to help ensure the appropriate transaction of organisational business, audit staff are frequently concerned with system specific issues, such as policy, procedures, back-up processes and data security. You may find that legal and audit staff share many of your concerns and may be key staff who can help you achieve the goals you have set. Legal and audit staff may also be interested in any reports you generate and recommendations you make.

If you have no internal legal or audit staff, you can seek the advice of qualified legal or audit consultants, or view advice that your organisation has previously received from lawyers or auditors, to help you get a broader perspective on your project.

Tip: Remember the importance of communication

Try to include a number of people on your project team who have good communication skills and are able to sell your project.

Use business experts

The participation of business area experts and system users is vital to the design process, to ensure you develop a system that is useful and useable. Be sure to include relevant business area experts in your project team.

Tip: Follow guidance on establishing business partnerships

One of the products of an Indiana University project to evaluate the recordkeeping capacities of its business information systems is a paper by Philip Bantin, 'Strategies for developing partnerships in the management of electronic records'. It discusses how partnerships can and should be made with a range of stakeholders, including audit and IT staff.[5]

1.3.6 Implement change management strategies

You need to consider change management before your DIRKS project begins. If you are planning a large and complex project, you will need to encourage staff involvement. This involvement will provide you with the information you need to undertake your work and will also make users more accepting of the outcomes and products you deliver.

Remember to encourage change management throughout your DIRKS project, not just at its beginning and end. There are a number of ways you can encourage change management in your organisation.

Using 'champions' can help you to help promote your DIRKS project and its objectives in the workplace. A champion is a person who can explain and promote your project to colleagues and who can assist you by providing advice and other forms of guidance.

Champions could include:

- senior managers with broad responsibilities for the areas in which your work is taking place
- IT managers, or
- other staff with influence in the areas in which you are operating.

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[5] Philip Bantin, Indiana University Electronic Records Project, Phase II, 2000-2002, *Strategies for the Development of Partnerships in the Management of Electronic Records*. Accessed via the IndianaUniversity website on 14 February 2003 at:
http://www.libraries.iub.edu/index.php?pageId=3313

Establishing a committee within your organisation to help guide your DIRKS project and provide ongoing feedback and promotion can be useful.

There may also be existing committee structures that you can leverage for this purpose. If you have hired consultants to undertake your DIRKS project, you could arrange regular committee meetings at which the consultants can report upon their progress and obtain feedback from a range of staff.

Another option is to form an information management committee.

Information Management Committee:

Objectives	a forum for: • progressing and gaining consensus for your DIRKS project • promoting an understanding of the technical and other detailed issues associated with the project • maintaining an awareness of related developments in your organisation • obtaining knowledge of organisational requirements and practices
Membership	• comprised of key representatives from your organisation who have an interest in improving information resources • business unit managers in areas affected by your DIRKS project • senior managers, if possible, to assist with decision making and resource allocation
Meetings	• should meet regularly (say every four to six weeks) to provide you with the advice and guidance you need.

User involvement in your DIRKS project increases the likelihood that the system you develop will be successfully implemented. Users should therefore be consulted throughout about their requirements and asked to test solutions developed as an ongoing part of your system development work.

Example: Ways of communicating with users

One organisation needed to develop a new recordkeeping system to support the needs of a broad business area. They did the following as means to inform staff of the changes they wished to make and to encourage feedback:

• established a user group comprised of representatives from each business unit to feed ideas from other staff into the development and implementation process for their new system
• created an information management steering committee which included senior management and staff with a vested interest in the project such as IT staff
• held briefing sessions for general staff at the commencement of the project
• held monthly updates for general staff and more detailed talks for particular groups
• provided continuously updated information material on the corporate intranet, and issued monthly e-mail bulletins.

Build your work on prior experiences

Talk to people both within your organisation and beyond it who have undertaken similar projects. See what knowledge and experiences you can use or draw from. Ask people to

summarise some of the lessons they have learned in the course of project development and implementation. Even very simple comments or reflections may provide you with useful guidance for your project. For example, in summarising a recent major system implementation at the Australian War Memorial the following points were noted:

'Lessons learnt along the way include the desirability of securing support from all technical staff, a willingness to experiment, knowing that perfection may not be achieved immediately, and a leap of faith in the future of…technology.[6]'

Building on prior knowledge will save you from 'reinventing the wheel' and may help foster relationships that will be of mutual benefit throughout your DIRKS project. Talking to people about previous experiences may also guide you towards a range of documentation or other resources that will be of benefit to your project. It will also help you to avoid mistakes that others may have made before you.

To facilitate discussion and share experiences, State Records has developed a DIRKS discussion page on its website, where people from a range of jurisdictions can post details about their DIRKS project. By posting issues or requests for information, it is hoped that this site will facilitate knowledge sharing about the actual implementation of a range of DIRKS projects.

In addition, if you have examples of completed information or innovative approaches these can be made available through the Tools and tips to improve recordkeeping practices page.

Irrespective of whether your DIRKS project is led by internal staff or consultants, it will require the involvement and commitment of a large number of people. It is important at the outset to explain the objectives of your DIRKS project to these people, as a means of outlining what the project means and what it will require of them.

Explaining your project and its goals clearly and early will help people to understand its objectives and will encourage them to be more willing to commit their time and expertise to it when you:

- ask to interview them
- require them to review some documentation
- ask them to be part of a focus group, or
- present them with a brand new system.

Early involvement of a range of staff will help to initiate the process of change management in your organisation.

Tip: Communicate widely

Try to talk to as many staff as you can about your project. The more people who are aware of it at the outset, the better. More information will be available to you and people will be more willing to participate if they already know about your project and its benefits. You will also save a lot of time and effort during the course of your project if you do not have to constantly repeat your project brief and a statement of its benefits each time you want to seek the advice of someone new.

You can tell people about your project:

- in newsletters

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[6] Carmel McInerny, 'Implementation of Encoded Archival Description at the Australian War Memorial: A Case Study', *Archives and Manuscripts*, Volume 30 Number 2, November 2002, 72.

- at staff meetings

- via an email circular or

in special meetings you convene to tell people about your project and the types of contributions you would like them to make.

Be aware that you may upset some people

Depending on the scale and type of your DIRKS project, be aware that when you are developing your project team and consulting people about your project, you may be seen as 'treading on toes' or as interfering in another manager's business domain. You may also be seen as pushing the boundaries of records management, and invading another staff member's turf. You may find that you need to convince managers why you can or should examine and redesign 'their' work processes or 'their' systems.

Records management cuts across your organisation and so proposed changes to it, particularly radical ones, can inspire this reaction.

To try and avoid such confrontations:

- talk openly and work collaboratively with people
- obtain senior management support for your project, as this will help to convince others of its value
- repeat your message and your goals and work with people, rather than against them in order to initiate the types of changes you desire
- use a range of other change management techniques to encourage support for your project and to enable the best organisational outcome

Be aware that not all your DIRKS initiatives may encounter such resistance, but it is important to deal appropriately with such confrontations should they occur.

2.   Doing a DIRKS project

You can use this manual to achieve a range of specific organisational outcomes. This section contains information on how the DIRKS methodology can be applied to achieve these specific goals.

Tip: Applying the information in this section

Each of these summaries is intended to provide you with an overview of how this manual can help you to achieve a specific outcome. If you wish to achieve one of these outcomes, it is recommended that you read the summary in conjunction with the relevant steps of the DIRKS methodology that are referenced in the summary.

2.1   Develop new systems with adequate recordkeeping functionality

2.1.1 New business systems

Organisations frequently purchase or develop new business systems to help the transaction of business.

Frequently these business systems are ad hoc creations, developed to meet a specific business need, without a full understanding of the recordkeeping and management requirements that surround the crucial business data generated by these systems.

Any system which conducts organisational business activities from which you require evidence of its operations needs to be a recordkeeping system. A recordkeeping system is one which is able to create, maintain and produce accountable and useable records of its operations. The vast majority of business systems should be recordkeeping systems but unfortunately for business accountability and performance, they are not.

American consultant Rick Barry at the 2002 Records Management Association of Australia conference made this point, stating that organisations possess many record making systems, but only a very small proportion of these systems are actually recordkeeping systems.[7]

Consequently, the records made within these systems are generally inaccessible, vulnerable, inappropriately destroyed or impossible to authenticate because the systems are not configured to adequately manage them for as long as they are required. Through not possessing adequate recordkeeping systems, organisations are therefore placing themselves at significant risk.

It is important to ensure any new business system your organisation purchases or develops is able to meet your recordkeeping needs.

Working through the DIRKS methodology is a means to ensure new systems are able to be developed with the functionality they need to work efficiently in your organisation.

Tip: DIRKS can be scalable

When considering or developing new business systems, remember that DIRKS can be a scalable process. If implementing new business systems, there are a number of options available to you:

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[7] Rick Barry, 'Transacting E-business - Is RM being passed by?', Keynote presentation at Records Management Association of Australia 2002 National Convention, 17 September 2002, accessible via http://www.mybestdocs.com/barrry-r-rmaa02-ebus-rm-3.htm (as at 20 January 2003)

- If your organisation is considering the purchase or development of a new system, you may want to just do Steps A-C of the methodology so that you can get a good understanding of your recordkeeping needs and build these into your system tender documentation or design specification.
- If new business systems have already been purchased, you may want to undertake all steps of the methodology, to understand what recordkeeping requirements the system needs to meet, and then to develop strategies to alter the new system so that it is able to meet these requirements.
- Alternatively, you can undertake all steps of the methodology to develop firstly a full understanding of the recordkeeping requirements the system needs to support, and then use the latter steps of the methodology to work through the actual development and implementation of the system. The guidance below supports this approach, but it can be tailored to accommodate any system development project.

2.1.2 Identifying your recordkeeping requirements

Undertaking Steps A-C of the DIRKS methodology can help you to identify the types of recordkeeping requirements your organisation needs to consider in the design and implementation of its new business system.

Step A: Preliminary investigation

Step A is an opportunity to look at your organisation broadly to see its goals, how business is performed, who performs it and the reasons why it is performed. In this step risks, stakeholders and other factors that impact on the way business is performed are also examined. Therefore, this step is extremely valuable for designing new systems, as you are able to see the context in which the system needs to operate and what factors will impinge on its operation. This understanding will be refined during subsequent steps.

Step B: Analysis of business activity

In doing Step B you will learn more about the specific business processes that your system will be required to support. You will also identify the records that are currently generated in the transaction of this business.

Step C: Identification of recordkeeping requirements

In Step C you look at the recordkeeping requirements that apply to the area of business you are assessing, that is, the area of business your new system will support.

This assessment enables you to identify the records your system will need to keep to meet regulatory requirements, your business needs and to meet any community expectations that apply to this area of business.

Step C analysis also involves an assessment of the organisation's exposure to risk.

2.1.3 Improving system design and implementation

Doing Steps A-C will help you to know what your system should be capable of.

Steps D-G of the DIRKS methodology can help you to develop further understanding of what your new system should be capable of by focussing on your existing systems, and learning from the problems associated with these.

These steps will also help you to identify and develop all components of your system - policy, procedure, personnel, tools and technology. They will also guide you through the implementation of your new business system.

Step D: Assessment of existing systems

Step D will provide you with a good understanding of your current business practices and the problems these may cause. If you are developing a system to completely replace an existing solution, be sure to study the existing system and identify all the positive and negative aspects of its operation. This assessment will provide important context for the development of your new system.

Your Step D research will not need to be as detailed as if you were seeking to redevelop the existing system, but you should include some examination of current practices to make sure you do not build existing mistakes into your new system.

Step E: Identification of strategies for recordkeeping

Step E will involve you looking at the functionality you require, and determining the best way this can be implemented within your organisation. You may have a range of requirements you need to meet - in Step E you can identify a combination of strategies, from the development of a policy, to the design of technical components, through to the implementation of training programs, to ensure your system is effective and make sure it is understood.

Certain strategies may best suit your objectives, budget and organisation and Step E will help you to determine what these are.

Step F: Design of a recordkeeping system

If you are seeking to develop a new recordkeeping system, Step F is where you actually develop its component parts. Based on the knowledge of organisational requirements and previous mistakes that you have learned about through the course of your DIRKS analysis, you will begin to develop all aspects of your system and incorporate any recordkeeping tools you have developed in the course of your DIRKS project.

Step G: Implementation of a recordkeeping system

A project to develop new systems will impact greatly on the day-to-day work of staff members. Its success also relies greatly on staff acceptance of the system. Therefore, it is essential to perform Step G. The change management mechanisms recommended in Introducing DIRKS and the promotional strategies recommended in Step G may contain useful suggestions to assist in your implementation. You will need to consider conversion strategies to move from the old to the new system, and what effect this will have on operations.

2.1.4 Reviewing your new business system

Step H: Post implementation review

Step H is an opportunity to measure how the implementation of new business system changes has fared and whether the system meets the expectations that were outlined in project planning.

Post implementation review also provides the opportunity to take corrective action regarding faults detected in the system, which will help to protect your investment of resources.

Further information

System development and implementation is referenced throughout the DIRKS Manual, so read the manual for more guidance.

2.2 Ensure the creation and capture of records

2.2.1 The creation and capture of records

You may embark on a DIRKS project with the aim of ensuring the creation and capture of appropriate records to meet your business needs, regulatory requirements and what the community expects of you. This involves:

- identifying what records your organisation is required to create and capture
- ensuring that your systems, including people, policy, procedures, tools and software, support this creation and capture.

2.2.2 Identifying what your organisation should create and capture

Steps A-C of the DIRKS methodology enable you to define what records your organisation is required to create and capture.

Step A: Preliminary investigation

To understand what requirements your organisation has for creating and capturing records you will need to undertake an assessment of the business performed. This analysis begins in Step A where you examine sources to learn about the broad context of the organisation.

If you are intending to concentrate on one function or business unit at a time, you should still broadly analyse your business in Step A but you can start to focus more on those sources that relate to the function or business unit.

Tip: Use general retention and disposal authorities where relevant

If you want to examine the creation requirements that apply to general administrative functions in your organisation, such as personnel management or financial management, you could start by examining the general retention and disposal authorities issued by State Records. These tools, which have been based on a broad assessment of recordkeeping requirements, indicate the range of records that could be created to document the transaction of general administrative functions.

The general disposal authorities will give you an idea of records that should be created. Sometimes however requirements for the creation and capture of records will specify that records should be created in a particular form or that specific access restrictions should apply to a certain class of records, etc. The general disposal authorities will not provide you with this information. If you believe that your business will be subject to this form of requirements, you will need to conduct specific research to provide you with this information.

Step B: Analysis of business activity

The functional analysis conducted in Step B and business classification scheme that results from this step are useful in a project to identify requirements for creating and capturing records, because they provide a workable structure for mapping the requirements to. However, you may decide, in the case of a business unit, to map only those requirements affecting the business unit. The sequential analysis in Step B gives you a much better understanding of current processes, current records creation and business needs for records creation.

Step C: Identification of recordkeeping requirement

Step C is essential to understanding your organisation's requirements for creating and capturing records as it enables you to understand what your recordkeeping requirements for evidence are. If you decide that the organisation should not meet particular requirements, due to costs or difficulties caused, you need to analyse the risks of not meeting the requirements. You will then come up with an agreed list of requirements which will demonstrate what records should be created and captured in the organisation. You should obtain the approval of senior management about this list.

2.2.3 Ensuring that your systems support creation and capture

Knowing what records your organisation is required to create and capture is important. However, you still need to ensure that these records are actually created and captured, and that your systems support these activities. Steps D-G of the DIRKS methodology can assist you in:

- understanding whether your existing systems enable your creation and capture requirements to be met
- deciding on the strategies required to ensure that your creation and capture requirements are met
- designing or redesigning software and necessary system tools to support the creation and capture of these records, and
- implementing these strategies effectively in your organisation.

Step D: Assessment of existing systems

Step D enables you to assess your current systems, to determine whether they are enabling your creation and capture requirements to be met. From this assessment you can see if systems need to be designed or redesigned to ensure that all appropriate documentation of business activity is being undertaken.

Step E: Identification of strategies for recordkeeping

Step E involves you determining the best combination of strategies - policy, design, standards or implementation - that will enable your creation and capture requirements to be effectively implemented and followed across your organisation.

Example: The policy strategy

You may decide to write a records management policy stating which positions have defined responsibilities for ensuring the creation and capture of records. Indeed Principle 2: Supported by Policy of the Standard on Records Management Programs recommends this strategy to support the creation and management of records.

Example: A relevant mix of strategies

You might decide in Step E that requirements for creation and capture should be integrated into workflow and procedure manuals for particular business units. You may also highlight individual responsibilities that need to be assigned and training that needs to be conducted to ensure that the creation and capture rules are followed.

Step F: Design of a recordkeeping system

In Step F you can actually design or write the strategies chosen in Step E. Your system redesign work will focus on incorporating creation and capture tools into your systems and will build upon the strategies you outlined in Step E.

Step G: Implementation of a recordkeeping system

In Step G you need to implement the strategies so that they have effective uptake.

Example: Implementation drawing on Step F

You can issue the procedures or documentation designed in Step F and train staff in how to use the procedures to create and capture the necessary records.

2.2.4 Reviewing strategies for records creation and capture

Step H: Post implementation review

Creation and capture requirements and system support should be reviewed (Step H):

- when new business processes or needs are evident
- when there is a major change (for example, a change in functional responsibilities or new legislation)
- on roughly a 5 year cycle to account for changes.

2.3 Manage record access and security

2.3.1 Records access and security

Recordkeeping systems should provide timely and efficient access to, and retrieval of, records. Systems should also include and apply security controls on access to ensure the integrity of records is not compromised.

Having an effective access and security program in place will help to ensure that records:

- are available, when appropriate, for use
- are not subject to unauthorised use
- cannot be altered, and
- cannot be inappropriately destroyed.

Doing DIRKS to manage record security and access could involve:

- identifying access and security requirements that relate to specific business activities and/or business units
- allocating the appropriate classifications or access rules to records
- incorporating requirements in a suitable, responsible and compliant way in recordkeeping systems, and
- monitoring decreasing sensitivities and changing requirements in systems over time.

Tip: Don't be over prescriptive

Access to records should only be restricted when there is a business need or when restricted access is required by law. Staff of your organisation needs access to records - try to facilitate this wherever possible.

Ideally record access and security should be defined and implemented across your whole organisation. Such a project could be implemented in stages, so you could examine your organisation's access and security requirements by unit or function. Priority should be given to areas where you have identified higher risks for unauthorised disclosure.

2.3.2 Identifying records access and security requirements

Undertaking Steps A-C of the DIRKS methodology can help you to identify the types of requirements your organisation has concerning record access and security.

Step A: Preliminary investigation

Step A will provide you with a broad overview of the requirements relating to access and security that your organisation is subject to. In Step A you should identify:

- what existing rules for access and security operate in your organisation
- the access and security rules contained in:
- government-wide and industry-wide legislation
- policies and codes of practice, and
- specific regulatory sources for your organisation.

Example:

Your Step A analysis may reveal that your organisation needs to implement an access and security program in order to protect:

- personal information, according to the requirements of the Privacy and Personal Information Protection Act 1998
- the commercial confidentiality of some of the business operations you conduct, and
- the physical security of your organisation's premises.

Your Step A analysis should reveal the need to comply with public rights of access to your records contained in:

- State Records Act 1998
- Government Information (Public Access) Act 2009, and
- Privacy and Personal Information Protection Act 1998.

Your development of access and security frameworks will need to take these requirements for both security and accessibility into account.

The sources you examine in Step A will also help you to understand what business is performed in your organisation, how and why it is performed and who is involved. This is important knowledge if you wish to establish better access and security frameworks. Risks and stakeholders are also examined in Step A and both of these may impact on your decision making about access and security requirements.

Tip: Security and access classification is a risk based decision - use your awareness of the risks faced by different areas of your business to prioritise how and where you need to most securely manage your organisational information.

When your focus is on one business function or unit

Even if you are intending to develop access and security regimes for one function or business unit at a time, you should still broadly analyse your organisation and its operations

in Step A. You can then start to concentrate on those areas that relate to access and security in the particular function or business unit you have identified as a priority.

Legacy records

Remember you may also have legacy records that will require access decisions, so you may need to do some research into the history of your organisation or the particular function or area of business in Step A, and build up a base of knowledge about the sensitivities that may have been involved in your organisation's past business activities.

Step B: Analysis of business activity

In Step B you learn about business processes and practices at a more detailed level, and identify the records that are generated from them. This assessment will help you to understand:

- which records require access and security management, and
- where the risks in relation to access and security management lie.

A key product of Step B is a business classification scheme. This is a tool that maps the business your organisation performs, by identifying the functions, activities and transactions that comprise your business operations. Your access and security requirements can be mapped to this framework to help you identify and manage these requirements.

When your focus is on one business function or unit

If you are developing access and security regimes for one business unit or function at a time, you should still look at this analysis broadly, and at least map a preliminary classification scheme before concentrating your attention on one particular area.

Step C: Identification of recordkeeping requirements

In Step C you will need to identify all of the recordkeeping requirements - requirements contained in legislation, best practice requirements or community expectations - that relate to giving or restricting access. The regulatory environment for the government and industry in which your organisation operates will establish broad principles on access rights, conditions and restrictions. There may also be specific requirements for the organisation.

If you have completed Step A: Preliminary investigation, this will involve examining in closer detail many of the sources already identified. In Step C you need to consider and assess the risks of not meeting the requirements and ideally you should map these back to your functions and activities (in the business classification scheme if you have completed Step B: Analysis of business activity) to understand the business context in which the requirement applies.

At the end of Step C you will have identified the range of specific requirements that govern access and security in the area or areas you are assessing. You can then start translating these into specific decisions concerning record accessibility or restriction that you want to implement in your recordkeeping system.

Tip: Discuss your recommendations with colleagues

Do not forget to discuss the access and security decisions you come up with in Step C with your colleagues, particularly those in the business areas that will be affected by your decisions.

2.3.3 Ensuring that your recordkeeping systems support access and security

Doing Steps A-C of DIRKS helps you to understand what your organisation's requirements relating to access and security. Steps D-G of the DIRKS methodology can help you to apply this knowledge. These steps of the methodology can help you to:

- determine whether your existing systems enable your access and security requirements to be met
- employ a range of strategies to identify how you can better meet your access and security requirements
- undertake system design work where necessary, to help you meet your access and security requirements, and
- implement access and security requirements effectively across your organisation.

Step D: Assessment of existing systems

In Step D you examine your existing systems to determine whether they are able to meet the access and security requirements you want to establish.

In your Step D assessments you could determine whether systems:

- employ appropriate metadata that clearly labels records that require restriction
- capture audit trails that document when, how and by whom records have been accessed
- have the capacity to restrict the access to certain records
- have security policies and procedures that explain how particular records need to be managed
- are supported by training programs which educate staff about security management
- have documented business rules which specify which records, or classes of records, need to be protected, and
- are regularly updated to reflect changes in staff and their responsibilities.

This assessment will enable you to determine whether systems need to be designed or redesigned to enable you to implement your access and security requirements.

the requirements of the Privacy and Personal Information Protection Act and the security controls you have specified, and

- personal information is destroyed using appropriate and authorised disposal authorities by the service provider.

In Step D, you should assess whether the systems your service provider is using meet your security requirements.

You should include in your contract a range of penalties that a contractor will be subject to if they breach the access and security requirements you have included in your contract.

Step E: Identification of strategies for recordkeeping

In Step E you decide how to rectify any business information systems that are not adequately managing your access and security needs. In this step you come up with broad ideas for what you want to achieve and how you want to do it. Step E recommends four strategies for turning business information systems into recordkeeping systems:

- policy
- design
- standards, and
- implementation

You can use these strategies individually or in combination to help ensure the effective implementation of your access and security program. The most effective solution is likely to come from a combination of strategies.

Example:

In Step E you may decide that for your high risk records, you will design a technical component of your system that does not enable staff members to see the file titles of records they do not have authority to access, as well as the records themselves (a design tactic). You may also decide to introduce an access policy (policy tactic) and a briefing session on responsibilities and rights of access (implementation tactic) to clearly explain security requirements to staff. In combination you are satisfied that this range of tactics will enable your security requirements to be addressed.

If you are seeking to introduce access and security classification schemes across a range of organisational systems, you may have to decide upon slightly different approaches in each system, depending on the records they administer and their:

- size
- role
- technical infrastructure, and
- user requirements.

Step F: Design of a recordkeeping system

In Step F you design solutions, based on the strategies you developed in Step E: Identification of strategies for recordkeeping, that will enable you to meet your access and security requirements. That is, in Step F you:

- draft policies
- develop technical components of systems to enable you to control access
- develop training programs, and
- draft business rules etc.

> **Example:**
>
> If provision of access to records to members of the public has been identified as an area you need to address, you may want to issue a public policy on this point.
>
> See the Department of Corrective Services policy on public access as an example.

> **Example:**
>
> If you have adopted the design tactic, in Step F you could develop an application which enables your records management software to inherit the logins and consequent security controls that govern access to your IT systems. This will ensure consistent control is exercised across your organisation and will save significant duplication of effort.

> **Example:**
>
> If you have adopted the design tactic, you could develop a means to issue a message to all staff at login, that reminds them of their obligations in relation to information security.

> **Example:**
>
> If you have decided to adopt the implementation tactic, you will focus on improving the way systems operate in order to improve record security. You may therefore decide to put a lock on the file room door, or move records staff so that they are adjacent to records storage areas to better monitor the security of these areas. Alternatively you could restrict access to the technical components of systems to the staff who have a requirement to use this system as a part of their business activities.

> **Example:**
>
> If provision of access to records to members of the public has been identified as an area you need to address, you may want to issue a public policy on this point.
>
> See the Department of Corrective Services policy on public access as an example.

> **Example:**
>
> If you have adopted the policy tactic, you draft a policy that specifies the different levels of security that operate across the business areas in your organisation. You also draft business rules that specify how and by whom security is to be managed across the range of your organisational business systems. You then implement procedures that require IT staff to update system user permissions as soon as staff leave or arrive in the organisation.

> **Example:**
>
> If you have adopted the design tactic, in Step F you could develop an application which enables your records management software to inherit the logins and consequent security

controls that govern access to your IT systems. This will ensure consistent control is exercised across your organisation and will save significant duplication of effort.

Example:

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Example:

If you have decided to adopt the implementation tactic, you will focus on improving the way systems operate in order to improve record security. You may therefore decide to put a lock on the file room door, or move records staff so that they are adjacent to records storage areas to better monitor the security of these areas. Alternatively you could restrict access to the technical components of systems to the staff who have a requirement to use this system as a part of their business activities.

Example:

If you have decided to adopt the implementation tactic, in Step F you will develop training programs to educate your staff about security issues. You may decide to develop an induction training program that informs new staff about privacy and other considerations they need to remember in their day to day business activities.

Step G: Implementation of a recordkeeping system

In Step G you implement the range of access and security solutions you have developed. When implementing this step you:

- provide staff with the policy and business rules you've developed
- present training courses and answer staff questions about security issues, and
- train staff in system use, if the security controls you've implemented have made a significant difference to system operations.

Example:

Further examples of the implementation tactic include:

- requiring all new staff to sign a form acknowledging their understanding of obligations concerning the disclosure of information and protection of private information
- providing an update of security issues at monthly staff meetings
- conducting an annual refresher course on security issues and responsibilities.

Be aware that if the implementation of your access and security requirements is poor, staff and others may gain access to restricted records, which could breach the Privacy and Personal Information Protection Act 1998 or other legislation. Breaches could result in high financial costs and public embarrassment.

Therefore, be sure to devote adequate resources that enable your access and security requirements to be met.

2.3.4 Reviewing strategies for records access and security

Step H: Post implementation review

Don't forget that an important part of access and security programs is to monitor security and access and to update your schemes on a regular basis. In Step H you monitor access and security regimes to ensure they continue to be based on your broad and specific recordkeeping requirements.

Any breaches to security should be used to initiate or inform your monitoring and revision process.

Further information

Further information about determining access requirements for records over 30 years old under the State Records Act 1998 is provided in:

- Attorney General's Guidelines on Making Access Directions
- State Records' Procedures for Making Access Directions

Further information about privacy provisions can be obtained from the Information and Privacy Commissioner.

Information on security can be derived from sources Department of Finance and Services Resources page.

International Standard ISO 17799, Information Security Management and its Australian compliance standard, AS 7799.2 available for purchase from Standards Australia.

These sources should be read in conjunction with the steps of the DIRKS methodology and the advice given above.

2.4   Ensure records are created and kept when business processes and systems are reengineered

Many organisations are committed to the philosophy of continuous improvement. This involves continually assessing and reassessing not only the outcomes of business processes but also the processes and systems themselves to see what improvements can be made to streamline and improve methods.

The DIRKS methodology is particularly valuable in assessing how recordkeeping can be built into redesigned business processes and for redesigning business systems to ensure they meet all your recordkeeping needs.

2.4.1 Identifying your recordkeeping requirements

Undertaking Steps A-C of the DIRKS methodology can help you to identify the types of recordkeeping requirements your organisation needs to consider when it is reviewing its business processes and systems.

Step A: Preliminary investigation

Step A is an opportunity to look at your organisation broadly to see its goals, how business is performed, who performs it and the reasons why it is performed. In this step risks, stakeholders and other factors that impact on the way business is performed are also examined. Therefore, this step is extremely valuable for business process or system review, as you are able to see the context in which processes and systems operate. This understanding will be refined during subsequent steps.

If you need to only analyse processes or systems for one function or business unit, it is good to start with (or obtain) a broad idea of your organisation's goals and business in Step A so you have a clear idea of your organisation's roles, requirements and operations. If there are blurry lines between business activities or areas, or if the systems or processes you are assessing cross between business areas, you will need to ensure your preliminary investigation covers all relevant areas. However, once you have a handle on the broader issues you can start to concentrate on the area of concern.

Example:

One local government authority was undertaking DIRKS analysis to assist in the design and implementation of an appropriate recordkeeping system for the transaction of the council's human resources function. The project team already had a good understanding of the organisation, and disposal coverage for this area but they still conducted some broad research in Step A to look at how the function interacted with other functions. Then they focussed their examination on:

- legislation that governs the operation of the personnel function in local government
- privacy management issues
- a broad identification of how personnel management is conducted across the council, not just in the Human Resources Unit
- stakeholders who should be consulted about the review, including business unit managers, each of whom has some personnel related responsibilities
- court cases involving personnel management which the council has previously been involved with.

Step B: Analysis of business activity

Step B is an opportunity to look in much greater detail at the functions, activities, transactions and business processes performed which will provide you with a useful basis for other decisions regarding improving business processes and systems. For example, the examination of business processes in Step B (particularly in the sequential analysis) can contribute to the identification of:

- existing inefficient or outdated work processes
- what records are currently created as part of work processes
- activities the organisation has a mandate to perform but are not carried out in practice and the reasons why they are not
- ways processes might be streamlined and documented in a standardised way (identified fully in Step E – Identification of strategies for recordkeeping), and
- risks with recordkeeping implications.

The scope of this analysis depends on the project goals. This information can be further defined in later steps of the DIRKS methodology allowing you to develop better business processes, design templates and standard procedures which integrate recordkeeping with the work tasks.

Step C: Identification of recordkeeping requirements

If you have undertaken process analysis in *Step B: Analysis of business activity* you will have a breakdown of your current activities and processes and some knowledge of the records captured as part of the performance of these. In *Step C* you look at what recordkeeping requirements the organisation is subject to - including records you need to keep to meet regulatory requirements, business needs and what the community expects of you. You also look at the risks of not meeting these requirements and devise a list of 'accepted' requirements, which can then be a benchmark for you to assess your business processes and systems against.

2.4.2 Improving business systems and processes

Doing Steps A-C and knowing the types of requirements that affect your business processes and systems is important.

Steps D-G of the DIRKS methodology can help you to apply this knowledge. These steps of the methodology can help you to:

- determine whether your existing systems enable your recordkeeping requirements to be met
- employ a range of strategies to ensure your business systems adequately support your recordkeeping requirements
- undertake system design work where necessary, to help you meet your recordkeeping requirements, and
- implement revised systems and processes effectively across your organisation.

Step D: Assessment of existing systems

If you are doing DIRKS to improve specific processes in your organisation, you need in Step D to target the system or systems that perform these processes. Remember to think broadly when looking for systems and do not only assess the systems you are aware of. Talk to other people who perform the process you are assessing and ask about the systems they use.

Some staff may have developed personal systems to control aspects of the business process, involving spreadsheets and their own personal procedures. Be sure to include any such systems and the records they create and generate in your assessment. Remember too that the systems performing your business process may not all be located within the one business unit. Make sure you include all business systems in your assessment, irrespective of their location.

If you have worked your way through the methodology and assessed your organisation in *Step A: Preliminary investigation* and done a detailed assessment of the business and how it should be conducted in *Step B: Analysis of business activity* and *Step C: Identification of recordkeeping requirements*, you will have a good idea of how systems should perform by the time you reach Step D. Use all this knowledge you have gained as a means to assess the effectiveness of the systems that are currently in operation.

Tip: Be comprehensive in your system assessment

If you are assessing the way a specific function is transacted or examining all business systems in your organisation, you need to be comprehensive in your assessment and make sure all appropriate business systems are examined.

Systems can be rapidly developed in ad hoc ways. Automated systems and processes can evolve rapidly across your organisation. You therefore need to be vigorous when looking for systems as you may not be aware of all systems currently used to transact and document your business.

Questions to ask

Specific questions about systems that you may want to ask could include:

- does the system meet the specific business requirements that apply to it?
- is the system easy to use?
- do all appropriate staff have access to it?
- are all relevant business rules applied within it?
- is the system adequately maintained?
- do procedures explain how it should be maintained?

- can the system adequately manage the records it generates?

This range of questions will help you to determine the appropriateness of the systems your organisation currently uses to transact its business.

Assessing all organisational systems

If you are doing a full review of all systems in your organisation, you will need your Step D assessment to be comprehensive, but attainable. To help you achieve this, your Step D analysis can be rolled out gradually across your organisation. If you are doing a full scale DIRKS assessment, you may wish to undertake your system assessments incrementally and gain a thorough understanding of a business system and its strengths and weaknesses before you move onto the next system.

Alternatively, to keep your work manageable, you may want to use the knowledge you have gained in *Step B: Analysis of business activity* and *Step C: Identification of recordkeeping requirements* to help you prioritise aspects of your *Step D* analysis. If you've undertaken an assessment of business in Steps B and C and gained a broad organisational understanding as a result of *Step A: Preliminary investigation*, you will have all the information you need to undertake a risk assessment of your organisational business operations.

Doing such an assessment will allow you to identify those areas of your business that perform crucial or litigious functions, as well as those areas that are less subject to difficulties or legal investigation. You can then use this risk analysis to prioritise your system assessment.

You will need to ensure that all relevant systems are assessed, in the areas you have chosen to focus on. Talk to action officers and use your knowledge of business process. Use interviews to determine how action officers would like to see business done. Have a very good understanding of the specific recordkeeping requirements that apply to the business areas you are assessing.

See the section above on the assessment of specific business systems for an outline of some of the questions you may choose to ask when you are ready to conduct a specific system assessment.

Step E: Identification of strategies for recordkeeping

Step D: Assessment of existing systems enables you to determine how your organisational systems currently operate and to identify the problems that may result from standard operating procedures. In Step E you will utilise knowledge of existing practices, and the problems associated with these practices, to determine a range of strategies that will enable you to solve these problems.

Step E outlines four strategies - policy, design, standards and implementation. Working through this step will help you to choose the strategy or combination of strategies that will enable you to redress the inappropriate system performance identified in Step D. Once your choice of strategies has been identified, in *Step F: Design of a recordkeeping system* you will start to design solutions based on the strategies you have chosen, that will enable you to rectify the system flaws you've identified, and allow you to start to meet your recordkeeping requirements.

Step F: Design of a recordkeeping system

If you are undertaking DIRKS to improve business processes and systems, in Step F you will start to implement the recommendations you have been building during the course of your DIRKS analysis. In Step F you will design all components of your system bearing in mind all the lessons you have learned about how to improve your business processes through the incorporation of better recordkeeping.

Step G: Implementation of a recordkeeping system

A project to improve business processes or systems will impact greatly on the day-to-day work of staff members. Its success also relies greatly on staff acceptance of the changes. The change management mechanisms recommended in Introducing DIRKS and the promotional strategies recommended in Step G may contain useful suggestions to assist in your implementation.

If you are only looking at work process changes, you will need to consider how you are going to move from one way of conducting business processes to the new way, and what effect this will have on operations. If you are making changes to systems, conversion strategies are very important to consider.

2.4.3 Reviewing business systems and processes

Step H: Post implementation review

Step H is an opportunity to measure how the implementation of new business processes or system changes has fared and whether they meet expectations outlined in project planning. It also provides the opportunity to take corrective action regarding faults detected in the process or system.

Further information

Business process and system assessment is referenced throughout the DIRKS Manual (particularly in *Step B: Analysis of business activity*, *Step D: Assessment of existing systems, Step E: Identification of strategies for recordkeeping* and *Step F: Design of a recordkeeping system*), so read the manual for more guidance.

Other recommended sources include:

- AS 5090, Australian Technical Report: Work Process Analysis. This document is available for purchase from Standards Australia.
- Step 1 of A Methodology for Evaluating Existing Information Systems as Recordkeeping Systems from the Indiana University Electronic Records Project at http://www.libraries.iub.edu/index.php?pageId=3313

2.5 Specify and apply Metadata for Managing Records and Information

2.5.1 What is metadata for managing records and information?

Metadata for managing records and information is data that facilitates the use and management of records. Metadata can be a key means of improving your system and helping it to meet recordkeeping requirements.

Metadata for managing records and information is a tool that enables you to describe records, people and business activities in a suitable amount of detail to ensure:

- better information accessibility
- improved records management
- greater accountability in business operations.

Tip: Metadata can be scalable

With metadata, it is rarely one size fits all. You may require a range of metadata strategies to meet the needs of your business environment. Remember that a metadata strategy can cover a section or part of your organisation's business or the whole organisation. It can relate to one or more of your functions. Consider the disparate needs of your business areas, your variety of staff.

Metadata is a flexible tool. Be sure to implement it in a flexible manner.

2.5.2 DIRKS and metadata for managing records and information

The DIRKS Manual can be used to develop metadata strategies that meet your organisational needs, constraints and objectives and to implement these strategies in effective and accountable recordkeeping systems.

You may choose to do a specific DIRKS project that is focussed only on metadata implementation, but it is more likely that metadata will be considered as an integral aspect of broader DIRKS projects you undertake.

The steps below flag the various different points at which you may want to consider metadata and its implementation during your DIRKS project.

Identifying your metadata requirements

Undertaking Steps A, B and C of the DIRKS methodology can help you to identify the types of requirements your organisation has concerning metadata, or how metadata for managing records and information can be used to help you meet other requirements.

To understand your organisation's metadata needs, you will need to start by conducting some broad research into your organisation, how it operates and its broad technological framework. The sources in Step A will help you to understand what business is performed in the organisation, broad legal requirements affecting this business and the stakeholders that impact upon your business operations. It also tells you about risks and organisational information needs, some of which you can address through appropriate metadata implementation.

If you are intending to develop a metadata scheme for one function or business unit at a time, you should still broadly analyse your business in Step A to get an overview of operations, but you can start to concentrate more on those sources that relate to the particular function or business unit you wish to focus on.

In Step B you focus on your organisation's business activity and how this activity is performed. The analysis in Step B allows you to start defining:

- what areas of your business might require more detailed metadata than others
- the scope and content of metadata schemes
- the ways metadata might be used to meet business objectives

The business classification scheme, a key product of your Step B research, is a tool that can be used to populate certain values in your metadata scheme. Products created from the business classification scheme, such as a keyword thesaurus or a retention and disposal authority, can also be used to populate your metadata scheme.

In Step C you identify the recordkeeping requirements affecting your organisation. In relation to metadata, these requirements may be of two types:

- those that specify particular metadata requirements - such as 'name of complainant must be captured with every complaint received'. These types of requirements point to specific metadata elements that you should be able to provide within your systems.
- those that can be satisfied, completely or partially, through the use of metadata - such as 'licence applications must be retained for fifty years'. Metadata can be used to facilitate the management and appropriate disposal of records to help to ensure that they are retained for as long as required.

Compiling a list of the recordkeeping requirements affecting your organisation as a whole, or each specific business unit, will provide you with a means to develop a comprehensive metadata strategy for your organisation. It will identify how and where metadata should be applied to help you meet your business needs.

Tip: Talk to staff about their metadata requirements

Talking to action officers about their business needs and information requirements is a very useful way to identify recordkeeping requirements concerning metadata. Staff will know the types of information that will facilitate their jobs or enable them to access information better. Use this feedback to help identify the metadata that should be captured to support a range of business activities.

Example: Long term retention

Have you identified a requirement to keep business records for long periods of time? If your records are in electronic form, maintaining these records for the ten, twenty or fifty years that may be required by legislation or to meet business needs, can be a difficult process. In this situation, you could look at utilising metadata as a means of helping you to meet this requirement. You could use metadata to flag those records requiring ongoing migration or to initiate the types of preservation acts they require. Metadata could also be used to document any preservation activities performed upon the records as part of your ongoing accessibility strategy.

Improving metadata creation and management

Doing Steps A, B and C and knowing the types of requirements relating to metadata, or those that can be satisfied by using metadata, is important.

Steps D, E, F and G of the DIRKS methodology can help you to apply this knowledge. These steps of the methodology can help you to:

- determine whether your existing systems enable your metadata requirements to be met
- employ a range of strategies to ensure adequate metadata is made and managed to support your recordkeeping operations
- undertake system design work where necessary, to help you meet your metadata requirements
- implement metadata effectively across your organisation.

In Step D you assess the capacities of your existing systems to meet your recordkeeping requirements. Including metadata analysis in your Step D assessments is important to determine the efficacy of your current metadata capture and management and to establish whether this can be improved.

To assess the metadata in your business systems, you need to have a good understanding of how business is currently transacted in your organisation. What technology is used, how is it used? What are the rules and procedures that people are following? Have problems in interpreting or using records been identified that you can use metadata to rectify?

Within your business systems, it is important to know the metadata they contain and how this metadata is being managed.

Tip: How to identify metadata

You can identify the metadata captured within a system by examining the system itself, by reading system documentation, data dictionaries and data models. Staff using the system will also be able to provide you with an understanding of the types of data they create and manage about records in their daily business operations.

Example: Questions to ask about metadata capture

Some questions you may want to ask during your system assessment to determine whether your system's metadata creation and management is appropriate include:

- is disposal metadata captured to describe the retention periods applicable to the record/system?
- is access metadata captured to describe who can or cannot access the record/system?
- is record title information provided to facilitate searching?
- is it possible to determine who created a record?
- is it possible to determine the business transaction that generated the record?
- is an audit trail that documents when a record was accessed, registered, sentenced etc created?
- does each record have a unique identifier?
- is a record linked to its metadata or is the metadata maintained in a separate database?
- can the link between a record and its metadata be maintained through system migration?
- do system rules prevent metadata alteration or update?
- if metadata is maintained in paper form, can it be logically related to appropriate paper or electronic records?
- where relevant, can the system capture structural metadata, such as data and media format, compression methods, hardware and software dependencies and description of standards used?

Tip: Metadata can be stored at different levels

Depending on the type of system you are assessing, metadata may be captured to describe:

- individual records (such as a title or unique identifier for an individual record)
- groups of records (such as disposal rules applied at the file level), or
- systems (such as access rules applied to a whole personnel records database).

Each of these options can be appropriate, but you need to determine the levels and types of metadata that will work best to meet your recordkeeping requirements.

If, at the end of your *Step D: Assessment of existing systems*, you determine that your existing practices, systems and structures are currently not enabling you to create and manage the metadata you require, Steps E - G can help you to design or redesign systems and practices that enable you to generate and maintain the metadata you require to meet your business requirements.

Once you have determined what metadata you should be capturing and examined the capacities of your current systems, in *Step E: Identification of strategies for recordkeeping* you can examine the policy, design, standards and implementation tactics to determine the

combination of these strategies that will best enable you to implement your metadata strategy across your organisation.

Based on your assessments in *Step C: Identification of recordkeeping requirements* and *Step D: Assessment of existing systems* you may have determined that different systems in your organisation require different metadata solutions. You may therefore develop quite a mixed approach in *Step E: Identification of strategies for recordkeeping*, utilising policy and design based approaches, to ensure all the gaps you identified in *Step D: Assessment of existing systems* are able to be rectified.

Example: Develop different requirements for different areas of your business

In one business area that operates in a high risk environment you may decide that a system needs to be redesigned to enable more metadata capture and to potentially automate much of this capture.

In another business area where the technical infrastructure is adequate but metadata capture is poor, you may decide to implement the policy tactic and establish rules that specify exactly what metadata people need to capture about each of the business transactions they document.

Step F: Design of a recordkeeping system

If, in Step F, you decide to design technical components of your systems, metadata will be a key component of your system design work. If you are working with IT or systems staff to develop your technical components, you will find that they generally have a good understanding of metadata and will provide you with some good ideas about how it can be used to best affect within your systems.

Part of effective system design is determining how the metadata you will require is to be generated. There are numerous options open to you. Metadata can be:

- input by staff
- automatically captured by system as a part of business transactions
- automatically created by system according to rules established within it (such as sequential file numbering, automatic capture of audit log details, automatic attribution of disposal class according to classified title applied to file)
- drawn from recordkeeping tools such as disposal authorities, thesauri – it is very important to have such tools to help populate your metadata fields and automate records management activities
- derived from security classification scheme employed within your organisation
- obtained from IT system controls, inherited from logins etc
- taken from dates and times inherited from system clocks

Metadata can be stored in documents, databases, distributed systems, paper form – a range of different options – so consider that which is best for your needs and what works best with your existing technologies.

A range of other guidance about incorporating metadata in your recordkeeping system design is included in *Step F: Design of a recordkeeping system*.

Tip: Try to automate metadata capture

If you are designing your system to capture better metadata, try to automate your metadata capture as much as possible. Look at the business environment surrounding your system, the recordkeeping tools you have developed and data that is maintained in other systems. Try to see where you can automatically extract or derive data from, to

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save users from having to enter significant amounts of information.

If, in Step E: Identification of strategies for recordkeeping you decided not to develop technical components of systems (ie decided not to adopt the design tactic), in Step F you can design approaches using the policy and implementation tactics to help ensure that metadata is better made and managed in your organisation. For example you can develop:

- policy or procedural documentation that require staff capture adequate metadata and explain specifically how they achieve this, or
- training programs to show staff how to use existing technical applications and recordkeeping tools, such as disposal authorities or thesauri, to create adequate metadata within systems.

Tip: Be aware in your system design work that your organisation's metadata may need to evolve through time

The metadata your organisation creates should evolve and be added to through time. Be aware of this when designing metadata systems, or liaising with software vendors over system design. A static, fixed metadata description will only serve a limited number of business needs. If your organisation has strong accountability requirements, can an audit trail of record use be compiled and maintained about high risk records? If your systems automatically trigger record migration operations, can documentation of these operations be captured within the system?

Step G: Implementation of a recordkeeping system

In Step G, you implement your metadata strategies in your organisation. Depending on the nature of your metadata project, only a small amount of implementation work may be required. If you have designed your system so that your metadata capture is significantly automated, you will need to apply the new system, and inform staff of its new capacities.

If you are relying on staff to provide much of the metadata for you, you will need to implement a training program and/or the policies and guidelines you have developed to clearly inform staff about the metadata they will be required to capture and the ways in which they can do this.

Tip: Be aware of the training that may be required to support metadata implementation

Certain forms of metadata creation can be complex, so ensure your staff have the knowledge they need to accomplish this.

For example, if staff are expected to use recordkeeping tools, such as disposal authorities or thesauri, to create adequate metadata within systems, they may require specialised training. If accuracy is crucial to your work, special emphasis on the importance of clear, consistent metadata creation may also need to be made.

Reviewing your metadata

Ongoing monitoring and review of your metadata requirements is important to the success of your metadata strategy - Step H. You may want to assess how metadata is being captured, to ensure this is efficient, test the security of metadata or examine the capacity of metadata to be migrated through system change.

Liaison with staff is a key means by which you can determine the adequacy of your metadata capture and whether it needs to be improved to better meet your recordkeeping needs.

Further information

Metadata is referenced throughout the DIRKS Manual (particularly in Step D and Step F), so read the manual for more guidance.

2.6 Ensure records are kept of outsourced functions

2.6.1 What is outsourcing?

Outsourcing is making financial and other arrangements for other organisations to perform ongoing work on an organisation's behalf.

Many NSW public offices outsource common administrative or 'support' activities, such as printing, cleaning, payroll or the storage of semi-current records. Some public offices also outsource core business functions.

Example: Different forms of outsourcing

The Roads and Traffic Authority may outsource the building of bridges and roads, or a council may outsource its pest and weed control function. This type of outsourcing is most commonly done by Government in conjunction with private sector organisations.

Another form of outsourcing is to share common administrative functions such as human resources, information technology and finance, by organising sharing arrangements with other agencies, setting up an internal shared services unit within an agency, or using the Central Corporate Services Unit, of the Department of Public Works and Services. This type of outsourcing is usually always done within Government.

Why do DIRKS projects for functions that are to be outsourced?

The Chief Executive of a NSW public office that outsources is still ultimately responsible for ensuring that the records of the outsourced business are created, maintained and disposed of in accordance with the State Records Act (section 10).

Full and accurate records should be kept of all public office activities, including those that are outsourced (section 12 (1)) and all public offices must ensure the 'safe custody and proper preservation' and 'due return' of specified records of outsourced business (section 11). State Records' standards and guidance should still be followed in their management.

NSW public sector offices who outsource their services can use DIRKS to identify what recordkeeping requirements should be included in contracts and monitored over time to ensure that the provider of these services meet the obligations of the State Records Act 1998 on their behalf.

2.6.2 Identifying requirements that need to be meet in your outsourcing arrangements

Undertaking Steps A-C of the DIRKS methodology can help you to identify the types of requirements you will need to identify in your contractual arrangements for outsourcing.

Step A: Preliminary investigation

It is important to approach an outsourcing project with a good understanding of the regulatory framework that governs information and records management in NSW. This framework will establish the boundaries for your recordkeeping obligations as a NSW public office.

The main requirements you need to identify are described in Step C: Identification of recordkeeping requirements of the DIRKS methodology. However, you may choose to also conduct parts of the preliminary investigation in Step A so that you can understand the context of the function you are outsourcing; in particular, the risks associated with that function.

Step B: Analysis of business activity

Step B is about analysing your particular business functions, activities and processes, defining how they are performed and creating a business classification framework. This step is unnecessary if you already have an understanding of the function you are outsourcing and its boundaries with other functions and business processes.

Step C: Identification of recordkeeping requirements

Step C is critical to undertake in a project to outsource functions. You should identify all the recordkeeping requirements associated with the function in question and assess the risks of them not being met. You can then compile a list of recordkeeping requirements for the provider of the outsourced services and include it in the contract to ensure they meet their obligations.

Assessing systems for outsourced functions

To ensure your recordkeeping requirements will be adequately met, you may also wish to examine the business systems that will be used by your service provider.

Step D of the DIRKS methodology provide a mechanism by which you can assess these business systems against your recordkeeping requirements. You can use this information to feed further requirements into your contractual arrangements.

Step D: Assessment of existing systems

Undertaking Step D of the DIRKS methodology can enable you to assess the systems intended to support your outsourced activities. In Step D you can examine these systems - their technical infrastructure, procedural support and staff training - as a means to determine whether they are sufficient to support your business requirements. You can then use this step to set criteria or develop a checklist for the systems designed to support outsourced activity.

Alternatively, in Step D you can assess your organisational systems that currently perform the activities that are to be outsourced, and use the knowledge gained from this assessment to develop a checklist for the systems to be used by your service provider to manage your outsourced activity.

In either of these situations, based on an understanding of the recordkeeping requirements pertaining to the outsourced function you could develop a checklist to accompany the outsourcing arrangements that states the business systems supporting this function must be recordkeeping systems. Consequently they must:

- be sustained by policies and procedures that specify which records should be created and managed and how these records should be created and managed

- be supported by adequate training procedures to ensure staff performing outsourced functions understand their recordkeeping responsibilities
- implement recordkeeping tools, such as disposal authorities and classification schemes, that are appropriate to the business function
- support adequate metadata attribution and maintenance
- adequately manage disposal class attribution and maintenance
- restrict record access to appropriate users.

Further information

Comprehensive guidance about all other aspects of outsourcing arrangements is provided in State Records' guidelines, Accountable Outsourcing: Recordkeeping Considerations of Outsourcing NSW Government Business.

2.7   Select and Implement Off-The-Shelf Records Management Software Packages

2.7.1 What is an off-the-shelf records management software package?

An off-the-shelf records management software package is a piece of software that you can purchase to help you meet a number of your records management needs. They are pre-configured software systems that undertake a range of key records management activities such as registration, indexing, tracking and disposal. These software systems can generally interface with a range of other business applications. An off-the-shelf software package could be used:

- across your organisation
- across a range of business areas, or
- within a specific business unit.

The scope of this project can therefore be flexible, depending on your business needs and budget.

The DIRKS process can be used to establish the requirements you want your records management system to meet. It can then be used to establish the training and other strategies you need to effectively implement the software system across your organisation.

Tip: Off-the-shelf packages are not the ultimate solution

Remember, an off-the-shelf software package is not a complete solution to your organisation's records management issues. It can definitely help with the management of records and will improve the accessibility of organisational information. However these systems need to be supported by policies, procedures, training and recordkeeping tools, in order to be effective in your organisation.

Over time you should also consider the recordkeeping needs that your organisation may have in other business systems, particularly those that are not or cannot be connected to your records management software. Many function specific applications, such as personnel, financial or particular business applications will not be connected to your records management software. You need to make sure that adequate records are created and kept of the business transacted in these systems.

The DIRKS Manual can help you to develop adequate recordkeeping strategies in such systems. See also Doing DIRKS to develop new systems with adequate recordkeeping functionality for more guidance.

2.7.2 Identifying recordkeeping requirements that your software package should meet

Undertaking Steps A-C of the DIRKS methodology can help you to identify the types of requirements you will need your software package to satisfy.

Step A: Preliminary investigation

In Step A you should assess your organisation, or the specific area of your organisation where you wish to implement your records management software. You should examine:

- what business is performed?
- how is it performed?
- why is it performed?
- what risks are inherent in this business?
- what technical infrastructure is present?
- what compatibilities are required to integrate with this infrastructure?

Establishing this context will give you a good overview of the environment in which your software package will be implemented and will begin to give you an understanding of the functionality the package must possess.

Step B: Analysis of business activity

In Step B, you examine your organisational business activities more closely. You will particularly focus on the activities you want the software package to support, in order to gain a thorough understanding of these activities. As part of this assessment you may also want to determine:

- what records are generated in the course of business activity?
- who generates them?
- are they in different forms and formats?
- how are these records currently managed?

Understanding issues such as these is important to help you determine the specific functionality you need within your records management software.

Step C: Identification of recordkeeping requirements

In Step C you determine the recordkeeping requirements - requirements for evidence and information, or requirements for the management of information - that your organisation needs to meet. When you are looking at purchasing software, you need to ensure that the software you are considering is capable of meeting some or all of these requirements.

Example: Make sure systems can capture all your records

You may transact a lot of organisation business via your website and the online services it offers. Your organisation has a significant recordkeeping requirement to capture evidence of these online transactions. If looking at off-the-shelf packages, you need to ensure that they can capture records of these online transactions.

Recordkeeping requirements can be derived from law, business needs, business practices, community requirements or best practice standards your organisation may choose to meet. They can relate to a wide range of issues. For example, legislation can require that specific types of records are created, or it can specify that particular records must be managed in a specific way. Be sure to identify the full range of requirements that affects your organisation.

2.7.3 Assessing

Steps D-G of the DIRKS methodology can help you to assess existing systems and potential software packages to determine their ability to meet your needs. They can also guide you through the process of system configuration or design and system implementation.

Step D: Assessment of existing systems

In Step D you can:

- assess business information systems currently used in your organisation, and/or
- assess the software package or packages you are considering.

In either case, you would use your recordkeeping requirements as a benchmark.

You would assess your current systems if you wanted to identify problems that are experienced as a result of your current business systems. This may be useful background information for your purchase of a new system as it will identify a range of issues that you want to rectify. Your system evaluation process may also demonstrate that your current systems operate well and actually do not need replacement - staff just need a good training program to introduce them to the system's full functionality.

If purchasing an off-the-shelf package, it is very important to do a thorough assessment of the functionality of a number of different packages. Compare them to your recordkeeping requirements. Can they do all that will be expected of them? How do they compare in terms of price? What kind of post-implementation support is offered?

Tip: Liaising with software vendors

Compile a list of your recordkeeping requirements. You may choose to prioritise them and make some mandatory and others desirable. Give the list to the software vendor whose products you are considering and ask them to demonstrate how their product meets your specific requirements.

For example:

- if you have a legal requirement to maintain your licencing records for fifty years, ask the vendor to demonstrate the migration strategies they have built into the software application that will help maintain your records for the required fifty years.
- you are legally required to use authorised disposal authorities for the destruction of records. Can the packages you are considering implement and incorporate State Records' general retention and disposal authorities and your own functional retention and disposal authority?
- does the metadata contained in the package meet your business and accountability needs? Can it be reconfigured to do so?
- can the software package inherit metadata from your retention and disposal authority, business classification scheme, thesaurus and/or other metadata already present in the system?
- in your software package you don't generally want 'user defined fields'. You will require data fields that are appropriately designed, that integrate with the rest of the fields in the software package and that can automatically inherit values, rather than you having to manually enter all necessary metadata. Can the package accommodate this?
- can the software package incorporate and apply your thesaurus product? Can it create the necessary connections between your thesaurus and disposal authorities?
- can the application capture adequate information about people and workgroups, and can this data be used to enable or restrict record access where appropriate?
- can metadata or audit logs be kept after the record to which they relate has been

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destroyed?

Completing *Step D: Assessment of existing systems* and undertaking all these assessments should enable you to select an appropriate records management software package for your organisation.

Tip: Document your assessment and any undertakings

Be sure to fully document your recordkeeping requirements and your software assessment process. Document vendor responses to your questions, and any undertakings they have given you.

Step E: Identification of strategies for recordkeeping

Once you have chosen your records management package, you need to determine the best way to implement it. To do this you need to choose from the range of *Step E: Identification of strategies for recordkeeping* - policy, design, standards or implementation - to determine the approach that will work best in your organisation.

The research you undertook in *Step A: Preliminary investigation* and *Step B: Analysis of business activity* will help you significantly in this step. Be sure to consider your business environment, corporate culture and other issues when determining the mix of strategies that will work best in your organisation.

Example: Determine the right approach for you

You decide that the best way to ensure your recordkeeping requirements are met and all people are using the system appropriately, is to:

- put the software package on everyone's desktop
- interface between the software package and other common applications
- establish a policy which says all staff must capture appropriate records into the records management package
- develop basic guidance that says what 'appropriate records' are.

You decide on this approach in *Step E: Identification of strategies for recordkeeping*. In *Step F: Design of a recordkeeping system* you start developing these rules and interfaces.

Step F: Design of a recordkeeping system

In Step F you make your plans a reality. You liaise with IT to undertake any system changes or interfaces you require. You draft policies and guidelines and develop any training materials you would like to support your new system.

Step G: Implementation of a recordkeeping system

In Step G you unveil your new system and roll it out across your organisation. You may undertake a pilot program before making it available to all staff. You may choose a staggered implementation schedule or release it to all staff at once. In Step G you also make any policies, procedures or other rules available to staff, and undertake training programs if these are required.

2.7.4 Reviewing your software package

Step H: Post implementation review

In Step H you evaluate your software choice and implementation. Is it working effectively? Do staff know how to use it? Is it meeting all your requirements? Do the vendors need to come in and do any remedial work?

Tip: Remember to undertake a post-implementation review

Step H is a very important one if you are implementing off-the-shelf software packages.

Make sure everything is correct and working as it should before you give vendors the final payment and sign off. Try to include a period of official evaluation and any remedial work necessary in your contract with vendors, so that you can ensure that all your requirements have actually been met.

Further information

System assessment, development and implementation is referenced throughout the DIRKS Manual, so read the manual for more guidance.

2.8   Manage your vital records

2.8.1 What are vital records?

Vital records include records needed to:

- operate the organisation during a disaster
- re-establish the organisation's functions after a disaster, and
- establish and protect the rights and interest of the organisation and its employees, customers and stakeholders.

In effect, they are records that are essential to the organisation. Without them the organisation cannot establish, conduct or continue business effectively.

State Records has also released a Standard on Counter Disaster Strategies for Records and Recordkeeping Systems which is mandatory for the NSW public sector. For the purposes of that standard only, vital records are also seen to include:

- manuscript records of outstanding historical, cultural or symbolic importance
- records that have been identified in authorised disposal authorities as 'State archives'
- indexes and catalogues to these.

How are vital records managed?

Managing vital records involves:

- identifying and documenting vital records
- finding measures to protect them, and
- ensuring they are priorities for salvage in a disaster.

This management regime is effectively an 'insurance policy' against disruption to critical operations.[8] A vital records program is an essential component of a counter disaster program, which aims to prevent disasters or enable the organisation to attain business continuity or quick recovery.

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[8] National Archives and Records Administration, Vital Records and Disaster Mitigation and Recovery: An Instructional Guide, 1999.

Scope

Vital records may be found in any part of the organisation, and in records created in the course of administrative and core functions.

Example: Types of vital records

Client licensing records for a software firm may be considered vital because they establish the rights and interest of customers. Likewise, personnel records are vital because they protect the rights and interest of the organisation's employees.

Therefore vital records programs should be organisation-wide. However, some functions or business units may have particular risks associated with them so vital records programs may be implemented first in these areas.

2.8.2 Identifying your vital records

Steps A-C of the DIRKS methodology can be used in order to identify what records are vital.

Step A: Preliminary investigation

Step A provides a broad overview of the business of the organisation, who its stakeholders are and the business risk factors the organisation and particular business units may be subject to. This information provides a contextual basis for the vital records program.

Step B: Analysis of business activity

The main benefit of Step B for a vital records project is that you are able to understand your business and how it is documented in more detail. You can therefore start to identify which of the functions and activities performed are critical to the organisation in meeting its goals and strategies. You may then wish to prioritise these in planning for your vital records programs.

The records to support these functions may be identified during Step B interviews and will be considered in more detail in later steps. Through interviews you can directly discuss what staff and stakeholders believe are the functions and processes of most importance to the organisation.

Tip: Not all useful records are vital

It is common for staff and stakeholders to consider all the records they use to be vital to the organisation. You need to make it very clear to them that vital records are only those ones that are so essential to the organisation that it could not function without them.

Linking risks to the functions and activities you identify may highlight high risk areas with high consequences for the organisation if the information is lost.

Step C: Identification of recordkeeping requirements

The outcomes of Step C are critical if you are doing DIRKS in order to identify what records are vital to the organisation. The analysis of business and regulatory requirements and community expectations and the risk assessments performed in this step will help you to see

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what records are key to business operations and the consequences to your organisation of not meeting its requirements. This knowledge allows you to have a far better understanding of what is really vital to the organisation's survival and whether staff and stakeholder views on vital records are accurate. At this stage you should be able to produce a list of your organisation's vital records. You should have this signed by senior management.

2.8.3 Implementing strategies for managing your vital records

Knowing what vital records your organisation has is important. However, you still need to plan for how your organisation will manage and protect these records. Steps D-G of the DIRKS methodology can assist you in:

- understanding where vital records are stored and how they are currently being managed
- deciding on the strategies required to manage and protect these records further
- designing or redesigning the necessary components of your strategies for managing and protecting vital records, and
- implementing these strategies effectively in your organisation.

Step D: Assessment of existing systems

You can use Step D as a means to determine where vital records are stored and how vital records are currently managed in your organisation, and to identify means by which their management can be improved. You can examine existing systems and ask:

- what are the vital records managed within this system?
- how are vital records currently identified and managed within this system?
- is the current management of vital records within this system adequate?
- have disaster recovery plans been established for this system?
- do policy and procedure documentation adequately reflect vital records management requirements, including backup, copying or relocation requirements?
- are record storage arrangements appropriate? are there physical risks in storage areas or locations that can be mitigated or controlled?

If, after your Step D analysis, you determine that vital records are not adequately managed, you can implement Steps E-G of the methodology to improve your vital records management practices.

Step E: Identification of strategies for recordkeeping

In Step E you can use the knowledge gained from identifying vital records (Steps A-C) and assessing the systems in which they are managed (Step D), to develop a range of strategies that will enable your organisation to have better protection for its vital records. In this step you will determine which combination of the policy, design, standards and implementation strategies will allow your organisation to improve the identification and management of its vital records.

Example: A relevant mix of strategies

You may highlight the need to have regular risk assessments and a counter disaster plan to address actual and potential risks (requirements of the Standard on Counter Disaster Strategies for Records and Recordkeeping Systems). Staff training strategies will also need consideration. You may also decide on the range of strategies you will implement to protect vital records, such as backups or other forms of duplication.

Step F: Design of a recordkeeping system

In Step F you can design the strategies identified in Step E to ensure your organisation is better able to manage its vital records. It involves assessing each component of your systems to ensure that they will work in a coordinated way to ensure that vital records are identified and protected.

Example: Design elements of strategies

You might write the counter disaster plan, write or source the training courses, assign responsibilities and integrate them into position descriptions and procedures manuals and design how protection methods will work and when they need to be reviewed.

Step G: Implementation of a recordkeeping system

Step G - It is important that a vital records program be implemented effectively. To effectively protect these records in a disaster, staff need to be trained in their responsibilities and disaster teams in disaster management techniques involving the prioritisation of vital records. In addition, protection methods must be implemented appropriately.

2.8.4 Reviewing strategies for managing your vital records

Step H: Post implementation review

Step H - What is vital to the organisation will change over time, particular when new business processes are undertaken, or functional responsibilities change. You will need to work with organisational staff responsible for critical functions at regular intervals to continuously identify and update lists of vital records and you will also need to review protection methods and duplicates.

Further information

For more information about disaster management and vital records read the relevant steps of DIRKS and see State Records' Standard and Guidelines on Counter Disaster Strategies for Records and Recordkeeping Systems.

2.9   Create and implement a retention and disposal authority

2.9.1 What is a retention and disposal authority?

A retention and disposal authority is a formal instrument that identifies records, defines how long they can be kept and whether they should be destroyed or retained as State archives. State Records uses retention and disposal authorities to permit disposal of records under the State Records Act 1998.

General retention and disposal authorities

To facilitate the disposal of common administrative records and common records relating to core functions, State Records has approved a number of general retention and disposal authorities (GDAs).

Several of these general retention and disposal authorities are specific to a particular sector of government.

The full list of current general disposal authorities, arranged by the jurisdiction they apply to, can be accessed via the General retention and disposal authorities page.

Functional retention and disposal authorities

If you do not have disposal authorisation for your core records (those that document business unique to your organisation) you also need to develop a functional retention and disposal authority to ensure that these records are disposed of in accordance with legal requirements. Once this functional retention and disposal authority is in place, you can use it, in conjunction with the general retention and disposal authorities, to ensure that all of your records have adequate disposal coverage.

State Records has recently redeveloped its Procedures for Disposal Authorisation. These guidelines provide the step by step guidance required to help public offices prepare a functional retention and disposal authority for approval by State Records. They include specific guidance about the types of documentation you need to submit to State Records to support your retention and disposal authority.

Tip: Coverage of administrative functions

If you are doing DIRKS to develop a functional retention and disposal authority, you do not have to assess the requirements of the administrative functions your organisation performs, as the records from these functions are covered by the general retention and disposal authorities.

2.9.2 Developing a functional retention and disposal authority

The process of developing a disposal authority draws on activities covered in Steps A-C of the methodology, and part of Step D.

Tip: Consider the types of disposal documentation you require to meet State Records and your own requirements

Functional retention and disposal authorities are required to be prepared in a particular format in order to obtain disposal authorisation under the State Records Act. This format may not necessarily be the most appropriate for your own implementation purposes.

It is worth thinking up front about whether the format required for approval is best for conveying disposal requirements within your organisation and for ongoing management of disposal. It may be better during implementation to incorporate the authorised decisions into a records management software application and to convey disposal requirements through internal procedures and guidelines which are more user friendly. Before you begin, plan for how you intend to implement and maintain the disposal authority.

Step A: Preliminary investigation

To obtain disposal authorisation, you will need to undertake a comprehensive assessment of the business your organisation performs. The preliminary investigation will enable you to understand how and why business is performed in your organisation and the broad legal requirements to which your organisation is subject. You will also overview the risks faced by different areas of your business and gain an understanding of the stakeholders that have an influence on your business operations.

If you want disposal authorisation to be extended to legacy (old) records, you will need to do some research into the history of your organisation or the particular function or area of business in Step A, and build up a base of knowledge about past activities.

Step B: Analysis of business activity

Step B is an important step in developing a functional retention and disposal authority. You learn more about business processes and practices in this step, and the records that are generated from them. When business is analysed, you can create a framework of functions, activities and transactions, known as a business classification scheme, which forms the structural basis for your retention and disposal authority. All functions and activities referenced in the disposal authority must be adequately described.

Step C: Identification of recordkeeping requirements

Step C is a critical step in obtaining disposal authorisation. In this step you examine the particular business and regulatory requirements and community expectations that relate to your business. These requirements may indicate that records need to be created, captured, maintained, accessed in certain ways or disposed of after particular periods. They may also indicate the content that should be found in the records, their quality and form.

Collecting such information is essential so that you know what records the organisation is likely to create (and what they should be creating to meet their requirements). You can then identify suitable classes of records and determine appropriate retention periods and disposal actions for inclusion in your retention and disposal authority.

Step D: Assessment of existing systems

Step D - It is useful to do some assessment of existing recordkeeping systems when developing your retention and disposal authority. It allows you to see which systems document particular functions and activities, and also allows you to check that you have full disposal coverage for all of the records created or likely to be created by your organisation.

2.9.3 Implementing retention and disposal authorities

Steps D-G of the DIRKS methodology can assist you in:

- defining the implementation issues with the recordkeeping systems you already have
- deciding on the strategies required to implement retention and disposal authorities successfully
- designing or redesigning software and necessary system tools to support authorities, and
- implementing authorities effectively in your organisation.

Step D: Assessment of existing systems

Step D can assist you with implementation as it shows you how to assess your existing systems to determine how well they are able to incorporate your retention and disposal authorities and perform disposal actions.

Example: Assessing your system's capacity to administer disposal

Ask a range of questions that will enable you to assess your system's capacity to administer disposal, and administer disposal in a manner that is appropriate to your operational needs and business requirements:

- can the system apply disposal information to each record or class of records?
- in a database environment where all like records may have the same retention period, are business rules concerning disposal currently applied to govern management of the records as a whole?
- can disposal actions be automatically triggered?

- is the system capable of calculating disposal dates from relevant triggers?
- can system generated reminder messages about disposal be automatically sent to relevant staff members?
- can system users sentence records at creation?
- is disposal functionality restricted to records staff only?
- can retention and disposal authorities be loaded into business software or into separate records management software which has an interface to the business software?

If your current systems cannot provide the functionality you require in relation to disposal, this is a gap you will need to address in Steps E and F.

Remember to continue to think broadly in your system assessment, and just don't focus on the technical components of your system. You should also assess how well disposal is integrated into the system's policies, procedures and training programs. If disposal is not reflected in these components of your system, you may want to redress this in Steps E and F of the methodology.

Example: Integration with policies, procedures and training

You may want to ask:

- can all appropriate staff access retention and disposal authorities?
- do they know how to use them?
- are procedures in place to ensure that retention and disposal authorities are maintained and updated when required?

Once you have determined whether your systems are capable of meeting these requirements or not, you will be able to decide whether you need to undertake further steps of the DIRKS methodology to redesign your systems so that they can effectively implement the retention and disposal authorities.

Step E: Identification of strategies for recordkeeping

Step E involves assessing the best strategies for implementing retention and disposal authorities in your organisation. Based on a knowledge of your existing systems and practices, as well as your recordkeeping requirements, in Step E you can examine the policy, design, standards and implementation strategies to determine how best to implement retention and disposal authorities in your organisation.

Example: The policy strategy

If only one or two staff are going to perform disposal operations in your organisation, you may choose the policy strategy and choose to develop a strong framework of rules and guidance to help them perform their disposal operations.

Example: The design strategy

If you would like to automate disposal as much as possible, and facilitate the sentencing of records at their creation, you would adopt the design strategy and plan to build technical components of your system that better accommodate disposal and enable its automation.

Step F: Design of a recordkeeping system

Step F involves determining the best means to incorporate retention and disposal authorities into the design of your recordkeeping systems.

Depending on your previously identified requirements, to incorporate retention and disposal authorities in your system design you may need to:

- develop the technical components of systems so that they can incorporate retention and disposal authorities and utilise them in a manner that is appropriate to your needs and operations (design strategy)
- develop a training program to educate staff about the proper use of retention and disposal authorities (implementation strategy), and
- develop organisation-wide rules and guidance about how disposal operates in your organisation (policy strategy).

Example: Link disposal to files at creation

You may want to be able to link disposal decisions to files when they are created so that the system can send a message to the appropriate staff member when the file is ready for disposal. You will need to design or configure your system to be able to perform this.

Step G: Implementation of a recordkeeping system

Step G is the physical implementation of the strategies to ensure the retention and disposal authorities are successfully introduced. This includes ensuring that it is acceptable to business units. It also includes training and managing staff who are performing sentencing or carrying out disposal actions in these important tasks. Leaving these to untrained staff can leave your organisation exposed to significant risk.

2.9.4 Reviewing a retention and disposal authority

Step H: Post implementation review

Step H - If changes are required to functional retention and disposal authorities they must be submitted to State Records and authorised before the changes can be implemented. Implementation of disposal decisions that have not been authorised constitute an offence under the State Records Act 1998 and can incur penalties. Both changes in terms of updates and major reviews require authorisation and you should consult State Records before undertaking a review.

Functional retention and disposal authorities should be reviewed whenever there is a major change (for example, a change in functional responsibilities or new legislation). In addition, reviews of disposal authorities should be undertaken on at least a 5 year cycle to account for changes in recordkeeping requirements.

Implementation of disposal authorities should also be the focus of ongoing review, to ensure the effectiveness of organisational disposal operations.

Further information

For further information about developing functional retention and disposal authorities, see Procedures for Disposal Authorisation.

2.10 Create and implement a keyword thesaurus

2.10.1 What is a keyword thesaurus?

In records management, a thesaurus is a tool that supports the classification of records into aggregates, or groups of related records. It is a 'controlled language' tool that ensures terms are used consistently throughout a recordkeeping system.

A keyword thesaurus is a thesaurus that groups records according to the business function they document.

A keyword thesaurus can be used as a tool to:

- control record titling
- facilitate user access to records, and
- link records to records management instruments such as disposal authorities or access classification schemes to automate records management processes.

Structure

A keyword thesaurus is based on the functions and activities that the organisation performs. Therefore, a records management thesaurus is quite different from subject thesauri used by libraries.

Scope

Ideally a keyword thesaurus should cover the whole of your business. However, in some cases, it is possible to develop thesaurus terms for a particular business unit or a particular function. Our advice in this case, is to create a draft map of functions using Step A and B before you concentrate on one function or business unit. See Step B for more information.

Existing thesaurus products

There may already be existing keyword thesaurus products that cover some or all of your business. You should examine these as a preliminary step in a thesaurus project to ascertain whether they will suit your needs.

Example: Existing keyword thesaurus products

State Records' Keyword AAA, a keyword thesaurus of general terms may provide adequate classification guidance for records generated when conducting standard administrative functions such as financial management, occupational health and safety, personnel, and property management.

Keyword for Councils provides a controlled language for all business conducted by local councils and county councils.

In the case of Keyword AAA, you will need to develop thesaurus terms to cover your core, unique functions, and merge them with this administrative thesaurus. As Keyword AAA has been developed for a very wide audience, and is necessarily generic, you may also decide to customise administrative terms to suit your particular organisation's needs and recordkeeping requirements using the DIRKS methodology.

Keyword for Councils includes thesaurus terms for all of a council's business, but again, it is generic, and you may still decide to customise terms to suit your particular organisation's needs and recordkeeping requirements using the DIRKS methodology.

If you decide these products are not suitable for you, or if you are embarking on your DIRKS project with additional goals in mind, such as redeveloping business systems to better implement recordkeeping tools, you will need to incorporate an assessment of how functions and activities are conducted in your organisation, and risks or issues associated with them in your Step A-C analysis.

2.10.2 Creating a keyword thesaurus

Steps A to C of the DIRKS methodology can assist you to create a keyword thesaurus.

Step A: Preliminary investigation

A thesaurus for records management should comprehensively support the current business activities being carried out in an organisation. It is important you read and undertake at least parts of Step A as it helps you to understand your organisation's business at a broad level, how the business is performed and the reasons why it is performed. This understanding will be refined during subsequent steps.

If you are intending to develop thesaurus terms for one function or business unit, you should still broadly analyse your business in Step A but you can start to concentrate more on those sources that relate to the function or business unit.

When compiling a thesaurus, it is less important to note the history of functions, unless you are also intending to compile a retention and disposal authority as well.

Step B: Analysis of business activity

To compile a keyword thesaurus it is very important that you read and undertake Step B and produce a business classification scheme which will provide you with an in-depth knowledge of your business to ensure your titling scheme is valid and comprehensive, and the structure you need for thesaurus development.

If you are developing thesaurus terms for one business unit or function, you should still look at this analysis broadly, and at least map a preliminary classification scheme before concentrating your attention more on the particular area of interest. This will enable you to see how functions relate to each other or how the work of other business units impact on the business unit you are focusing on. Without this broader analysis, you may have a distorted view.

If you are only producing a thesaurus from the analysis, and are not undertaking DIRKS for other purposes as well, you may decide to identify groups of recurring transactions and subjects/topics rather than each transaction in a process or activity.

Step C: Identification of recordkeeping requirements

While a keyword thesaurus can be developed after Step B, it is advisable that Step C is also conducted for the areas of business you are examining. The reason for this is that the identification of your recordkeeping requirements allows you to understand more about the business that is being performed or that should be performed to meet your organisation's requirements for evidence. This will enable you to add useful information about file titling and creation to your thesaurus. It will also help you ensure that your thesaurus is fully covering all potential needs in a way that suits the business.

Example: Case files

You may have identified a number of activities in Step B in relation to one function. In Step C you may discover a recordkeeping requirement that says all matters pertaining to

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a particular case should be retained on a case file. Therefore, what is a number of activities in a BCS will become just one activity descriptor (covering the case) in a functional thesaurus.

If you are reviewing the applicability of an existing generic thesaurus, such as Keyword AAA or Keyword for Councils, investigating your specific recordkeeping requirements will help you to eliminate terms you do not require and customise other terms to better fit your business.

You can scale down this examination to the recordkeeping requirements that affect a particular business unit or function if that is the scope of your project.

2.10.3 Implementing a keyword thesaurus

There a numerous ways you may choose to implement a keyword thesaurus. Steps D-G of the DIRKS methodology can assist you in:

- defining the implementation issues with the systems you already have
- deciding on the strategies required to implement the thesaurus successfully
- designing or redesigning software and necessary system tools to support the thesaurus, and
- implementing the thesaurus effectively in your organisation.

Step D: Assessment of existing systems

While Step D is not essential for the development of a thesaurus, you may wish to undertake parts of this step to assess how current systems might handle the thesaurus and whether there are existing policies, procedures, strategies or programs which can assist you to introduce it. If there is not, you should identify what strategies you need in Step E: Identification of strategies for recordkeeping. Some redesign of the system (Step F) may be necessary to suit this and other recordkeeping tools and practices.

Step E: Identification of strategies for recordkeeping

If you have a thesaurus, or have developed one using DIRKS, Step E can assist you to assess the best strategies for successfully implementing the thesaurus in your organisation. Step E examines policy, design, standards and implementation strategies, so you can determine the combination of strategies that will be most suitable to achieve your aims.

Step F: Design of a recordkeeping system

If you wish to incorporate your thesaurus into the design of your recordkeeping systems, tep F will be useful to you.

Example: Business units with limited access

You may have decided in Step E that you wish to design the thesaurus module of your system so that business units only see and have access to the specific thesaurus terms that relate to their business activities, rather than all thesaurus terms. This will need to be designed in Step F.

Example: Standard file lists

You may decide in Step E to create standard file lists - ie. standard lists of commonly used

file titles for each of the divisions in the organisation. These will be created in Step F. This approach:

- saves users effort in locating the correct title from the thesaurus, and
- ensures that each division is titling consistently.

Example: Integration with workflow

You may have decided in Step E that you wish to design the thesaurus so that it sits within workflow tools and is hence invisible to users. This will need to be designed in Step F.

Example: Mirrored terms in directory structures

You may decide to apply the hierarchical version of your thesaurus to your electronic network directories as well, so that it mirrors the structure in your records management system. This approach:

- helps staff to become familiar with the new management structure
- improves the document management of items in your shared network, and
- helps to facilitate your broad records management objectives.

Note: Users should be clearly told that the network is a working area, where documents in progress are drafted and kept. Your organisation's records management system should be the repository of all final 'records' of your organisation's business.[9]

Step G: Implementation of a recordkeeping system

A well planned implementation of thesaurus products, as outlined in Step G, is essential for the effectiveness of the project. A thesaurus impacts on the day to day working life of every staff member using it, and you need to give them the tools and education to interpret it in the correct way. Support tools, you identify in Step E and develop in Step F, such as standard file lists, can be introduced in your implementation.

Tip: E-tidying

As part of implementing your new controlled vocabulary, you should undertake e-tidying. E-tidying could involve moving records in your networks or records systems to their locations in the new directory structure. As well as removing material that is no longer required by the organisation, e-tidying can also help to reduce the duplication that may exist between your network and formal records management environments[10].

Example: Consistent classification structure

In its implementation, the United Kingdom Debt Management Office used a consistent classification structure for the management of information across a range of different business systems it administered. By using this one structure, information accessibility

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[9] Peter Benfell, 'An integrated approach to managing electronic records', Records Management Journal, Volume 12, Number 3, 2002, 95-96
[10] Peter Benfell, 'An integrated approach to managing electronic records', Records Management Journal, Volume 12, Number 3, 2002, 95-96

was improved as users became familiar with the standard structure and therefore knew where to find the information they required.[11]

2.10.4 Reviewing a keyword thesaurus

Step H: Post implementation review

Step H, the post implementation review, is very important for thesaurus products. Ongoing monitoring can help you to detect changing needs and ongoing maintenance can mean that terms are available at the time they are needed by the business units. Regular reviews can ensure that the thesaurus is still aligned with business needs and goals and with keyword products from State Records. If a thesaurus becomes out of date, people will stop using it.

Reviews should be instituted when there is a major change (for example, a change in functional responsibilities or new legislation). In addition, reviews should be undertaken when it is required to meet your business needs.

Further information

For more information about keyword classification and developing a keyword thesaurus read the relevant steps of DIRKS referenced above, and see State Records' Guidelines for Developing a Keyword Thesaurus.

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[11] Ibid, 96

3. Step by step through the DIRKS Methodology

Introduction

It is important to realise that you don't need to progress sequentially through the manual. The DIRKS methodology is based in a Step A - Step H structure, but it does not need to be read or applied in this way.

Reading the manual as a whole will give you a good overview of:

- how to understand your organisation's business needs, and
- to build recordkeeping infrastructures that meet these needs.

See…	…if you wish to…
Step A – Preliminary investigation	understand your organisation
Step B – Analysis of business activity	know how it performs its business
Step C – Identification of recordkeeping requirements	know its recordkeeping needs and business requirements
Step D – Assessment of existing systems	assess its current systems and approaches
Step E – Identification of strategies for recordkeeping	design recordkeeping strategies and systems to help it meet its business needs
Step E – Identification of strategies for recordkeeping	design recordkeeping strategies and systems to help it meet its business needs
Step F – Design of a recordkeeping system	effectively design solutions
Step G – Implementation of a recordkeeping system	effectively implement solutions
Step H – Post-Implementation review	review solutions implemented

3.1 Step A – Preliminary investigation

Collect information from documentary sources and interviews; identify and document the role and purpose of the organisation, its structure, its legal, regulatory, business and political environment, critical factors and critical weaknesses associated with recordkeeping. [AS ISO 15489.1, Clause 8.4]

3.1.1 Content and scope of Step A

Aim of Step A

Step A of the methodology is all about context. It involves gaining an understanding of your organisation's role and operations and an awareness of how recordkeeping is conducted.

Summary of Step A

This part of the methodology is designed to help you to understand:

- how recordkeeping fits within your organisation
- how recordkeeping interrelates with other business areas
- business needs you have to consider in your DIRKS project
- your organisation's recordkeeping strengths and weaknesses
- concerns or barriers to improving recordkeeping
- the legal or other requirements you may need to accommodate, and
- the requirements of stakeholder and other broad interest groups

For your project to be successful, you will need to consider all these different factors and build them into your project planning.

Undertaking Step A

Step A can be quite flexible in its implementation. It can be done as:

- an independent scoping or exploratory exercise to determine the feasibility or boundaries of your proposed project, or
- as the first point in your project to develop a recordkeeping system and/or recordkeeping tools for your organisation.

Tip: Scale your research to your project requirements

The amount of research you undertake in this step will depend on the nature of your project, your level of corporate knowledge and the availability and currency of pre-existing reports on relevant facets of the organisation.

External consultants unfamiliar with your organisation are likely to draw heavily on source material during the analysis phase while you may tend to rely more on your own knowledge.

Why should you do Step A?

It is good idea to complete Step A for any DIRKS project you undertake. It is the information discovery and scoping step of methodology that provides the context that can help you to understand:

- how your project should be structured
- the factors it must consider in order to be successful
- the strategies that will be most effective in your organisation
- the staff, technology and other resources you can draw upon, and
- the business and legal realities and constraints you need to be aware of.

The processes outlined in Step A are particularly important if you are going to develop a business classification scheme and a retention and disposal authority for your organisation. Much of the information you will need for the development of these tools will be identified in the Step A analysis.

You do not need to do Step A if you have a good idea of:

- your organisation's structure and the business activities it performs
- the legislation and other requirements to which your organisation is subject
- your organisation's technical infrastructure and corporate culture, and
- the risks that your organisation's business environment is subject to.

Relationship to other steps

As stated, Step A, Preliminary investigation, is a useful step to undertake as an introductory component of all DIRKS projects.

In addition, you can do much of the research required within other steps as part of your Step A investigations. For example you can:

- gather and assess information to assist with Step B: Analysis of business activity
- pinpoint recordkeeping requirements to assist with Step C: Identification of recordkeeping requirements, and
- identify systems currently used to conduct business in your organisation, to assist with Step D: Assessment of existing systems.

Tip: DIRKS can be tailored to meet your needs

DIRKS can be a very flexible process. It can be tailored to meet the specific needs of your organisation and implemented in ways that suit the business practices and operations of your organisation.

3.1.2 Focus of Step A assessment

When undertaking Step A, it is useful to know the scope of your DIRKS project as this will help to give focus and structure to your Step A analysis.

Overview

This section identifies the particular areas you should examine in your Step A assessment. It highlights the importance of examining your:

- business environment
- corporate culture
- stakeholders, and
- technology

to obtain a good understanding of your organisation and how it operates.

Know the scope of your project

When undertaking Step A, it is useful to know the scope of your DIRKS project as this will help to give focus and structure to your Step A analysis.

For example, if you are doing a DIRKS project that is focussed on improving recordkeeping in one specific area of business, your Step A analysis will only be concerned with assessing and understanding this area of business.

Alternatively, if you are doing a broad DIRKS project that requires knowledge of all your organisation's business operations, such as the development of a whole of organisational retention and disposal authority, your Step A analysis will need to provide you with a good understanding of the broad business environment.

Examine your business environment

Irrespective of the type of DIRKS project you are undertaking, in Step A you need to examine your business environment. This will enable you to understand the factors that influence your organisation's need to create and maintain records to support and sustain its business activities.

To understand your business environment you can examine:

- The role and structure of your organisation, or the relevant section of the organisation
    - the organisational or workgroup structure
    - the business functions and activities performed by your organisation (these will be examined and defined more closely in Step B: Analysis of business activity)
    - how it performs this business
    - why it performs this business
- Legal and best practice requirements
    - the laws that govern or affect the operations of your organisation
    - the business, social and ethical standards the community expects your organisation to meet
- Stakeholder influences
    - the internal and external stakeholders whose interests your organisation must take into account
- Case histories
    - litigation or legal disputes your organisation has been subject to
    - the business, social and ethical standards the community expects your organisation to meet
- Recordkeeping practice
    - how recordkeeping is undertaken
    - critical factors affecting recordkeeping (this could include audits, court cases, new legislative requirements to keep records, introduction of new ways of doing business)
    - critical weaknesses associated with recordkeeping (including business inefficiencies or losses brought about by poor recordkeeping)
- Relationship to other public offices
    - identify whether other agencies report to your organisation
    - determine whether your organisation oversights the performance or operations of other public offices
    - determine whether your organisation has a regulatory or compliance monitoring role in the non government sector

Example: A DIRKS project focused on a specific area of business

If your DIRKS project is focussed on improving how a specific business activity is

performed, your Step A analysis could focus on:

- what laws affect this activity?
- how is the business currently transacted?
- what are current recordkeeping practices and how are these helping or hindering business objectives?
- what systems are staff using?
- is this area of business subject to significant risk?

These and a range of other issues may be important to identify in order to give you the context and understanding you need to progress with your project.

The case of shared or decentralised business

In assessing your business environment, you may identify, or need to consider, whether your business shares any of its business functions with other organisations or if it conducts its activities in a decentralised way.

In devolved organisations or decentralised business structures, the same business function can be shared between a number of organisations or be undertaken in a variety of business locations. These types of arrangements should be noted in your preliminary analysis as they will affect the strategies you choose to improve recordkeeping in the latter steps of the methodology.

Tip: Focus on business activities

If you want to improve business practices in one specific business unit, it is important to keep your focus on the business activities performed by this unit. Business functions frequently cross across sections or organisational structures. If you keep your focus on the work this unit is doing, the activities it performs and the systems it uses, you will ensure that you consider all relevant areas in your assessment.

Defining the scope of your organisation

Depending on the nature of your DIRKS project, it may be necessary in your preliminary investigation to determine the functional and administrative boundaries of your organisation. These boundaries can sometimes be hard to determine, particularly if your organisation carries out secretariat activities for and maintains records of advisory councils, committees or boards. Although these councils, committees or boards can be closely linked to your organisation and may have organisational staff members carrying out tasks for them, they may need to be regarded as separate bodies for recordkeeping purposes. Depending on the nature of your project, you may therefore have to exclude these organisations from your Step A analysis.

Examine your corporate culture

Your corporate culture is the set of values, attitudes and beliefs that are shared by the members of your organisation. It emerges from long-established practices, procedures, structures and systems. Your corporate culture could be described as:

- hierarchical, meaning that it is tightly structured and well defined
- laissez-faire, meaning that it is unstructured and autonomous
- regimented, meaning that it is strictly controlled, or
- democratic, meaning that everyone has their say and more freedom is allowed in processes.

Your organisation may have one defining corporate culture, or different sections of your organisation may have their own distinct cultures.

If it is strong in your organisation, it is important to identify what your corporate culture is, as it may currently be affecting your recordkeeping practices and could influence your choice of strategies later in your DIRKS project.

Tip: Corporate culture can affect technological aspects of your project

Your organisation may have strong corporate views about technology. There may be support for it, resistance to it or existing technology may be ignored completely. Be aware of your corporate attitudes towards technology as they may have an impact on any DIRKS project you undertake that has a technical dimension to it.

Examine your stakeholders and their requirements

Stakeholders are 'those people and organisations who may affect, be affected by or perceive themselves to be affected by a decision or activity'[12]. Internal stakeholders may include business units and employees of the organisation. External stakeholders include clients, customers, public lobby groups, business partners, regulators and those regulated by the organisation.

It is necessary to consider the needs of internal and external stakeholders in your project. Depending on the nature of your project, in Step A it may be necessary to get an overview of your stakeholders and their requirements, if you feel that these will have a significant impact on your project and its outcomes.

Examine your technical infrastructure

If a key objective of your DIRKS project is to develop or implement new technical components of organisational systems, or if you think this may end up being a key focus, it is useful to get an overview of the technology your organisation uses in your Step A assessment.

At this stage you may want to ascertain:

- what range of systems are used in your organisation, or used to transact the specific area of business you are examining, by conducting a basic inventory of systems
- whether the organisation has a strong commitment to electronic service delivery and e-business
- the functionality provided by your website and intranet
- networking capacities within your organisation and those that exist between your organisation and others (such as agencies performing similar functions or other offices in your organisation)
- software used in the business area you are assessing
- the extent to which e-mail is used to transact business
- broad data management practices
- disaster management strategies, or
- compatibilities between office applications or systems.

Tip: If you're developing a retention and disposal authority...

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[12]Australian Standard, AS/NZS 4360-1999, Risk Management 1.3.32

> If you are doing DIRKS to develop disposal coverage for your organisation, you will need to provide State Records staff with a range of background information to help them to understand the context of your organisation and the types of records you are seeking disposal coverage for.

See Appendix 1 of State Records' Procedures for Disposal Authorisation for an overview of the types of information you should gather in your Step A assessments to support your disposal authority.

3.1.3 Sources for Step A

A number of key sources can provide a good starting point to help you understand your business environment, corporate culture, stakeholders and technical infrastructure.

Documentary sources

> **Tip: Look for sources immediately relevant to your project**
>
> Try to use sources that are immediately relevant to your intended project.
>
> For example, if a key objective of your project is to develop a business classification scheme, a retention and disposal authority and a functional thesaurus for your organisation, examine:
>
> * superseded thesauri
> * previous retention and disposal authorities and
> * risk assessment activities,
>
> all of which could have immediate bearing on your project.

Internal sources

Sources generated by your organisation which may be useful include:

* annual reports
* organisational charts
* strategic plans (eg corporate plans, business plans and related planning documents)
* policies and procedures
* your organisation's existing records, including establishment files (records that document how, why and when your organisation was created)
* publications targeting the interests of particular stakeholders, and
* media releases regarding the establishment and operations of your organisation.

Many of these sources may be accessible online through your organisation's internet or intranet facilities.

> **Tip: Use of vision, mission and value statements**
>
> Vision, mission and value statements may also provide useful information for analysing corporate culture. They will help you identify the organisational goals and strategies that your project will need to fulfil or ally with.

Some of these sources can supply you with a very large amount of information about your organisation.

Example: Annual reports

Depending on the nature of your project, annual reports can be very rich sources, providing information on the organisation's:

- current structure and business activities
- mission statement defining the boundaries of the organisation
- corporate objectives that define broad functional areas and descriptions of major programs and their budgets
- enabling legislation or other legislation which the organisation administers
- external requirements, such as reporting arrangements
- statistics relating to business activities
- powers and functions as described in the publication guide required under the Government Information (Public Access) Act 2009
- an organisational chart
- structure, as represented by an organisational chart, and
- information management and technology requirements and plans.

External sources

There are many different types of external sources that will provide important contextual information. Some of the more important sources are:

- legislation governing your organisation's operations
- whole-of-government legislation that affects the way your organisation carries out its unique functions (eg State Records Act 1998, Government Information(Public Access) Act 2009, Privacy and Personal Information Protection Act 1998, Crimes Act 1900)
- government circulars, directions, memorandums and instruments affecting the public sector
- ministerial statements
- reports and guidelines issued by audit, complaints-handling or other investigative bodies
- media reports
- letters of thanks from clients
- letters of complaint, and
- standards, codes of practice and protocols that are relevant to your organisation's business.

Tip: Access legislation online

All NSW legislation is available online. Check the Australasian Legal Information Institute databases (AustLII) or www.legislation.nsw.gov.au

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State Records' Investigator database

For a concise summary of your organisation's background and current role, we would recommend checking Archives Investigator on State Records' website. This database provides information on the origins, predecessors and boundaries of the organisation, as well as its evolution over time ('administrative history'), major functions and responsibilities, and its place in the broader New South Wales Government context.

In preparing the registration, our staff will have already checked many of the official sources (including legislation, regulations, the NSW Government Gazette and annual reports), and specific citations are given. These may help you to avoid unnecessary duplication of research effort, or provide useful pointers in cases where more detail may be required.

Tip: Visit Investigator

Investigator can be accessed via www.investigator.records.nsw.gov.au *(Note: Investigator is no longer available. Please click here to search NSW State Archives' collection.)*

Interviews

A complete analysis of your organisational context will not be possible only from documentary sources. One of the most effective ways to obtain information about how your organisation functions and the requirements it has to meet is through interviews or discussion groups with appropriate staff. Interviews, particularly with long term staff, can be a way to validate aspects of your work or to gain information you cannot obtain from documentary sources. One major examination of business practices determined that, for their purposes, 'Interviews constitute, by far, the most important source of information'[13].

If your project has an IT focus, talking with system administrators or IT managers may give you the concrete information you need to understand how business is currently conducted. Talking to staff who actually use business systems on a daily basis will give you a very hands on understanding of current systems and practices and their possible shortcomings.

You can also use interviews to help determine the list of sources you will examine in your preliminary assessment. Other people will have a range of ideas you can incorporate into your research plans. It may also be important to confirm with other staff that the sources you are using are current and of continuing relevance to your organisation.

Don't forget to consider interviewing external parties who may have a stake in how records are managed and retained. These might include staff of other government organisations, clients or contractors.

Who to interview?
- head of agency
- unit manager / team leader
- staff responsible for particular business activities
- staff who have worked in your organisation for a long time
- records managers
- external parties who are affected by your organisation's business or records

This manual contains some tools which can help you to manage the interview process.

See:
- Guide to Interviews
- Sample Interview Questions

Tip: Schedule interviews effectively

You may want to obtain a large amount of information through interviews during the

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[13] Victoria L Lemieux, 'Let the Ghosts Speak: An Empirical Exploration of the 'Nature' of the Record', Archivaria, Number 51, Spring 2001, 83

course of your DIRKS analysis. Given that the people you wish to interview are likely to have busy schedules, it could be beneficial to have one or two longer interviews, and discuss a number of points that may come out of your Step A, B and C research, rather than scheduling a large number of smaller meetings.

Assessments and surveys

If your DIRKS project is focussed on developing a better business system or systems, you may want to include a survey or assessment of your current technical infrastructure in your preliminary assessment.

This assessment or survey should be very general and aim to give you a good understanding of your technical environment, its capacities and limitations. This form of assessment should be teamed with a series of interviews that will enable you to talk to IT and other staff about how business systems function in your organisation.

Step D: Assessment of existing systems is concerned with undertaking a more detailed assessment of business systems, in order to identify whether they meet your recordkeeping requirements. If you go on to do Step D, you can use this early assessment to initiate your Step D work.

Tip: Liaise with IT staff

If your DIRKS project is likely to involve a significant technological component, it is important now to begin to liaise with IT staff and other management representatives about your ideas, if you have not already. Redeveloping business applications requires significant organisational support and the commitment of individual managers. It is never too early to start fostering this commitment.

Still confused?

If you are really stuck and do not know where to begin your Step A analysis, you could:

- start with the Organisation Context Document, provided as part of the DIRKS Manual. This document asks a range of questions about your organisation and can be used to structure your research or give you an indication of some of the broad areas you may want to investigate in order to understand how your organisation operates.
- start by reading your annual report. You'll find it a very rich source of information that will provide a useful overview of your organisation and its business functions. Check your library or website for a copy.

It is important not to get overwhelmed with your Step A research. Be aware that one or two key sources may provide you with the bulk of the information you need. For example, your organisation's main enabling legislation may provide an adequate summary of your business functions, your corporate plan will help you identify goals and strategies, while external standards governing the business area you are examining may provide you with the remainder of the contextual information you require.

Tip: Use existing research

Where possible, particularly if you are looking for a place to start, use existing research. If business process reviews, system reviews, audits or workflow analysis have been undertaken in all or in parts of your organisation, make use of this documentation as it may provide you with much of the detail you need.

3.1.4 Step A - Making you DIRKS project feasible

After your initial investigations, your intended DIRKS project may seem either too overwhelming or may need to be extended to meet the range of needs you've identified. This section identifies how you can scale back or extend your project by using risk management or feasibility assessments.

Scaling back or extending your DIRKS project

Your Step A analysis could reveal that the project you wish to undertake is larger than anticipated and that the initial project brief can not be fulfilled with existing resources. Alternatively, your Step A overview may show that there is much to do, and your planned project should be extended. Two methods you can use to limit or expand the extent of your project are:

- using risk management techniques, and
- undertaking feasibility assessments.

Risk management

Risk management is a theme that runs through the DIRKS methodology. Its particular application in Step A relates to its value in focussing your analysis to those areas that pose a significant risk to your organisation.

For example, your preliminary investigation, intended as part of a major DIRKS project aiming to completely review how business is undertaken and documented in your organisation, may show that your focus is too broad in that it will require too many resources to complete. You can use risk assessment methodologies to identify the areas of your organisation that could pose a significant risk if poorly performed, and focus your reviewing efforts on these specific areas or functions. This can help either to scale back your assessment, but identifying what are business critical areas, or scale it up, by identifying the range of risks your organisation faces through poor recordkeeping practices.

More advice about risk management and risk assessment processes is provided in Australian and New Zealand Standard AS/NZS 4360-1999, Risk Management.

Feasibility assessments

Feasibility assessments involve determining the feasibility or viability of your intended project. They generally involve assessing your project to determine its:

- operational need
- financial value, and
- technical practicality

Using these criteria will help you to determine whether your project is a realistic and viable option for your organisation.

Operational feasibility

To determine whether the scope of your intended project is operationally feasible, you should look at:

- timetabling and scheduling issues to determine whether staff have time to commit to the project
- corporate culture to identify whether the changes you wish to make will be adopted and adhered to by the organisation
- management support for improved recordkeeping, to determine whether adequate resources will be made available to help you achieve all your planned outcomes, and

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- potential improvements to the efficiency of current work / recordkeeping practices to determine whether improvements will be so significant that they will outweigh any other identified concerns.

Financial feasibility

To determine whether the scope of your intended project is financially feasible, you should look at:

- the cost of having staff members taken away from other work to participate in the project
- the cost of software purchase / upgrade that may result from the implementation of your planned changes
- costs of litigation which could potentially be avoided if your recommendations are implemented
- improvements in organisational efficiency that will potentially result from your system improvements, and
- potentially improved levels of compliance with legislative and regulatory requirements

Technical feasibility

To determine whether the scope of your intended project is technically feasible, you should look at:

- staff levels of technical expertise and whether all staff will be able to implement system changes you recommend, and
- availability of technical infrastructure for development and maintenance of new systems

A proposal may be regarded as feasible if it meets a number of these operational, financial and technical criteria.

3.1.5 Documenting your Step A research

This section identifies the importance of documenting your research, and suggests different forms of documentation you may wish to compile.

Document what you have researched

During the course of your Step A analysis it is useful to compile:

- a list of all sources used, citing the name of the source and where it can be accessed
- copies of each documentary source or a set of notes which summarises the key information you derived from the source, and
- a set of notes for each interview or other consultative forum.

Tip: Document your work

You may cite pre-existing reports or personal knowledge as sources where you consider that these are sufficient, but you should provide adequate information to enable every source to be identified and to retrace your steps and decisions where necessary.

Compiling documentation about your Step A research will enable you to:

- have a record of your research which you will refer to throughout your project

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- facilitate future retrieval of the sources you have used. This is particularly important if you are undertaking major projects, such as the development of a disposal authority, where you may need to check and cross check your work
- have data to feed into any reporting you are required to do for management, staff or external organisations, and
- use as an information resource to share with other people and projects in your organisation.

Documentation tools

This manual contains some tools that can help you to document your organisational assessment. This include an organisation context document - a comprehensive form that can enable you to record a large amount of information about your organisation.

Please note that none of the tools or forms provided in this manual are mandatory in NSW. You may therefore choose not to use the forms provided in the manual and adopt a less structured approach, or one that fits better with your normal business practices. You can also customise the forms provided so that they better meet your business needs.

Documentation for disposal purposes

If you are doing DIRKS to develop disposal coverage for your organisation, you will need to provide State Records staff with a range of background information to help them to understand the context of your organisation and the types of records you are seeking disposal coverage for.

See Appendix 1 of State Records' Procedures for Disposal Authorisation for an overview of the types of information you should gather in your Step A assessments to support your disposal authority.

Compile a report

When you have finished Step A you may want to compile a report that includes:

- a summary of the issues you have identified in the course of your Step A research
- a statement on how these issues affect your intended project, and
- a project plan to guide you through the subsequent steps of the methodology that are relevant to your work.

The report could also be used as a reporting mechanism to keep management informed of your progress and findings.

Develop a business case

If you do not have financial support and management commitment to continue with your DIRKS project beyond the Step A analysis, or if your scoping has revealed that the project needs more time and resources than originally envisaged, you may want to compile a business case as a means to summarise the significance of what you want to achieve and to lobby for additional resources.

Business cases are documents or presentations that identify and justify an intended course of action. In the DIRKS methodology, the objective of a business case is to:

- secure commitment to and funding for your DIRKS project
- drive change management in your organisation
- secure broad commitment to and understanding of your project, and
- provide a means by which you can measure your project's progress and viability.

No.	Suggested components of a business case
1	A discussion of why you need to undertake this project, highlighting the internal or external drivers that are requiring the changes you propose to make. Drivers could include: • business needs, directions or priorities • current corporate goals, or • recent investigation or accountability crises. In your business case, try to tie your project to other significant initiatives in the organisation, or to current 'hot topics' or issues of concern within your environment.For example, if management is very concerned with information access, privacy management or knowledge sharing, you could list these as a driver and a section of the business case could address how the project will contribute to these broader objectives.Adequate corporate governance is also a significant organisational issue, and so your business case could demonstrate how your proposed solution will facilitate this objective.
2	A summary of your current situation.Depending on the project you are proposing, this could include an indication of the current costs associated with the way you currently do business. This could calculate: • 'lost time' spent doing tasks that could be avoided with a new recordkeeping system • specific costs, such as storage costs, that will be removed by the implementation of a new system. This section could also identify: • inefficiencies or draw backs to your current practices, and • the risks faced by your organisation if it continues with current systems and practices. Note that if you have done any risk assessments to date, draw on this specific knowledge and cite examples from your research and analysis. See Making your DIRKS project feasible for more guidance on risk assessment.
3	A definition of your proposed solution to the issues you have identified, including the: • infrastructure requirements • staffing resources • technical needs • costs, and • timetable involved in developing and implementing the solution. Be sure to highlight the existing sources or infrastructure you can use for your project.If you have undertaken a feasibility assessment as part of your project development process, be sure to cite your research and conclusions. See Making your DIRKS project feasible for more guidance on undertaking feasibility assessments.
4	A benefits analysis which: • identifies what the organisation will receive as a result of this project and • clarifies exactly how the proposed solution will bring these benefits to the organisation. As a part of your benefits analysis you may want to identify some of the 'quick wins' the project will generate, to demonstrate some of the immediate benefits you

No.	Suggested components of a business case
	hope to achieve.

A Sample Business Case for an improved records management program is included in the 'Tools' section of the manual for guidance.

Tip: Quantify as much as you can

Although it can be hard to determine specific costs to demonstrate the benefits of improved records management, it is worth calculating as many specific costs as you can and including these in your business case.

For example, one organisation wanted to develop a retention and disposal authority for its records. Some of the records to be covered by the authority were stored in secondary storage. To help demonstrate the range of benefits that would come from developing the disposal authority, the organisation calculated what had been spent on this storage over the past five years, and projected costs for the next five years. They were able to demonstrate that the project they were proposing would pay for itself within three years, based on storage costs alone.

Business cases as promotional tools

If you do not need to develop a business case to gain additional resources for your project, you may still develop one to use as a communication device and promotional tool.

Your DIRKS analyses will require that you communicate to a number of staff across your organisation. It can be hard to get staff to focus on records management issues as they often do not see the relevance of recordkeeping work to their daily business lives. If you specifically outline the benefits and objectives of your project in a short document, it could prove a useful and persuasive tool for obtaining staff cooperation. It will also keep all staff informed of what you hope to achieve.

Tip: Do not duplicate effort

If you already developed a business case for your DIRKS project before commencing on Step A, you don't have to develop a new business case once your Step A research is complete. You may however want to update or slightly alter your proposal, to accommodate any new priorities your Step A research has identified.

Further guidance

More information about the development of business cases can be found in an Office of Information Technology publication, Business Case Development Guideline.

3.2 Step B – Analysis of business activity

Collect information from documentary sources and through interviews; identify and document each business function, activity and transaction and establish a hierarchy of them, that is, a business classification system, and identify and document the flow of business processes and the transactions which comprise them. [AS ISO 15489.1, Clause 8.4]

3.2.1 Content and scope of Step B

Overview

This is an introduction to Step B: Analysis of business activity. This section: outlines the aim of Step B including what understanding the analysis will give you and what tools can be developed; summarises the major elements of Step B; explains why it is important to undertake Step B for particular DIRKS projects; indicates how Step B is scalable and when it is necessary to complete, and; shows how Step B relates to the other steps in the DIRKS methodology.

Aim of Step B

The aim of Step B is to analyse your business in order to gain a thorough understanding of the business activities and processes that are carried out. It also involves establishing a classification structure known as a business classification scheme. A business classification scheme is a hierarchy of functions, activities and transactions that can be used to support a variety of records management processes[14].

Summary of Step B

In Step B you should analyse the documentary sources and interviews you have collected in order to identify:

- your organisation's goals and the strategies to achieve these goals
- the broad functions the organisation undertakes to support its goals and strategies
- the activities which contribute to the fulfilment of the organisation's functions, and
- the groups of recurring transactions or processes which make up each of these activities.

Two types of analysis may be used:

- hierarchical analysis, a 'top down' approach where you start with the goals and strategies and gradually look deeper into how these are achieved, and/or
- sequential analysis, a 'bottom up' approach where you start by examining work processes and the transactions resulting from them, then gradually relate it to more broader levels of classification.

The analysis can be represented in a number of ways. The hierarchical model, known as a 'business classification scheme' is the method preferred by State Records. This scheme can then be used to make a variety of decisions about the management of records.

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[14] Australian Standard AS ISO 15489-2002, *Records Management*, Part 2, 8.4b

Why should you do Step B?

Step B is a foundation step for many DIRKS projects. It helps you to:

- gain a greater understanding of your organisation both at a micro level and a macro level and the context in which records are being created (in this way it adds to Step A: Preliminary investigation)
- start identifying existing recordkeeping problems and issues, such as inadequate work processes
- establish a business framework for recordkeeping tools, such as thesauri and retention and disposal authorities which can also be used to populate metadata fields
- establish a business framework to map recordkeeping requirements to, which will assist with the production of creation and retention and disposal authorities, metadata strategies, the identification of vital records, gap analysis and system design or redesign.

How is Step B scalable?

Relate to the project scope

The scalability and relevance of Step B depends on the scope of your project and the outcomes you are looking for.

You may decide not to do Step B at all if you:

- do not need to conduct such a detailed examination of processes, transactions and records generated, and
- do not need to construct a business classification scheme based on functions and activities (used as a basis for recordkeeping tools or to map your recordkeeping requirement to).

See Doing a DIRKS project how Step B specifically applies to particular projects.

Existing frameworks

Step B can be scaled down for particular projects if existing generic or organisational classification schemes, already exist and are suitable. You may have, for example, a general retention and disposal authority or keyword thesaurus in place. If this is the case, you can easily scale down your project to examine a specific function in isolation (perhaps due to identification of a recordkeeping crisis or a recognised problem).

Example: Scaling down

Your project may be to do DIRKS to ensure the creation and capture of the necessary records to meet your recordkeeping requirements for a key, high risk function. You may already have a functional thesaurus that covers the majority of your business and which can provide a suitable classification framework.

You can then choose to examine a particular function in detail using sequential analysis.Be careful however, if you are using a thesaurus as the basis for your assessment. Thesauri generally only cover records documented in files or file like structures. As a consequence they may exclude terminology for records not documented in files - for example those maintained within databases.

Example: The personnel management function

One council decided to undertake a DIRKS project where they needed to analyse the business conducted within their human resources function. Their aim was to improve their

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current practices and to identify their recordkeeping requirements and determine their levels of compliance.They chose to use the function of PERSONNEL and related activities from the Keyword for Councils thesaurus as a basis for their business classification scheme. However, they still needed to analyse the way business was being conducted and the records produced (sequential analysis in Step B) and recordkeeping requirements (in Step C) to determine changes to their current practices.

When to look more broadly

If your organisation's core functions are not covered by a classification scheme of any kind, it is not advisable to try to analyse a core function or system in isolation. You should at least roughly map your core business functions and activities in a business classification scheme and consider issues which may affect them before trying to concentrate on one function or system.

The reason for this is that:

- you need a broad perspective of the boundaries of the function or system and how it relates to, and impacts on, other business activities being performed
- you may discover when taking a broader view that there are other areas of high risk that may warrant priority in subsequent stages of the design and implementation process. These areas may correlate to particular recordkeeping systems, business activities or business units.
- if you analyse one function or system in isolation, without a broader map, you may inadvertently cross boundaries of other functions and may miss risk identification. These omissions may force you to revise your analysis later.

Relationship to other steps

Step A

Step A: Preliminary investigation and Step B both involve data collection. If you are doing Step A and are familiar with the requirements of Step B before you start, you may start identifying functions and activities while completing Step A. If this is the case, record your findings and refer back to them when you start Step B.

Step C

Step B may also be carried out concurrently with parts of Step C: Identification of recordkeeping requirements, as many of the same sources are used. You will often find that you come across recordkeeping requirements when you are conducting research to identify functions, activities and transactions. All of these can be documented using the using the function source template.

Step D

It is also possible to gather information about the use, scale and operations of systems for Step D: Assessment of existing systems when you are undertaking Step B.

Steps E and F

If you are examining your processes, you may discover during the sequential analysis in Step B and assessment of how these are working in Step D: Assessment of existing systems that you need to redesign some processes. Redesign will occur in Step F: Design of a recordkeeping system.

You may also decide on other methods of representing the information from the business classification scheme for particular uses in Step E: Identification of strategies for recordkeeping and design these methods in Step F.

3.2.2 Sources for Step B

This section recommends the kinds of information, resources and tools you should locate and draw on in your analysis in Step B. These sources can be both internal and external.

Use existing analysis tools

If your organisation has been analysed for other purposes it may be possible to draw on the results of such work. Projects which may involve an analysis of business activity include:

- business process re-engineering
- privacy management strategies
- imaging and work flow automation
- activity-based costing or management
- quality accreditation, and
- systems implementation.

Likewise, if these projects have not been undertaken yet, the results of your analysis can be a valuable source for future projects of this nature.

If the analysis arising from such projects is available, you will need to consider how, why and when the projects were undertaken to determine whether their findings are applicable for recordkeeping purposes.

Obtain recordkeeping tools

If you do not have these tools, you may wish to obtain what is available from State Records or their delegates. You need to obtain a licence to use Keyword AAA or Keyword for Councils. The general retention and disposal authorities are available for free on State Records' Web site but only apply to the NSW public sector.

If you use the structure and terminology from these products you can save considerable time in planning frameworks in Step B and can concentrate more on the analysis. Such analysis can actually help you to refine the applicability of generic recordkeeping tools by mapping your specific business needs to them.

Example: Streamlining tools

A council may discover during the business analysis that some of the activities in the Keyword for Councils thesaurus are not actually performed by their council, or they are documented in databases rather than files.

In this case they can remove them and streamline their version of the Keyword for Councils thesaurus, increasing the usability of the tool for file titling and customising it to their exact business. The council may also find a need for additional or more customised subject descriptors based on the transactions performed. Any changes should be documented so that they can be made again when Keyword for Councils is revised.

Note: Records stored in databases and business systems should be retained in accordance with the General retention and disposal authority: local government records.

Check the analysis

Another useful source to check before the Step B analysis is to see if other organisations that have similar functions or share parts of the same function have performed an analysis or have functional classification schemes or recordkeeping tools.

Example: Similar functions

Both the Sydney Harbour Foreshore Authority and the Historic Houses Trust have functions and activities concerned with managing heritage buildings.

There may also be other state or federal bodies that carry out similar functions.

Example: Similar functions

Each of the state fire brigades services will perform similar functions.

If these related organisations or counterparts have existing schemes that are comprehensive and they are willing to share them, you may find them valuable to draw on. Alternatively, you may decide to share resources and undertake some joint development. Such consultation will reduce duplication and enhance consistency.

It is very important to remember, however, that even if classification schemes can be partially shared, each organisation will still have to perform its own analysis (Step B) and define its own recordkeeping requirements (Step C) as they will have different operating environments, with different cultures, risks and recordkeeping regimes.

Example: Shared classification schemes

A number of galleries and museums around Australia all participated in the PAINT project, the goal of which was to produce consistent classification schemes and controlled language to share between participating agencies.

Naturally each museum or gallery will need to analyse their own business environments and recordkeeping requirements. They will have to take these into account when customising the product. In addition, if government organisations wish to produce retention and disposal authorities, each organisation will need to do so in line with the relevant archival authority's procedures and have them separately authorised.

Use sources from Step A

Many of the sources used in Step A: Preliminary investigation will be pertinent to the analysis of your organisation's business activity. These include:

- internally generated sources such as mission statements, corporate plans, annual reports, organisational charts, policy statements, procedure manuals, information systems documentation, records and forms
- external sources such as legislation, regulations, instructions and circulars. Legislation is a particularly important source for this step as it can indicate when your organisation has a legal responsibility to perform particular functions, activities or tasks.

Although you may refer to many of the same sources if you are doing Steps A, B and C, it is important to note that you are seeking different information from the sources and working towards different outcomes for each step.

Conduct interviews

Interviews are used in a number of DIRKS steps. For example, you may have interviewed people in Step A: Preliminary investigation to help you to get an overview of the organisation and an understanding of their context. In Step B you can interview people to gain more information about their functions and activities, but also to give you process and transactional information and to verify your analysis. Staff are also aware of ad hoc practices that might go undocumented. An advantage of involving staff is that by contributing they feel they have some ownership of the project and are more likely to accept outcomes.

It can be useful to clarify 'big picture' functions with a group of staff from several parts of the organisation and use smaller groups or one-to-one interviews for obtaining the detailed information about processes and transactions.

Tip: Be prepared for interviews

To ensure you do not waste staff time you should be prepared fully before interviews take place. This may involve preparing questions relating to a number of DIRKS steps.

See for more guidance:

- Guide to Interviews
- Sample Interview Questions

3.2.3 Hierarchical analysis

Overview

Once you have established the scope of your project and collected sources, you can apply two main types of analysis used to understand your business activity - hierarchical analysis and sequential analysis.

There are several useful reference sources to assist you with the analysis[15]. You should then analyse the risks associated with your business activities.

This section describes what hierarchical analysis is and the steps in performing the analysis.

What is hierarchical analysis?

Hierarchical analysis involves taking a 'big picture' view of your organisation's business activity and then breaking it down into more detailed parts. You look first at the goals and strategies of the organisation, then at component parts - the organisation's functions, activities and transactions. The boundaries of your analysis will be based on your project's scope.

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[15] For example: Standards Australia AS 5090, *Australian Technical Report: Work Process Analysis*. This document is available for purchase from Standards Australia. This document provides guidance on undertaking work process analysis for recordkeeping purposes and includes both hierarchical and sequential analysis methods.
Indiana University Electronic Records Project, Step 1 of 'A Methodology for Evaluating Existing Information Systems as Recordkeeping Systems' available at December 2002 via http://www.libraries.iub.edu/index.php?pageId=3313 This document describes practical use of both hierarchical and sequential analysis.

Functions

A function is 'a set of related and ongoing activities of the business.'[16] Functions represent the major responsibilities that are managed by the organisation to fulfil its goals. Functions are high level aggregates of the organisation's activities.

Functions are generally not based on organisational structures because they are more stable than administrative units, which are often amalgamated or devolved when restructuring takes place. Functions can also be dispersed across structural components of an organisation.

Example: Functions cut across organisational structures

The Roads and Traffic Authority has a LICENSING function - including a range of activities performed to manage the licensing of drivers in NSW. Different organisational units within the RTA may be involved in performing aspects of this function.

In some organisations there may be multiple layers of functions. There can be very large government functions which relate to a number of different organisations. Government functions are too large to be useful in the Step B business analysis.

Example: Levels of functions

Law and Order is an example of a government function. However, that level of function is too broad for a business analysis for NSW Police.

Even within an organisation there may be larger and smaller functions and you will need to decide which level you choose for your business analysis.

Example: Levels of functions

Human Resource Management was considered to be too large a function when producing the Keyword AAA thesaurus, so it was broken down into smaller functions like Personnel, Industrial Relations, Staff Development etc.

Activities

Functions are then decomposed into smaller (sub) functions or into a discrete and related set of ongoing activities.

Activities are the major tasks performed by the organisation to accomplish each of its functions. An activity should be based on a cohesive grouping of transactions producing a singular outcome.

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[16] J. Whitten and L. Bentley, *Systems Analysis and Design Methods*, 4th ed., McGraw-Hill, Boston, 1998, 218

Example: Transactions making up an activity

Transactions under the activity of 'drafting' may be:

- write draft
- circulate for comments
- receive comments
- incorporate comments in new draft
- seek approval.

It is a cohesive group that results in the production of a draft.

Activities should not be based on how records are currently kept, for example as a case, project or event file. Such files might comprise many activities and represent a legitimate way to maintain the record, but the analysis of business activities should represent the component parts.

There may be several activities associated with each function. In some cases, the same activities may occur under a number of different functions.

Example: Recurring activities

Generic activities like giving advice or planning may recur under administrative and core functions.

Transactions

Transactions are 'the smallest unit of business activity'[17]. In the business classification scheme, they should be represented as tasks, not subjects or record types.

Example: Transactions within an activity

In the Indiana University Electronic Records Project they identified the activity of 'Student grades and credit maintenance.' The transactions were:

- Registrar's Office posts grade for students upon completion of course work, and
- Registrar's Office assigns credit for student work done at other academic institutions.[18]

Often transactions relate directly to recordkeeping requirements which are identified in Step C.

It depends very much on the scope of your project whether you will look at each transaction in depth. If you are doing DIRKS to create a thesaurus you may decide to classify more at the level of groups of transactions, subjects or record types than individual transactions.

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[17] AS 4390-1996, Part 1: *General*, Clause 4.27
[18] Philip C Bantin, 'The IndianaUniversity Electronic Records Project Revisited', *The American Archivist,* Volume 62, Spring 1999, 156

> **Example: Transactions, subjects or record types**
>
> A transaction may be to 'complete an evaluation form for a training course.' The record type produced from this transaction is the 'evaluation form' and the subject may well be the name of the training course.

Transactions help you to define the scope of your activity. The identification of transactions will also help:

- you to identify what records support the transactions and the recordkeeping requirements related to these (Step C)
- in the formulation of the records description part of a retention and disposal authority.

Relationships between entities

> **Example: Relationships between entities**
>
> Function: Publication - the function of having works, irrespective of format, issued for sale or general distribution internally or to the public.
>
> Activity: Drafting - the activities associated with preparing preliminary drafts or outlines of addresses, reports, plans, sketches etc prior to publication.
>
> Transaction(s): Create draft copies of publications/website/intranet with associated metadata, distribute drafts for comment, file comments made on these drafts.

Stages in hierarchical analysis

The following tables outline one recommended approach to identifying your organisation's functions, activities and transactions.

Stage 1: Identify your organisation's functions

Action	Output
Examine the organisation's establishing legislation for a description of the purpose for which the organisation was established, possibly in a section called 'Functions' or similar.	List of functions identified in legislation.
	For example, the Greyhound Racing Act 2002 lists a number of functions for Greyhound Racing NSW, including:
Tip: There may be more than one relevant piece of legislation.	• registering greyhound racing clubs and greyhound trial tracks • initiating, developing and implementing policies for the promotion, strategic development and welfare of the greyhound racing industry in NSW • allocating the dates on which greyhound races may be conducted, and • developing and reviewing policy in relation to the breeding and grading of greyhounds.

Action	Output
Examine the organisation's annual budget for the current year. This may list the outputs of the organisation with a description of each output.	List of annual budget outputs, with descriptions. For example, the 2003/04 budget lists the following outputs of Greyhound Racing NSW: • Members • Stewarding • Central Grading • Drug Detection • Registrations • Appeals Tribunal, and • Administration.
Examine the organisation's most recent annual report and identify the main headings under which the organisation's achievements are grouped. Alternatively, identify the main budget headings under which expenditure was incurred.	List of key achievements for the organisation in the past financial year, with summaries of each achievement. For example, the Greyhound Racing Authority (NSW) Annual Report 2003 grouped its outputs and achievements under the following headings: • Achieve a viable industry structured to promote growth • Continually strive for an improved standard of administration provided to industry clients • Improve, promote and foster the public image of greyhound racing, and • Formulate, progress and participate in an active Marketing and Promotion strategy
Examine current or recent organisation-wide corporate or action plans for the key objectives of the organisation or of significant parts of the organisation. Note: If the plans only apply to part of the organisation, they will probably be of more use in identifying activities and transactions in Stages 2 and 3.	List of corporate objectives. For example, the corporate objectives for the Greyhound Racing Authority in 2003 included: • Achieving a viable industry structured to promote growth, and •Improving the public image of greyhound racing.
Examine the organisation's website and Intranet, and note the main headings. **Tip**: Ignore headings like 'About us' and just focus on the headings that relate to things the organisation does for its clients (whether external or internal).	List of main subject headings with summaries of the area to which each refers. For example, the Greyhound and Harness Racing Regulatory Authority's website includes the following headings: • Racing information • Stewards inquiries • Greyhound ownership, and • Drug information.
Assess any other relevant sources for possible information about the organisation's functions.	Other information about the organisation's functions.
Use the lists developed in this Stage to	Draft list of the organisation's functions with

Action	Output
compile a single, consolidated list of the functions of the organisation, including a description for each function which states what the term includes. (The description may also state what the term excludes, if necessary.) **Tip**: Compare the lists developed in this stage and group elements together as appropriate. **Tip**: Use the descriptions to ensure that no functions overlap, and that all aspects of the organisation's business are covered. **Tip**: It may be necessary to come up with new terms to describe the organisation's functions rather than using the language from the sources examined.	descriptions
Identify which business units are involved in delivering each function.	List of functions and associated business units

Stage 2: Identify your organisation's activities

Action	Output
Examine the sources looked at in Stage 1 for references to specific activities that the organisation undertakes in support of its business. **Tip**: See Sources for Step B for other suggested documentary sources.	List of activities undertaken by the organisation, with descriptions For example, the Greyhound Racing Authority (NSW) Annual Report 2003 identifies a number of activities, including: • policy development • standards setting, and • compliance monitoring.
Use the list of functions and associated business units developed in Stage 1 to identify and arrange interviews with key staff in the business units that deliver each function, ensuring that all involved business units are covered, to discuss the activities their unit carries out.	List of activities carried out by organisational units, with descriptions **For example**, staff in the Stewarding Section of the Greyhound Racing Authority may undertake the activities of: • supervising race meetings • drug testing • inspecting kennels, and • instigating inquiries.
Use the lists developed in this Stage to compile a single, consolidated list of activities for each function identified in Stage 1, including a description for each activity which states what the term includes.	Draft list of activities for each function with descriptions.

Action	Output
Tip: Compare the lists developed in this stage and group elements together as appropriate. **Tip**: Use the descriptions to ensure that no activities overlap, and that all aspects of the function are covered. Combine any overlapping activities into a single activity if appropriate. Otherwise, redefine the description of the activities so that they do not overlap.	

Stage 3: Identify your organisation's transactions

Action	Output
Review the organisation's lists of records series (if available) and identify the transactions which produce these records.	List of transactions which produce the organisation's records, with descriptions. For example, if the Greyhound Racing Authority has a series of records called 'Greyhound welfare policies', the transactions which produce these records may include: • research • draft policy • consult with stakeholders on draft policy • redraft policy • implement policy, and • review policy.
Use the list of functions and associated business units developed in Stage 1 to identify and arrange interviews with key staff in the business units that deliver each function, ensuring that all involved business units are covered, to discuss the transactions their unit carries out.	List of transactions carried out by organisational units, with descriptions. For example, staff in the Stewarding Section of the Greyhound Racing Authority may undertake the transactions of: • swabbing greyhounds • testing swabs for drugs • writing reports of findings, and • notifying greyhound owners of results.
Examine the draft list of activities with descriptions developed in Stage 2 and detail the sequence of steps that make up each activity. Tip: Use the descriptions to refine the list of transactions. Tip: After this step, it may be necessary to go back and further refine the activity descriptions developed in Stage 2. Draft list	Draft list of functions, activities and transactions with descriptions of the scope of each function and activity.

Action	Output
of transactions that make up each activity Use the lists developed in this Stage to compile a single, consolidated list of transactions for each activity. Tip: Compare the lists developed in this stage and group elements together as appropriate.	

Stage 4: Review functions, activities and transactions

Action	Output
Review the draft list of functions and their descriptions from Stage 1 with reference to the draft list of functions, activities and transactions with descriptions of the scope of each function and activity developed in Stage 3. This may highlight any gaps or problems with the way the functions are defined. **Tip**: It should always be clear as to which function an activity belongs. If it is not clear, refine the description of the scope of the function or the scope of the activity.	Reviewed list of functions, activities and transactions with descriptions of the scope of each function and activity

Stage 5: Testing functions, activities and transactions

Action	Output
Test the list of functions, activities and transactions with descriptions of the scope of each function and activity developed in Stage 4 in interviews and workshops with relevant staff members.	Final list of functions, activities and transactions with descriptions of the scope of each function and activity

Although the hierarchical analysis involves a 'top-down' approach, it is not essential that you finalise the highest level of the hierarchy before moving on to its lower levels. Indeed, identifying transactions will help define the boundaries of activities and therefore the scope of functions. The examination of sources will often provide information that is relevant to a number of levels and you should expect to revisit each level several times in order to refine and enhance the model.

Tip: Start with the function you understand best

This might be the one in which you are involved or it might be the one that is very easily understood. This will help you get used to the methodology.

3.2.4 Sequential analysis

Overview

This section describes the other type of analysis carried out to analyse your business activity - sequential analysis.

What is sequential analysis?

Functions also consist of business processes which are responses to a business event. An event is 'a logical unit of work that must be completed as a whole. An event is triggered by a discrete input and is completed when the process has responded with appropriate outputs'[19]. Sequential analysis is a 'bottom-up' approach - at a smaller scale than the hierarchical analysis. It involves identifying the sequence of steps or transactions and any variations that are currently undertaken to respond to a business event and achieve an outcome within the context of an organisation's functions, systems and rules. This may involve identifying the linkages and dependencies between processes and is workplace and time specific[20]. Sequential analysis should be carried out after, or as part of the hierarchical analysis, and the processes mapped to the hierarchy. The advantage of starting with hierarchical analysis is that it gives you the organisational context in which the activities and processes are taking place. Processes may straddle across a number of different functions or may be contained within one or two functions.

Stages in sequential analysis

Considering the boundaries of your project and the tasks on which your analysis will be focused, you need to begin by investigating the process to find out:

- the standard sequence of steps within the process. Each transaction should be a separate step
- the inputs or dependencies from other systems (such as the need for authorisation, records etc)
- critical actions which need to be completed before steps can occur
- the people managing and performing the process and what accountabilities they have
- where the process is being carried out

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[19] J. Whitten and L. Bentley, Systems Analysis and Design Methods, 4th ed., McGraw-Hill, Boston, 1998, 218
[20] Standards Australia, AS 5090-2003, *Australian Technical Report: Work Process Analysis*, pp 4 and 8. This document is available for purchase from Standards Australia.

- what rules affect the process
- what records are currently being generated as a by-product of transactions and why, and
- any needs for generating records that are not currently being created.

Not all processes are step by step. There may be different paths contingent on certain decisions or actions and these should also be examined.

You can identify these by:

- observing work flows
- reviewing regulatory and legal requirements that impact on the process
- reviewing local operational manuals, business rules and organisational policies and related documentation that impact on the process, and/or
- interviewing staff members involved in performing the processes and managers who have accountabilities.

Australian Standard AS 5090-2003, Work process analysis for recordkeeping contains a range of questions to assist you in identifying the sequence of actions, variations and rules that provide the basis of processes, and other elements of the sequential analysis.[21]

Example: Sequential analysis of training authorisation process

This is the sequence of steps in a process to authorise training for a staff member:

- a staff member expresses interest in a training course
- a training application form is completed by the applicant
- the form is authorised by the supervisor along with details of the course applied for
- the form is sent to the Human Resource Manager who checks for conformity with internal training policy and records details in database
- the form is authorised by the Human Resource Manager and recorded in their training database
- notice of the authorisation is confirmed to the supervisor and applicant.

A variation to this process may be that the form is rejected and notice is given to the supervisor and applicant of the rejection. Another possible variation may be an appeal about the rejection.

A related process would be the process of enrolling and paying for a training course that has been approved. The process of enrolling is contingent on the authorisation process.

Like hierarchical modelling, you should expect to revisit your business process models several times in order to refine and enhance them. You should document your analysis and seek validation of the information from participants in the process.

If you find problems or issues with your processes during sequential analysis you should note them and consider whether you want to redesign them in *Step F: Design of a recordkeeping system*.

Process mapping

Process mapping provides a graphical representation of a process, using arrows, boxes and other tools to indicate the 'flow' of the process, what steps are taken, what decisions are made and what records are created. It is a methodology used in systems design.

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[21] Australian Standard AS 5090-2003, *Work process analysis for recordkeeping*. This document is available for purchase from Standards Australia.

Using a process map may assist in graphically documenting your analysis of the records produced by different activities. The value of a process map is in building a picture of activities with which you are less familiar, helping you to identify the different steps in the process and what records should result.

Example: Process map of training authorisation process[22]

3.2.5 Analysing risk

Overview

Once the hierarchical analysis and process analysis has been performed, the risk connected to functions and activities should be analysed.

How detailed the process will be will depend on your organisational culture with respect to risk, whether recent organisational risk assessments have been done and whether research indicates there is likely to be a high level of risk.

Assessing risk at the functional level in Step B assists in:

- prioritising areas for future analysis, and
- identifying organisational areas that perform the function as requiring more stringent recordkeeping practices and training.

Risks in Step B

If you have conducted the analysis in *Step A: Preliminary investigation* you may have already identified some areas of risk in your organisation. Source analysis during Step B may have revealed other areas of risk, for example, legislation may carry strong penalties for non-compliance in particular areas, or risks may have been identified in workshops with staff.

You also need to consider the consequences of these risks, such as financial loss, public embarrassment or unacceptable delays. The degree of analysis will be dependent on your organisation's culture and experiences with respect to risk.

Link to functions and activities

If you have identified areas of risk in *Step A: Preliminary investigation* or *Step B* you should link them to the analysis you have performed. For example, the risk can be noted next to the functions - activity - transaction it relates to. This will assist you to see what functions and activities constitute the most risk for the organisation and help you if you wish to prioritise your DIRKS work based on levels of risk.

3.2.6 Documenting Step B

It is at your discretion regarding how you wish to document the business analysis and how detailed this documentation needs to be.

Decisions may be made based on the aims of your project.

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[22] Cayman Islands National Archives (CINA), *Records Management Workbook 1: Developing a disposal schedule*(Draft) (2006)

Documentation should be kept on functions, activities, transactions, processes and sources analysed. This section gives further advice on what should be documented.

Business classification scheme

The business classification scheme is a hierarchy of functions, activities and transactions. A business classification scheme helps you to make decisions about the management of records at an aggregate level.

The layout of the business classification scheme can make it easier to see if there are any inconsistencies or overlaps in your analysis. You can check that:

- the combined functions account for all of the business the organisation carries out
- each function and activity and transaction is described using meaningful terms
- each function and activity has a definition and date ranges if they can be found (and if they are relevant to the project)
- the boundaries of each function mutually excludes the other functions, and
- the boundaries of each activity mutually excludes the other activities.

Example of a business classification scheme

An example of one way you might represent a hierarchical business classification scheme is shown below. In this example, the definitions have been turned into scope notes in preparation for a thesaurus. The organisation is a fictitious one that monitors food production.

Function	Activity	Transaction
Quality Compliance **Date range**: 1998 - **Description**: The function of monitoring the observance of quality assurance standards and licence conditions by food producers. Includes managing complaints,	**Complaints management** **Date range**: 1998 - **Description**: The activity of receiving and responding to complaints. Includes ensuring that any necessary corrective action is taken.	- Receive complaints - Assess complaints and possible solutions - Refer complaints to other programs - Respond to complainants

Function	Activity	Transaction
inspecting facilities and taking enforcement action where the health and safety of consumers is at risk.		
	Inspection **Date range**: 1998 - **Description**: The activity of inspecting food producer production methods and facilities. Inspections may be in response to complaints or as a part of licence allocation or monitoring processes. Includes reporting on the inspection, issuing notices, re-inspection and referrals to other Departments for action.	• Inspect and assess food production processes and facility • Issue Direction or Improvement Notices where applicable • Report on inspection • Reinspect and assess where notices have been issued • Report on re-inspection • Refer breaches to other Departments
	Investigation **Date range**: 1998 – **Description**: The activity of investigating and reporting on breaches of quality standards and licence conditions with regarding to food production methods and facilities. Includes interviewing and observing production and facilities, reporting and referrals.	• Interview food production staff • Observe food production and facilities • Refer breaches to other Departments where further action is required • Report to the Quality Food Board • Inform producer of results of investigation • Include summary of breaches in annual report

Document details regarding functions

Aside from your business classification scheme, it can be useful to record your more detailed findings regarding the functions. This information can be picked up in later steps or projects. For example, you could record information on:

- legislation or other sources that underpin the functions and activities
- risks associated with each function and activities
- stakeholders that have an interest in the function or activity
- business sections that are responsible for or carry out aspects of the function, and
- changes to the function through time (if found), and
- more details regarding the dates of functions (if found).

In addition, you should keep documentation of the information collected in your sequential analysis. Diagrams, known as 'logical models' are often a suitable way to record the analysis of business process information[23]. Textual information should also be recorded about processes, such as the name of the process, transactions within it, records created or that need to be created as part of transactions, responsibilities, recommendations regarding changes and what functions and activities they have been mapped to. Dates when the processes were analysed should be recorded.

Assign terms to functions and activities

As part of your analysis it will be necessary to choose terms that can provide labels for the functions and activities you have identified. The terms chosen should reflect the terms used in your organisation or industry and in current files.

At this stage the terms do not need to be too controlled - they simply act as a 'handle' on the concepts. They can be phrases, for example, rather than one or two terms. If you are going to develop a keyword thesaurus you can refine them at a later stage.

Tip: Using controlled vocabulary

Some people do set up a controlled vocabulary in their business classification scheme as it enables them to clarify the document and make it suitable for viewing by organisational staff. If you have an existing thesaurus or retention and disposal authority, you may decide to use that terminology in your business classification scheme. If you are going to develop a thesaurus anyway, you may find it useful to include the controlled vocabulary in the business classification scheme. You will need to consider how the terms used 'fit' with Keyword AAA terms and should refer to Guidelines for Developing and Implementing a Keyword Thesaurus for more information.

Tip: Terms that reflect administrative areas

If you choose terms that relate to administrative areas you may have difficulty in convincing staff of the differences between the function and the administrative area. If the terms are also in the thesaurus, staff will need to be instructed in their use or they tend to assume the terms refer to the administrative area.

Describe functions and activities

You will also need to include descriptions for functions and activities in the business classification scheme. The main reason to define the boundaries or breadth of each function or activity is so you can ensure that their meaning is understood, that entities at the same level do not overlap and that the relationship between entities is clear.

The definition of the function or activity will start as quite tentative statements or even dot points, and then can be revised as you refine your business classification scheme. If you are intending to compile a thesaurus these definitions can be turned into scope notes.

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[23] Such models are shown in Jeffrey L. Whitten and Lonnie D. Bentley, Systems Analysis and Design Methods, 4th ed, McGraw-Hill, Boston, 1998, 122

Assign dates to functions and activities

If your project involves creating a disposal authority, it is valuable to note down details of changes in the ways functions and activities are performed when you come across them. Sources for this information should also be noted in case you wish to go back and check the information.

Date ranges are particularly valuable for compiling retention and disposal authorities. Information about changes over time will help you to assess whether additional disposal classes and actions are required in the retention and disposal authority to reflect the changes.

Tip: Note changes

If you suspect or know changes have taken place but you cannot find authoritative sources to support this, note the changes and inform State Records when you submit your retention and disposal authority.

Link stakeholders

As part of analysing the broad legal and social context in the preliminary investigation (Step A), you would have identified organisational stakeholders and you may come across more during this step.

Example: Identify stakeholders

- external stakeholders that participate in the work of the organisation, like individual clients, client organisations or other NSW public offices will be obvious when you analyse activities and transactions
- particular areas or individuals in the organisation may also have an interest in the function. They will include those areas responsible for carrying out the function and activities, but may include other areas and individuals.

Stakeholders in processes will include those involved and those managing the processes or those requiring the process to take place in order to complete other processes.

These stakeholders should be linked to the relevant function or activity as their interests may be a source of recordkeeping requirements in Step C: Identification of recordkeeping requirements.

Validate schemes

It is important that you consult widely during your functional and sequential analysis of business activity. It is also important that you validate what you have found and documented in your business classification scheme. This will involve asking questions of managers and operational staff to confirm that your analysis and representation is accurate and complete. It is essential that your models are meaningful to the organisation as they have the potential to inform key recordkeeping activities (including intellectual control and appraisal).

The hierarchical and sequential analysis and business classification scheme should also be validated with senior management. You may, for example, compile a report on your findings to show senior management which can also serve as a progress report on your project.

Keep your analysis up to date

Analysis of business activity can provide an effective and powerful tool for managing records. To ensure that your analysis and business classification scheme remains relevant to your needs it is prudent to periodically review its currency, particularly when there is:

- administrative change within the organisation
- a government election, or
- a change in organisational responsibilities.

3.3   Step C – Identification of recordkeeping requirements

Collect information from documentary sources and through interviews; identify the requirements for evidence of and information about each business function, activity and transaction which should be satisfied through records. The requirements can be derived from an analysis of the organisation's regulatory environment and the risk of not creating and maintaining the records. Determine how each requirement may be satisfied through records management processes, and articulate and document the requirements for records. Choose the appropriate records structure which best satisfies each business function, activity or transaction. [AS ISO 15489.1, Clause 8.4]

3.3.1 Content and scope of Step C

The aim of Step C is to identify and document your recordkeeping requirements. Recordkeeping requirements are requirements arising from regulatory sources, business needs and community expectations.

Overview

This section in an introduction to Step C: Identification of recordkeeping requirements. This section:

- outlines the aim of Step C
- summarises the major elements of Step C
- explains why it is important to undertake Step C for particular DIRKS projects
- indicates how Step C is scalable and when it is necessary to complete, and
- shows how Step C relates to the other steps in the DIRKS methodology.

Aim of Step C

The aim of Step C is to identify and document your recordkeeping requirements. Recordkeeping requirements are requirements arising from regulatory sources, business needs and community expectations. They identify the types of records you need to create and the management framework you need to establish in order to have and accountably manage all the business information that is necessary for your organisation.

Many DIRKS projects require knowledge of your recordkeeping requirements, so that you can determine whether your current practices are actually meeting your business needs, and so that you can design systems that fully meet your range of requirements.

Summary of Step C

Step C is concerned with finding and documenting the recordkeeping requirements that exist either for your whole organisation, or in relation to particular functions, activities, processes or business systems. These may be broad requirements relating to the jurisdiction or

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industry your organisation operates within, or may be specific to your particular business. Such requirements may be explicit or implicit.

Documentary sources and interviews provide information on recordkeeping requirements. You need to collect and analyse these sources so you can identify your:

- business needs
- legal and regulatory obligations, and
- community expectations.

You also need to:

- define the type of requirement (ie what it is requiring you to do in terms of creation, capture, disposal, access, form, content and/or quality) so that you can plan whether and how to satisfy it
- map requirements to your functions and activities (your BCS if you have completed Step B) so the business context of the requirements is clear

If there are recordkeeping requirements your organisation does not wish to satisfy, perhaps due to cost or other difficulties they impose, you will need to identify your organisation's exposure to risk if these evidential requirements are not addressed. The main product of Step C, then, is set of requirements the organisation has agreed to meet (which may be limited according to the scope of your project).

Why should you do Step C?

Opportunities from knowing your requirements

Step C is a crucial step in designing a recordkeeping system. If you know exactly what your recordkeeping requirements are you can ensure:

- you make effective use of records management resources
- your organisation is meeting its requirements and conducting business in line with best practice.

Step C can assist you to obtain:

- an understanding of the requirements to create and keep records as evidence in relation to specific business activities
- an appreciation of your organisation's level of exposure to evidence-related risks (such as failures in accountability, legal action)
- a basis for designing tools that can facilitate good recordkeeping
- a benchmark for assessing your current systems (Step D)
- a basis for determining the range of recordkeeping strategies which best enable your organisation to meet their recordkeeping requirements (Step E), and
- the basis for developing functional specifications for recordkeeping systems, including software products (Step F).

Consequences of not knowing your requirements

If your organisation is not aware of its recordkeeping requirements it might:

- unnecessarily keep records it doesn't need to maintain, which is inefficient and costly
- fail to create records that it is required to keep
- manage records inappropriately, or
- keep records for insufficient periods of time, which will expose the organisation to certain risks and prevent business being conducted effectively.

How is Step C scalable?

Relate to the project scope

Step C is essential to most DIRKS projects because it provides the benchmark to measure systems against. The only time it need not be completed is if you already know your organisation's recordkeeping requirements in detail and know the risks of not meeting them. However, Step C can be scaled down for particular projects. See Doing your DIRKS project for how Step C specifically applies to particular projects.

Existing frameworks to map requirements to

You may already have frameworks in existence derived from *Step B: Analysis of business activity* or from existing recordkeeping tools such as function based thesauri or retention and disposal authorities. These will give you the structure to map your recordkeeping requirements to, so you can scale down your examination of recordkeeping requirements to a particular function.

Example: The personnel management function

In Step B: Analysis of business activity there was reference to the council that had decided to analyse the business conducted within their human resources function. Their aim was to improve their current practices and to identify their recordkeeping requirements and determine their levels of compliance. They chose to use the function of PERSONNEL and related activities from the Keyword for Councils thesaurus as a basis for their business classification scheme.

In Step C they could focus on finding recordkeeping requirements relating directly to the personnel function, or broadly affecting it, and exclude the requirements that did not have implications for this function.

When frameworks do not exist

As discussed in *Step B: Analysis of business activity*, if your organisation's core functions are not covered by a classification scheme of any kind, it is not advisable to try to analyse a core function or system in isolation. You should at least roughly map your core business functions and activities and consider issues which may affect them before trying to concentrate on the recordkeeping requirements relating to one function or system.

The reason for this is that:

- you need a broad perspective of the boundaries of the function or system and how it relates to, and impacts on, other business activities being performed
- you may discover when taking a broader view that there are other areas of high risk that may warrant priority in subsequent stages of the design and implementation process. These areas may correlate to particular recordkeeping systems, business activities or business units.
- if you analyse one function or system in isolation, without a broader map, you may inadvertently cross boundaries of other functions and may miss requirement and risk identification. These omissions may force you to revise your analysis later.

See Sources for Step C for more information about other sources that can save you time and effort in your project.

Relationship to other steps

Steps A and B

You may have completed either all or parts of Step A: Preliminary investigation and Step B:Analysis of business activity before undertaking Step C. The earlier steps contribute to Step C in the following ways:

- the investigation in Step A and analysis in Step B allow you to understand your organisation and the context in which it operates, including areas of risk
- the business analysis and scheme produced in Step B provides a workable structure that you can link recordkeeping requirements to in order to understand their context
- the sources you examine in Steps A and B will contain a range of recordkeeping requirements.

If you have not conducted the earlier steps, you will need to have a good knowledge of the organisation and its functions and practices and be prepared to do some research into sources for Step C. You will also need to develop or have in place a suitable way of mapping your recordkeeping requirements to their business context.

Step D

The recordkeeping requirements identified and agreed to in Step C provide a benchmark for assessing the operation of your existing systems in *Step D: Assessment of existing systems*.

While the identification of current recordkeeping systems is carried out in Step D, some initial work can also be done during Step C.

Example: Identifying systems that keep records

During the process of identifying records currently created in the organisation you may discover that records are kept in a variety of formal systems such as the centralised registry system, human resource management system, the financial management system, as well as ad hoc systems maintained by individual officers at their desks. Document this information as you come across it, rather than duplicating your effort at a later stage.

Step E

The strategies for meeting recordkeeping requirements that you select in Step E: Identification of strategies for recordkeeping will be chosen to suit the nature of the recordkeeping requirements identified in Step C.

3.3.2 Sources for Step C

To identify recordkeeping requirements you need to find relevant internal and external sources.

What sources are relevant?

To identify recordkeeping requirements you need to find relevant internal and external sources. There are a wide variety of sources available and you will need to consider which of those is most relevant to the scope of your project. Different types of requirements will generally come from different sources.

> **Example: Sources of recordkeeping requirements**
>
> A regulatory requirement for the creation of evidence may be found in a documentary source, whereas the business need to retain evidence may come from an interview with staff and a community expectation from a discussion with an external stakeholder group.

Draw on other recordkeeping projects

If an identification of broad requirements has already been completed for your industry or jurisdiction, and it is still current, you may be able to draw on this for your analysis.

> **Example: Previous identification of requirements**
>
> For a project to develop a retention and disposal authority, you may like to reference the Australian Records Retention Manual, which includes details of legislation, statutes of limitations etc. The manual is designed to assist organisations in developing their own retention and disposal authorities.

However, it is important to remember that it is the specific nature of your organisation and the context in which it operates that dictates:

- whether it needs to create evidence of its activities
- what type of evidence it needs to create
- what form that evidence takes
- how long the evidence should be retained, and
- what access should be provided to that evidence over time.

Therefore, you need to complete your own analysis of broad and specific requirements.

Internal documentary sources

Previous analysis of system specifications

You should investigate any previous research into recordkeeping requirements carried out in your organisation. You may be able to use or tailor this information for your current purposes.

Analysis carried out in preparation for the design and implementation of other information systems within your organisation may have examined requirements for recordkeeping in specific functional areas. This is particularly likely in core functional areas that require high levels of reporting and/or financial accountability.

It may be worth looking at the requirements documentation compiled for these other systems or procedural guidelines that support particular business processes. Your information systems or business systems unit should be able to provide you with copies of any requirements documentation relating to in-house electronic information systems.

Retention and disposal authority

If your organisation has a current retention and disposal authority you should look at this and the research that sits behind it to find previously identified requirements.

However, remember that in some cases the recordkeeping requirements listed here may not be comprehensive. Some requirements may have been superseded, while new requirements may come into effect at any time. They should be seen as a starting point only.

Corporate policies, guidelines, procedure manuals etc

Requirements for evidence may be found (or corroborated) in corporate policies, internal guidelines, procedure manuals, reporting structures (such as those between managers and staff), and quality assurance programs.

Consumer comments

To ascertain community needs or expectations you might also examine complaints received or comments made by consumer groups or customer councils and written reports addressing customer concerns.

External documentary sources

Legislation

The most relevant external sources are likely to include your organisation's enabling legislation, the legislation it administers, and any legislation that applies to its operations. Regulations issued under legislation may also specify recordkeeping requirements.

Codes of practice, policies, guidelines, reports etc

You will also need to consider codes of practice, policies, guidelines, reports or directives arising from:

- complaints handling bodies such as the NSW Ombudsman
- audit authorities such as the NSW Audit Office
- administrative or judicial reviews
- committees of inquiry
- investigative bodies such as Royal or independent commissions
- central agencies like the Department of Public Works, Department of Local Government and the NSW Department of Health, and
- State Records.

Industry and best practice standards

Various industry standards and best practice standards and guidelines are also relevant, and include:

- the International Standardization Organization AS ISO 15489 standard on records management and the accompanying technical report
- the International Standardization Organization (ISO) 9000 series of quality management standards, and
- best practice standards relevant to particular sectors, such as the health sector.

Media reports

Examining media reports, including newspaper and magazine articles and radio and television coverage that focus on your organisation may also provide valuable information, particularly on accountability or business failures and future risk areas.

Interviews

In addition to documentary sources, key personnel in your organisation can be interviewed to obtain detailed information on business activities and processes and provide useful perspectives on why particular records need to be created and kept.

The following table indicates who you might interview and the information you might obtain:

Person to interview	What might they provide?
Managers	The big picture regarding the organisation's business and accountability requirements.
Operational staff and action officers	Information on more specific business requirements. Knowledge of community expectations in relation to their work.
Audit and legal specialists (internal and external)	Specific accountability requirements and retention requirements for legal defensibility.
Quality assurance managers	What records needs to be kept and why to meet quality standards.

If you have carried out interviews with some key personnel during *Step A: Preliminary investigation* and *Step B: Analysis of business activity*, and you could draw on this contextual material to focus your inquiries in Step C.

You should carefully consider whether you need to also interview some external stakeholders, or whether documentary sources and staff views on stakeholder interests are sufficient. If you have consumer groups or customer councils, these groups could be consulted for stakeholder views. External stakeholder interests may represent different types of recordkeeping requirements.

For further advice on interviewing, see

- Guide to Interviews
- Sample Interview Questions

3.3.3 Identifying recordkeeping requirements

Overview

This section explores how to use the sources you have collected to find the recordkeeping requirements that are likely to apply to your organisation. These could be broad or specific, implicit or explicit, and could be regulatory, business or community requirements. The process of identifying recordkeeping requirements also involves identifying the types of requirement they are so that you can build mechanisms to meet these requirements into your recordkeeping systems.

Broad or specific?

Requirements may be:

- specific, with applicability to a particular record or group of records, or
- very broad, applying to whole functions, types of records or the organisation, industry or state as a whole.

Example: Broad or specific requirements

The requirement in the Ombudsman's Principles of Administrative Good Conduct for public

officials to 'create and maintain full and accurate records which document their activities and decisions, plus the reasons for those decisions' is a very broad recordkeeping requirement that would apply to any area of organisational activity involving decision making and in any public office in NSW.

There is a requirement in the State Records Act 1998, s.61 for State Records to 'keep a register of access directions in force under this Act. The register must be accessible to all free of charge.' This requirement is a very specific recordkeeping requirement, only applying to one record. In this case it only applies to State Records and not to any other organisation.

Legislation that applies across a broad range of public offices can also contain broad recordkeeping requirements.

Example: Requirements applicable across the sector or jurisdiction

The following are examples of legislation that contain recordkeeping requirements and are applicable across the NSW public sector:

- Privacy and Personal Information Protection Act 1998
- Occupational Health and Safety Act 2000
- Government Information (Public Access) Act 2009, and
- State Records Act 1998.

The following are examples of legislation that may apply to a particular jurisdiction:

- Local Government Act 1993, and
- Public Sector Employment and Management Act 2002.

Likewise best practice standards or whole of government policies may introduce a range of broad recordkeeping requirements.

In NSW the broad requirements for 'full and accurate' records are articulated in the Standard on Full and Accurate Records. See also Characteristics of Recordkeeping Systems for an outline of some general requirements for recordkeeping systems.

Explicit or implicit?

Requirements can be explicit, but are more often implicit.

Example: Explicit or implicit requirements

An explicit requirement for creation and access might be that 'the organisation must create a register of licences and members of the public must be given access to it.'

Implicit in this statement is that the records within the register must be captured and maintained for a certain period of time, so that access is possible.

Identify regulatory, business or community requirements

Business needs, accountability requirements and community expectations all contribute to the requirements for organisational recordkeeping. Some requirements may arise from a combination of these.

Regulatory business or community requirements

Regulatory requirements

What are regulatory requirements?

Regulatory requirements are imposed upon an organisation by legislation, regulation, whole-of-government policy, standards or similar instruments.

Example: Regulatory requirement

"A cash book shall be kept in every accounting office and all receipts and payments and amounts deposited in the bank shall be recorded therein." (Treasurer's Directions 400.01.)

Most relevant sources

The Australasian Legal Information Institute databases (AustLII) or the Government of NSW Legislation are useful access points for legislation relevant to your organisation. Similar searches should be conducted of relevant industry regulations and standards although, if such resources are not available in electronic form, manual searches may need to be conducted. A number of standards, including those available through Standards Australia, are accessible (or can be ordered) online.

Determine regulatory requirements

Determining regulatory requirements for recordkeeping involves looking at authoritative documentary sources (such as legislation and whole of government rules, guidelines, directives, standards, codes of practice and policies) and locating where there are requirements for the creation or management of records.

Look for regulatory requirements that relate to:

- the entire industry or business sector in which your organisation operates
- the high-level business functions of your organisation, and
- specific activities or transactions carried out by your organisation.

Identify explicit recordkeeping requirements first. One way to identify explicit requirements is to scan the text of relevant sources for terms such as record, keep/kept, document, preserve, maintain, evidence, destroy, information, store, transfer, year, dispose, retain, month, writing/written etc. Also look for references to specific types of records, e.g. submission, application, register, inventory, appeal, minutes etc. This is especially efficient if the sources are available in electronic form and searches can be performed online.

Implicit regulatory requirements will be more difficult to ascertain. While it is a time-consuming exercise, searching manually through the relevant legislation, formal directives and standards for implicit references to recordkeeping requirements is beneficial to the identification process. It provides a means of acquiring much of the contextual information you need to fully understand your organisation's regulatory environment.

Of course, this approach can also be supplemented by an examination of corporate policies and procedures, and by interviewing personnel who are familiar with the relevant pieces of legislation, formal directives and industry standards, such as accountants, senior officers and legal staff.

Business requirements

What is a business requirement?

A business requirement supports the efficient and effective performance of an organisation's day-to-day work and on going activities. These are the records the organisation needs to carry out its business.

Example: Business requirement

Both schools and universities create and maintain records of student enrolments and progress so they can allocate and manage resources for delivering courses and determine student eligibility for graduation and awards.

Example: Remember requirements to keep electronic records accessible

Your organisation will have a business requirement to keep its electronic records accessible for as long as they are required to meet business needs. This requirement is also included in s14 of the State Records Act 1998.

It is important to consider such accessibility requirements now, and then to ascertain whether all your current systems will enable you to meet this need.

Most relevant sources

Recordkeeping requirements that support business needs are likely to be identified through an organisation's enabling legislation or other instruments of authority (business requirements reflected in regulatory sources), or as a routine part of establishing and maintaining its operations.

Example: Form and content often a business requirement

Organisations that manage funds will automatically identify a business requirement to make and keep evidence of the receipt and expenditure of those funds as this is a routine part of conducting financial affairs and they need the records for accountability. This is likely to be in regulatory sources anyway. However, the form and content of evidence will vary depending on an organisation's functions, corporate culture and external environment. (The records maintained by the NSW Treasury will differ from those maintained by a council or a hospital).

Example: Business requirement derived from interview

You may interview someone in the organisation responsible for managing training course enrolments. In the interview you may discover that they have had a number of complaints about how slow staff are in responding to telephone enquiries about enrolments.

They may identify the need for keeping a list of participants enrolled as it takes less time in referring to the list than going through individual registration forms. This record is required for business reasons as it makes the process of answering enquiries more efficient.

In Step C you could consider the different AGLS requirements that may relate to different areas of your business. For example, if one business area publishes a lot of information to the web, they should be considering resource discovery metadata to improve the online accessibility of this information. In your Step C assessments you should identify such needs and then consider in subsequent steps how the recordkeeping of your organisation can support these needs. For example, in Step C and in subsequent steps you may want to ask:

- what specific types of resource discovery metadata are required to support different web publications in our organisation?
- who should or does capture or create this metadata?
- can some of this metadata be derived from recordkeeping systems and processes?
- can the recordkeeping system be designed to interface with our content management system, to enable automatic creation of AGLS metadata?
- what processes and training can we develop as part of our recordkeeping system development to support our needs for AGLS metadata?

For more information about AGLS, see the Government Chief Information Office website.

Determine business requirements

Determining business requirements for recordkeeping involves looking at corporate documentary sources (such as business plans, corporate policies and procedures, and organisational reports) and locating where there are requirements for the creation or management of records.

Identify explicit and implicit recordkeeping requirements as outlined for determining regulatory requirements above.

Another useful way to identify business requirements is to consider the chain of evidence an organisation or individual needs to substantiate a sequence of decisions or actions, that is, processes. You may have considered this to some extent in Step B.

Example: Chain of evidence required

Copies of invoices sent provide evidence of income due in return for goods or services rendered.

During Step C, you will also need to closely examine existing policies, guidelines, work procedure manuals and standard operating procedures to identify when records relating to organisational functions and activities are created. You will then need to interview business area experts within the relevant functional areas to determine:

- why these records are created
- how long the records remain active
- how long the records are required for reference or ongoing use
- whether any other business units may also use the records, and
- who might use these records in the future, and when might they use them.

Example: Organising and conducting a meeting

Transaction	Record	Business need
Determine time and venue of meeting	Emails between participants	Need to keep until meeting has been arranged
Book meeting room	Email request / Email confirmation	Need to keep until meeting has been held, and possibly for reference when booking next meeting
Write agenda	Agenda	Need to keep until meeting has been held
Circulate agenda, agenda papers and minutes of previous meeting	Email invitation with attachments	Need to keep for as long as minutes, as evidence that participants were invited to meeting
Record apologies	Minutes	Need to keep at least until next meeting, but probably longer – as evidence of deliberations and decisions. Business need depends on work of the committee, how long its projects run, how long minutes are required for reference etc. May also be a regulatory requirement for minutes.
Record meeting business and discussions		
Schedule next meeting		
Close meeting		

Community expectations

What is a community expectation?

A community expectation for records creation, management and disposal refers to a requirement from the general public or a stakeholder group within the community. It indicates what records they expect you to create and maintain. Expectations reflect either an interest in the records themselves as sources for research, or the desire for government to account for its administrative affairs.

> **Example: Community expectation**
>
> It is a well recognised community expectation that government will create and keep records of all financial expenditure and commitment of expenditure. The community, as taxpayers, reasonably have this expectation.

Most relevant sources

Documentary sources that may give expression to the community's interests in records include:

- minutes of consultative meetings

- proceedings of advisory board or council meetings (where impressions of community expectations are reported)
- representations
- parliamentary debates
- media monitoring exercises, or
- the organisation's website (visitor logs or users questionnaires).

You may also obtain further guidance from staff in the business areas who are aware of community expectations that should be considered in relation to their activities. Consultation with stakeholder representatives should be conducted if sufficient information on their expectations is not available internally, and to foster understanding with the stakeholders.

Determine community expectations

Community expectations expressed by a wide range of external stakeholders can give rise to recordkeeping requirements that may or may not be reflected in business and regulatory requirements.

There are times where there is concern in the community about the interpretation and/or application of particular laws or the administrative actions taken by government. Both existing community bodies, or new advocacy or interest groups will express their views and concerns to the government in office. Individuals and groups from the media can also be part of this process. An organisation may consult with and form an ongoing relationship with these groups to provide briefings and receive feedback in return.

Some organisations also have established relationships with researchers, historical groups or enthusiasts who take a particular interest in the organisation's archives. Community views may affect government policy informally. Alternatively, the activities of these groups may impact more formally on the process of government and eventually their views can be transformed into formal accountability requirements.

Nonetheless, it is often difficult to discern what evidence an organisation should create and keep to satisfy community expectations until it fails to anticipate or recognise an interest in some way and attracts public criticism. Evidence of potential value will include policy documents and general correspondence that reveal government's changing stance on a particular issue or a community's shifting response over time. The value of such records becomes obvious when the histories of particular organisations, functions or activities are commissioned.

Community expectations may become apparent when, for example:

- the organisation receives a request under the Government Information (Public Access) Act (GIPA) for planning applications from 1985
- a newspaper article highlights the value of particular files for statistical research
- debate in Parliament criticises a department for destroying application files two months after grants are allocated, or
- a local committee for the preservation of historic buildings writes to the Minister explaining their interest in maps, plans and aerial photographs of a particular site or area.

Identify types of recordkeeping requirements

You also need to recognise different types of recordkeeping requirements so that you can plan how to satisfy them. The following table shows a range of types of recordkeeping requirements and examples of each.

Type of recordkeeping requirement	Example
Creation of a record	'A cash book must be created.'
Capture and maintenance of a record	'Submissions received by the organisation must be registered.' 'A record of the conversation must be kept.'
Retention and disposal of a record (could be expressed in a number of ways as shown below)	
• in terms of the record's retention for a set period	'Leave records must be kept for at least 6 years.' 'The record must be kept for the lifetime of the child.'
• in terms of the record's retention for an extended period	'These records should be retained permanently.' 'The records must be retained as State archives.'
• in terms of the record's destruction	'The records of the check must be destroyed within X months.'
Access to a record	'Licensees should not be given access to the records of other licensees.'
The form a record should take	'A cash book should be created' 'A register must be kept'
The content a record should contain	'The Register must contain details of the person's name, current address, interests...'
The quality of the record	'Details in the register should be accurate and authenticated by a senior officer.'

Required recordkeeping functionality

There are also recordkeeping requirements that relate to the functionality a system should have to support good recordkeeping. These requirements are just as important, as they ensure that records are created and maintained in appropriate ways to ensure they function as evidence. For more information about required recordkeeping system functionality, see Characteristics of Recordkeeping Systems. Sources for Step D assessment also contains additional information on these system requirements.

3.3.4 Linking requirements to functions and activities

Once you have identified your recordkeeping requirements in relation to the area of business you are investigating, you need to be able to link them to the function/activity to which they relate.

If you are only concentrating on one particular function you will only need to focus on:

- what specific requirements you have found in relation to that function, and
- the broad recordkeeping requirements you have that relate to every function.

Advantages of linking recordkeeping requirements

The advantage of linking recordkeeping requirements to functions and activities is that you can place them in context. You can then see where responsibility lies for ensuring requirements are met and you can assess if and how the recordkeeping requirement is being met. If you are doing Step D: Assessment of existing systems it will also assist you to assess systems supporting those functions and activities.

With requirements that apply to the activities of the organisation as a whole, you will also need to consider how these requirements are being met across the organisation in Step D.

Matching sources of recordkeeping requirements with records

The following tables set out some methods for deciding which sources are likely to contain recordkeeping requirements for specific records classes. Once you have matched recordkeeping requirements with records classes, you will be able to link recordkeeping requirements with functions and activities.

Action	Example
Identify the types of records created as part of a particular business activity, e.g. contracts, reports, designs, maps, cost estimates, applications, tenders, proposals, letters, emails, policies, registers, minutes, working papers, agenda, plans, submissions, research etc.	An energy company may create records relating to renewable energy and greenhouse gas targets, e.g. annual renewable energy returns, as part of their business activity of 'environmental performance management'.
Now examine the sources relating to this particular business activity for possible recordkeeping requirements.	One of the sources relating to this business activity is the NSW Greenhouse Gas Abatement Scheme, Guide to Record Keeping, which notes that records relating to greenhouse gas must be retained for a period of at least 6 years. Therefore, annual renewable energy returns need to be retained for a minimum of 6 years.
Identify the people responsible for records created as part of a particular business activity, e.g. the person who creates the records, the person who receives the records, the person who maintains the records etc. The customer service officer of an organisation may create a register to record the number of requests for information about the organisation's opening hours received every day.	Now examine the sources relating to the business unit these people work in for possible recordkeeping requirements. An internal policy states that the customer service section must report quarterly on the number of inquiries received. Therefore, the register needs to be retained until the report is prepared at the end of the quarter.
Identify the use of the records, e.g. which staff or business units refer to the records, whether the records are needed by external stakeholders etc. For example, the NSW	Now examine the sources relating to these stakeholders for possible recordkeeping requirements. An interview with staff reveals that these plans are used by staff

Action	Example
Fire Brigade may create fire management plans for specific areas.	while current, and are also referenced by staff as part of planning review processes. Therefore, the plans need to be retained after they are superseded for as long as needed for reference in planning review processes.

3.3.5 Analysing risk

Overview

Once recordkeeping requirements are identified and linked to functions and activities, you should analyse the risks associated with the requirements. This section explains the types of risk you examine in Step C, and gives further information on when and how to analyse risk and what to do with the results of your risk analysis.

Types of risk examined in Step C

The risk assessment in Step C is a different approach than that used in other steps. In *Step A: Preliminary investigation* and *Step B: Analysis of business activity* you examine the risks related to the business activity, that is, the risk involved in performing the work. In this step, you examine recordkeeping risks.

Recordkeeping risks are the risks that result from:

- creating and maintaining records
- not creating records at all, or
- not having appropriate or adequate records of the work to meet your recordkeeping requirements.

There are links between the three types of risks.

Example: Links between types of risk

The high risk related to a particular area of business could be reduced by good recordkeeping. Therefore the risks of not creating records relating to this area may be high.

When to analyse risk

You do not need to perform a risk analysis for all of your records. Rather, you should look at your list of recordkeeping requirements and determine if:

- it may not be in the organisation's best interests to meet a requirement fully or in part, or
- there is a conflict between requirements.

In this case, a risk assessment of the likely consequences of not meeting the risk is necessary.

> **Example: Requirement not in the organisation's interests to meet**
>
> You may have identified that there is no legislative or business need, but there is a community expectation that a certain series of records is available for research. Yet, it is extremely costly to store these records, and expensive and difficult to continually migrate them so that they remain accessible.
>
> You need to assess the risk to the organisation if it destroys the records in a shorter period of time. If the result of the risk analysis is that the risk is 'low' the organisation may choose not to meet the community expectation.

> **Example: Conflicting requirements for census records**
>
> The Australian Bureau of Statistics faced an interesting dilemma with the individual census returns they created as part of the course of their business. On one hand there were groups in the community who believed strongly that these records should be destroyed in the interests of privacy after the business need had been met. Another group of stakeholders believed strongly these records should be kept to support future research. In addition, there were recordkeeping requirements under the Commonwealth privacy legislation that needed to be taken into account in the creation, management, use and destruction of these records.
>
> The ABS had to assess the interests of both stakeholder groups and the risks of keeping and not keeping these records.
>
> They decided to offer Australians the choice if they ticked a box on the census return to indicate they wished the return to be kept, it became a National archive with access restricted for 100 years. If they did not tick the box the return was destroyed after it had ceased to be of business use. This decision partly met stakeholder interests and was compatible with privacy requirements.

In the majority of cases, regulatory requirements are essential for organisational accountability and you should meet them. However, implied requirements or the level of quality to which the requirements are met might be questioned.

The level of risk associated with maintaining records may influence the length of time they are retained, particularly if the risk of disposing of them is moderate to low. Risks associated with maintaining records include:

- costs of preservation, storage and security
- costs of setting up programs, policies, procedures and systems to manage the records effectively, and
- risks of improper access leading to breaches of privacy or confidentiality.

> **Tip: Risks of discovery or access do not justify non-creation or disposal**
>
> The risks of discovery action or legitimate access to records should not be used to justify the non-creation or premature disposal of records that it would otherwise be desirable to have.

How to analyse risk

If there are requirements your organisation is considering not meeting, or if there is a conflict between requirements, you can determine through risk assessment an appropriate course of action.

You need to establish clear definitions of what constitutes different levels of risk to your organisation (including 'unacceptable risk' as a benchmark), and then prioritise the identified recordkeeping requirements according to this scale. Your organisation may already have in place its own risk management policy that defines such benchmarks.

The following table outlines some steps you might like to take in conducting a risk analysis:

Step	Action
1.	Assess conflicting requirements in terms of: • the financial costs of meeting or not meeting the requirement, such as the cost of storage if records are to be retained for a long period • the volume of the records affected by the requirements • the impact of retaining the affected records for long periods on computer systems • the business value of the information contained in the records • any legal or financial penalties that may be incurred if the records are destroyed prematurely • the historical significance of the records • your organisation's ability to maintain the records for long periods, such as preserving paper records or migrating electronic records, and • the potential effects on your organisation's public image if the records are destroyed.
2.	Identify and describe the consequences of not meeting each requirement, and determine the likelihood of each consequence occurring.
3.	Weigh up the costs and benefits of meeting each requirement and the consequences of not meeting the requirements.
4.	Discuss the issues with operational staff and management to reach an informed decision. Document this analysis and the decisions reached for future reference. This will assist in justifying your recommendations for retention and final disposal actions if you develop a disposal authority for these records.

Example

Requirement	Costs and benefits of meeting requirement	Consequences of not meeting requirement	Decision and justification
A business requirement to purge computer data every 6 months to keep online storage available	Available memory keeps the system operating efficiently	Organisation cannot demonstrate the integrity and security of the database over time Less memory and a slower system	Output audit trails to printed report and purge system every 12 months. Retain printed reports for 75 years
A regulatory requirement to keep audit trail data for 75 years	Memory is reduced and the entire system slows down Organisation is able to prove the	Severe legal penalties and a failure of accountability	

	integrity and security of the database content		

Consequences of risk

Decisions not to meet requirements may:

- compromise current or future business activity
- compromise the organisation's capacity to defend or prosecute claims
- result in loss of amenity for the organisation
- attract adverse publicity or community reaction
- compromise rights and entitlements of other parties affected by government decisions and actions
- compromise wider government interests, and
- diminish archival resources.

Example: Consequences of not keeping adequate records - out of court settlements

The Audit Office did an investigation into out of court settlements made by government agencies in 1999-2000. They sampled 85 agencies of all types and sizes. 163 out of court settlements were made in this period, costing $19.2 million in awards and costs.

The Audit Office reported that 'in some instances, settlement was recommended because agency records were deficient and defending the action in court would therefore be much harder. Agencies should be reminded of the need to maintain full and complete records in accordance with the State Records Act 1998.'[24]

Decisions to meet recordkeeping requirements will also have consequences such as:

- costs of preservation, storage and security
- costs of setting up programs, policies, procedures and systems to manage the records effectively, and
- risks of improper access leading to breaches of privacy or confidentiality.

Results of risk analysis

The results of this risk assessment, and risks linked to particular functions (Step B: Analysis of business activity) can help determine what recordkeeping requirements should be met. The various tables, matrices and other techniques used in risk and feasibility analysis will help you to:

- identify specific areas of recordkeeping risk in your organisation
- quantify and prioritise those risks in terms of the cost to, or impact on, your organisation (ie operational, financial and technical feasibility factors), and
- make, justify and document recommendations for meeting recordkeeping requirements.

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[24] 'Across the Board Review on Out of Court Settlements,' *Auditor General's Report to Parliament 2000*, Volume 6, p.22. Accessed in February 2003
at: http://www.audit.nsw.gov.au/publications/publications.htm

3.3.6 Documenting Step C

Overview

This section outlines the type of documentation you should keep about sources, recordkeeping requirements and findings in Step C. It also explains when you should maintain and update that documentation.

Documenting recordkeeping requirements

Importance of documentation

It is important to document what sources you have used for the Step C analysis as you may need to justify your findings or refer to the sources again. A simple list of sources is sufficient to record the location of sources.

You will need to document each of the business, regulatory and community-related recordkeeping requirements that you have identified in relation to your project. If you are continuing with DIRKS these can be used to assess your existing systems and work processes (Step D – Assessment of existing systems), develop recordkeeping strategies (Step E – Identification of strategies for recordkeeping) and design new systems and work processes (Step F – Design of a recordkeeping system).

Tip: Making reference to the source of your recordkeeping requirements can help 'sell' them in your organisation

Being able to say, 'we have to do this because it is required by this piece of legislation, legal precedent, code of best practice, or accounting standard' can carry significant weight in your organisation.

A major research project into recordkeeping demonstrated this point. It found that including legal citations with requirement statements had a significant impact on the organisational acceptability of that requirement. Statements by auditors, business managers and IT managers justifying recordkeeping requirements also had a significant impact and increased acceptance of the requirements.

Providing sources therefore enhances the credibility of your recordkeeping requirements and so it is important to document where your requirements have been derived from.[25]

You should use a format for documenting your requirements that is easily maintainable as requirements are prone to change and will need to be amended or updated from time to time.

Tip: It is a recordkeeping requirement to document changes to recordkeeping requirements

The need for evidence of changes to recordkeeping requirements is in itself a recordkeeping requirement, because it enables your organisation to account for past recordkeeping actions and decisions.

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[25] Wendy Duff, 'Increasing the Acceptance of the Functional Requirements for Electronic Evidence', *Archives and Museum Informatics: The Cultural Heritage Informatics Quarterly* 10:4 (1996): 326-351. Accessible via http://web.archive.org/web/19981202051911/www.sis.pitt.edu/

Documentation options

There are a number of possible options for documenting recordkeeping requirements, depending on your organisation's needs and the number and complexity of its requirements. For example, you may choose:

- tables/templates in a series of word-processed documents
- spreadsheets, or
- databases.

Templates

The following table illustrates how full information on a recordkeeping requirement may be documented in a simple template format. The requirements are grouped together as they relate to the one record and come from one source.

Name of organisation	Roads and Traffic Authority
Source name	Road Transport (Driver Licensing) Act 1998
Effective date	In force 29 November 2000
Source type	Legislation
Reference	Section 8B, 12, 35
Function/activity	Driver Licensing – Registration
Citation	S.8B "maintain a drivers licence register."S.12 "the Authority must ensure that the information contained in [the] register that is of a personal nature...about whom it is kept is not released except as provided by the regulations or under another law." S.35 "any drivers licence register maintained... may be kept in the form of... computer databases or in any such form as the Authority considers appropriate."
Requirement(s) derived from the citation	Creation: A Register of drivers licences must be created. Form: The register can be in the form of a computer database or another appropriate form. Capture and maintenance: Drivers licences must be registered and the register must be maintained.Retention and disposal: The register will be retained for a period of time. Access: Information in the register of a personal nature should not be released except as provided by the regulations or under law.
Risk assessment	High

See also Sample Recordkeeping Requirements Documentation

Spreadsheets

Spreadsheets offer more functionality than word-processed document and need not be complex. Benefits of spreadsheets include being able to sort by different elements, for

example function or requirement type, making your research more useable for different purposes.

Databases

In instances where there are many recordkeeping requirements, or where requirements are likely to change frequently, it may be appropriate to place information about your organisation's recordkeeping requirements into a database. The advantages of a database over other options are:

- only having to record information, including changes, about a particular requirement, function, activity or function-activity pair once
- being able to produce tailored views of the information in the database to meet different needs.

This option will involve more work at the outset, because a database needs to be properly specified, designed and documented for it to be useful and maintainable.

Information to include

Regardless of the format that you choose, you will need to decide what data to compile about your organisation's recordkeeping requirements. Your organisation should consider the number and complexity of your recordkeeping requirements, the project scope, and exactly what information is essential, and create documentation that suits your needs. Documentation of the requirements could include all or a selection of the following:

- the name of the source including reference number (ie legislation title and number, publication title and details, personal name and position of informant)
- the date the source came into effect (ie publication or issue date and superseded or decommissioned date)
- a description of the source (eg legislation, regulation, directive, industry standard, best-practice standard, internal policy, community expectation)
- the specific paragraph, clause, section or page in the source that contains the requirement
- a statement outlining how the requirement relates to the organisation's specific situation (ie the recordkeeping requirement). Remember requirements relate to records and the statement should also identify the record involved, eg a register, minutes of meetings etc
- the stakeholder that has their interest met by the requirement eg. a community group or a particular section of the organisation
- the evidential need the requirement relates to (eg the content, form or quality of the record or its creation, retention, disposal or access)
- the business function, activity or function-activity pair the requirement applies to (ie drawn from the analysis of business activity in Step B)
- the citation of the precise text in source which specifies (or implies) the requirement
- the organisational position responsible for ensuring that the requirement is met, and
- results of any risk assessments.

Documentation to meet disposal requirements

If you are doing Step C to develop disposal coverage for your organisation, you will need to provide State Records staff with documentation that justifies the decisions you have made about record retention periods and disposal actions. This documentation will draw directly from your assessment of recordkeeping requirements.

Appendix 1 of State Records' Procedures for Disposal Authorisation provides an overview of the types of information you should gather in your Step C assessments to support of your

disposal authority. Read this section prior to documenting your recordkeeping requirements, to save any duplication of effort.

Report to management

For most DIRKS projects, your prioritised recordkeeping requirements should be formally submitted to management for endorsement. It is also particularly important to justify your recommendations if you are not meeting certain recordkeeping requirements. These management-endorsed recordkeeping requirements will provide a mandate/specification for the creation of records in the organisation and for the design of systems to meet those requirements.

You may also wish to draw on the generic characteristics of systems that keep records to inform management about the structures necessary to support these recordkeeping requirements (see Characteristics of Recordkeeping Systems). This report can also be used as an opportunity to gain management support for future steps.

If you are developing a retention and disposal authority, you may wish to postpone seeking management approval until after you have completed disposal recommendations. However, it is important that management endorses the full set of recordkeeping requirements including creation, access, content and form, not just those relating to retention or disposal.

Maintain and update documentation

Recordkeeping requirements will form the agreed benchmark against which your recordkeeping practices will be judged, therefore it is important to track changes to recordkeeping requirements over time. Records about past and current requirements should be maintained, because such information provides context for the evidence that your organisation chooses to keep.

Changes to recordkeeping requirements could occur as a result of:

- changes to business practices or needs
- changes to legislation
- changes in perceptions of risk or priorities
- the organisation losing or gaining functions
- tests in Steps E, F or G that expose flaws or inconsistencies in the requirements
- the discovery, during systems design and implementation, that a particular requirement cannot reasonably be met due to financial, personnel, design, equipment or other considerations, or
- the results of a post implementation review of a recordkeeping system (Step H) or ongoing monitoring.

In these cases, you will need to review your analysis of recordkeeping requirements and risks and document the changes.

3.4   Step D – Assessment of existing systems

Identify and analyse existing recordkeeping systems and other information systems to measure their performance against the requirements for records. [AS ISO 15489.1, Clause 8.4]

3.4.1 Content and scope of Step D

Overview

This section is an introduction to *Step D: Assessment of existing systems*. This section:

- outlines the aim of Step D, and what it can help you to achieve
- summarises the major elements of Step D
- explains why it is important to undertake Step D for particular DIRKS projects, and
- shows how Step D relates to the other steps in the DIRKS methodology.

Summary of Step D

Step D is the benchmarking step of the methodology.

In Step D you:

- assess all relevant business information systems
- determine whether these systems are in fact recordkeeping systems, capable of meeting your organisation's requirements for record creation and management
- identify the gaps that may exist between your desired or required practice and your actual system operations

This requires you to have a good understanding of your organisation's recordkeeping requirements and to be able to identify and examine current business information systems.

Example: System assessment

In your organisation you have identified that it is necessary for your system to:

- maintain a history of past transactions that can be accessed as evidence of its business activities
- employ recordkeeping controls to facilitate management of this evidence through time.

If your system is not designed to do this, or cannot be modified to do so, your organisation may expose itself to business and accountability risks. You need to assess this system to ensure it is capable of meeting your recordkeeping requirements.

Why should you do Step D?

Step D is the step where you get a concrete understanding of how business is transacted in your organisation and where you determine whether documentation of business transaction is adequate to meet your recordkeeping requirements.

By completing an assessment of your existing business information systems you will develop:

- an understanding of the strengths and weaknesses of your organisation's existing business information systems in terms of their recordkeeping capacities
- an appreciation of your organisation's potential exposure to business and accountability risks (in relation to the performance of your existing systems), and
- an informed basis for developing strategies to address your agreed recordkeeping requirements.

Using this knowledge, Step D will help you to determine whether existing business information systems, as whole or in part, need replacement or redevelopment to help you achieve your business needs.

Case study - issues identified in Step D assessment

The following information comes from an ICAC report, Investigation into the conduct of officers and students at University of Technology, Sydney. It helps to illustrate the types of issues you may identify in your Step D research when assessing your existing systems.

ICAC was investigating alleged improper use of a computerised student record system. A key business requirement in the university environment identified by ICAC is to ensure the integrity of university academic results. This means that records must provide an accurate representation of student results and be protected against alteration or unauthorised deletion. ICAC's investigations revealed that the business information system used to manage student results was not able to meet these key recordkeeping requirements.

Although not an example of a full DIRKS analysis, ICAC used system analysis techniques, similar to those outlined in Step D, to determine weaknesses or gaps in student record systems used across universities in NSW. The weaknesses included:

- absence of full audit trails
- infrequent checks that access levels are appropriate
- exception reports, which alert administrators to system breaches, are not being generated or used adequately
- too many staff with access to 'modify/create' records
- failure to check for and remove 'modify/create' access following staff resignation/changed duties
- failure to automatically remove 'modify/create' access when casual/temporary employment ceases
- students employed by the university having 'modify/create' access to student records

These gaps in the system meant that record integrity could not be assured and therefore this business system was not meeting one of the University's key objectives. The gaps also meant that significant fraud could, and in some instances did, occur. Undertaking a system analysis, based on knowledge of what you know systems should be capable of, will allow you to prevent similar inappropriate action in your organisation and will enable you to ensure that records and the systems that create and manage them, are actually meeting your business requirements and needs.

The example provided in the ICAC report also demonstrates the different types of issues you may identify in the course of your Step D analysis. Some may identify issues applying to the technical applications that are being used, but others will apply to the policy and procedural framework that support the system. For example, ensuring that business rules to remove the rights of former employees from the system are policed would have circumvented many of the issues identified in the ICAC report.[26]

Relationship to other steps

Steps A and B

You may have completed all or parts of Steps A, B and C before undertaking your Step D research. If you have completed these earlier steps they will help you to:

- understand how your organisation operates, and
- understand your business operations

This is important context for your assessment of business information systems.

Step C and an understanding of recordkeeping requirements

Having an understanding of your organisation's recordkeeping requirements is crucial to your Step D analysis. Recordkeeping requirements, as discussed in Step C, are identified needs for evidence and information, derived from internal and/or external sources. Recordkeeping requirements can be satisfied through recordkeeping actions, such as record creation, capture, management and use.

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[26] ICAC report, Investigation into the conduct of officers and students at University of Technology, Sydney. Accessed via the ICAC website on 14 August 2002 at: http://www.icac.nsw.gov.au/

If you have not conducted the earlier steps, you will need to have a good knowledge of your organisation's business needs and the requirements for evidence and information that are derived from this business.

If you have a good idea of the recordkeeping requirements in your organisation, you can use this step as the initial starting point of your DIRKS project, to help you establish a business case for a more extensive recordkeeping project that will result in the redesign of business systems.

Steps E, F and G

Step D is a crucial step if you wish to redesign business systems or develop new recordkeeping systems. You should undertake Step D to have an awareness of your current capacities or issues that relate to your current recordkeeping practices, before you embark upon Steps E, F and G of the methodology.

Undertaking Step D in conjunction with other steps

As has been stated, the DIRKS methodology does not need to be undertaken in a linear way. Therefore it may be feasible for your organisation to undertake Step D in conjunction with your Step A preliminary analysis and organisational assessment. If you are doing a small scale DIRKS project, you may also wish to merge your Step D and E analysis and combine your system assessment with an identification of appropriate strategies for remediation.

3.4.2 Identifying systems for Step D assessment

Overview

This section discusses the specific types of systems you will be examining in Step D: Assessment of systems. It is intended to help you identify the systems you need to focus on and examines the specific components of those systems that you need to consider.

What type of systems should be assessed?

The types of systems you are assessing in this step are those used to perform organisational business operations and which are required to keep evidence of those operations as records. They may be systems that we think of as traditional records management systems, or could be business applications, such as databases or web content management systems and their supporting infrastructure.

In reality, a business system can be anything from an Excel spreadsheet on someone's hard drive to a system dedicated to a particular activity such as HR or financial management, to a million dollar database accessible via your website. It is also important that you evaluate every system in the organisation that involve processes that may have evidential requirements. This includes familiar automated systems such as accounting, human resource and client information applications that may not function as recordkeeping systems.

Any system which conducts organisational business activities and from which you require evidence of its operations should be a recordkeeping system, and be included in the scope of your assessment.

Tip: Seek advice

If you are having trouble identifying all relevant systems, or want to ensure that you have examined all relevant systems, seek the advice of staff who perform the business activity you are assessing to make sure you have got everything covered.

Determine the specific systems to assess

When undertaking Step D, you will generally be focussed on a specific area of business. You therefore need to target the system or systems that perform that business. When identifying the systems upon which you are to perform your assessment, you should bear a number of points in mind:

- business systems exist in a variety of forms
- focus on all systems performing the business you are examining, and
- assess all components of a system.

Tip: Focus on systems

The focus of your assessment of existing systems should be the broad systems used to manage records created in your organisation. Do not focus too much on the individual records that are managed within the system - your focus should be on how these records are managed and the qualities of the system within which they are kept.

Business systems exist in a variety of forms

Be aware that business systems can exist in any form – they can be purely electronic, they can be paper based or they can be hybrid systems. Hybrid systems represent a mixture of electronic and paper based components. Systems can be also small, discrete and located in one specific area of your business, or they can be large and diverse structures that span a number of geographically diverse business areas.

Tip: Only assess systems from which you require evidence

You may have systems which are managed for their information value only – they transact no business and no evidence is required of their operations. Such systems generally contain timely, manipulable information. A database containing name and address details of your clients is an example of such a system. You don't need to include these in your system assessment. Remember, you only need to include in your assessment those systems from which you require evidence of their operations.

Tip: Don't forget to include relevant databases in your assessment

Certain organisational databases may be required to operate as recordkeeping systems. If you have such databases, you will need to determine whether they are able to meet your recordkeeping requirements. You should identify whether these databases are making adequate records that meet your business needs. You should also determine whether these databases manage records in secure and appropriate ways, that will ensure the records are maintained and evidential for as long as you have a business need for them.

For further guidance see Public Record Office of Victoria, Preserving Records in Databases, May 2003

Focus on all systems performing the business you are analysing

Whether you are doing DIRKS as a whole-of-organisation exercise or whether you are focussing on a specific area of business, you will need to assess ALL systems in the functional areas you are focussing on, not just those which are known to be operating as recordkeeping systems.

Example: Poor information systems contribute to collapse of national banks in Jamaica

In the late 1990s, a number of large national banks collapsed in Jamaica, precipitating a national financial crisis. In the years since the collapse, research has been done into some of the recordkeeping-related causes of the crisis. Poor business information systems, and the number of ad-hoc and uncontrolled systems adopted to circumvent these, created a number of problems.

Since the banks' existing computer systems lacked the functionality to produce the types of reports that managers required, managers tended to create and use ad hoc reports using popular spreadsheet software (eg Excel)…

Many of these spreadsheets provided what could be viewed as important evidence of decisions concerning critical bank business functions such as asset and liability management, budgeting and loan loss provisioning, however, the informal way in which managers created and kept these spreadsheets often led to dissolution of the meaning in these records over time…the spreadsheet software had no features that automatically linked spreadsheet documents…to the business transactions and processes from which these records had been created…

Over time, the context in which the Jamaican bank managers had created these records became more distant and the significance of the records and their meaning became more obscure…Moreover, the records' meaning and significance often were lost completely because of the ease with which the technology for storing spreadsheets permitted alterations and deletions of computer files, a characteristic which also undermined accounting and accountability for the banks' financial transactions[27].

Talking to action officers and drawing on your analysis conducted in previous steps of the methodology will help you to be aware of all possible systems that should be incorporated into your assessments, including those ad hoc ones that may have been created as ways around existing problems.

Tip: Systems can span business units

Be aware that systems may cut across business units - not all systems that perform a particular function will be located in the one section of your organisation.

If you undertook process analysis in Step B: Analysis of business activity, you can refer to this documentation to identify the disparate business areas and systems that you need to examine.

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[27] Victoria L Lemieux, 'Let the Ghosts Speak: An Empirical Exploration of the 'Nature' of the Record, *Archivaria*, Number 51, Spring 2001, 102

Assess all components of a system

Remember, when you are assessing your organisational business information systems you are not just looking at the technical components of these, but also the broader framework of:

- the people who use the system
- the people who manage the system
- policies and procedures that support system maintenance and use
- recordkeeping tools used in the system
- business rules applied within the system, and
- training programs that support system use.

Step D will provide guidance about how to assess each of these different system components.

Keep your focus on the business you are examining

To identify systems for your Step D assessment, you need to keep your focus on the business activity or activities you are examining, as this will help you to identify the systems that are relevant to your assessments. In Step B: Analysis of business activity you identifies business activities and processes, in Step D you are assessing the capacity of the systems that perform these processes.

Remember that the business activity you are examining may cut across organisational systems, so be sure to think broadly and include all relevant components when assessing your existing systems.

Example: Assessing the personnel management function

As has been discussed, one organisation wanted to improve the way personnel management was documented. In Step D, the focus of their system assessment had to be quite broad as, as they had identified in Steps A and B, aspects of personnel management were performed across the organisation. The Staffing Section obviously had a coordinating role, but section managers also administered a range of personnel activities. To determine whether existing systems were adequate, they needed to look at:

- the personnel database administered by the Staffing Section
- the hard copy personnel files maintained by the Staffing Section
- the staff files and work planning documentation maintained by section managers, and
- the policies, procedures and training that applied in each of these environments.

Therefore not one, but a range of systems needed to be examined to ensure that the adequacy of their personnel records could be assessed.

3.4.3 Sources for Step D assessment

Overview

This section outlines the different sources you will need to conduct a system assessment.

These include:

- recordkeeping requirements, identified in *Step C: Identification of recordkeeping requirements*, and
- required recordkeeping functionality, as outlined in Introducing DIRKS, Characteristics and functionality of recordkeeping systems, and
- all relevant system components, including policies, procedures and training materials.

Determine the requirements or benchmarks specific systems must meet

Once you have identified the system or systems that should be the focus of your assessment, you need to determine their adequacy.

To do this it is necessary to establish measures or benchmarks against which your systems can be assessed.

The benchmarks that should be used to assess your systems are:

- identified recordkeeping requirements and
- required recordkeeping functionality.

You should measure the systems you need to assess against both of these types of requirements.

Identified recordkeeping requirements

Recordkeeping requirements pertaining to your organisation's business activities can be identified using Step C of the DIRKS analysis. If you have not undertaken Step C but are aware of the recordkeeping requirements that relate to the area of your business requiring assessment, be sure to document these. You should have some documentation of recordkeeping requirements to ensure the consistency and comprehensiveness of your analysis.

Tip: Pose questions

It may be helpful to reframe the requirements for evidence as a series of questions. The answers to these questions should help to determine whether the requirement is satisfied or not.

For example, in doing its Step C: Identification of recordkeeping requirements assessment, one organisation identified that the following requirement applied to the management of its licence records: 'Licensees should not be given access to the records of other licensees.'

To determine whether the system they use for managing their licencing operations is meets this requirement, they could ask:

- is the system capable of restricting access to designated users?
- does system user training make it clear that access restrictions apply to licensee records?
- do the policies that are part of this system inform staff of these access rules?

If the response to each of these questions is yes, then it is likely that the recordkeeping requirement has been met.

Tip: Remember all components of a requirement

Remember that recordkeeping requirements may have several components to them. Be sure to read your requirements thoroughly and measure whether all its requirements have been fulfilled.

For example, for a licensing activity, a recordkeeping requirement could be:

'When a licence is revoked, a record of the reasons for revoking the licence will be created and retained with the licence records.'

This requirement contains a number of parts. Firstly it states that records must be created. In your system assessment you would firstly need to ensure that records documenting the licensing process are in fact being created, including records of licence revocation. You would then need to determine that the system is capable of linking all related records in ways that

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meet your identified business requirement.

It is also important to realise that the sources that you used in step C contained implicit and explicit references regarding the form, content and quality of evidence your organisation should satisfy. It is important that the survey techniques that you use in step D are flexible enough to assess the variety of recordkeeping requirements identified in the earlier step.

Required recordkeeping functionality

Required recordkeeping functionality refers to the recordkeeping controls and business rules that are necessary to ensure your system operates effectively as a recordkeeping system.

The range of qualities a system should possess in order to be a recordkeeping system is outlined within the section of Introducing DIRKS, Characteristics and functionality of recordkeeping systems. Review this section to help identify the range of recordkeeping functionality your business systems may need to possess. You can turn these requirements into benchmarks for your system assessment.

Example: Assessing the recordkeeping functionality in a system

In the NSW public sector, all records of government business must only be disposed of in accordance with authorised retention and disposal authorities. General recordkeeping rules (outlined in Introducing DIRKS, Characteristics and functionality of recordkeeping systems also specify that records must reside in a system where they cannot be tampered with or altered. In your system assessment, you may decide to assess whether your systems are capable of providing this recordkeeping functionality.

Questions you may want to use to assess this functionality in a system could include:

- is the system capturing business records?
- is the system ensuring that all necessary metadata is captured?
- are records protected against alteration/deletion?
- is the system implementing disposal decisions?
- are strategies for the long term preservation of records in place?
- can records be easily accessed and retrieved?
- can the system track record use and management?
- is information duplicated?

Note, that depending on the business it documents, the system you are assessing may need to meet these and a range of other requirements.

Use appropriate benchmarks

If you undertook Step C of the methodology, you may have identified a range of recordkeeping requirements relating to numerous business activities your organisation performs. When undertaking specific system assessment in Step D, you need to make sure you identify the recordkeeping requirements that pertain specifically to the system or systems you are assessing. That is, you need to identify the recordkeeping requirements that are relevant to the area of business you are focussing on.

The same requirement applies to the recordkeeping functionality you are assessing. Make sure you assess a system only against the functionality you need it to have in order to meet your business requirements, and the recordkeeping functionality outlined in Introducing DIRKS, Characteristics and functionality of recordkeeping systems. Only compare a system to the recordkeeping requirements that relate to it.

Other sources

To assist with you system assessment, you may want to examine a range of other sources to ensure you have a good understanding of the system's role, operation and structure and to ensure you are measuring the full functionality and capacity of the system against your recordkeeping requirements.

Given systems are comprised of people, policies, procedures, tools and technology, you will want to include all these components in your assessment.

There are a range of sources you can use to provide you with the information you will need, and to ensure you cover all relevant aspects of your system.

Interview with system users and managers

The best means to understand how a system works is to talk to the people who use the system and the people who manage the system. These staff can summarise the role and functionality of the system for you and answer any specific questions you have.

If possible, try to talk to a range of staff. Include operational staff as well as managers to get a good understanding of the system's operation and desired functionality.

Remember, DIRKS is intended to be a flexible methodology. Therefore you can include questions about system operation and functionality as a part of the interviews you may conduct in Step C to help identify recordkeeping requirements.

See for further guidance:

- [Guide to Interviews](#)
- [Sample Interview Questions](#)

System policy and procedure

In the course of your system assessment you must examine the policies and procedures that support system maintenance and use. Remember that policy and procedure are a key component of any system and must be included in your assessment.

Example: Lack of clear and consistent procedure contributed to the Jamaican banking collapse

In the Jamaican banking collapse, lack of clear and consistent procedure was identified as a major system failing, and one of the significant contributing factors to the collapse:

While deliberate failure to create and keep accurate and complete records of financial transactions did contribute to the problems experienced by the banks, the failed banks' routine practices of records creation and recordkeeping were an equally, if not more, significant problem. As a result of these practices, managers and directors in these financial institutions and bank supervisory authorities lacked the trustworthy and timely and accounting and management information they needed to maintain effective control of the banks' operations, to assess and manage their financial positions and risk exposures, and to prevent fraud.[28]

This assessment also identified that:

The problems created by weak enforcement of any existing controls permitted the banks' officers to record transactions according to their own motivations, preferences, and personal standards.[29]

Consequently poor evidence and information was created. This significant problem could have been avoided if clear procedural documentation had been in place.

All systems that need to operate as recordkeeping systems must be supported by policies and procedures. If the systems you are examining are not sustained by this type of documentation, be sure to make note of this. Steps E, F and G of the methodology outline how you can develop policies and procedures as part of the process of transforming business systems into recordkeeping systems.

Tip: Check procedures for board management

If your organisation is regulated by a board, it is important to ensure that the minutes for this board are appropriately made and maintained. In your system assessment you could ensure that the procedures for board management state that:

- all board minutes should be signed by the chairperson
- an official record is retained
- an electronic copy is kept for ease of reference.

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[28] Victoria L Lemieux, 'Let the Ghosts Speak: An Empirical Exploration of the 'Nature' of the Record, Archivaria, Number 51, Spring 2001, 86
[29] Ibid, 101-102

Recordkeeping tools operating within the system

If they exist, recordkeeping tools, such as disposal authorities and business classification schemes, are key system components. In your system analysis you will need to examine these, if you have not done so already, to determine their currency and effectiveness.

When looking at tools you will also want to assess whether and how they are implemented within the system. You may want to ask:

- Are they employed systematically?
- Is their use automatic?
- Could their use be made easier?
- Are they supporting or hindering the satisfaction of recordkeeping requirements?

Educational programs supporting the system

Given the crucial role that staff play in a system's effective operation, your Step D analysis may also include an assessment of the training or communication programs that explain to staff how to use the system. Your organisation may not have such programs in place, but if courses, brochures or other resources exist, you should examine these to get an understanding of how the system operates, what users are required to do and other training frameworks that may be required.

Talk to key staff about the training they have received to help them perform their roles. Document any training programs you identify, and also document when they do not exist.

Example: Lack of training contributed to the Jamaican banking collapse

Lack of training in recordkeeping system operation was a problem that contributed to the Jamaican financial collapse:

In many of the failed banks, responsibility for the management of records stores was assigned to low-level clerical staff. For example, one person in charge of the registry for the credit files was untrained in recordkeeping principles and techniques. Neither had this person received any training in the basics of credit administration. Thus, this clerical officer was ill-equipped to appreciate the information retrieval requirements of the bank's credit administrators and risk analysts and had little, if any, understanding of the value of, and techniques for, creating indexes searching tools] to support managers' information requirements.[30]

Technical documentation describing the system

Obtaining a good, basic knowledge of how the technical components of your organisational systems work - how they process and manage information - may be crucial to this assessment. In implementing Step D it is crucial to know your recordkeeping requirements, but also to understand how your online transaction processing system or decision support system fares in terms of its recordkeeping functionality.[31] You may be able to gain a lot of information about your existing systems by reading relevant documentation on system functionality, requirements and operations. This documentation could include procedure

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[30] Victoria L Lemieux, 'Let the Ghosts Speak: An Empirical Exploration of the 'Nature' of the Record, *Archivaria*, Number 51, Spring 2001, 105

[31] This strategy is outlined in Philip C. Bantin, Indiana University Electronic Records Project, Phase II, 2000-2002*, Skills Required to be an Effective Manager of Electronic Records White Paper*, BloomingtonIndiana, 2002. Accessed in January 2003 via the IndianaUniversity website at: http://www.libraries.iub.edu/index.php?pageId=3313

manuals, disposal schedules, business rules specifying access rights, standards that need to be complied with, training materials etc.

If documentation is poor or non-existent, talk to staff that use the system and examine the system in operation to gain an understanding of its technical infrastructure.

You may also want to examine the business rules applied within the system - any rules built into it that specify how the system should function and manage data - and see how these correspond with or relate to the recordkeeping tools, such as disposal authorities, that should be employed within the system.

3.4.4 Assessing and documenting systems

Overview

This section outlines the ways in which you can perform system analysis. It also provides examples of system analysis that can be used to guide your own assessment exercises.

How is the analysis performed?

Assessing systems in your organisation is best achieved by approaching each system with a specific set of questions in mind. These questions should relate to:

- the recordkeeping requirements this system should meet
- the recordkeeping functionality it should employ, and
- any other relevant issues you've identified in the course of your Step A-C analysis.

It is likely that a number of these questions will be standard across the types of systems you assess, while those relating to recordkeeping requirements will of course change from system to system.

You may also want to prioritise responses. That is, you may want to say that a system is 'poor', 'inadequate', 'adequate' or 'good' when it comes to meeting requirements. Make comments or notes as you go. This will simplify your reporting down the track.

Tip: What about big, complex systems?

You may have large systems that perform a range of activities for your organisation. The analysis of this type of system is necessarily more complex than simple systems that only administer one discrete transaction.

In complex systems you should first identify the range of different activities and transactions they support. Assess the performance of each of these individually, to help avoid confusion. Document your analysis well, clearly differentiating between transactions, to provide a good basis to your final recommendations.

Tools to facilitate system assessment

System Inventory

If you are assessing all organisational systems that need to function as recordkeeping systems, or if you are examining a number of systems that are used to conduct a specific business activity, it can be useful to prepare a system inventory to help guide your assessment. A system inventory can just be a simple list of systems, or it can be a document that identifies your systems and provides you with a comprehensive overview of their functionality.

If you have completed *Step A: Preliminary investigation*, you may have already prepared a basic system inventory, when undertaking a broad assessment of your organisation and its operations. See Focus of Step A assessment for more advice.

Template for system assessment

A template for system assessment is a tool that outlines the specific questions or issues you want to know or identify about the specific systems you are assessing.

Developing a template to guide your system assessment will give structure to your system examination and will also help you to document your assessment. If you know your assessment is going to involve more than one system, the template is also a means of ensuring you apply a consistent approach to each individual assessment you conduct.

A template may include a range of fields that should be very specific to the needs of your organisation. A range of generic fields could include:

- name of system
- function/activity performed or supported by system
- transactions performed within system
- recordkeeping requirements system is subject to
- location of system
- system administrator
- identified system risks
- size of system
- system controls/business rules implemented
- system users - number and location (business unit, external users)
- system interfaces - is the technology employed stand-alone or linked to other applications
- type of data stored within system
- frequency with which the information is collected/stored, accessed/used/disposed
- business rules are employed within the system
- metadata employed
- identified constraints or problems affecting system use
- physical form of information within system
- physical location of system and the information it contains
- budget allocation used for collection/storage/access/use/disposal of information within the system
- privacy management implications of information within the system
- standards applicable to the system
- how are records created in the system?
- how are they described?
- how are they used?
- how are they maintained?[32]

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[32] Information provided by NSW Government ICT Strategy

Please note that this list provides a very extensive range of issues, templates you develop need not be so extensive.

You should also include fields that enable you to test the specific recordkeeping requirements you have developed for the system. The list of questions or the template you develop can be as large or small as is appropriate to your requirements.

Response form for system assessment

Based on the system assessment template you develop, you should consider a means of documenting the systems you assess. This form will need to note the variety of questions you've asked about a system, and flag your responses to these questions.

Note that in your response form you will possibly want to leave space to make notes about the 'gaps' that your system assessment has identified. Please see the sample system assessment below for more information.

Sample system assessment

The following example illustrates how a system assessment or 'gap analysis' may be undertaken with respect to a sample business activity, grant management, using a recordkeeping requirement derived from an Independent Commission Against Corruption guideline.

The assessment is divided into various stages, in accordance with the methodology that has been outlined above.

Step 1 - Check the recordkeeping requirement/s

Requirement	Example
Registration number	1
Source name	Independent Commission Against Corruption (ICAC)
Source type	Guideline
Reference	ICAC, *Taken for Granted? Better Management of Government Grants (March 1994)*, Principle 4
Relates to	Accountability
Description	'Funding recommendations and decisions should be fully documented and supported with explanatory notes. The Minister's role in the decision making process should be publicly disclosed with his/her decisions also documented. Documentation relating to funding decisions should be available for external scrutiny.'
Business activity	Grant management
System functionality requirement	Make record, Ensure accessibility

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Accountability	Ministers, chief executives
Jurisdiction	NSW Government
Effective date	March 1994
Risk assessment	Required

Step 2 - Identify the system to which the recordkeeping requirement applies

Identify the relevant system or systems, basing your assessment on the business activity the systems perform. In this example, the analysis would be focussed on the system or systems that are used to administer grant management. Remember to identify all components of a system - people, policy, procedure, tool and training.

Step 3 - Translate recordkeeping requirements into questions you can use to interrogate the system

The following questions will help test whether requirements for evidence are met by the existing system(s):

- are records of funding recommendations and decisions made?
- are these records captured in the system?
- are these records available for external scrutiny?
- are such decisions supported with explanatory notes?
- are the Minister's decisions documented?

Step 4 - Undertake system assessment

Such findings may be documented in the following manner:

Are requirements satisfied by existing systems?

Requirement	Response	Gap
Recommendations and decisions are made?	Yes	Nil
Records are captured into recordkeeping system?	No	Decisions kept by individual, Minister or CEO
Records are available for external scrutiny?	No	Kept in hard copy form by individual, not in recordkeeping system

Such a methodical means of assessment will enable you to identify exactly how your systems are meeting, or in this case not meeting, your recordkeeping requirements. You can use the results of this assessment to identify strategies for rectifying these gaps in Step E: Identification of strategies for recordkeeping.

Case studies and tips

Example: Common issues you may identify

Indiana University recently undertook a project to assess major business systems operating across the university. Common issues that arose in the University's assessments of its systems included:

- staff not sure of what records are being retained or how to access older records
- duplicate files managed within systems
- inadequate naming conventions
- no policy or procedures explaining what records should be captured or how they should be captured. As a result there is no routine or systematic capture of records
- no clear retention strategies - staff tend to keep everything because there are no clear rules, or destroy records without appropriate authorisation
- some systems do not allow older records to be saved, instead they overwrite old data
- some systems do not capture important metadata
- some systems do not maintain the relationship between a record and its metadata
- some systems do not maintain a logical or physical relationship between records generated by the same or related business processes
- staff are creating paper versions of electronic records, or creating personal electronic databases because they fear they will not be able to retrieve information from central systems.[33]

Example: Results of Step D analysis

One organisation had a requirement to keep records of its licence agreements for fifty years after the issue of the licence. These records must be securely maintained for the duration of their existence. The organisation has a number of offices across the state, each performing the licence management function.

After undertaking their Step D analysis, it was concluded that:

- the long term accessibility and evidentiality of the records was not assured. Licence records have to survive for upwards of fifty years and currently no strategies are in place to ensure this long term objective is achieved.
- records are not stored in appropriately secure ways. System controls prevent unauthorised personnel from accessing and changing the records, but they do not prevent authorised staff from accidentally or intentionally modifying or deleting licences.
- policies and procedures for system use are widely available at central office. Training in system use and access is often frequently conducted in this office. In the regional offices, however, little policy or procedural documentation exists and that which does exist is frequently different to that used in central office. Regional office staff have also not been trained in system use.[34]

This case study is discussed again in Step E, to illustrate how the strategies outlined in the DIRKS Manual can enable you to remedy these types of system problems.

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[33] Philip C. Bantin, Indiana University Electronic Records Project, Phase II, 2000-2002, *Final Report to the National Historical Publications and Records Commission*, Bloomington Indiana, 2002. Accessed via the IndianaUniversity website in January 2003 at:
http://www.libraries.iub.edu/index.php?pageId=3313
[34] Case study detail derived from Philip C Bantin, 'Developing a Strategy for Managing Electronic Records - The Findings of the Indiana University Electronic Records Project', *The American Archivist*, Volume 61 (Fall 1998), 361

Tip: Duplicate systems and duplicated information

Your assessment may reveal that information is duplicated across your organisation, in formal or informal systems. While removing duplicated information may increase organisational efficiency, it could also be a sign that something is wrong with current systems and practices. By asking staff why they retain their own copies of records or operate their own personal systems, you may discover:

- poor response times from existing recordkeeping staff or systems hamper work
- lack of trust in current systems
- no knowledge of official systems, or
- inaccessibility of official systems.

These problems should be included in your analysis and strategies to address them can be identified in Step E.

How long does system assessment take?

Unfortunately there is no easy answer to the question of how long it will take to assess a system or systems in your organisation. This issue will depend on the amount of staff you are able to devote to the project, the size of the system or systems you are assessing and the extent of support you have for your investigations.

Example: How long does system assessment take?

Indiana University calculated how long it took them to assess one of the largest systems in their organisation, the Financial Aid Information System. This system processes data for an eight-campus system with over 90 000 students. It was calculated that it took 7.5 working weeks to identify all the functions, activities and transactions performed within this system, assess how the different records created in the course of these activities are managed, describe the general rules and operations of the system, and provide a series of recommendations as to how the system could be improved. Project staff said that as this system was the first they assessed, subsequent analysis would be faster. Note too that this was a very large and complex system and this explains the length of time required to assess it.[35]

Tips for improving your system assessment

The following advice may help you with your system assessment:

- you will notice similarities between systems. Once you have assessed your first system, this assessment will provide you with relevant pointers or areas to look out for in subsequent analyses.
- do not over-describe systems. It is hard to strike a balance and when you are uncertain you should document more about a system rather than less, as this will save you repeating your efforts down the track. Based on their experiences, staff at IndianaUniversity decided that in future they would spend less time describing how the technical components of systems manage a transaction and less time actually describing functions, activities and transactions.
- use risk assessment strategies to pinpoint functions and activities that have the

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[35] Ibid, 355

> greatest importance to your organisation, or that are subject to the greatest risk.
> * employ staff with system assessment skills and with a good awareness of your recordkeeping requirements to undertake your system assessment.[36]

Prepare a report

No further action is warranted if your assessment reveals that your organisation's existing systems are fully functional and satisfying requirements for evidence, but it may be worth compiling a report of your assessments and findings for future reference.

If however you did identify some flaws in your system analysis that you want to rectify, it is important to prepare a status report on your organisation's existing systems before starting to design or redesign business information systems.

Depending on the nature of your recordkeeping project, the report may include:

* a brief summary of the gap analysis, an outline of the strengths and weaknesses of your business information systems
* detailed documentation highlighting the extent to which systems satisfy each recordkeeping requirement, and/or
* an assessment of the operational, technical and economic feasibility of addressing the system's deficiencies.

While the processes of documentation and assessment are resource intensive, they will provide a sound basis for developing functional specifications for any new or enhanced recordkeeping systems (Steps E and F).

Remember, Step E can be undertaken in conjunction with Step D, to ensure a solution is proposed for all the problems you have identified within your system or systems.

Tip: Prioritise your recommendations

Not all the issues you identify in your assessment will have the same degree of importance or seriousness attached to them. Be sure then to prioritise your recommendations to ensure that those of key importance are addressed by your future DIRKS work.

You may also decide to categorise your findings. IndianaUniversity used the following to categorise their findings:

* highest priority recommendations
* concerns
* for your information[37]

In this way you can make clear to decision makers in your organisation what the key concerns are in your organisation that need to be addressed, but flag another range of issues as well.

3.5   Step E – Identification of strategies for recordkeeping

Identify strategies for satisfying recordkeeping requirements, which may include adopting policies, procedures and practices, designing new systems, implementing systems in a way

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[36] Ibid, 356-357

[37] Philip C. Bantin, Indiana University Electronic Records Project, Phase II, 2000-2002, *A Methodology for Evaluating Existing Information Systems as Recordkeeping Systems - 2002 Version*, Bloomington Indiana. Accessed via the IndianaUniversity website in January 2003 at: http://www.libraries.iub.edu/index.php?pageId=3313

which satisfies a recordkeeping requirement, or adopting standards. Strategies may be applied to each recordkeeping requirement separately or in combination. Strategies should be selected on the basis of the degree of risk involved in failure to satisfy a requirement within the business function which the recordkeeping system is intended to support, the existing systems environment and the corporate culture in which the strategy should succeed. [AS ISO 15489.1, Clause 8.4]

3.5.1 Content and scope of Step E

Step E is the point in the DIRKS methodology when you identify strategies to transform your business systems into recordkeeping systems.

Overview

This section is an introduction to Step E. It:

- outlines the aim of Step E, and what it can help you to achieve
- summarises the major elements of Step E
- explains why it is important to undertake Step E for particular DIRKS projects, and
- shows how Step E relates to the other steps in the DIRKS methodology.

Aim of Step E

Step E is the point in the DIRKS methodology when you identify strategies to transform your business systems into recordkeeping systems.

By applying the range of strategies it outlines, you will specify the changes necessary to:

- meet the recordkeeping requirements identified in Step C and
- redesign the systems assessed in Step D so that they are fully able to meet your recordkeeping needs.

Tip: Focus of Step E

Step E is about determining the right approach to your system design or redesign. In Step E you choose a mix of strategies to apply to meet your identified recordkeeping requirements. In Step F you commence the actual process of system design and develop means by which you can actually implement the strategies you have chosen.

Summary of Step E

The Australian standard AS ISO 15489 recommends four strategies that can be used to improve recordkeeping in your organisation:

- policy
- design
- implementation, and
- standards.

A mix of strategies should generally be selected. The choice should be based on knowledge of how your organisation functions (see Step A – Preliminary investigation) and the specific recordkeeping gaps (Step D – Assessment of existing systems) you are trying to remedy.

The standard also provides you with scope to devise your own strategies for meeting recordkeeping requirements.

Step E is focussed on making improvements to all components of a system in order to meet recordkeeping requirements. The recommended tactics may be applied separately or in combination, to help you meet your recordkeeping requirements. Implementing these strategies will help you to ensure your organisation has the recordkeeping systems necessary to sustain its business activity. You can select from between them to determine the most effective combination of strategies that will enable you to meet your range of business needs.

Why should you do Step E?

In Step E you brainstorm ideas and solutions for the problems that have been hampering your organisational recordkeeping.

You will transform a number of these ideas into tangible recordkeeping improvements in Step F: Design recordkeeping systems.

Relationship to other steps

Step D

Step E has a close relationship with Step D. In Step D you assess organisational business information systems and determine if they are a liability to your organisation because they do not meet recordkeeping requirements. In Step E, you should take this assessment as the starting point to begin to identify how to rectify these problems. As a result of their close relationship, Steps D and E - identification of problems and determination of solutions - will often be undertaken in parallel.

Step F

If the objective of your DIRKS project is to develop or redevelop systems for recordkeeping, undertaking Step E will provide you with a clear outline of the directions you want your system design to take and a good understanding of the problems you need it to address. Step E will also help you to ensure that the system you develop in Step F is comprehensive and adequately addresses all the issues identified in your Step D analysis. Again, Steps E and F can be undertaken in parallel, so that you can actually build solutions as you develop your strategies.

3.5.2 Policy strategy

Overview

This section examines what the policy strategy is and explains how it can be used to help you meet your recordkeeping requirements. It provides a number of examples of uses of the policy strategy.

What is the policy strategy?

The policy strategy involves using policy or other forms of organisational rules as a means to meet recordkeeping requirements. Employing the policy strategy involves developing:

- policies
- procedures
- practices
- guidelines
- business rules, or
- other instruments

to specify what recordkeeping is, how it should be undertaken in your organisation and the specific rules that apply to your recordkeeping system.

Establishing these rules is a means to educate staff about recordkeeping, make them aware of their recordkeeping responsibilities and ensure that they meet these responsibilities in their day to day activities. Clearly specifying these rules and responsibilities is a means of enabling your organisation to meet its recordkeeping requirements.

Example: Policy and procedure could have helped avoid Jamaican banking collapse

In an investigation following a major banking collapse in Jamaica it was determined that: 'Lack of clear corporate definitions of 'records' led to confusion in the organisation and meant consistent documentation was not made and managed.' As a result, the institution did not have the records it needed to identify its precarious position and save itself from collapse. Having a clear policy and procedural framework in place can help to avoid such problems.[38]

Policy requirements can be broad statements that specify general records management rules for your organisation, to ensure staff are aware of these rules and their responsibilities. Alternatively, if you are aware that a specific area of your business is a concern, you can use the policy strategy to target a specific issue, such as e-mail management, or target a specific business area, such as complaints management.

Tip: Use policy to encourage your organisation to adopt best practice standards

If you have decided that, based on your assessments, adoption of best practice standars such as State Records' records management standards or the Australian Standard AS ISO 15489:2002 Records Management would help your organisation to better meet its recordkeeping requirements, use the policy strategy to make this happen.

Issue a policy which explains what the records management benchmarks for your organisation are - for example, AS ISO 15489 - and develop procedures that will enable people to meet this benchmark in their daily practices.

When should the policy strategy be used?

The policy strategy should be used when you want to:

- set rules and guidelines for the operation of recordkeeping systems
- establish a framework for consistent and accountable recordkeeping practices
- emphasise corporate ownership of records
- establish an official position on recordkeeping issues, and
- demonstrate how recordkeeping fits within information management and corporate programs.

Generally, the policy strategy should not be employed in isolation. Just having a policy in place will not ensure that people are making and managing records appropriately, in ways that meet your recordkeeping requirements.

Policy should be supported by other strategy when:

- a recordkeeping requirement must be satisfied

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[38] Victoria L Lemieux, 'Let the Ghosts Speak: An Empirical Exploration of the Nature of the Record', *Archivaria*, Number 51, Spring 2001, 102

- there is likely to be resistance to the policy, or
- it introduces significant new responsibilities to employees.

Tip: Policy and implementation strategies work in combination

Policy and implementation strategies will usually work in combination. Policy statements often need to be supported by extensive training and education (this is part of the implementation tactic) to ensure employees are well informed about their recordkeeping responsibilities. It is important, however, to have a high level framework of rules in place, and this is what employing the policy tactic provides.

Examples of the policy strategy

Examples of rules you may wish to codify using the policy strategy could include:

- records must be classified according to the corporate classification scheme before they are saved within a corporate data store or filed in the paper-based recordkeeping system
- employees must save electronic records into shared directory folders instead of personal files
- the appropriate disposal status must be linked to records at the time of creation or receipt
- all papers attached to files must be folio numbered
- employees must not destroy records unless such action is authorised by approved disposal procedures, or
- metadata must be captured during business transactions to describe the content, context and structure of records in both paper and electronic recordkeeping systems.

These types of rules would generally be codified in policies or procedures that support your recordkeeping system operation.

Example: Development of corporate policy to meet recordkeeping requirement

An organisation has determined it has a requirement to create and capture records documenting business conducted in monthly business meetings. It is currently not meeting this requirement.

A corporate policy is developed that stipulates employees must create records that document decisions made at business meetings, and that these records must be captured into relevant recordkeeping systems.

Example: Development of corporate policy to meet recordkeeping requirement

An organisation has determined it has a requirement to create and capture records documenting business conducted in monthly business meetings. It is currently not meeting this requirement.

A corporate policy is developed that stipulates employees must create records that document decisions made at business meetings, and that these records must be captured into relevant recordkeeping systems.

Example: Development of procedure statement to meet recordkeeping requirement

In the course of evaluating their existing systems (Step D of the DIRKS methodology), an agency identified that many staff were not using a recordkeeping system correctly.

They therefore developed a procedure statement which identified the specific records that must be made and registered in the system, who should make and register these records and the process by which these records should be registered into the system.

By specifying the system rules in this way they were able to resolve the problems previously identified with the system.

Example: Development of corporate policy and disposal project to meet recordkeeping requirements

Your Step D research has revealed that record disposal is being poorly managed within current systems. The organisation has no functional retention and disposal authority, there are no policies concerning record destruction or maintenance and staff are unaware of what their responsibilities are.

In Step E you therefore decide to develop a corporate policy which will tell all staff that they must not destroy any records without the approval of the Records Management Unit.

You also initiate a new DIRKS project, with the objective of developing full disposal coverage for your organisation's records. This will involve doing Steps A, B and C and producing a retention and disposal authority.

Example: Value of creating policies

According to Indiana University which undertook a major assessment of university business systems:

working more intensively on policies turned out to be a real plus in moving the records management agenda forward. One of the real deficiencies at [the university] is the lack of a solid foundation for recordkeeping, beginning with basic policies. Once I began writing the electronic records policy, I recognized how necessary it was to develop a whole suite of related policies. This meant actually stepping back from electronic records management and creating more fundamental documents on records management in general...I [also] needed to develop a group of related policies on imaging and e-mail.[39]

Compliance issues

Developing policies and procedures for your organisation will help with a range of compliance requirements you may be subject to, including those issued under the State Records Act.

State Records' requirements

The Standard on Records Management requires that corporate records and information management is directed by policy and strategy. This requirement establishes the importance

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[39] Philip C. Bantin, Indiana University Electronic Records Project, Phase II, 2000-2002 - *Final Report to the National Historical Publications and Records Commission*, Bloomington Indiana, 2002. Accessed via the Indiana University Web site in January 2003
at: http://www.libraries.iub.edu/index.php?pageId=3313

of high level policy and strategy, adopted by the Senior Executive of an organisation, to ensure good records and information management practice in an organisation.

The Australian/International standard on records management, AS ISO 15489

This standard says that all organisations must develop and implement policies and procedures, as a means of ensuring its recordkeeping requirements are met.

Quality management standards

Organisations seeking to comply with international quality management standards need to be aware that the production of policy documentation is a requirement for certification. The current ISO 9000 family of standards, particularly, ISO 9001: Quality Management Systems - Requirements, highlight the importance of policy and procedure to quality management frameworks.

Sample policy documentation

State Records has collected a range of examples of policy and procedural documentation from across the NSW public sector. This is accessible via the Examples of records management policy, procedure and planning documents page of the State Records website.

3.5.3 Design strategy

Overview

This section examines what the design strategy is and explains how it can be used to help you meet your recordkeeping requirements. It provides a number of examples of uses of the design strategy.

What is the design strategy?

The design strategy enables you to design or redevelop recordkeeping systems in ways that enable your organisation to automatically meet its recordkeeping requirements.

Design strategy apply to the technical components of recordkeeping systems and to business processes. Using the design strategy makes recordkeeping less obvious or intrusive to employees by rendering it a routine or automatic part of doing business using the systems and technology available. An employee's direct involvement in recordkeeping tasks is thereby removed or reduced.

When should the design strategy be used?

Design should be used when:

- it is critical that recordkeeping requirements are satisfied, and
- users do not need to be aware of recordkeeping functionality.

As it frequently involves technical design work, implementation of the design strategy can be costly. Application of the design strategy will often require the involvement of IT specialists, working together with records staff to build the necessary technological components. It is therefore effective to employ the design strategy when:

- new business information systems are being developed
- business information systems are being redesigned, or
- business processes are being reengineered.

Tip: Not all design work has to be expensive

Remember that design can also be about using existing technology in different ways. For example, if you already have records management software, you could decide to adopt the design strategy and configure the software in a different way so that certain fields are displayed to all users and others are not.

This form of design work is not expensive, if you already have the records management software.

Examples of the design strategy

Examples of the design strategy include:

- designing a system that will prohibit users from completing an electronic business transaction until a record has been registered
- deciding to purchase an off-the-shelf records management software package
- making certain fields mandatory in a database or registration box
- ensuring that audit trails are activated in systems
- prescribing 'read-only' access to electronic records retrieved from a corporate data store
- maintain a history of authorised system users
- link disposal decisions to records to assist data storage and migration
- preventing the deletion of records without authorisation, and
- configuring e-mail systems so that copies of outgoing messages are automatically saved into a shared corporate data store rather than personal e-mail folders.

Example: Using the design strategy to integrate systems

Your Step D assessments may have revealed that systems cannot communicate, contain duplicate information or that efficiency is hampered because data cannot be inherited between systems.

You can flag this as an issue and in Step E develop an integration strategy that you can begin to develop in Step F of the methodology.

The integration strategy could be to build interfaces between systems, or could involve the development of a business portal that brings together all relevant business applications.

Example: Using the design strategy to improve metadata

In your Step C analysis you identified that, in order to efficiently manage the complaints management process you need to:

- document the complaint (as required by AS 4269)
- record name of complainant, date of receipt, nature of complaint, action taken

In Step D you determined that you current complaints management system does not provide you with the capacity to create or manage this metadata. The system does not:

- allow for documentation of nature of complaint
- track action undertaken in response to complaint.

In Step E you decide to utilise the design strategy, and redesign the complaints management system so that it has the capacity to capture and manage metadata describing the complaint and the action undertaken.

> **Example: Using the design strategy to integrate systems**
>
> Your Step D assessments may have revealed that systems cannot communicate, contain duplicate information or that efficiency is hampered because data cannot be inherited between systems.
>
> You can flag this as an issue and in Step E develop an integration strategy that you can begin to develop in Step F of the methodology.
>
> The integration strategy could be to build interfaces between systems, or could involve the development of a business portal that brings together all relevant business applications.

How far can you take the design strategy?

Potentially, the sky is the limit with the design strategy, but you have to remember that technical solutions to problems can come at a significant cost. If you have a large budget, however or significant technical expertise at hand, what you can achieve with the design strategy need only be limited by your imagination.

For example, a way to solve your problems may be to adopt a graphical user interface based on its business activities rather than software applications and documents so that when an employee selects the activity they are undertaking, the necessary applications are launched and resulting records are automatically tagged with information applicable to that activity.[40]

3.5.4 Standards strategy

Overview

This section examines what the standards strategy is and explains how it can be used to help you meet your recordkeeping requirements. It provides a number of examples of uses of the standards strategy.

What is the standards strategy?

This strategy concerns the use of technical standards as means of ensuring that recordkeeping requirements are met.

Technical standards usually apply to the creation and management of electronic records or to the design of electronic systems, although they can also be applied in paper based environments. Different areas that can be governed by technical standards include:

- technical system and communication protocols
- computer, personnel and/or physical security
- documentation
- record formats, and
- record storage.

Note that the standards strategy has a strong relationship with the design strategy. To incorporate technical standards within systems, you will need to consider elements of technical design.

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[40] The National Archives of Canada has experimented with this design strategy, see John McDonald, 'Recordkeeping systems: Lessons learned from the experience of the Canadian Federal Government', paper presented to the 1999 conference of the Australian Society of Archivists. Accessed via the Australian Society of Archivists Web site in January 2003 at: http://www.archivists.org.au/events/conf99/mcdonald.html.

Why use technical standards?

The use of open technical standards for the creation and management of records will serve to improve their chances of being accessible over time. This is not only because the systems they are kept in will be more compatible with new systems, making migration easier, but also because many technical standards are non-proprietary and consequently have published codes which will allow formats and information to be re-constructed later on if the records and/or the recordkeeping systems become obsolete.

Technical standards, particularly when they are non proprietary are also less subject to change. Storing records in these formats can therefore lessen the need for system migration. The adoption of a standard format may occur at the creation of a record, or the record may be converted to a standard format.

Using standards for the design and development of the software and hardware that will be used in your system, may also help to address some of your recordkeeping requirements.

Use of such standards can facilitate:

- interoperability with external systems (eg departmental systems, systems of other organisations in the same or different jurisdictions)
- maintainability (these standards are subject to less change and have published codes)
- portability (enables systems to run on a new platform or work with new languages, business rules and other controls)
- modularity (minimal disruption to other components of a system when a change is made to one particular component), and
- reuseability (one approach can be used in multiple applications within your organisation, thereby promoting data inheritance and flexibility).

Tip: Standards require little of users

The standards strategy generally requires little user involvement. If you have issues with system interoperability and know you need to maintain records for long periods of time, consider the standards strategy as a means by which you can achieve these objectives with little user involvement.

When should the standards strategy be used?

Standards are a useful strategy to:

- manage software and hardware dependencies
- ensure electronic systems' interoperability, and
- foster the creation of electronic records that will be useable, understandable and available over time.

Given it may involve technical issues, the standards and design strategies are often used in combination.

Tip: This strategy is not about 'best practice' standards

The standards discussed in this strategy should not be confused with the records management standards issued by State Records, nor with best practice requirements such as AS ISO 15489 or sector specific standards. The standards referenced in this tactic relate to record format, display or networking capacities of systems. These standards relate to technical capacities, not to broad best practice requirements.

Examples of the standards strategy

Examples of technical standards used for record formatting

Non proprietary technical standards which are widely used for text and image formatting include:

- HTML (Hyper Text Markup Language)
- SGML (Standard Generalised Markup Language)
- XML (eXtensible Markup Language)
- ASCII (American Standard Code for Information Interchange)
- JPEG (Joint Photographic Experts Group)

Some proprietary standards are widely used and accepted. If non proprietary standards cannot be used, widely used and supported proprietary technical standards should be selected, as these have a better chance of being supported and maintained through time.

Examples of these types of standards include:

- formats employed within the Microsoft Office suite of applications, by Microsoft Corporation (including Word, Excel, Powerpoint, Outlook and FrontPage)
- GIF (Graphics Interchange Format)
- TIFF (Tagged Image File Format), and
- PDF (Portable Document Format by Adobe Systems Inc)

Example: Use of standards for records creation

Organisation X has a requirement to keep all its Board records as State archives (ie forever). They therefore need to be sure the format in which they create these records enables them to do this.

Applying the standards strategy, they decide to use archival quality paper for Board record creation that complies with technical standards issued for paper production, as this paper is manufactured to survive for the long term.

It is important for Organisation X to apply this strategy in relation to its Board records as some paper, such as many recycled papers, may not survive longer than 20 years. Using the standards strategy will enable them to ensure that this recordkeeping requirement concerning record retention will be met.

Example: Use of standards for records management

In Agency Y, license records, created and maintained electronically, need to be kept indefinitely. XML is used to encode these records after their creation. A Word version is also maintained on the agency's network.

Encoding records in XML facilitates their long term maintenance as it means the records will be easier to migrate, are subject to fewer migrations and can be accessed and read using a number of different hardware and software combinations.

Example: Use of standards for system development

In Enterprise Z, Board records are generated in three different systems. Currently these systems cannot communicate and so compiling Board reports is a laborious, paper based process.

To facilitate their requirement to maintain Board records indefinitely, Enterprise Z is going to

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redevelop the systems used to create and manage Board records.

It will use a variety of technical standards in its system design process to ensure the different systems can communicate and data can be exchanged between them. This will help them to ensure that their recordkeeping requirement to manage their Board records is easier to achieve.

Tip: Conduct conversion appropriately

If part of your Step E strategy is to convert existing records to standard formats, be sure to conduct this conversion process in a controlled, tested and documented way that ensures the integrity of your records is not compromised.

See State Records' Future Proof guidelines for more information.

Tip: Apply standards in your Step F: Design recordkeeping systems work

If you decide to use technical standards in Step E to facilitate system integration and extensibility, you would determine exactly how you want these standards to be applied in the course of your Step F design strategies.

Need for ongoing maintenance when using the standards strategy

Remember, if you use the standards strategy to manage the long term accessibility of your electronic records, you will need to continue to monitor your electronic records and systems, to ensure they continue remain accessible and continue to support the functionality you require.

Electronic records management needs to be an ongoing process, so do not forget to regularly monitor the ongoing accessibility and interoperability of your records and systems.

3.5.5 Implementation strategy

Overview

This section examines what the implementation strategy is and explains how it can be used to help you meet your recordkeeping requirements. It provides a number of examples of uses of the implementation strategy.

What is the implementation strategy?

The implementation strategy involves considering the way in which you implement recordkeeping systems in your organisation. If systems are implemented in a particular way, you can ensure that recordkeeping requirements are met.

Example: The implementation strategy for accessibility

An organisation may have a requirement to ensure that all records are accessible to all staff. To ensure this requirement is met, the organisation may adopt the implementation tactic and choose to remove the hard drives from networked computers and rely on file servers, under the control of a data administrator, for online storage of corporate records and information. In this case, the way the system is implemented is a means of ensuring its ability to meet stated recordkeeping requirements.

When should the implementation strategy be used?

Implementation strategies are particularly useful when:

- there is user resistance to change, or
- design is not cost effective.

Examples of the implementation strategy

Examples of the implementation strategy include:

- provide organisation-wide recordkeeping training
- design or redesign business processes to better facilitate recordkeeping
- provide folio numbering sheets for all paper-based files to provide protection against record removal
- require employees to complete a 'request for file' form before gaining access to files and maintain this information in the organisation's records management system
- lock records storage areas (eg room, compactus, safe) to ensure only authorised access to paper-based records
- assign access permissions to ensure records are appropriately protected and secure
- remove hard and floppy drives from personal computers so that records cannot be saved outside the corporate records store, and
- ensure agency-wide data management practices are carried out, to assist with record preservation and information security management.

Example: Implementation and policy strategies determined by data management survey

If you have undertaken it, your Step D research will help you to identify whether implementation strategies are required in your organisation.

In the course of its analysis, Indiana University undertook a data management survey to determine how data was being used and managed across the university. This information was used to provide an understanding of how the university's electronic records are regarded and managed. It also helped to reveal what types of strategies would need to be employed to improve University recordkeeping:

In general, I found that personnel in units wanted to do the right thing, but they did not have the information or skills to meet the challenges. They tended to:

- *have too many files*

- *convert electronic records to paper documents and*

- *duplicate data files to ensure that they would have access to data and could produce the reports they need.*

The most important needs are for retention schedules, for education in managing digital objects, and for instilling in managers a better sense of how information flows through the University.[41]

Through its survey, Indiana was therefore able to determine that staff need more training in various aspects of records administration, and need rules such as disposal authorities.

In Step E, the University would therefore decide to adopt the policy and implementation

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[41] Philip C. Bantin, Indiana University Electronic Records Project, Phase II, 2000-2002 - *Final Report to the National Historical Publications and Records Commission*, Bloomington Indiana, 2002. Accessed via the Indiana University Web site in January 2003
at: http://www.libraries.iub.edu/index.php?pageId=3313

strategies, to ensure staff have the disposal rules they require and have the knowledge to implement these and other requirements that would enable them to improve their daily business arrangements.

3.5.6 Selecting appropriate strategies

Overview

This section highlights the importance of selecting tactics that meet your requirements and that can be applied easily in your organisation. It provides a number of examples and a case study to help illustrate the various factors you should consider.

Assess factors that will support or inhibit use

Be sure you choose strategies that will work in your organisation and that will enable you to address and resolve the gaps or issues you have identified.

To do this, make sure you consider:

- the organisation's corporate culture
- the organisation's systems and technological environment
- the organisation's geographic spread, and
- risks and implications.

The organisation's corporate culture

Choose strategies that will work with and be accepted by your organisational culture and business practices.

Examples: Aligning strategies to organisational culture

- an organisation that displays a culture in which recordkeeping is taken seriously and staff understand their recordkeeping responsibilities is likely to embrace policy and implementation strategies
- an organisation that is enthusiastic about information technology may be particularly receptive to design solutions involving the capture and maintenance of electronic records
- an organisation with a high degree of risk sensitivity, an aversion to change, and fear of losing control over its records may willingly adopt design and standards strategies that enable it to meet its recordkeeping requirements.
- a corporate culture where people do not worry or do not care about recordkeeping may need to be coupled with strong policy and design strategies. Lack of a strong policy framework was a significant factor in the Jamaican banking collapse:

Where documentation was poor it was the cultural predilection not to document coupled with an organizational absence of accountability for the making of records that led to failures to account.[42]

Step A: Preliminary investigation provides more information that you can use to determine the type of corporate culture or cultures that operate in your organisation, and the importance of considering corporate culture in the course of your DIRKS activities.

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[42] Victoria L Lemieux, 'Let the Ghosts Speak: An Empirical Exploration of the Nature of the Record', *Archivaria*, Number 51, Spring 2001, 99

The organisation's systems and technological environment

Consider your systems and realistically assess what is possible in relation to them. Make sure you also assess financial or personnel issues that may support or inhibit your ability to utilise certain strategies.

Example: If one strategy has proven to be unsuccessful, try a mixture of strategies

If an assessment of your existing systems (Step D) demonstrates poor compliance with a corporate policy which states that employees should capture electronic messages as records, continued reliance upon the policy strategy alone would be futile. Instead, the policy strategy should be supported by design or implementation strategies to ensure that recordkeeping occurs and that it takes place with minimal user effort.

As another example, your technology may have the capacity to enable you to link existing document management applications and the thesaurus and disposal modules of records management software to assist with the classification and sentencing of text-based electronic records, but this capacity has not been adopted. You could therefore use the design strategy to make sure recordkeeping requirements that specify mandatory disposal requirements are met.

The organisation's geographic spread

Today many organisations are comprised of a range of offices which can be located in the one city, across the state or country or be located across a range of international environments. Using your knowledge of the organisation, or research you conducted in Step A, you need to consider geographic spread when considering strategies to employ in your systems.

Depending on your organisation's geography you could ask:

- can common software and procedures be deployed across all offices?
- is it possible or financially feasible to establish network connections that enable all offices to utilise one cross-organisational system?
- can standard retention rules apply across all offices?
- can the one range of strategies be applied across the organisation or do separate decisions need to be made for specific offices?

Cost, risk and other factors

Other factors affecting your choice of tactics can include:

- the costs, in terms of money, human resources and time, incurred by each proposed strategy
- the tangible and intangible benefits to the organisation offered by each proposed strategy
- the risks to which the organisation will be exposed if it adopts particular strategies, and
- the amount of user support and training that will be required to support the strategies you have selected.

The appropriate mix of strategies likely to work best in your organisation should:

- score well across the criteria judged by your organisation to be the most important, and

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- pose little risk, or an 'acceptable' level of risk, to the organisation in terms of cost, commitment of resources, interruption to core business, and level of organisational change required.

Make sure strategies meet your range of needs

Once you have selected the strategies you wish to employ, you need to confirm that the recordkeeping requirements you arrived at in Step C and the gaps you identified in Step D have been addressed.

To do this you need to:

- revisit the requirements that relate to the system you are assessing
- look at the gaps you identified in this system, and
- ensure that your chosen strategies are capable of resolving all identified issues and meeting the requirements you specified.

This will enable you to determine the extent to which requirements are being met by the broad strategies you have selected, and to identify any glaring gaps or omissions in the system's coverage.

The mapping between system components and requirements will not be 'one-to-one'. Some strategies will address more than one major requirement; some major requirements will be met using a combination of different strategies.

Tip: Keep a broad focus

You should keep in mind that this tool is meant to provide a check of the initial high-level solutions you are proposing against your major recordkeeping requirements. You should not get bogged down at this stage with very particular requirements. These will be addressed by the more detailed and precise design specifications produced in the systems development process in Step F.

Document your decisions

Once you have selected a range of strategies and ensured that they enable you to meet your recordkeeping requirements, you should document your decisions. These can be documented in a plan that outlines how you want to proceed with your design work, based on your work and assessments to date.

Your plan may need to receive managerial endorsement before you can proceed to implement your recommendations.

Tip: Reconfirm organisational commitment

Step E can be a useful point at which your organisation can make or reconfirm a high-level commitment regarding the remaining design and implementation process. This may involve using in-house staff, external consultants, system vendors or a combined project team to bring some or all of the strategies to fruition.

Be pragmatic

You may have significant objectives that you wish to achieve following from your research to date. However, given business considerations and financial constraints, it may not be possible to achieve all that you have identified, or actually implement the strategies you've proposed. Depending on the nature of your organisation, it may also not be possible for the

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records management area to set organisation-wide information management practices and priorities.

To help your objectives to be achieved, it may be possible to use other organisational initiatives to help leverage your project. That is, if knowledge management, work process re-engineering, business system redesign or other initiatives are current hot topics in your organisation, it is worthwhile trying to use these projects as means by which your work can be initiated.

Tip: Other pragmatic approaches

- implement part of the strategy to address essential needs
- opt for no further action at this time
- revisit the preferred solution when its circumstances have changed, or
- take a staged approach to the implementation of your solution.

Case study

The following case study was discussed in Step D: Assessment of existing systems as the results of a gap analysis. The following identifies how Step E can be used to identify strategies to help resolve the issues identified in Step D.

Example: Strategies for licence agreements

One organisation had a requirement to keep records of its licence agreements for fifty years after the issue of the licence. Their legislation stated that these records must be securely maintained for the duration of their existence. The organisation has a number of offices across the state, each performing the licence management function.

After undertaking their Step D analysis, it was concluded that:

- the long term accessibility and evidentiality of the records was not assured. Licence records have to survive for upwards of fifty years and currently no strategies are in place to ensure this long term objective is achieved.
- records are not stored in appropriately secure ways. System controls prevent unauthorised personnel from accessing and changing the records, but they do not prevent authorised staff from accidentally or intentionally modifying or deleting licences.
- policies and procedures for system use are widely available at central office. Training in system use and access is often frequently conducted in this office. In the regional offices, however, little policy or procedural documentation exists and that which does exist is frequently different to that used in central office. Regional office staff have also not been trained in system use.

In Step E, the following strategies to remedy these gaps were decided upon.

Long term accessibility

The organisation is to employ the policy strategy. It will develop procedures, aimed at both records and IT staff, that will require that licence records are securely and accountably migrated through system change. Back-up procedures operate over the records, but these do not enable the full record to be preserved in a secure and evidential manner over time.

Again in conjunction with IT, use of the standards strategy will be investigated. The agency knows it has to keep its records for long periods of time and believes that adoption of a

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standard, non-proprietary format will be a more secure and cost effective solution in the long term.

Record security

The security of its licence records is of key business importance to the organisation. It will therefore use the design strategy to limit user activities within the system and to make all records subject to read only access after their creation. To deal with security issues, the organisation will also again employ the policy strategy to alter work processes to ensure that two staff have to authorise and validate any changes made by the administrator to licence records within the system.

Training in regional offices

The organisation will use the implementation strategy to make sure training is conducted on an annual basis in all regional offices. Using the implementation strategy, the organisation will also distribute up to date policy and procedure manuals to ensure all staff are following the same processes. Again using the implementation strategy, the organisation is researching alternative training mechanisms for regional staff and is particularly examining online training mechanisms.

3.6   Step F – Design of a recordkeeping system

Design a recordkeeping system which incorporates the strategies, processes and practices endorsed by AS ISO 15489; ensure that the system supports, and does not hinder, business processes; assess and, if necessary, redesign business processes and operational business and communication systems to incorporate recordkeeping. [AS ISO 15489.1, Clause 8.4]

3.6.1 Content and scope of Step F

Step F is where you turn the strategies identified in Step E into actual system components.

Overview

This section is an introduction to Step F: Design of a recordkeeping system. This section:

- outlines the aim of Step F, and what it can help you to achieve
- summarises the major elements of Step F
- explains why it is important to undertake Step F for particular DIRKS projects, and
- shows how Step F relates to the other steps in the DIRKS methodology.

Aim of Step F

Step F is where you turn the strategies identified in Step E into actual system components. Step F is intended to help you turn:

- an awareness of the requirements your organisation is subject to
- an understanding of problems with current systems and practices, and
- an understanding of possible strategies

into an actual blueprint or program for putting together or redeveloping your systems to transform them into recordkeeping systems.

Summary of Step F

Step F involves system design, the actual process of developing the components of your recordkeeping system.

Step F, like the other steps in the DIRKS methodology, adopts a broad definition of systems, encompassing people, policy and processes as well as tools and technology. Therefore this step is likely to involve:

- designing changes to current polices, processes, practices and tools, and
- adapting or designing and integrating technological solutions.

Why should you do Step F?

Step F is where you actually start to design tangible solutions for your organisation. This step will enable you to:

- address issues that have hindered good recordkeeping in your organisation
- design a recordkeeping system that meets a range of business needs, and
- liaise with a range of stakeholders to ensure good recordkeeping is conducted in your organisation.

Example:

Step F will help to consistently work through the problems affecting your systems and design appropriate and thorough responses to them. Rushing through design work is a common problem, but it can have significant negative effects. An investigation into banking collapses in Jamaica identified rushed and inappropriate system design as a problem that contributed to the problematic business environment that lead to the collapse of the banks:

Many managers seized on digitisation and electronic recordkeeping as the solution to their information retrieval difficulties. However while digitisation did lead to faster information retrieval, systems were inadequately designed and did not incorporate appropriate metadata fields or database structures to assist with information retrieval issues.[43]

Working through Step F will enable you to design the systems that are the most efficient, useable and appropriate for your organisation.

Relationship to other steps

Steps C, D and E

It is very difficult to design a successful recordkeeping system if you do not know and understand your recordkeeping requirements and organisational constraints. Without this knowledge, you will potentially waste a lot of time unnecessarily backtracking and re-doing tasks before you accomplish a successful implementation.

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[43] Victoria L Lemieux, 'Let the Ghosts Speak: An Empirical Exploration of the 'Nature' of the Record, *Archivaria*, Number 51, Spring 2001, 106

To ensure you have adequate knowledge to progress with system design, your work in this step should ideally have as its basis:

- the recordkeeping requirements identified and documented during Step C and
- any organisational recordkeeping inadequacies or gaps identified during Step D, and
- the strategies for improving recordkeeping identified in Step E

to ensure your system design encompasses all organisational requirements.

Step G

In Step F you design and develop your recordkeeping system. Step G involves implementing your revised or new system in your organisation. There is therefore a close relationship between Steps F and G - in one you develop your solution and in the other you unleash it. If you are undertaking Step F it is important to consider Step G and ensure that the system you have developed is effectively implemented and used across your organisation.

3.6.2 Designing a recordkeeping system

Overview

This section summarises the major issues you will need to bear in mind when designing your recordkeeping system. This introductory session flags these issues, while the remainder of Step F provides practical guidance as to how specific aspects of recordkeeping system design can be completed.

Steps in recordkeeping system design

System design in Step F is concerned with implementing strategies you identified in Step E, to help you build systems that meet your recordkeeping requirements. System design is therefore based around implementing the Step E strategies:

- policy
- design
- standards, and
- implementation.

Your work in this step will involve designing or structuring all components of your system so that it:

- is useable and understood by staff
- accommodates all recordkeeping tools it needs to support
- is sustained by adequate policy and procedure, and
- is technically adequate and has the necessary functionality to support recordkeeping requirements.

When you have designed a system that meets all these requirements, you will have established an effective recordkeeping system for your organisation.

Tip: See system design in the context of the organisation and its requirements

The DIRKS methodology is intended to be a very scalable and flexible one. See Keep your focus on the business you are examining in the context of your own organisation and its requirements and develop a design strategy that is appropriate to these. You do not need to develop all system components listed in this step - keep your focus based on the research you have done, the specific requirements you have identified and the strategies you've selected in the previous steps of the DIRKS methodology.

Principles of recordkeeping system design

Throughout the system design activities you will undertake in this step, it is important to bear two key principles in mind:

- taking an iterative approach, and
- involving users in the process.

This approach will break your system design approach down into the following activities:

- design a bit of the system (eg a new procedure, a training package, a piece of software, a paper-based template, or a screen interface)
- test it against the requirements, deficiencies and strategies documented during steps C to E
- review it with users and other stakeholders
- depending on the outcome of the review, either redesign that bit of the system to better meet recordkeeping requirements and incorporate user feedback, or modify the requirement if it is inconsistent with user needs or recordkeeping requirements or infeasible, and
- document any changes to the design or the requirements, indicating reasons for the change, and the authority under which the change was made.

The extent to which you can involve users and take an iterative approach during the design phase will depend on time and cost constraints. However, adopting such practices will help ensure that:

- a useful, viable system is developed
- users develop a sense of system ownership through their involvement, and
- users understand the system and use it as it is intended to be used.

Tip: Remember the importance of useability, integration and the long term maintenance of records

When designing your system, remember to not underestimate the importance of system useability. Many recordkeeping systems have good capacities to create and capture records, but useability is often overlooked. The effectiveness of your system will come down to its ability to be used for a variety of purposes, and for the information it contains to be extracted and utilised. Ensure that this requirement is key among your design considerations.

When considering your recordkeeping system design, it is also important to bear system integration in mind. If you are developing a new technical application to support better recordkeeping, you will need to ensure that this integrates well with other systems currently in place in your organisation.

Remember too that some records in the system you are designing will need to be kept for long periods of time. Consider any such long term requirements during your system design phase. You may have already decided in Step E: identification of strategies for recordkeeping to use technical standards as a means of improving the long term accessibility of your records, but it is worth considering your longer term requirements at other points through the system design process.

For example, you may want to consider at the outset the system migration strategies that are necessary to sustain the records in the system and the strategies that will be necessary to sustain the security or other management controls that you apply in the system.

Recordkeeping system design may require a mix of skills

System design involves recordkeeping professionals and other experts working with users to produce specifications that best meet:

- recordkeeping requirements (identified needs to create, capture, maintain and dispose of records)
- organisational technical, economic and cultural constraints, and
- user requirements.

Given that in the contemporary business environment many business activities are conducted electronically, your system design initiatives may require significant IT involvement to ensure that the technical components of systems are adequately designed and implemented, to ensure you are able to meet your recordkeeping requirements.

Tip: Do not use jargon

Do not forget that if you are employing additional staff members to undertake system design and development and if these staff are unfamiliar with recordkeeping words and concepts, you will need to provide these staff with a good overview of your project and its recommendations to date. Particularly, make sure all staff understand the recordkeeping 'language' you use. Quite a bit of this terminology may be confusing to other staff or they may misinterpret its meaning. Providing a clear, concise overview will help to avoid any such confusion.

Example: Communicate well with IT colleagues

Be sure to communicate your ideas and requirements clearly to IT colleagues, as their support is crucial to any design projects you may want to undertake. Inadequate systems contributed to the Jamaican banking collapse in the late 1990s and inadequate communication with IT staff meant problems were not rectified when they should have been.

One respondent observed that, having identified the need for a different view of the bank's accounting information, managers experienced difficulties in negotiating the necessary systems changes with information technology staff. Interview subjects suggested that information technology experts' own assumptions about the significance and meaning and the information being requested made them reluctant to make systems changes. In other words, they simply did not share line management's understanding of why this information should be needed for accountability purposes.[44]

Clear discussions with your IT staff will enable all parties to understand project requirements and constraints and will contribute to the better development or redevelopment of systems.

Managing recordkeeping system design

At this stage of your project, your DIRKS work may become a multi-team initiative, with staff from IT, training and other areas participating. If you are in this situation, be aware that unanticipated delays and changes may affect your project, as a result of the larger numbers of staff and potentially consultants involved. Other staff will have competing demands and requirements and these may affect your project timetables.

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[44] Victoria L Lemieux, 'Let the Ghosts Speak: An Empirical Exploration of the 'Nature' of the Record, *Archivaria*, Number 51, Spring 2001, 106-107

> **Example: Reliance on partners**
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> The University of Indiana which undertook a major multi system assessment project noted that:
>
> In almost every initiative undertaken in this project, we were relying on other partners to meet their obligations and maintain the original timetable. We simply could not control our own fate in the same way one can in a processing or scanning project.[45]
>
> Try to be flexible, but also stress your own project's specific timeframes and deliverables. Talk to other project staff about the importance of your work and the importance to the organisation of having it completed.

Documenting recordkeeping system design

In Step F you are designing your new or revised system. As you progress with its development, you need to fully document the decisions you are making and the type of system you are designing.

In Step F, some of your documentation will be created as a part of completing the step - for example drafting a policy or developing a training implementation plan. You will also need to create other documentation, such as decisions made about the logical structure of your technical components or revised work processes.

If you do take an iterative, consultative approach to your system design, be sure to fully document any changes to requirements and design components that arise from your consultation.

Creating documentation of recordkeeping system policies, procedures and practices as well as the documentation of the system implementation process is good business practice. It is also a requirement for certification against the ISO 9000 quality standards.

3.6.3 Applying the policy strategy

Overview

If in Step E - Identification of strategies for recordkeeping, you selected policy as a strategy that would be of use to your organisation, this section examines how you can deploy policy as a means to improve organisational recordkeeping. It looks at compiling policy and procedural documentation and provides guidance about what these types of documents should say and do.

Establish and maintain recordkeeping policy and procedural documentation

If, in Step E, you decided that implementing policies, procedures or other business rules would help your organisation meet its recordkeeping requirements, Step F is the point in the methodology where you start to develop these tools. These documents will specify exactly how recordkeeping should be undertaken in your organisation, or undertaken within a specific business environment.

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[45] Philip C. Bantin, Indiana University Electronic Records Project, Phase II, 2000-2002 - *Final Report to the National Historical Publications and Records Commission*, Bloomington Indiana, 2002. Accessed via the Indiana University Web site in January 2003 at: http://www.libraries.iub.edu/index.php?pageId=3313

What to do with existing policy documentation?

Your organisation may already have a policy framework in place. If so, old recordkeeping documents should be reviewed and updated as necessary.

If your systems are going to change radically, it may be worthwhile officially withdrawing your old policy documentation and releasing new documents that better describe how your new system will operate.

Your organisation may also be expected to operate under policies that have been promulgated by another organisation within the same portfolio or sector. Subject to your recordkeeping requirements, you may need to take into account the existence of such policies to help ensure a consistent approach to recordkeeping within your environment.

What should policy and procedural documentation say?

Policy documentation

A policy is a high level plan of action. Therefore policy documents should contain high level rules and requirements - more practical detail should be included in procedural and guideline documents.

When developing a policy statement to help address recordkeeping issues in your organisation, you may want it to include some of the following components:

Purpose	It is customary to start a policy statement with a brief introduction to the document and its objectives. This purpose section can also be used to discuss records and their value to an organisation or business unit.
Description of recordkeeping system	Provide details of the system or systems staff should use for the capture and management of records. Briefly describe the system/s and identify the staff with responsibility for operating and maintaining it. This will provide high level guidance for staff about their recordkeeping requirements.
Records management rules	It is important to outline at a high level the rules that staff are expected to follow in relation to record creation and management. These rules should be brief, but can be elaborated on in procedure documents, if this is required in your organisation.
Responsibilities	A key component of a policy statement is the identification of responsibilities for recordkeeping. Outlining the responsibilities allows each person in the organisation to be aware of what they must do in relation to records management.
References	It is useful to outline the legislative and other requirements that exist in your organisation for the creation and management of records. Certain legislation such as the *State Records Act* applies to all NSW public offices, but there may be other pieces of legislation that are unique to your organisation which contain recordkeeping requirements. It is useful to also include these in the references section.
Issued by	If it is organisation wide, it is important to have your policy authorised and issued by your Director, Chief Executive or General Manager. If your policy applies in a specific

	business unit, it needs to be signed off by the head of that unit. The policy needs this level of approval and authority to be appropriately adopted. The policy also needs to be dated to enable it to be regularly reviewed.
Glossary	Providing a glossary is a means of ensuring the requirements of your policy statement, and all the terminology used, are fully understood by all appropriate staff. Define any terms you may think will not be consistently understood across your organisation. A full Glossary of Recordkeeping Terms can be accessed via the State Records website.

Procedures and guidelines

Procedures and guidelines should give clear instruction about how a specific activity, task or process should be conducted. When deciding to use procedural documentation to help address recordkeeping gaps, ensure that procedures or guidelines adequately specify how and when records should be made, and specific staff responsibilities for their capture and management.

You need to develop guidelines and procedures from scratch if:

- there were previously none in place
- those in place are out of date
- changes to business rules, processes and responsibilities are extensive, or
- your organisation is moving from a wholly paper-based to an electronic recordkeeping system.

As with the other components that are designed for use by people, you need to gain user feedback on the layout and clarity of the guidelines and procedures as they are being developed.

State Records' procedures for use of its records management system are available as a guide for procedure document content and layout.

Tip: Support your policy development with use of the implementation strategy

As was flagged in Step E Identification of strategies for recordkeeping, if you are developing policy or procedure tImplementation strategyo help meet your recordkeeping requirements, try to support the actual use and understanding of these documents with training, or revision to business processes. See Implementation strategy below for more advice.

Use policy to assign recordkeeping roles and responsibilities

To ensure recordkeeping requirements are met and to ensure that your recordkeeping system operates effectively, it is important to ensure that responsibility allocation is included as part of your system design.

You can use the policy you are developing to assign responsibility for records management.

What responsibilities should be assigned and to whom?

In previous steps you will have determined what recordkeeping tasks need to be performed in your organisation. You can use policy to assign responsibility for these recordkeeping tasks.

You can also use policy to assign responsibilities for quality control. Someone must be responsible for ensuring that recordkeeping tasks are not only performed, but performed correctly, so make sure you allocate this responsibility.

In some cases, you may use policy to assign responsibilities to a particular individual or staff position, say the Nominated Senior Officer for records management. In other cases, you may assign responsibilities to particular work groups or sections, or to all staff across the organisation. Regardless of the persons, positions or sections to which you assign particular responsibilities, you must ensure that all recordkeeping roles and responsibilities are clearly documented. This will help ensure accountability for recordkeeping actions (or inaction). Responsibilities should usually be documented in policy and procedure documentation, or position descriptions.

The activity of assigning roles and responsibilities should be conducted in conjunction with any workflow or business process design or redesign being undertaken. New or redesigned processes will result in the creation of new roles and responsibilities across the business area or organisation concerned.

Tip: Policies and procedures can assist with compliance

Remember that developing policies and assigning recordkeeping responsibilities to staff across your organisation are requirements under State Records' Standard on Records Management. By including these components in your recordkeeping system design, you are able to comply with this mandatory requirement. Having a formal policy or policies in place is also a means to help ensure that your organisation is meeting good corporate governance requirements.

3.6.4 Applying the design and standards strategies

This section looks at issues associated with technical design, including the skills required to undertake it, the steps that need to be considered as part of technical design and the documentation of technical design.

Overview

If in Step E: Identification of strategies for recordkeeping, you selected design and standards as strategies that would be of use to your organisation, this section examines how you can develop and use technical solutions a means to improve organisational recordkeeping.

Design technical components of systems to enable better record creation

Depending on the strategies selected in Step E, or the nature of the systems with which you are working, it may be necessary to design significant electronic components for your recordkeeping system, or to integrate some automation into existing paper-based systems.

Responsibilities for technical design

The technical design of your recordkeeping system may be conducted by:

- the IT and business analysis staff on your project team
- external consultants
- system vendors, or
- a combination of the above.

The range of staff you may want to include in your DIRKS project is outlined in the Introduction to DIRKS.

Tip: Staff with recordkeeping responsibilities should be involved in technical design

Staff with recordkeeping responsibilities have a key role to play in technical design. Even if you have no interest or expertise in technical design you must be prepared to provide a professional opinion on the recordkeeping functionality of the electronic system as it is being designed. Ask questions or speak out if it appears that the recordkeeping functionality of the system is being compromised, or if your requirements are being misinterpreted.

Obtaining IT involvement

If you are having trouble in convincing your IT staff that they should be involved in your system redesign projects, there are a number of points you can emphasise to demonstrate the utility of your project to both organisational and IT objectives.

Example: 'Sell it' the project your IT staff

To demonstrate your project's relevance, objectives and validity to IT personnel, discuss it using IT terms and concepts. You could emphasise that your project is:

- concerned with better management of organisational data - its implementation will help IT deal with this key objective
- identifying and rectifying data redundancies, another key IT objective
- seeking to establish better control over corporate information
- developing more comprehensive disposal coverage to enable the legal destruction of inactive records
- improving metadata capture to better document the use of records
- improving record accessibility, including those records that have been 'archived'
- improving information accessibility rates, or
- concerned with the better management of organisational e-mail.

Your project will have many synergies with organisational IT objectives, and highlighting these should help to give you the IT or system development support you need. Better positioning your requirements, and demonstrating how they serve broader information management needs, will help you to obtain the support you require.

Example: Work together

In its assessments of organisational systems, Indiana University noted that to the university's IT managers that the 'standard back-up procedures were not creating an environment where records could be easily retrieved and were not preserving the kind of records that would be useful in the future'.[46] Specifically examining IT procedures and discussing their concerns from an IT viewpoint helped both IT and records staff to agree that there was a problem and to work together to rectify it.

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[46] Philip C Bantin, 'Developing a Strategy for Managing Electronic Records - The Findings of the Indiana University Electronic Records Project', *The American Archivist*, Volume 61 (Fall 1998), 359-360

> **Tip: Sign a 'memorandum of understanding' (MOU)**
>
> Consider establishing an MOU with the IT Department and build responsibilities for your project into IT planning. If IT staff have written responsibilities as part of the project this indicates their significant commitment to the project.

Before you talk to IT staff about the type of technical components you want, make sure you have a very good idea about the functionality you want from your system:

- what should it be able to do?
- what type of metadata do you want to capture?
- what types of records should it administer?
- should it be capable of resolving access permissions?
- does it need to integrate with other business systems?
- do you want to employ classification schemes?

Clearly outlining these and other requirements will greatly assist IT and system designers to understand your needs and help all participants build a system that meets business needs. The ideas you outline should not just be preliminary. You must provide solid information so that the designers can create specific functionality that enables your organisation to meet its recordkeeping requirements.

You do not need to become an IT or technology expert to effectively undertake this step. You do however need a good understanding of how you want your system to operate and be able to explain this, using appropriate terminology and concepts, to IT or system design staff.

> **Example: Do not assume understanding**
>
> Staff at IndianaUniversity found that when dealing with IT staff or those with data management responsibilities, IT personnel had a good understanding of functional assessment, metadata and how data is managed within systems. They did not tend to have a great degree of familiarity with records as defined by AS ISO 15489, the role and importance of contextual information and the value of evidence in organisational business systems. Informational content is often regarded as more valuable and of more organisational importance than the preservation of evidence.[47] Therefore do not assume that all your colleagues will have the same understanding of concepts and issues. Be sure everyone is working from the same definitions and understandings before you commence any specific design work.

Steps involved in technical design

It is not the purpose of this step to describe in detail the different modelling tools used in computer system design. The following outline simply provides a brief introduction to the process and focusses on:

- determining whether to buy or build
- conducting logical systems design
- conducting physical systems design, and
- developing a systems testing plan.

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[47] Philip C Bantin, 'Developing a Strategy for Managing Electronic Records - The Findings of the Indiana University Electronic Records Project', *The American Archivist*, Volume 61 (Fall 1998), 360

Determine whether to buy, build or both

When it comes to designing or redesigning the technical components of your system, it is necessary to determine whether:

- existing in-house technology can be utilised
- additional technology should be bought and/or tailored, and
- additional technology should be designed and by whom.

The recordkeeping requirements that you articulated in Step C, the recordkeeping gaps identified in Step D and the overall design strategies determined in Step E will indicate the complexity and scope of the technological components that you need.

Factors likely to influence the decisions you make about the technical components include in your decision to adapt, acquire or design include:

- cost of the proposed strategy
- the flexibility or lack of flexibility it contributes
- the speed and/or ease of integration with existing technical and other system components, and
- availability of staff or contractors to perform design work.

Conduct logical system design

Logical design pertains to the 'what and when' of a system, that is, its functions and processes. It focuses on what the system should do, and how it should appear to the users. Logical design involves the use of various conventions and modelling tools to translate the requirements identified and documented in steps C and E into detailed technical specifications for system inputs, outputs, interfaces and data stores.

Logical design includes the design of:

- forms and templates, such as metadata templates, which enable the presentation and collection of information
- user interfaces, such as menus and dialogue boxes, which enable users to interact with a system, and
- data stores, such as databases, which enable data or information objects to be stored in a structured way.

During the logical design of an electronic system, users need to be actively involved in reviewing the design to verify that the system is usable and continues to meet requirements as it evolves.

If, in the course of your Step D: Assessment of existing systems analysis you noted that your business system is not specifying adequate metadata, and you opted for the design strategy in Step E: Identification of strategies for recordkeeping, you should incorporate metadata redesign into your Step F work.

Consider the types of metadata required to meet your recordkeeping requirements and build these into your system design. Consider means by which metadata capture can be simplified through such means as automatic metadata attribution, metadata inheritance etc.

Consider how record classification can assist with metadata attribution. Can certain metadata elements - such as disposal, access, preservation, function etc - be applied to aggregates of records that have been similarly classified, to save you or your users from having to attribute metadata to each individual record? The business classification scheme you developed in Step B will help you to simplify your metadata management in this way.

Consider too, how you want staff to apply metadata. Do you want to include a lot of guidance in the system to help staff choose appropriate metadata? Do you want to build thesauri or other tools into the system, or a range of default values, to limit user choices and control the type of data that is input into the system? Choosing to follow this approach can be labour intensive in the design phase, but can help to reduce mistakes and the amounts of invalid data that is input into the system.

Metadata can be used in many different ways to help you meet your recordkeeping and other business objectives, so consider how you can make this happen during the course of your Step F deliberations.

You may also want to examine the NSW Recordkeeping Metadata Standard for additional guidance in this area.

Conduct physical system design

Physical design deals with the 'how and where' of a system. It involves specifying the technological characteristics of the system, including:

- overall system structure
- system integration
- software program structures
- hardware configuration, and
- data (information) processing, storage, access and protection.

Tip: Use open systems and technical standards where possible

In their physical system design, it is strongly recommended that organisations specify and adopt open systems architecture and non-proprietary information technology standards to manage electronic records required for long-term access.

Note that system integration can include:

- integration with existing electronic systems or applications (for example, an organisation's legacy system, current electronic document management system or suite of document authoring applications), and
- integration of specific recordkeeping tools (such as thesauri, retention and disposal authorities, or metadata creation tools) to enhance the recordkeeping functionality of the system.

A system integration plan should be compiled for use during implementation phase (Step G). This plan is similar in concept and structure to the system implementation plan, but it relates only to the technological components of the system.

Decisions made earlier about whether to buy, build or combine both approaches will impact on the physical design of the system. In one sense, the decisions made at that time really constitute a part of the physical design. Inevitably, the choice of particular technologies will place constraints on the functional capabilities of system being designed.

It is possible that problems or errors will occur during physical design which can be traced back to the logical design stage. This may reflect inconsistencies in the requirements. Even at this late stage, you need to continue consulting with users, gathering additional information and, where necessary, making and documenting changes to the requirements and/or the system design.

As the final design activity before system implementation, physical design provides the last opportunity to ensure that the system design is consistent, complete, and meets the requirements. Changes to design after this time will prove both costly and time-consuming. It is therefore strongly recommended that system auditors and security specialists contribute to this activity.

Tip: Considerations when developing a database solution

If it has been decided that your solution will involve the development of a database within which to conduct your organisational business, make sure that recordkeeping is adequately built into this solution.

The Public Record Office of Victoria says that the following issues need to be considered during database design, to ensure that the solution you are constructing is able to meet your recordkeeping requirements:

- The record - identify exactly what is being recorded, and what is the evidence required of this business?
- The schema - create full documentation of the database tables and relationships (this is usually done as part of the design specifications for the database)
- Standards - be sure to consider use of open data standards for both database construction and data formats
- Export - ensure you have the ability to extract (export) all the components of the record (which may include tables, audit logs, report templates and other design information) from the database in usable formats

For further guidance see Public Record Office of Victoria, Preserving Records in Databases, May 2003.

Example: What if the system I have developed is too large?

You have developed a technical component for your system that meets all identified recordkeeping requirements. Unfortunately, however, it is too big. Storage costs are getting cheaper in the electronic environment, but infrastructure required to support systems is getting more expensive. Therefore your solution may be too costly for your organisation to implement or may require too much network space than can be allocated.

If you find yourself in this position you can:

- negotiate with management and IT - demonstrate how your project is trying to provide solutions for key organisational issues and the extra cost required to complete the project is therefore justified

- use risk management techniques as a means of scaling back your solution - have you built in functionality that addresses only medium level concerns? Can some functionality that deals with such matters be removed as a means of decreasing system size? Is the system scalable - can the desired functionality be incorporated in full later when greater system capacity may be possible?
- utilise other Step E tactics - if your full design plans are just not feasible, can you use policy or implementation tactics to meet your recordkeeping requirements? Will a combination of rules and training lead to the same outcome?

Develop technical application testing plan

One final activity in the design of the technical components of your system is to develop an overall testing plan. This plan is a sub-element of the testing processes referred to in Step G.

The system testing plan details the different kinds of testing which need to be carried out during implementation of the system, and specifies what form(s) the testing should take. Testing of electronic systems involves using test data and scenarios to verify that each component, and the system as a whole, works as intended under both normal and unusual circumstances. Working 'as intended' means meeting requirements as documented in the requirements specification.

Some examples of what needs to be tested during the implementation of an electronic recordkeeping system, or during the incorporation of recordkeeping functionality into an existing system, include:

- system functionality (does the system do what it is required to do?)
- system integration (how well do the different components work together?)
- user interfaces (are menus, forms and templates understandable and usable?)
- validation of inputs and outputs (does the system produce or allow the entry of erroneous data?), and
- system response and recovery times (how quickly does the system perform tasks and how long does it take to recover from crashes or interrupts?).

As discussed above, system operating procedures will also need to undergo testing to ensure correctness, usability and understandability.

> **Tip: Competing priorities may affect timetables**
>
> Remember DIRKS projects, particularly if they involve technical design components, are very reliant on the efforts of a range of people across your organisation. These people will have a range of other demands on their time, and so making long term commitments to achieving your DIRKS requirements may be difficult. Be prepared for compromises and delays that may be unavoidable due to competing priorities amongst your DIRKS team members.

Conduct regular design reviews

Remember that it is important to involve system users in the process of the design or redesign of your technical components. Liaise with users about aspects of the design that affect them through both formal and informal means, and use this as a mechanism for obtaining useful feedback. Do not forget to have formal design reviews at critical stages in the design process, such as the completion of the design of a major system component.

Design reviews help to maintain links between the requirements you are aware of or articulated in Step C of your analysis, and the design activities you are now undertaking. These reviews will highlight requirements which have:

- not been properly addressed
- changed, or

- become infeasible due to other changes or new constraints.

Design reviews often result in requests for changes to requirements and/or to parts of the design itself. For this reason, it is essential to document the outcomes of the review. It is also vital that you maintain a visible documentary trail from the requests for change to resulting changes in requirements or design. Requested changes which are not implemented, or which are implemented only partially, must also be documented.

Tip: Remember to separate development and operational facilities

According to ISO 17799, the International code of practice for informatio security management, it is important to ensure that design and testing operations for significant system redevelopment are separated from your operational environment. In clause 8.1.5, the standard states that the following controls should be in place:

a) development and operational software should, where possible, run on different computer processors, or in different domains or directories

b) development and testing activities should be separated as far as possible

c) compilers, editors and other system utilities should not be accessible from operational systems when not required

d) different log-on procedures should be used for operational and test systems, to reduce the risk of error. Users should be encouraged to use different passwords for these systems, and menus should display appropriate identification messages

e) development staff should only have access to operational passwords where controls are in place for issuing passwords for the support of operational systems. Controls should ensure that such passwords are changed after use.

The standard also states that 'rules for the transfer of software from development to operational status should be defined and documented.'

ISO 17799 can be purchased from Standards Australia.

Develop a migration and/or conversion strategy

If, at the end of your work in applying the design and standards tactics, you have developed new systems or redeveloped old ones, you may need to develop record migration and conversion strategies to ensure records are carried forward from old frameworks into new ones. You plan for and undertake these activities in Step F, Design of recordkeeping systems.

Migration is the 'act of moving records from one system to another, while maintaining the records' authenticity, integrity, reliability and useability'[48]. Conversion is the 'process of changing records from one medium to another or from one format to another'.[49] [7]

Example: When migration is needed

You would need to undertake migration activities if:

- business information systems were to be decommissioned or superseded as a result of your DIRKS work and the records they contain need to be maintained in an active system,
- as a result of your system assessment it has been decided to upgrade to the next

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[48] Definition provided in AS ISO 15489, Clause 3.13
[49] Definition provided in AS ISO 15489, Clause 3.7

> version of a software application and records need to be carried over into this new environment, or
> - existing business information systems have undergone significant transformation and records need to be migrated into new system components.

Example: When conversion is needed

You would need to undertake conversion activities if:

- you have decided to implement technical standards for records management and need to convert existing records to the new standard format
- you have decided to adopt a digitisation strategy and need to convert all paper records into an electronic format, or
- you have identified that records stored on one format are at risk, such as records stored on floppy disks, and want to move these to a more secure format, such as CD-ROM.

Both migration and conversion activities need to be conducted carefully and need to be tested and well documented.

Documenting technical design

In most design projects documentation is an ongoing and prolific activity. System design documentation is developed progressively at different stages (or 'milestones') in the design process. In addition to the policies and procedures you may develop, each design solution generated by the project team or tendered by an external party should incorporate extensive design documentation, including:

- design diaries, detailing original design decisions and rationale, and documenting changes made to the design over time
- introductory, non-technical design descriptions which can be understood by senior management, staff and other stakeholders
- descriptions of redesigned or newly designed business processes
- logical and physical models of different aspects of the system
- metadata specifications
- structured, precise hardware and software design specification(s), aimed at computer system developers and vendors
- initial testing plans
- initial training plans, and
- skeletal system implementation plan.

3.6.5 Applying the implementation strategy

This section looks at revising work processes and training as two key implementation options. It concludes with a case study that demonstrates how implementation can be used as a stand-alone strategy, and as a means to promote all the changes you've made to your recordkeeping system to the staff of your organisation.

Overview

If in Step E: Identification of strategies for recordkeeping, you selected implementation as a strategy that would be of use to your organisation, this section examines how you can develop and use a range of implementation options as means to improve organisational recordkeeping.

Design or redesign work processes

Your work to date may have revealed that you need to:

- design new processes and work flows that incorporate recordkeeping functionality, and/or
- redesign existing processes and work flows to incorporate recordkeeping functionality.

Step F is the point in the methodology where you look at redesigning work processes so that they encompass adequate recordkeeping.

Tip

Your work in Step D: Assessment of existing systems may have revealed that changes should be made to business processes to eliminate existing problems, such as:

- information bottlenecks and duplication
- information double-handling, and
- inability to quickly locate and retrieve important information (including records).

You would design approaches to eliminate such problems in the course of your Step F work.

Example: Business process improvement case study

An organisation has worked through the DIRKS methodology and realised that its current business processes are contributing to its poor recordkeeping practices.

In their Step B analysis they documented their current workflows.

In Step D they identified that in no point of the workflow for the complaints management process or the policies surrounding this process were staff required to formally create a record of their responses to a complaint. This had resulted in a number of significant business inconveniences to the organisation. It also meant that the organisation was not complying with its Charter of Public Service. The Step D analysis revealed that technical applications were appropriate and required no configuration - people had just not been instructed in how to use them appropriately.

In Step E the organisation decided to adopt the policy and implementation strategies to rectify the issues they had identified.

In Step F the organisation redesigned the work process underpinning its complaints management process, as part of its application of the implementation strategy. After consultation with staff, the following workflow was decided upon:

- Receive complaint
- Register date and nature of complaint in complaints management system
- Research complaint
- Formulate response
- Respond to complainant verbally or in writing
- Capture details and date of response in complaints management system

As part of the implementation strategy, the organisation also decided to develop training for staff involved in complaints management, to explain why complaints need to be documented and how this documentation should be achieved. This training was tailored to those staff who managed complaints management, and was designed to provide a very practical overview of how the new process worked. A number of case studies and practical examples were used in the training to help accustom people to the new practice.

In applying the policy strategy, the organisation chose in Step F to develop corporate

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procedures for complaints management.

Manage change and involve users

Changes to business processes will result in the creation of new, or the modification of old, business rules. More importantly, it will result in new ways of working for staff. Changes to business processes must have clear management backing, and be supported by:

- the assignment and documentation of new roles and responsibilities;
- timely modification or development of guidelines and operating procedures, and
- training in new responsibilities, processes and procedures.

Tip: Use policy, training or system design to implement changes to business process

Try to support any changes you make to business processes by:

- issuing policies and procedures that support or explain your revised business processes,
- developing detailed or minor training to help staff understand the changes, and/or
- incorporating aspects of your business process redesign into any technical work you are undertaking. You may be able to automate aspects of business processes, or make certain steps in a workflow mandatory.

Supporting business change in this way will help staff to understand and implement the new processes you are requiring.

There is significant potential for business process change to cause major disruption to staff (and, hence, to the organisation's business). Any redesign of work flows and business processes should be handled sensitively and within a change management framework.

Tip: Discuss changes with users

If you are redesigning work processes for a particular work group, it may be useful to verify your recommendations using a formal review process. You could convene a meeting with affected staff and go through your redesign of work processes, explain what you have done and why you have done it, and show how the changes you have made enable the group and the organisation to better meet their requirements. At the meeting users and other stakeholders could be given the opportunity to ask questions, comment, criticise or suggest alternatives to the design you have developed. Remember, involving users in the process is crucial to any effective system redesign.

Develop a training strategy

If you believe that a staff training program will be necessary to enable effective system implementation in your organisation, Step F will involve you developing a training strategy that allows you to achieve this objective. This strategy will be implemented in Step G, Implementation of a recordkeeping system.

If you are developing a training strategy, in Step F you should specifically identify:

- what concepts, policies, procedures or requirements you want to support using training
- recommended training methods - will training be face to face, online, publication based, hands-on use of live system etc, developed and conducted by internal or external staff, and
- the timetable for your training schedule.

As has been discussed, training should be used as a strategy to support virtually any DIRKS project. Training ensures that staff affected by the design of the new recordkeeping system are informed, supported and equipped with the appropriate skills and experience to effectively use this system.

What to support using training

Making decisions about the type and content of the training you will offer to staff will largely depend:

- the nature of the system changes you are implementing
- the staff members' roles in relation to the operation of the new system, and
- the appropriate knowledge and skills required to carry out that role.

If the system changes you are implementing are significant, fairly detailed training in actual use of the system may be required for all staff that will use it. If changes are minimal but you still want to keep people informed, your training strategy could comprise a ten minute briefing at your next staff meeting.

If the changes to your recordkeeping systems are significant, or if you think there is an organisational need for it, you may wish to collect information regarding current levels of knowledge and expertise in order to assess individual, work group and organisational training needs. Some of this information may have emerged during your DIRKS project and can be used to guide your training strategy development.

Other ways to collect information about training needs might include:

- interviews
- observation
- job analysis
- quality control and performance appraisal reports, and
- skills analysis and/or audit.

Determine how training will be developed and presented

If you recommend that training should be developed and presented internally, your training strategy should identify the person or persons with training drafting and presentation responsibilities.

Recommended training methods

Depending on the needs of your organisation or the nature of the system you are implementing, you may want to develop a range of delivery methods for your training strategy, or adopt a specific method that is going to best meet your needs.

Possible options for your training program include:

- briefings
- face-to-face training, where participants also have 'hands-on' practice on a live system
- online, context-sensitive help
- reference cards and charts
- 'tips and hints' documentation, regularly updated in response to problems and quirks encountered by users
- user guides and manuals - in hard-copy form, or made available on your organisation's intranet, and
- user help-desk facilities.

Be guided by your own risks, resources and systems when determining the best method of training for your organisation.

Example: Online training or printed course materials

If yours is a large and distributed organisation and you know you will never gather all relevant staff in one place at one time, investigating online training or the use of printed course materials which people can pick up in their own time.

Example: Working through changes in small groups

If you have implemented significant technical changes to the system and consequent changes to business processes, it may be best to sit people down in small groups in front of the new technology and walk them through the changes.

Example: Immediate training and induction training package

You may decide to have an immediate training run, where you provide all current staff with an overview of the existing system. However you also decide to develop an induction training package, to ensure all new staff are also provided with relevant information about recordkeeping and the organisation's recordkeeping systems.

External training options

If you do not have the resources internally to develop courses and present them to all relevant staff, you may want to consider engaging consultants to do this for you. Records management consultants can develop customised training and present this for staff. A wide range of consultants who may be able to develop such training for you are listed in the Records and Information Management Professionals Association of Australasia's (RIMPA) Product and Services Directory.

Alternatively, you may want to examine the different forms of external training that are available. External training options might include:

- tailored courses prepared and provided by external consultants
- presentations by records management software vendors
- vocational, undergraduate and post graduate courses in archives and records management conducted by TAFE or universities, and
- short courses, seminars and other forms of continuing education offered by State Records, tertiary institutions and professional associations.

Develop a training timetable

It is important to determine when you are going to implement your training plans. Consider the state of your system's development, issues that may have previously delayed its deployment or other risks it may face.

With these in mind, draft a plan that states when you will have training content developed by, when when you will present this content to users, or alternatively, when you will engage consultants to develop a training package for you.

Be sure to consider the requirements of your chosen training method - face to face classes, formal course reading material etc when finalising your timetable.

Note that this training timetable will need to be referenced in the broader implementation timetable you develop as part of Step G: Implementation of a recordkeeping system

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Tip: Keep focussed on your target audience

Remember your target audience and remember the message you want to communicate. When developing course material, try to explain your message using examples that are relevant to your target audience and provide them with knowledge that will be directly relevant to their responsibilities.

When determining a project timetable, also keep users in mind. Try not to let there be a lag between the time the system is rolled out, and the time when users actually receive training.

3.7 Step G – Implementation of a recordkeeping system

Implementing a recordkeeping system should be undertaken systematically using project planning methodologies appropriate to the situation and with a view to integrating the operation of the recordkeeping systems with business processes and related systems. [AS ISO 15489.1, Clause 8.4]

3.7.1 Content and scope of Step G

The aim of Step G is to manage the implementation of your recordkeeping system, using an appropriate mix of strategies, so that it integrates appropriately with business practices.

Overview

This section is an introduction to Step G: Implementation of a recordkeeping system. It:

- outlines the aim of Step G
- summarises the major elements of Step G
- explains why it is important to undertake Step G for DIRKS projects
- indicates how Step G is scalable, and
- shows how Step G relates to the other steps in the DIRKS methodology.

Summary of Step G

DIRKS should not be seen as a linear process, and this is most obvious when you examine Step G. There are many aspects of implementation should be a consideration from the very beginning of any DIRKS project.

Examples: Implementation measures required from the beginning

- Change management initiatives, such as the involvement of staff and communication methods with staff and management, should be built into your project planning at the start and happen throughout the project.
- Some people chosen for the project team should be good communicators and have the skills to sell the project.
- Choosing a suitable champion for the project, and gaining the support of senior management should be at the beginning of the project but will be a crucial part of implementation.

As these need to be addressed throughout the project, they have been explained in Introducing DIRKS and referred to in various steps within the manual.

You may have already examined implementation issues and chosen the appropriate mix of design, standards, implementation and policy strategies to best meet your particular situation and goals in Step E: Identification of strategies for recordkeeping. These are designed in Step F: Design of a recordkeeping system, but need to be practically implemented in Step G. This might involve:

- planning for implementation
- communicating roles, responsibilities and skills to staff by training and other means
- introducing staff to new policies, procedures and tools, and
- conducting your rollout of systems according to chosen methods.

Tip: There is no such thing as a perfect system

Do not try to implement the perfect system as perfect systems do not exist. Just try to implement the system that will help your organisation to meet its business needs.

Why should you do Step G?

Any project, no matter how large or small should involve a planned and considered implementation to increase the chances of success. Even if you have only performed a few of the DIRKS steps, you have probably spent time and energy on your project. If you are integrating new or improved systems with office communications and business processes you may have very high accountability and financial stakes. In addition, all recordkeeping

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projects will invariably impact on organisational responsibilities, work practices and procedures, and there is considerable risk that staff will not embrace the changes.

Planning and managing the practical implications of implementation can minimise risks to your project. It give you a better chance of integrating your improved recordkeeping tools, systems or practices in your organisation in way that causes minimum disruption to your business activities. It will also:

- contribute to organisational requirements for quality accreditation
- encourage uptake by staff, and
- help you to remain within your budget.

This will allow you to capitalise on your investment of resources.

Tip: Implementation is costly

You should never underestimate the importance of your implementation or the costs. In significant projects in large organisations implementation costs can account for over 50% of the total budget. Even in small projects, implementation time and costs can take up a large amount of available resources.

How is Step G scalable?

The implementation step is essential for any DIRKS project - there is no point in creating solutions for existing problems or designing systems if you do not implement them. However, the scale of Step G will depend heavily on solutions you are implementing and how much of the DIRKS process you have already undertaken. With large and complex changes, you may choose to implement aspects gradually to make the best use of resources and to manage change effectively.

There may be management-driven imperatives to skimp on resources for implementation or to implement systems or components of systems without fully understanding recordkeeping requirements and organisational constraints. Be aware that implementing a new system without proper resources or the knowledge that comes from completing relevant steps of DIRKS may adversely affect:

- how the system or component is configured or developed
- its ability to meet your organisational needs
- the way implementation is carried out, and
- the acceptance of the change by staff.

You may ultimately incur additional, and otherwise avoidable costs (in terms of staff, time and goodwill) and your system may not be able to guarantee you are creating and managing the evidence you need to satisfy your regulatory and business needs and community expectations.

Relationship to other steps

All other steps

Step G is, of course, reliant on having something to implement, so you will be undertaking other steps of the DIRKS methodology in order to use it. You may have undertaken some or all of the following:

- analysed recordkeeping requirements and organisational constraints. These can be derived fully from Steps A to E
- developed any specific tools to assist your records management needs, such as a corporate thesaurus (arising from Step B or C) and retention and disposal authority (derived from Steps A to C)

- developed a list of vital records which can help you to protect them from disaster, promote business continuity and prioritise recovery efforts during a disaster (derived from Steps A to C)
- identified the strengths and weaknesses of your existing systems (Step D)
- agreed on a range of strategies to satisfy your recordkeeping requirements and organisational constraints, including implementation strategies (Step E)
- developed a plan that shows how the various system components (processes, procedures, people and technology) fit together in practice (Step F)
- obtained management support and resources to implement the plan, and/or
- acquired necessary hardware and software.

Step E and F

Step E: Identification of strategies for recordkeeping and Step F: Design of a recordkeeping system are closely aligned to Step G and in many cases these steps will be undertaken together. In Step E you choose strategies to meet your needs and you design these in Step F to implement in Step G.

Example: Relationships with Steps E and F

You may decide in Step E that an important strategy for implementing a thesaurus across the organisation is to have classification procedures in place (policy strategy) and to train staff in those procedures (implementation strategy). Step F is where you design these procedures, decide training methods and write the training course. Step G is where the procedures are distributed to the organisation and where training is conducted.

3.7.2 Planning for implementation

At various stages in your DIRKS project you will need to plan for implementation.

Plan for implementation at the beginning of your project

At various stages in your DIRKS project you will need to plan for implementation. You will have established broad strategic plans at the beginning of your project and these should address some aspects of implementation and change management, such as involvement of staff in analysis and design. See Implement change management strategies for more information on project planning and change management issues.

If you have a particular issue in mind, such as implementing a thesaurus, you may have also developed more detailed implementation plans at the outset of your project, focused on how you want to design and introduce this tool into your organisation (aspects of Step E: Identification of strategies for recordkeeping and Step F: Design of a recordkeeping system can help you with this).

Plan for implementation at later stages of your project

However, sometimes you may be unclear at the beginning of a project just what strategies you will choose to address your problems. You may not even be fully aware of the nature of the problems! Therefore, you may need to do some additional planning at a later stage, after you have assessed existing systems (Step D) and looked at strategies to address problems (Step E).

Implementation issues are likely to come up again in Step F when you are deciding how to design aspects of your overall strategy. Planning for rollout may begin in Step F but should

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form part of your planning for implementation in Step G. See [Roll out new or redesigned systems](#) for more information.

Develop a timetable for implementation

Before embarking on Step G you need to draw on your existing project planning to develop a detailed timetable for implementation. This might include when and how often the training will be delivered and who will present it.

Use project management and change management methodologies

As with any planning, ensure that you use project management methodologies and that change management is considered every step of the way. If you require further advice on project management or change management refer to the Introduction.

3.7.3 Implementing strategies and systems

This section contains some general advice on implementing the main types of strategies that are usually adopted when introducing recordkeeping systems.

Overview

The main emphasis of Step G is the physical implementation of the strategies chosen in Step E: Identification of strategies for recordkeeping and designed in Step F: Design of a recordkeeping system according to the implementation plan. This involves implementing:

- the roll out of the system
- implementation, policy and some design strategies (standards strategies are technical and are implemented as part of Step F).

Naturally the elements to implement will be entirely dependent on the mix of strategies chosen in Step E and designed in Step F. This section contains some general advice on implementing the main types of strategies that are usually adopted when introducing recordkeeping systems.

Communicate

In implementation phases you need to inform staff about:

- timeframes for the introduction of the new or revised system along with revisions to timeframes
- methods of implementation and when they will be introduced eg. how the system will be rolled out
- who will be trained in how to use the system and when this will happen
- how they can give feedback on the system and the implementation process
- how the system is likely to directly affect their work processes and practices.

Tip: Tailor communication methods to your audience

Different levels of staff and stakeholders within the organisation may respond to different communication methods and content. Therefore you should carefully consider your audience when designing the method, content and the style of presenting information in Step F. Your experiences when implementing may reinforce your assumptions about the best methods of communicating with staff, or you may decide you need to revise your strategies.

Roll out new or redesigned systems

Follow plans for roll out

In Step G you need to implement your plans for roll out, part of your implementation planning. The methods chosen should ensure that the risks are identified and counteracted effectively. Some possible methods of roll out are listed in the table below:

Method	Advantages	Disadvantages
Direct changeover - where the new system is introduced at an agreed point in time without any gradual implementation This method is best for organisations that are: • small • highly centralised • good at handling change, and • good communicators.	Low operational costs due to the maintenance of only a single recordkeeping system Straightforward implementationAll staff are using the same system at all times Clear direction for policy	Any problems with new system will not be identified until after implementation Possible disruption to the organisation's business during implementation
Parallel operation - where the new and old systems run in tandem for an agreed time This method is best for organisations that are: • medium or large • well-organised, and • familiar with change.	Change for staff is more managed Less disruption to business Problems with new system can be resolved with less pressure	Staff may continue to use the old system rather than adapting to the new Complexity of running two systems at the same time Staff may get confused as to which system to use Lengthy implementation period Maintenance of dual systems is potentially more expensive
Pilot operation - where the new system is implemented initially for only a discrete part of the organisation This method is best for organisations that are: • medium or large • resistant to change • not well organised, and • decentralised/have very distinct	Implementation team can focus on providing support to each business unit Implementation team can use evidence of successful implementation in other units to support the process Lessons learned in earlier implementation can be incorporated into later	Different parts of the organisation using different systems may cause confusion if information is to be shared Lengthy implementation period Business units scheduled for later implementation may

Method	Advantages	Disadvantages
business units or sections.	implementations	resent having to wait
Phased changeover - where only certain modules of the new systems are implemented over time and the old system is phased out as functions are subsumed by the new system	Enables the organisation to achieve some benefits from the new system more rapidly than they would using other strategies[50]	Lengthy implementation period

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Example: A combination of roll out methods

State Records used a combination of roll out methods when implementing their electronic records and document management system.
The records management system was introduced first. A pilot was conducted for the system and new file classification scheme, and changes were made before rolling the system out across the organisation.

For the document management component, a small pilot group began using the system for several months and made suggestions for improvement to the design team. Later the pilot group was extended and new versions of the customised software were made available to these groups. Finally a decision was made that the document management pilot met all requirements and the implementation would go ahead, first in the Sydney location, then in the Western Sydney location.

There are a myriad of other smaller decisions that need to be made when you are rolling out new systems which need to be carefully considered in planning and implementation.

It is important to liaise with IT staff to ensure that the roll out is fully and appropriately completed. Roll out processes should be tested before sign off, and should be fully documented.

Train staff to use new or redesigned systems

Training is probably the most common method of implementing your DIRKS projects. Information on choosing methods of training and writing training courses is provided in Step F. Training programs should be well-planned, explicitly supported by management and delivered in a timely manner.

The actual implementation of training is also very important to consider carefully. If delivering training internally, you should ensure that:

- rooms or spaces away from the normal office environment are available for training and are conducive to learning
- regular breaks are planned and there are changes in presentation styles to keep the audience interested
- group sizes are suitable for the type of training being offered. More difficult concepts may require smaller group sizes so trainers can provide more personal attention

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[50] For an overview of methods see W Martin, C Brown, D DeHayes, J Hoffer and W Perkins, *Managing Information Technology: What Managers Need to Know*, Prentice Hall, Upper Saddle River, New Jersey, 1999, 403-404

- trainers are knowledgeable about the subject matter
- trainers are dynamic communicators who can adapt to different levels of audience understanding.

Try to find innovative means of delivering your message that will keep your audience interested.

Example: Innovative training methods

One organisation used a range of techniques to deliver face to face training for their staff. They started with a skit to deliver the message that poor recordkeeping can adversely affect the organisation. They also focused their training around 3 key themes and had visual symbols for each of the themes so people would remember them. The organisation also used games, bedtime stories, competitions with prizes and quizzes. All these techniques made the training fun and made the participants more responsive to further training initiatives.

Tip: Training should be offered for all relevant personnel

Remember that training in recordkeeping systems should not only be for full time staff. Part time staff, casuals, consultants and contractors all create records and interact with systems and should also be trained.

Training needs to be offered on a reasonably regular basis as staff change over time and existing staff need to be reminded of their responsibilities. Innovative ways of working around budget restrictions may also be required.

Example: Training strategy incorporating regional areas

Steps D and E discussed the example of an organisation which had identified problems with its management of its licensing agreements.
It was identified that training in the use of the licensing system was regularly conducted in central office. In the regional offices, however, staff have not been adequately trained in system use and also do not have copies of up to date system policies and procedures.

In Step E the organisation decided to adopt the implementation strategy and undertake concerted training to ensure all staff are aware of how the licensing system operates and the requirements surrounding licence management.

In Step F the organisation developed a training strategy that said training had to be regularly conducted in the regions, it had to be consistent across all offices and it should be presented by organisational staff with a good understanding of the licensing process.

To implement the training strategy in Step G, the organisation offered a program of annual training across their offices. To make this cost effective, the organisation brought a representative from each of its regional offices to central office for two days each year. These representatives and their central office colleagues were educated on system changes and given a refresher course on best practice. They had a lot of unstructured discussion time during the course of the two days where they could discuss as a group the issues they were facing and determine best practice solutions.

The week after they returned to their offices, regional staff were required to give a series of presentations to all staff of their office on system changes and any other knowledge they learned during their time at central office. At these meetings they distributed any updated policies and procedures that had been developed to ensure that these could be effectively implemented by all staff.

Introduce new or revised processes, documentation and responsibilities

In Step E you may have identified the need for:

- new business processes or revision of existing business processes
- new policies, procedures, guidelines or business rules, or
- new or revised allocation of responsibilities to staff for particular recordkeeping tasks and issues.

These will be designed in Step F and need to be introduced and distributed to staff in Step G.

Training is often a suitable time to:

- introduce policies, procedures, guidelines or business rules and responsibilities that apply to the organisation as a whole

- reinforce managerial commitment to them, and

- clarify any misapprehensions and reduce concerns.

Training can also contribute to the revision of these documents over time, allowing them to remain an ongoing resource for your organisation.

If there are business processes, documentation or responsibilities that apply only to certain groups or individuals within the organisation, they could be addressed in:

- smaller, tailored training courses for the groups in question, or

- discussions within the areas affected.

Step G can involve implementation methods other than training programs. It is also concerned with implementing frameworks that enable recordkeeping to be effectively managed and recordkeeping advice to be provided, long after the training courses themselves are over. In addition, you may have identified other needs, as part of the implementation strategy, where training is not an appropriate method of implementation.

Example: Implementation of needs that do not require training

- The need to lock particular storage areas.

- The need to remove hard drives from computers so staff to do store files there.

- The need to document responsibilities in position descriptions.

- The need to monitor documentation of business practices.

The reasons for these measures should be communicated to staff. However, it may be more appropriate to introduce them with an email message or statement rather than the provision of a training course.

Highlight support feedback and review mechanisms

You should establish support, feedback and review mechanisms such as:

- user or interest groups

- help desk support

- contact people to respond to enquiries and comments

- evaluation forms for systems and training, and/or

- other methods of ongoing monitoring.

When you are implementing Step G it is a good time to ensure staff are fully aware of these mechanisms. Information received can assist you in making changes to the system and/or the ways you are approaching implementation. Relevant feedback should be acted on as soon as it is viable and can also contribute to the post implementation review in Step H.

3.7.4 Managing ongoing implementation

It is important to realise that implementation is not a one-off process. Certainly there will be a point where the system goes 'live' and staff will require the training, and/or policies and procedures and support to ensure the transition is a straight forward one. This will be the main thrust of your implementation, and the main expense.

However, staff may change and even existing staff need to be regularly reminded of responsibilities and methods. Therefore you should budget for, and ensure the implementation of:

- mechanisms to monitor staff usage of the system and to detect problems (see Step H: Post implementation review for further information)
- regular refresher courses or briefings, which can focus on their responsibilities and the whole system or particular aspects that may be problematic, and
- training or advice for new staff members on their responsibilities and the system itself.

Tip: Give staff assistance to change and evolve

Remember the adage from Charles Darwin 'It is not the strongest of the species that survives, nor the most intelligent, it is the one that is most adaptable to change.' Any assistance you can give to help staff to adapt to the changes facing them in the short and the long term can help you in achieving success with your project.

3.7.5 Documenting Step G

Document implementation plans

You may have planned for implementation as part of your broader project planning or in earlier steps of DIRKS. You should also document the timetables and implementation plans developed for Step G showing:

- what implementation methods will be used for the rollout of systems and strategies
- when implementation will happen, and
- ongoing implementation required.

Changes to implementation

Once you have started implementing you should also note any changes made to plans.

Changes might be documented in:

- versions of the plans and reports on implementation, or
- minutes of project team meetings.

The implementation process may also have highlighted the need for changes to documentation such as training notes and procedures and policy. These changes should be noted and consideration given to changes.

Report on implementation

It is a valuable exercise to prepare a report at the end of the implementation process. This report could outline:

- areas or staff targeted in the implementation
- methods implemented
- changes made to implementation planning, such as timetables or budgets, and the reasons why
- changes made to documentation from Step F, such as training notes or procedures
- issues or problems identified
- action required, and
- future implementation needs.

Such documentation can be valuable for accountability and auditing purposes and can be a case study for future implementation projects.[51] Major issues with the implementation process, along with recommendations for future action, should be highlighted in a report to management.

3.8   Step H – Post-Implementation review

Gather information about the performance of the records system as an integral and ongoing process. This may be undertaken by interviewing members of management and key employees, using the questionnaires, observing the system in operation, examining procedure manuals, training materials and other documentation, and carrying out random checks on the quality of records and control measures. Review and assess the performance of the system, initiate and monitor corrective action and establish a regime of continuous monitoring and regular evaluation. [AS ISO 15489.1, Clause 8.4]

3.8.1 Content and scope of Step H

Step H is an important step to all DIRKS projects.

Overview

This section is an introduction to Step H: Post implementation review. It:

- outlines the aim of Step H
- summarises the major elements of Step H
- explains why it is important to undertake Step H for particular DIRKS projects
- indicates how Step H is scalable, and
- shows how Step H relates to the other steps in the DIRKS methodology.

Aims of Step H

The aims of Step H are to:

- measure the effectiveness of the recordkeeping system or system components, after they have been implemented

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[51] Implementation issues are canvassed in Sauer, C, *Why Information Systems Fail: A Case Study Approach,* Alfred Waller Ltd, Henley-on-Thames, 1993

- identify and take corrective action where it is required
- evaluate the efficiency and appropriateness of the system development process and implementation, and
- establish and implement an ongoing monitoring regime for the duration of the system.

Summary of Step H

Step H involves the planning and implementation of both:

- set reviews of the system and development process, and
- ongoing monitoring regimes.

Planning involves deciding:

- what is required for ongoing monitoring
- how and who will perform ongoing maintenance
- when post implementation reviews should be conducted
- the scope of reviews
- what criteria should be used in reviews for evaluation
- how projects will be evaluated and by whom.

Measurement techniques for reviews or monitoring can include:

- interviewing management, staff and other stakeholders
- conducting surveys
- examining documentation developed during the earlier phases of the systems development project, and
- observing and randomly checking operations.

Ongoing changes to systems or tools should be documented when they are made. The findings from reviews should be documented in a manner that can be used for comparative purposes in the future. Needs for corrective action highlighted in ongoing monitoring or a review should be prioritised and acted on.

Why should you do Step H?

Your DIRKS project has involved an investment of resources, in terms of time, money, staff and goodwill. It is important to demonstrate to management and other stakeholders with a vested interest in organisational accountability that:

- the developmental process has been conducted efficiently, and
- the recordkeeping system has the capacity to deliver its stated benefits in the short and long term.

A post-implementation review can provide such assurance.

In addition, by completing the initial post-implementation review and developing ongoing monitoring strategies you will:

- help guarantee a continuing return on the organisation's investment by maintaining the recordkeeping system to optimal levels of performance throughout the system's lifecycle
- have objective proof that your organisation is creating and managing appropriate evidence of its business activities in accordance with operational, accountability and community expectations
- minimise your organisation's exposure to risk through system failure, and
- over time, anticipate significant changes in recordkeeping requirements and organisational needs that necessitate a new developmental cycle.

Tip: If you fail to plan, you plan to fail

If in the rush to implement a new system your organisation fails to realise the importance of planning for ongoing monitoring, measuring system effectiveness and the effectiveness of the development process, you can jeopardise the entire endeavour. Faults may go undetected or untreated and system users may become increasingly disgruntled. The project may ultimately fail as a result. In addition, lessons learnt and knowledge gained as part of the implementation may not be available to future projects. Strategies for review and ongoing monitoring are therefore essential.

How is Step H scalable?

The scale of the ongoing monitoring will depend on the scope of your initial project and what kinds of faults or problems are detected.

In terms of reviewing, you can choose to conduct a full review of all components of the system (people, processes, tools, technology) that you have implemented or you may decide to review elements of the project independently. The scale can be according to the needs, resources and priorities of your organisation.

Depending on the complexity of the system and the level of resources available, it may be appropriate to conduct risk assessments to determine the scope and emphasis of the post-implementation review.

Relationship to other steps

Step H is an important step to all DIRKS projects.

Example: Information from other steps can assist

- if you have analysed your recordkeeping requirements and organisational constraints (Step C-E) you can assess the system to see if it meets these, or
- if you have completed Steps F: Design of a recordkeeping system and Step G: Implementation of a recordkeeping system you can examine the efficiency and appropriateness of systems design and implementation in Step H.

Some aspects of Step H, such as putting plans in place for future monitoring, can also be conducted concurrently with Step G: Implementation of a recordkeeping system.

3.8.2 Planning for ongoing monitoring

Plans and timetables for ongoing monitoring of systems and system components should be a part of any DIRKS project.

Mechanisms such as:

- help desk support
- suggestion forms, or
- user groups

should be considered and adequately resourced. Problems found through observation and use, reports and random checks may highlight where corrective action is needed.

Responsibility for ongoing monitoring should be assigned to people with the appropriate skills and knowledge to find and address problems.

3.8.3 Planning the post implementation review

This section outlines what you should consider when planning for a review of your recordkeeping system.

Overview

Suitable resources should be allocated. You will need to decide:

- the scope of the review (what you want to evaluate)
- who will perform it
- when it will occur
- what performance indicators should be used
- what methods should be used, and
- the documentation required.

Ideally an evaluation framework should be developed as part of the original design process so that any performance data requirements can be built into management and administrative processes and the review can be conducted with minimal intrusion on work practices or the delivery of services.

The scope of the review

The scope of the review will be dependent on the original scope of your project, the resources available and organisational needs and priorities.

Who should review?

The choice of the reviewer(s) is dependant on a number of factors such as:

- the specific circumstances
- needs
- organisational culture
- knowledge possessed, and
- the size of the review and the organisation.

process.

Members of the review team will need to have good analytical skills and knowledge appropriate to the task at hand. They should understand and have access to the project goals and design and implementation documentation, so that they are able to assess whether the system or system component is adequately meeting the project goals and organisational needs.

When should you review?

An initial post implementation review for a system should be carried out between six and twelve months after the system has been implemented and then repeated on an agreed cycle. Smaller reviews of elements of the system may be conducted at more regular intervals, or in accordance with organisational needs.

Performance indicators

As part of initial project planning the project team should have established performance indicators to measure the success of your project. The indicators (eg. timeliness, teamwork, budget, satisfaction of sponsors and other stakeholders) should be used in the review process to measure project progress.

The project team should also have established expected project outcomes (eg comparison of inputs to outputs, behavioural change, cost savings, level of satisfaction or involvement) as part of initial planning. These should also be measured in the review along with other outcomes evident along the way.

Depending on the scope of the project other measurement tools may have been developed during the project.

Example: Information produced during other steps can become measurement tools

The list of agreed recordkeeping requirements developed by the end of Step C: Identification of Recordkeeping Requirements can become performance indicators for assessing the performance of the system in meeting these requirements.

Reports arising from earlier steps might include recommendations on improvements to existing systems will help inform the review process.

Any criteria used must be objective, verifiable and quantifiable and should allow for comparisons to be drawn over time. Organisational constraints (cultural, technical, economic, political and other factors) and their impacts should also be assessed.

Questions for the review should be related to the particular project you have undertaken.

See below: What should you review? for a list of possible questions (based on an entire system review).

There are various types of evaluation depending on the particular questions you want answered. Generally, they fall into the following areas:

- appropriateness
- appropriateness of solution compared to the organisation's needs
- objectives compared with available resources, and
- comparison of need now with original need.
- effectiveness
- original objectives compared with outcomes (what was desired and what was achieved)

- outcomes compared with needs
- outcomes compared with standards
- present outcomes compared with past outcomes, and
- comparison between target groups within the organisation.
- efficiency
- current costs compared with past costs (people, processes, technology and tools)
- costs compared with similar systems elsewhere (benchmarking), and
- extent of implementation compared with targets.

Tip: Develop clear performance criteria

One of the common faults in performance criteria and measures is that they are are vague and ambiguous. Try to be clear about what you are measuring.

Review methods

Methods for collecting information for the review may include:

- interviewing stakeholders (eg project sponsor, senior management, business experts, records management staff and representative users)
- using questionnaires or surveys
- observing the system in operation
- examining procedures manuals, training materials and other documentation
- carrying out random checks on the quality of records and control information, and/or
- obtaining computer-generated reports on usage figures for statistical analysis.

What should you review?

What you need to review will depend very much on the scope of your review. See Doing your DIRKS project for reference to particular projects. Below are some sample questions you might select from, as appropriate, to measure systems:

Records creation and retrieval

- Are records being created to adequately document the organisation's business activity?
- Are records being captured into the recordkeeping system in a timely, accurate and complete manner?
- Are records adequately preserved and accessible?
- Can users retrieve the records they need?
- Can users easily locate the records they need using the new system?
- Do the organisation's business classification scheme, thesaurus and recordkeeping metadata adequately reflect functions, activities, and transactions

Management

- Is systems documentation adequate for operational and maintenance purposes?
- Have audit trails been established between the old and new systems?
- Have vital records and relevant control information from the old system been converted to the new system?
- Are staff still relying on any unauthorised stand alone or ad hoc systems in preference to the new system?
- Are adequate security arrangements in place to protect sensitive records (including privacy and confidentiality aspects)?
- Is the physical security of records adequate (eg locked cabinets/compactus)?

- Has the quality and level of records-based services changed since implementation from both the user and management perspective (eg ease of use, precision and coverage of search and retrieval)?
- How often are maintenance checks carried out?
- Has the disaster response plan been tested

Retention and disposal

- Does the organisation have comprehensive records retention and disposal coverage?
- Does the coverage satisfy the needs of the organisation?
- Is it consistent with the requirements of the State Records Authority of New South Wales (known as 'State Records')?
- Is the retention and disposal authority built into the recordkeeping system in a way that meets the needs of the organisation?
- Are the retention periods sufficient to fulfil business, accountability requirements and community expectations or do they need to be revised to longer/shorter periods?
- Are records being sentenced and disposed of appropriately?
- Is there documentation to substantiate these actions (eg certificates of destruction, retention of control records, current retention and disposal authorities)?
- Is the organisation creating any additional types of records that need to be appraised and incorporated in its disposal coverage?
- Are some of the vital records listed no longer being created?

Staff training

- Are personnel aware of their recordkeeping roles and responsibilities (eg through job descriptions, training)?
- Do personnel have access to up-to-date policy and procedural documentation?
- What problems have personnel experienced with the new system?
- Are personnel applying classification and titling conventions appropriately and consistently?
- Are personnel retrieving records using the appropriate tools?
- Are staffing levels and competency skills adequate (within the records management area and among other staff)?

Learning from the process

- Were the original terms of reference sufficiently precise to guide the project?
- Did we negotiate sufficient resources to carry out the project?
- Did we keep the key stakeholders informed and committed during the project?
- Could we improve our broad planning processes if we had to start afresh?
- Was the planning process appropriate to the project's size, complexity and predictability?
- Did our techniques for managing the project work well?
- Are the stakeholders satisfied?
- Did we complete the project on time?
- Did we complete the project within budget?
- Have we handed the project over as a going concern?
- Do we need a formal sign-off?
- Have we acknowledged everyone who made a contribution?
- Have we celebrated our success as a team (and as an organisation)?

Documentation required for review

You should specify in review planning what type of documentation is required. You might, for example, construct a table that lists the aspects of the recordkeeping system you wish to measure, with columns for a 'yes/no' answer and comments.

See Documenting Step H analysis for information on all of the documentation recommended for this step.

3.8.4 Conducting the review or ongoing monitoring

Monitoring and review are not one off processes. Components of the system are likely to require ongoing monitoring and regular review.

Monitor

Ongoing monitoring

Planning for ongoing monitoring of systems and tools should be implemented when the need arises.

Post implementation review

Once the planning for a post implementation review is in place, the review team can conduct the review using the performance criteria and methods identified. Review teams should be given access to all appropriate sources and personnel required to conduct the review effectively.

Taking corrective action

Any remedial action suggested by the review or ongoing monitoring should be documented and assessed. It may also need to be prioritised. If the action is essential to the viability of the recordkeeping system it should be undertaken as soon as possible.

Continuous review and monitoring

Monitoring and review are not one off processes. Components of the system are likely to require ongoing monitoring and regular review. They should be periodically examined to allow the organisation to:

- identify changes to recordkeeping requirements
- respond to environmental changes (such as user requirements)
- assess the efficiency of technological components, and
- anticipate the need for any modifications or systems redevelopment.

In some cases this may involve re-examining other steps of the DIRKS methodology.

Example: Use existing internal methods of monitoring

One organisation has included recordkeeping components in their scheduled internal audits as a means of promoting ongoing monitoring.

3.8.5 Documenting Step H

Overview

It is very important to document reviews and ongoing monitoring processes. Such documentation can demonstrate that you have undertaken the review or monitoring in an accountable and objective way.

Planning documentation

You should document all decisions made in planning for:

- ongoing monitoring, including what needs to be maintained, what methods should be used, who is assigned responsibility, and
- the review process, including choosing the scope, particular reviewers and dates, performance criteria and methods.

Any variations to planning documentation that resulted from monitoring or reviews should also be documented.

Data gathered and recommendations

You should document the data gathered in ongoing monitoring or post implementation review, such as checklists used.
You might also:

- document any variations or deviations to requirements defined in Step C and Step D
- review the effectiveness of recordkeeping strategies chosen in Step E
- identify areas that warrant priority treatment
- recommend corrective action, and
- propose mechanisms for ongoing monitoring.

Report to management

The monitoring and review process and findings should be presented to management and a record created and retained for evidential and future reference purposes. This record may take the form of a written report, speaking notes or minutes.

Remember that circumstances may change over time and justification for decisions made or action taken may become very important. For this reason the review and any follow-up action should be formally endorsed by senior management and all project management files and systems documentation should be brought up to date before the project team is dispersed.

4. Tools and tips to improve recordkeeping practices

A number of tools and tips have been included in this manual, to provide further guidance to people seeking to improve their records management practices.

The tools and tips take the form of case studies, examples, templates, reports and checklists. This advice is for guidance only - all recommendations provided can be adapted to suit particular projects or to help achieve specific outcomes.

4.1   Sources of tools and tips

A number of the tools and tips in the manual have been provided by public offices that have undertaken DIRKS related records management initiatives. State Records is grateful to these organisations for their willingness to make this documentation publicly available. If you use some of the information in this section that is attributed to a particular person or organisation, State Records asks that you please acknowledge this person or organisation in the documentation you produce.

It is important to note that some examples provided within the manual are fictitious, created to illustrate a particular point, or to represent amalgamations of different stories.

Contributing to DIRKS tools and tips

Please note that this page will evolve as State Records becomes aware of more tools and guidance that will assist public office recordkeeping. If you have a case study, template or other tool that you would like to add to this page, please contact Government Recordkeeping, (02) 8247 8627 or email govrec@records.nsw.gov.au.

Note that State Records reserves the right to refuse to post information on this page that they believe is not in the spirit of this manual or the DIRKS methodology.

4.2   List of tools and tips

For tools and tips on...	go to...
understanding recordkeeping systems	» Recordkeeping systems » Identifying systems for Step D assessment » Characteristics of Recordkeeping Systems
understanding the DIRKS methodology	» DIRKS Methodology and Manual
understanding what you can achieve with DIRKS	» What can you do with the DIRKS methodology?
using DIRKS to improve compliance with the State Records Act	» DIRKS and the State Records Act
developing a business case for a records management project	» Step A – Preliminary investigation » Sample Business Case
obtaining support for records management initiatives	» Commencing a DIRKS Project

For tools and tips on...	go to...
initiating change management	» Tips on Managing Change in Records Management Projects
determining the feasibility of your planned project	» Step A - Making you DIRKS project feasible
analysing recordkeeping risks	» Analysing risk
conducting interviews	»Guide to Interviews » Sample Interview Questions
developing a management plan for a recordkeeping project	» Sample Management Plan

4.3 Sample Recordkeeping Requirements Documentation

Recordkeeping requirements are requirements derived from business, legislation or the community that specify how your business should be documented.

It is important to identify the requirements that pertain to your business and to ensure that your business practices enable you to meet these requirements. See Step C – Identification of recordkeeping requirements for further information.

There are a variety of ways of documenting recordkeeping requirements.

Minimal documentation may be preferred. A model for this is as follows:

Requirement	All complaints must be registered into complaints management system
Source	Interview with Complaints Manager, 2 June 2003
Risk	High - this requirement must be met as problems have previously arisen with lack of complaint documentation
Notes	Currently compliance with this requirement is minimal.There is poor organisational access to the complaints management system.

Alternatively, more extensive documentation may be preferred:

Source name	Road Transport (Driver Licensing) Act 1998
Effective date	In force 29 November 2000
Source type	Legislation
Reference	Section 8B, 12, 35
Related function/activity	Driver Licensing - Registration
Citation	S.8B "maintain a drivers licence register." S.12 "the Authority must ensure that the information contained in [the] register that is of a personal nature...about whom it is kept is not released except as provided by the regulations or under another law." S.35 "any drivers licence register maintained... may be kept in the form of... computer databases or in any such form as the Authority considers appropriate."
Requirement(s) derived from the citation	Creation: A Register of drivers licences must be created. Form: The register can be in the form of a computer database or another appropriate form. Capture and maintenance: Drivers licences must be registered and the register must be maintained. Retention and disposal: The register will be retained for a period of time. Access: Information in the register of a personal nature should not be released except as provided by the regulations or under law.
Risk assessment	High - these requirements must be met

Further guidance is provided in the manual in Documenting Step C.

Specific forms of documentation may be required if you are undertaking a disposal project. See State Records' Procedures for Disposal Authorisation for more advice.

4.4   Organisation Context Document

Use this form to consolidate information about the organisation gathered during the preliminary investigation (Step A of the DIRKS methodology).

Please note: If you are gathering information for the development of a functional retention and disposal authority, see the *Procedures for Disposal Authorisation* for State Records' requirements.

Background

1. Who is responsible for managing this project in your organisation?

Show details of the senior officer in charge of the project.

Name	Position	Phone number
Jane Smith	*Chief Information Officer*	*X978*

Identifying the organisation and its administrative context

2. What is the name of the organisation?

Include all names that the organisation is known by including acronyms, registered business names, and names of business units (eg shopfronts).

Name	Source number
Fire Management Agency	*Source 1: Fire Management Agency Annual Report 2005/6*

3. What type of organisation is it?

For example, department, statutory body, non-statutory body, corporation, university etc. If your organisation is registered show relevant details.

Type	ABN or ACN	Source number
Statutory authority	*123456*	*Source 1: Fire Management Agency Annual Report 2005/6*

4. To whom does the organisation report and is there anything unique about the reporting arrangements?

For example, to parent department, directly to portfolio minister.

Reporting arrangements	Source number
Reports to the Minister for Law and Order	*Source 1: Fire Management Agency Annual Report 2005/6*

5. What are the defining characteristics of the organisation?

Comment on unique characteristics (for example, the organisation's autonomy, budgetary status etc) and indicate whether the organisation is the 'lead agency' responsible for administering legislation which affects most organisations.

Characteristics	Source number
Statutory body with sole responsibility for fire management in NSW	*Source 7: Fire Management Agency website*

6. What is the history of the organisation?

Indicate the date that the organisation came into existence, predecessor or successor organisations and any major losses or gains in functions and/ or restructures of the organisation.

Date	Comments	Source number
July 1 1975	*Fire Management Agency brought into existence by an Act of Parliament. Predecessor organisation was the Fire Brigades (1886 - 1975).*	*Source 2: NSW Government Gazette July 1975*
c. 1980	*Lost the function of 'fire saftey in the home' to the NSW Police.*	*Source 6: Fire Management Agency Annual Report 1980/81*

7. What is the structure of the organisation? Where are the various units located if there is more than one, and what is the business activity carried out by each?

All units of the organisation need to be clearly identified so that the full scope of its business activity is taken into account. If there are numerous units they should be grouped into types of units that carry out the same group of business activities (for example, overseas posts may be classified as consulates and embassies).

Office-holder responsible for the organisation, eg Secretary, Director-General: *Chief Executive*		
List units, eg offices or posts of the organisation and their location	Business activity	Source number
Head office	*Strategic management; fire policy; reporting to Minister; Personnel management; Corporate services*	*Source 3: Interview with head of Corporate Services, Bob Francis, 14/1/07*

8. Who are the organisation's major stakeholders?

For ease of reference, list the stakeholders identified during the course of the preliminary investigation and specify the nature of their interests.

Stakeholder	Nature of interests	Source number
NSW Police	*Records of fires for investigations*	*Source 5: Interview with legal officer, John Brown 15/1/07*

Identifying the legal and regulatory framework

9. What is the official basis of the organisation and why was it established?

Identify the nature and extent of the organisation's role, purpose and responsibilities, noting any divisions of responsibility between the organisation and its major stakeholders that are supported by establishment legislation or related documents.

Establishment of the organisation	Source number
Fire Management Act 1975 establishes the Agency and described its functions. Amended twice; 1980, 1989.	*Source 4: Fire Management Act 1975*

10. What legislation is administered by the organisation?

List legislation administered by the organisation. This may include legislation referred to in earlier questions.

Source name (short title)	Source number
Fire Management Act 1975	*Source 3: Interview with head of Corporate Services, Bob Francis 14/1/07*
Fire Safety Act 1980	*Source 3: Interview with head of Corporate Services, Bob Francis 14/1/07*

11. What legislation affects the role or the operation of the organisation?

Do not include legislation that is shown in the previous question or legislation that underpins the general administrative functions carried out by your organisation and covered by General Disposal Authorities linked to Keyword AAA.

Source name (short title):	Business activity	Source number
Privacy and Personal Information Protection Act 1998	*Personnel management; fire incident reporting*	*Source 5: Interview with legal officer, John Brown 15/1/07*
Freedom of Information Act 1989	*All*	*Source 5: Interview with legal officer, John Brown 15/1/07*

12. Has the organisation contracted out to non-government organisations any functions and /or activities that these bodies will perform on its behalf?

Note specific legislative provisions and/or contractual arrangements that govern these relationships.

Contracted out functions and details	Source number
-	-

13. Does the organisation have a role in overseeing the performance / operations of other organisations?

Nature of role of overseeing other organisation	Source number
-	-

14. Are there standards that have been imposed on or adopted by the organisation? If standards are imposed which body has the authority to monitor compliance? What purpose or effect do the standards have?

List mandatory standards, voluntary standards (or parts thereof) including best practice, technical, or industry standards to which the organisation subscribes. A distinction should be made between standards that are administered by the organisation (such as a regulatory body) but which apply to other bodies; and standards that apply to the organisation itself. Indicate, where applicable, the regulatory body which is responsible for monitoring compliance.

Source of standard and other details	Source number
-	-

15. Does the organisation have any significant joint ventures, agreements or consultative arrangements with other organisations relating to core functions?

Agreement / arrangement	Source number
-	-

Identifying the business context

16. What does the organisation do?

List the general areas of business activity for which the organisation is responsible (for example, health, education, employment, scientific research).

Business activity	Source number
-	-
-	-

17. What services or products is the organisation responsible for?

List the major products and services provided by the organisation.

Product or service	Source number
-	-
-	-

18. What industry sector or sectors does the organisation operate within (eg social services, higher education, health). Explain how changes in the industry sector(s) affect the operation of the organisation.

Industry sector	Source number
-	-

19. Are any of the business areas of your operations subject to a high level of litigation?

Comment on the nature, frequency, trends, risks and consequences of litigation. Show different areas of business activity separately.

Litigation details	Business activity	Source number
-	-	-
-	-	-

20. Who are the organisation's clients, customers or target audience?

Identify the principal client groups for the organisation's products and services. Do these correlate with its target audience? If not, ensure that actual and potential client groups are identified.

Client / customer / target audience	Source number
-	-

21. Are there interest groups in the general community who express opinions, either formally or informally, on how the organisation carries out its business? What business activities do they focus on?

Sources of interest may include consultative bodies, advocacy or community groups, the media, or Parliament.

Stakeholder/Source of interest	Nature of issue and dates when the issues were current or topical	Source number
-	-	

22. What Committees (if any) oversee key aspects of the organisation's business?

Committee	Dates of operation	Source number
-	-	-

Identifying the corporate culture

23. What is the current strategic focus of the organisation?

Look at the organisation's strategic planning documents and recent executive statements. These will identify the organisation's direction, changes in activities that are currently carried out, or new activities.

Document	Source number
-	-

24. Has the organisation or any facet of its business been the subject of any recent internal or external audits?

List all the reports that have been produced in the course of these audits with a brief summary of any recommendations that have not been implemented. Indicate the business activities involved.

Date	Recommendations	Business activity	Source number
-	-	-	-

25. Does your organisation have a formal compliance program or strategies and/or procedures in place to ensure compliance to laws, standards etc?

Indicate any measures in place to ensure that relevant laws, regulations, codes and standards are not breached.

Details of compliance programs, strategies or procedures	Source number
-	-

26. Does the organisation have a formal risk management program in place?

Comment on the risks associated with the organisation's business activity and the strategies and/ or procedures in place to deal with such risks. Indicate if there are risks that could be better managed through improved recordkeeping practices.

Risk levels and the recordkeeping risk management strategies in place	Business activity	Source number
-	-	-

27. How is recordkeeping managed within the organisation?

Comment on recordkeeping systems in existence; who has responsibility for recordkeeping; the structures, policies and procedures in place to manage recordkeeping; the resources directly allocated to recordkeeping; staff awareness about recordkeeping; and staff competence and training.

Recordkeeping management	Source number
-	-
-	-

28. Does the organisation have a systematic records disposal program? What records disposal coverage currently exists and is there a significant volume of existing records that require coverage?

Include details of current record disposal authorities.

Information about records disposal	Source number
-	-
-	-

29. How is technology used in business information systems and information management systems including recordkeeping and /or records management systems?

Comment on the technological capabilities of the organisation, referring to indicators such as use of technology in business information systems, work-stations and work practices, resources allocated to technology, and staff competence and training.

Technology and its use in the organisation	Source number
-	-
-	-

30. What sources have been used to undertake the preliminary investigation?

Compile an annotated register of all documentary and oral sources used during the preliminary investigation.

4.5   Sample Business Case

Department of Aged and Community Care - Business case for an improved records management program

Aim: To undertake a scoping study of requirements to assist the department to meet its legal and business obligations by improving access to records and information.

Please note that this is a fictional case study, developed for guidance purposes only. See <u>Step A</u> *of the manual for more guidance on developing a business case.*

Business background

The Department has responsibility for a number of key functions with a requirement for public scrutiny. The current records system cannot meet retrieval requirements in either speed or comprehensiveness. The current system regularly fails to ensure that all records relating to an issue have been retrieved for answer to questions raised by the media, in parliament and directed to the Minister. Valuable staff time is lost searching for records that are either registered but lost, or not registered and their existence and location is difficult to identify.

Methodology

The project methodology is based on the Australian Standard on Records Management – AS ISO 15489, and the DIRKS Manual developed by State Records NSW.

Scoping study findings - current situation

This investigation has identified a number of shortcomings of the current records management system in addition to those which instigated this study:

- the user metadata in the system is significantly out of date (as staff changes have occurred over the past five years, this information has rarely been updated) [a comprehensive clean-up project is required which will also require a partial file census to verify locations]
- there is an urgent need to convert legacy data relating to the transfer of 25,000 records acquired along with the Community Care Access Program [there are an estimated 10,000 current and 15,000 non-current records which need to be brought under control and develop a disposal program]
- there are no controlled terms or conventions for file titling , and
- disposal of non-current records is ad hoc and there is a significant backlog of non-current records awaiting evaluation and disposal action.

A review of the recordkeeping system by independent consultants in 1999 found no major breaches of government security requirements for records, but a number of issues to be addressed which are still in evidence:

- some important file records could not be located via the tracking system
- some scanning/data conversion processes were substandard, requiring on-going reference to archived paper records
- the ministerial tracking system cannot adequately track briefing papers
- information about Nursing Care Centres which have been operating for more than 10 years is incomplete because earlier records were not included in the new system
- the software application used to manage the centralised records system does not meet current standards, and
- electronic lodgement of license applications are not systematically captured and stored electronically. The Department is reliant on the hardcopy version of the license application.

The most immediate implications of these shortcomings are that:

- the department's records management systems and tools do not meet best practice standards
- inaccurate information may, unknowingly, be provided in answer to questions because records cannot be identified, retrieved or are not accessible if over 10 years old
- security is compromised because non-current staff members have not been removed from the system, and
- additional costs are incurred due to the inefficiencies in the system and poor control over records.

Solutions

To bring the central records management system up to best-practice standard, the department will need to commit to a comprehensive records improvement program, over time, which will comprise the following:

- development of a functional thesaurus merged with Keyword AAA
- development of a thesaurus for Ministerial briefings and issues
- new procedures for filing and tracking Ministerial briefings and issues through integration of the document and records management systems
- assessment, selection and purchase of upgraded software
- a comprehensive clean-up project is required which will also require a partial file census to verify locations
- conversion of an estimated 10,000 current and 15,000 non-current records which need to be brought under control, and
- development of a etention and disposal authority, disposal guidelines and an implementation plan.

These changes could be managed in a phased approach, enabling change to be managed at a pace which can be accommodated by the organisation without trading off a reasonable timeframe for positive results. Some aspects of the project, such as disposal implementation, will initially have little effect on the current operations of the department since we would implement first in secondary storage.

A suggested approach is:

Stage 1 – Undertake a business analysis and develop a functions thesaurus and retention and disposal authority

- collect and analyse information about the department's business activities including outposted locations
- develop a business classification scheme
- negotiate approval with the archival authority
- develop a merged functions thesaurus/Keyword AAA
- develop a retention and disposal authority
- negotiate approval with the archival authority.

Stage 2 – Software upgrade

- using available assessments of suitable systems made by government IT supply officers
- IT Unit requested to cost the options for implementation in RMU and 50 workstations across the department
- tender for the purchase, installation, configuration and training in software.

Stage 3 – Implementation strategy

- develop, in consultation with unit manager, a strategy for implementing the thesaurus across the department, unit by unit

- develop, in consultation with RMU, a strategy for implementing the thesaurus across the department [note that these may require additional resources to undertake the conversion or sentencing within a reasonable timeframe]
- this will include a conversion strategy (for files to be closed/retired and those required in the new system), identification of supporting documentation required (guidelines and procedures) and a timetable for implementation
- development of a training strategy for RMU and operational staff to support the implementation.

Stage 4 – Thesaurus implementation

- implement the thesaurus in RMU, then progressively in selected business units.

Stage 5 – Staff training

- deliver training for staff in records management practices, principles and use of the thesaurus and retention and disposal authority.

Stage 6 – Disposal implementation

- commencing at backlog at secondary store, sort, list into RM software and sentence the backlog of records
- arrange for transfer of archival records
- arrange for destruction of records due/overdue for destruction.

Stage 7 – Post implementation review

- 6-12 months after the implementation is complete, a review of the implementation should be undertaken to identify any problems.

Resource estimates

Stage 1– Undertake a business analysis and develop a functions thesaurus and retention and disposal authority

Project Manager	6 days
Records Manager	4 days
Consultant	20 days
Access to key staff/unit meetings	As required

Stage 2– Software upgrade

Project Manager	5 days
Records Manager	2 days
IT Unit assistance	10 days
Records Management software and licence for 50 users	

Stage 3 – Implementation strategy

Project Manager	1 day
Records Manager	2 days
Consultant	5 days
Access to key staff/unit meetings	As required

Stage 4 – Thesaurus implementation

Project Manager	6 days
Records Manager	10 days
Records Management staff in teams of 2	140 days
Access to key staff	10 days per business unit

Stage 5 – Staff training

Short sessions of several hours for operational staff

Full day session for RMU staff and 1-2 days hands on implementation training

Stage 6 – Disposal implementation

Project Manager	6 days
Records Manager	15 days
RMU staff in teams of 2 or contractors	140 days
Access to key staff/unit meetings	As required

Stage 7 – Post implementation review

5-10 days depending on requirements

Options for implementation

In-house

There is insufficient expertise in-house to undertake the project within a reasonable timeframe. It would not be possible to release the Chief Information Officer from regular duties to work full-time on the project. A period of intensive training would also be required for the CIO to update her knowledge of the latest methodologies. This option is not considered feasible to produce the required result.

Engage a consultant

There are specialist consultants available in this field who could undertake key elements of the project to deliver tools which could then be implemented by in-house staff. This would provide timely delivery of a useable system at a reasonable cost. It would have the added advantage of involving staff in the development process, which would be an important part of the change management strategy.

Conclusions and feasibility assessments

Operational feasibility

The Department has made a commitment to move towards best practice in records management. The results of our scoping study were that there were a number of shortcomings in the current department-wide records management system which do not meet best practice specifications, and that appropriate practices, while in place, need to be followed more rigorously.

Market-testing in the Department indicated that users of the system are aware of the shortcomings, have altered their work practices to support or circumvent the system where

it does not work effectively, and are supportive of the need for an upgraded system. Those who are particularly supportive have come from organisations with effective records management programs and systems in place. The major concern amongst staff is the potential for increased workload in some areas if records creation and maintenance are heavily decentralised; this is one option for implementation and would be addressed in developing an implementation plan.

The Department is beginning to investigate the feasibility of sharing records/information across jurisdictions. For such an approach can work successfully with all safeguards in place to protect privacy, commercially sensitive information, and ensure information protection protocols work effectively good practices and systems must be in place.

In July 1998 the Department out-sourced its IT operations and support and at the same time undertook a major upgrading of technology. This was a complex process and staff found it difficult to cope with the pace of change. Now that the systems are bedded down we have the advantages of an operational system which is working well and with which staff feel comfortable. We are due to tender for a new outsourcing contract, to be let from July 2001. If there is a change in supplier, there will be a period of disruption. Any major system changes we commence as a result of this project will take place from now to December 2001, and it is advised that any technical changes wait until after the new contract is let.

We recommend commencing the development of tools to be used with the new system - thesaurus and retention and disposal authority and development of an implementation plan for further discussion.

It is concluded that the improvements to the system are operationally feasible, based on the current and immediate future needs of the Department, and taking the change management issues into account.

Technical feasibility

Due to the improvements made in the operating system in 1998, the Department now has a standard platform across the whole organisation including new regional offices.

There are a number of products available which have been evaluated and approved by the Office of Government Online for use in government and which would meet our needs. Because new products are being placed on the market all the time, we recommend undertaking a review of what is available through other State government assessments.

The skills required to complete the project would involved in-house staff in project management and on-going maintenance, and consultants to assist in developing the tools, advising on software configuration and delivering training.

It is concluded that the improvement to the system are technically feasible both in terms of the Department's IT infrastructure and products and skills readily available in the marketplace.

Financial feasibility

The costs of the project will be further quantified with the letting of requests for Expressions of Interest, to include estimated time frames and costs. The purchasing of a software licence for a records management system and the development of the tools to support its operation are a standard operating requirement of any government organisation, along with staff training in the new tools and system.

As the implementation progresses there will be a need for discrete projects to migrate data to the central system, convert legacy data and to update user metadata which is significantly out of date and affects ability to track records accurately. The productivity benefits of better retrieval and control on records will be realised in the medium-term, and will flow through to areas such as the Ministerial system, with improved workflow and better access to information.

It is concluded that further costings are required but that the costs of initial purchase and installation will be at a level expected for a Department of this size.

4.6   Tips on Managing Change in Records Management Projects

Acknowledgement: This guidance was provided by Denis Comber, based on his experiences as Records Manager at NSW Police.

See the Commencing a DIRKS Project section of the manual for more guidance on managing change.

Do your homework

Research and plan your project extensively before you start.

Document your research and decisions. This will provide you with necessary information, and will also help to meet any quality or accountability requirements that you may be subject to.

Take your time

Make sure you take adequate amounts of time to develop both your project and your change management strategies. The importance of adequate planning should not be underestimated.

Look at the value-add

If you are implementing a records management system, don't just see it as a records management solution. Put it in its bigger context and articulate the value it will contribute to organisational and other business objectives.

Take time too to look at the extra value you can add to the project you are developing. Don't just implement the basics, but identify the extra things that can be done to better meet organisational needs.

Trust your own views

Often consultant's reports can be taken as gospel. If you have significant concerns about a consultant's recommendations that relate to the project your are undertaking, be prepared to express these views and justify why you think some of their recommendations should not be implemented.

Motivate

People have to be motivated to make change happen. Discuss current problems and what you hope to achieve. Use organisational drivers and other factors to motivate people to support the changes you propose.

Meet the people

Where possible, it is important to meet as wide a range of users as possible. Face to face meetings, and travelling to meet staff in other offices, is a key means of obtaining meaningful information about how people actually do their job, and the functionality they will require from the recordkeeping system you are developing.

Meeting people, and discussing the changes to systems and processes that you wish to make, is also a key means of initiating effective change in your organisation.

Run training programs

Training programs provide an excellent opportunity for you to get close to the people who will be using the system you implement and to learn exactly what these people require.

Having the opportunity to communicate directly with users can make your life much easier and can save much time in the future. It also makes users more comfortable with the solution you are proposing. This will provide tremendous value to your change management objectives.

Liaise as much as possible with executive management

Keep management fully briefed about your project and its progress. Obtain some quick wins, if possible for your project and get some early runs on the board. This can make a big difference to how your project is perceived.

Be open and upfront with management, and don't be afraid to advertise your goals and achievements. A profile for your recordkeeping objectives at the management level is crucial if you are to have the organisational support that will enable effective implementation of your objectives.

Have a can-do attitude

Try to work with all reasonable staff suggestions about the work you are undertaking, and try not to work around them.

Listening to staff recommendations and taking these in a positive manner will yield positive results. It will make staff feel part of the process, and will mean the system you are developing will meet specific needs.

Be open to constructive criticism

No one knows it all and with a large scale organisational project, external feedback is crucial to the effectiveness and appropriateness of the work you do.

Be very open and encouraging of feedback, even negative feedback, as this will help your project to provide exactly the type of solution that is required by your organisation.

Have a hands on approach

Implementing an appropriate solution for your organisation will require a real knowledge of the organisation, its staff and its requirements. It requires extensive liaison and discussion. Be actively involved in your organisation and the evolution of your solution, as this will be crucial to the viability of your project.

Problems will happen

You will encounter issues with whatever project you are implementing, but try not to let problems bog down your progress. Be determined, have patience and keep focussed on your objectives.

Get a mentor

Build on knowledge that exists within or beyond your organisation. Don't be afraid to ask others to share their expertise.

Having one person as a mentor or sounding board for your project can be incredibly valuable. You will both amass a range of knowledge through your work together that will greatly contribute to the project's effectiveness.

Sell good news stories

When you make progress, tell people. When you remedy a problem, let people know.

Evaluate

If possible, use an external service provider to evaluate the recordkeeping system you have developed and implemented. Having this external validation and comment can be extremely beneficial for selling the system internally and for also identifying any areas for improvement that you may have overlooked.

4.7   Guide to Interviews

Before you start interviewing colleagues, you should have a good understanding of what your project is seeking to achieve, a good knowledge of your workplace and its operations, and a good idea of the outcomes you want to achieve through the interview process.

Before you start

Interviews can be a useful means of:

- gaining information to support and progress your project
- validating information you have gathered
- presenting ideas to colleagues
- advertising your project, and
- gaining using feedback.

Before you start interviewing colleagues, you should have a good understanding of what your project is seeking to achieve, a good knowledge of your workplace and its operations, and a good idea of the outcomes you want to achieve through the interview process. Introducing DIRKS and Step A: Preliminary investigation can provide you with guidance on achieving this important background understanding.

There are a number of different ways in which to conduct the interview process. You will need to decide which of the following methods is appropriate to your organisation:

- interviews with individual officers or
- workshops with selected staff.

Each method has its advantages and disadvantages. Interviewing individuals is particularly useful to determine what terms are used within the organisation to describe its functions and business activities, while a workshop may be preferable if you are seeking to document a work process. Much of what is discussed in this guide pertains to the interview process, but it can be easily adapted to suit a workshop situation.

Determining who to interview

Decisions about who to interview will depend on the nature of your project. If you are doing a large scale system assessment and want to develop a thesaurus and retention and disposal authority, you will need to talk to a range of staff across your organisation. If you are focussing on one specific business system, you will only need to liaise with staff involved with this system.

You may need to talk to talk to a range of staff, from senior managers to system users, or one or two interviews will close colleagues may suffice.

You may decide that external stakeholder liaison is important to your project. As a result, you could choose to interview a range of external stakeholders about their views and requirements for your project.

Adequately structuring your interview

Remember that people are giving up their time to participate in your interview process. As a consequence you need to be well prepared and to know in advance the range of different issues you need to seek advice upon. Structure your interviews accordingly.

If you are doing a large scale project, you should ask questions of your interview participants that relate to all your requirements, instead of interviewing them once as part of your Step A research, and again as you reach Steps B, C, D etc.

Over-interviewing people can lead to them feeling frustrated with your project. This could make them unwilling to participate further in your work and may affect their responsiveness

to your final product. Be very aware of this as your prepare for and structure your interviews.

Preparing interviewees for your discussions

To make the most of your time and the time of your interviewees, preparation is important. Try to ensure that the people you want to meet are fully briefed about your project and the specific information you will be requiring from them.

You can ensure that people are well briefed by running pre-DIRKS training programs that explain who you are and what your project is seeking to achieve. Pre-DIRKS training programs are discussed in Commencing a DIRKS Project.

You could also arrange for a memorandum to be circulated to all staff identified as potential interviewees. The memo should:

- explain who you are and the name of your project
- describe the expected outcomes of the project, emphasising the benefits to the organisation (for example, savings in money and staff time used in storing, retrieving and locating records)
- indicate that interviewees have been selected because of their knowledge of the structure, functions and business activities of the organisation, as well as their understanding of the organisation's information needs
- identify the type of information you require and request that the interviewee consider these matters prior to being interviewed. Matters to be canvassed could include:
  - the functions and activities of the operational area, and how these fit into the overall purpose and structure of the organisation
  - what records and recordkeeping systems result from these functions and activities
  - any legal or other recordkeeping requirements relating to the records, and
  - the interviewees' opinion on how long the records they use are required for business purposes.
- state how long you anticipate the the interview will last, and
- thank prospective interviewees for their cooperation.

Once you have decided on a time period in which to conduct the interviews you should contact the interviewees and find out when each is available to be interviewed.

You may need to extend the interview program's timeframe to fit in with the interviewee's other commitments. Be prepared to be flexible.

Preparing yourself

It can be useful to have a range of pre-drafted questions to help you manage and structure your interviews. Sample interview questions for record managers and corporate managers are provided to help you with your interview process. Don't be limited by what is included in these sample questions - be sure that the questions you ask specifically relate to the types of information you wish to obtain.

Writing up notes

Write up your notes directly after the interview, while the information is still fresh in your mind. It is a good idea to structure your notes clearly, for example according to each question or according to predetermined topics such as functions, activities, processes and recordkeeping requirements.

You should provide adequate information to enable every source to be identified (eg person's name, position, functional responsibilities, length of experience in the organisation). Be sure also to document the date of the interview.

4.8   Sample Interview Questions

It is important that you have a good understanding of what you want to achieve through your interviews prior to commencing.

Preparing for interviews

It is important that you have a good understanding of what you want to achieve through your interviews prior to commencing. See Guide to Interviews for more information about preparing for interviews.

In your preparations, it is important to plan so that you do not over-interview participants. If you are doing a large scale project, you should ask questions of your interview participants that relate to all your requirements, instead of interviewing them once as part of your Step A research, and again as you reach Steps B, C, D etc. One integrated interview will be much more beneficial than a range of piecemeal discussions.

Before commencing the actual interview, explain to your interviewee what research you have done and what you are specifically seeking to obtain. Remember that you can use the interview as an opportunity to clarify any questions you may have arising from your previous research.

This section contains a range of sample questions that you may wish ask senior managers, records managers and business managers or users. Don't feel limited to interviewing these groups of people, however. Interview the range of internal and external staff that will be of assistance to your research.

Tip: Key issues you may be trying to identify

Have a good understanding of what you want to achieve through your project, and use this to structure your questions and approach.

For example, depending on the nature of your project, you may find it useful to focus on:

- the areas of responsibility of the operational area in which the interviewee works
- how these areas of responsibility relate to those of other operational areas and fit into the functions of the organisation as a whole (eg with reference to legislation under which the organisation is established and/or administers)
- how the activities of the operational area are carried out, including what processes are included in carrying out particular activities (eg report writing, preparing submissions, drafting publications, running training courses, liaison with other organisations or contact with members of the public)
- any specialist terminology used to describe business activities
- what records are generated as a result of these activities
- if the organisation has a functional thesaurus, which terms apply to the operational area's functions and activities
- whether information in the records is duplicated elsewhere, or if any of the records are duplicates or have duplicates held elsewhere
- whether any of the records are related to each other or related to records used by other sections of the organisation (ie documenting different aspects of the same function or activity)
- what recordkeeping requirements affect the records (eg through legislation or other external requirements), and
- the interviewee's opinion of how long the records should be retained for the organisation's business purposes and the basis for this opinion.

Sample questions for senior managers

- What are the core areas of responsibility for the organisation?
- What are the reporting lines within the organisation and to external authorities?
- Does the organisation consider itself to be in a highly regulated environment?
- What is the organisation's attitude towards the degree of regulation?
- Who are the organisation's stakeholders?
- How does the organisation manage its external compliance regime (eg managing its performance in relation to the regulatory environment, audits, standards and best practice)?
- Does the organisation operate in a litigious environment?
- If so, can you give a general description of how it manages claims made against it (eg through one unit such as a legal team)? What are examples of recent litigation it has been subject to?
- Does the organisation have a risk management plan? Can you outline its major features and provide a copy?
- How are risks monitored and managed in the day to day operation of the organisation's business?
- What are the high risk elements of the organisation's business? Where in the structure of the organisation are high risk activities or processes performed or concentrated?
- Are there special policies or procedures in place to help officers contribute to external compliance or risk management within the organisation? If so, what are they?
- What role does recordkeeping play in managing risks and external compliance within the organisation?
- How does the organisation obtain feedback from its clients?
- How does it gauge community attitudes in relation to its performance?
- Has the organisation established any advisory or consultative bodies that address or represent community concerns in relation to the business activity or activities of the organisation. If so, what are they?
- Does the organisation have any statements about community relations or any special agreements or undertakings with clients or stakeholders that are documented (eg memorandum of understanding with stakeholders, service charters)?
- Is the organisation subject to frequent Parliamentary or Ministerial scrutiny? If so, give examples. How does the organisation manage its reporting to the Parliament and the government?
- Is the business of other organisations reliant on the activities of your organisation? If so, describe how.
- Has the organisation conducted internal reviews or audits concerning its performance and accountability recently? If so, what were the conclusions of review/report? (Get a copy if relevant).
- What degree of technological currency and competence does the organisation display?
- What are the organisation's current priorities and goals?
- Can you refer me to internal publications that will help define, at a detailed level, the organisation's business activity and recordkeeping requirements (eg policies and procedures, publications for clients or the community in general, technical codes or standards)?
- Can you refer me to any historical publications about the organisation?

Sample questions for records managers

- Could you describe the range of recordkeeping systems used in the organisation?
- Is records management software used in the organisation? Which sections use this system? What software or systems does it integrate with?
- Is electronic recordkeeping used in the organisation?
- What retention and disposal authorities do you have which cover records produced in the course of current and (if appropriate) historical business activity?

- Does the organisation have difficulty producing records when they are required (eg for litigation, audit, Ministerial or Parliamentary briefing, reporting)? If so, why do such difficulties occur?
- In a general sense, are the recordkeeping systems operating in your organisation adequate to meet the requirements of the organisation? Could you give more details?
- Does the organisation have formal recordkeeping procedures for staff to follow? If so, are these up to date and adequate?
- What level of prominence, resources and support from management do the staff responsible for recordkeeping have within the organisation?
- Are any of the organisation's recordkeeping requirements documented?
- Have you ever assessed corporate business information systems against recordkeeping requirements?
- Are disposal activities regularly undertaken?
- Do you regularly assess the effectiveness of your records management program?
- Have you assessed the organisation's use of metadata?
- What are frequent records management problems or concerns that you are aware of?
- Are there formal policies governing records management?
- What is management's perception of records management?
- Is the organisation compliant with State Records' records management standards?
- Is a thesaurus or other tool used to control file titling?
- Is the Records Management Unit consulted when new systems are purchased or developed?
- Where are the organisation's record, both paper and electronic, stored?
- What is the proportion of electronic records in the organisation?
- What strategies have previously been employed to improve organisational recordkeeping?
- What key records management objectives would you like to see the organisation obtain?

Sample questions for business managers and action officers

- What functions and activities is your area responsible for?
- What specific processes do you follow when performing these activities? (Ask only if you are interested in identifying and mapping work processes in a particular area of business.)
- Do you have procedures that guide your work?
- Have you or other staff done a risk assessment of your activities?
- Do you administer any legislation?
- Is your work governed by any best practice standards?
- Are there any compliance checks made on your work?
- Do you interact with other business areas when performing your activities?
- Do you interact with external organisations when performing your activities?
- What business information systems do you use?
- Do you find these systems to be adequate?
- What problems have previously arisen with these systems?
- Do you provide services to the public?
- Who are your key stakeholders? What influence do they have over your operations?
- Has your area been subject to any litigation?
- Are consultants employed to carry out any of your work?
- What records do you create and why?
- What records do you refer to, if not create? Eg applications received from clients, reports from other areas of your organisation, records of previous contact with a client
- What recordkeeping system(s) do you use?
- Do you regard your recordkeeping as adequate - ie do you always have the evidence and information you need to meet your business needs?

- Can you always find information when you require it? If not, what are the problems that affect information access?
- How long do records need to be kept to meet your specific business needs?
- Are your records referenced and used by other areas of the organisation?

4.9 Sample Management Plan

Acknowledgement: This plan has been provided by the Australian Broadcasting Authority.

Australian Broadcasting Authority Thesaurus and Disposal Authority (TADA) Project Management Plan January 2000

The Australian Broadcasting Authority is a Commonwealth agency. In 2000 they completed Steps A-C of the DIRKS methodology and created a keyword thesaurus and retention and disposal authority.

A project officer was hired for 6 months to complete this project. Instead of a business case (funds had already been allocated) the project officer compiled a Management Plan to give strategic direction to the project.

Introduction

This is a Management Plan for the temporary project to compile a thesaurus and records disposal authority (named 'TADA') and to assist in the development and pilot implementation of an electronic records/document management system and associated recordkeeping policies and procedures at the ABA. The project Work Plan contains a more detailed examination of tasks.

Background

The ABA is committed to integrating knowledge across the organisation and sharing resources in order to reduce duplication of effort and inefficiency and streamline information resources in support of changing business goals. As part of this process, a new ABA information management system (AIMS) is being developed, integrating data from a number of access databases to provide the core data and technology infrastructure to support the ABA's functional requirements.

It is proposed that a new electronic records/document management system will be established to capture electronic transactions that fall outside the sphere of the AIMS databases. It is envisaged that the electronic records/document management system will operate along with the paper-based recordkeeping system - a 'hybrid' system.

Even if the electronic records/document management system is not implemented, a number of recordkeeping tools need to be developed so that the ABA's systems function effectively as recordkeeping systems. These tools need to be developed in compliance with relevant legislation and with standards set by the Office of Government Online (OGO) and the National Archives of Australia (NAA), and recommended in the Australian Standard AS 4390-1996, *Records Management*. They also need to be supported by relevant training, guidance, policy and procedures.

Scope

The main business objective of this project is to create a number of new tools necessary to support recordkeeping across the ABA. These tools should assist all staff at the ABA to meet their business needs, legal and regulatory obligations, and broader community expectations and should meet the relevant standards.

Specifically, the project involves using the methodology for *Designing and Implementing Recordkeeping Systems (DIRKS)* and associated guidance, to:

- assist in the selection and development of an electronic document/records management system for the ABA that will be linked to the ABA's information management system (AIMS)
- create a ABA specific thesaurus of functions, activities and topics/subjects that can be merged with the Commonwealth version of *Keyword AAA: A Thesaurus of General Terms* for the coverage of functional and administrative records
- implement the merged thesaurus across the ABA and train staff in its use
- create an ABA specific *Records Disposal Authority* based on the same business classification scheme that can be used to sentence paper and electronic files from creation
- assist in the identification of policy, procedures and other records management tools as required to support the above products.

It is expected that the implementation and review of AIMS and the EDMS/RMS will occur after the 6 month period, so it is not part of the project's scope. In addition, while the project does involve identifying the need for policy, procedures and guidance regarding recordkeeping, it is not the responsibility of this position to develop them within the 6 month period for which this project is being resourced.

Methodology

Source of the methodology

The methodology to be used is outlined in:

- *Designing and Implementing Recordkeeping Systems: Manual for Commonwealth Agencies*, jointly produced by the State Records Authority of NSW and the National Archives of Australia and customised to the Commonwealth environment (Steps A-C), and
- the *Appraisal Guidelines for Commonwealth Records* produced by the National Archives of Australia.

The manual and guidelines are based on Section 3 *Strategies* of the Australian Standard AS 4390-1996, *Records Management.*

Key stages of the methodology

The DIRKS methodology identifies 8 key stages for implementation of a recordkeeping system:

- Investigation of broad environment in which the organisation operates (stage 1 of *Appraisal Guidelines*)
- Analysis of the functions and activities performed by the organisation (stage 2 of *Appraisal Guidelines*)
- Analysis and identification of organisation's requirements for making and keeping records relating to these functions and activities (modified in Stage 3 of *Appraisal Guidelines*)
- Assessment of the extent to which existing systems meet these requirements
- Identification and selection of recordkeeping strategies to meet requirements
- Design of a recordkeeping system that incorporates these strategies
- Implementation of the recordkeeping system
- Evaluation of the performance of the recordkeeping system.

Stages 1-3 of the *Appraisal Guidelines* draw on Steps A-C, with some modification to Step C. The TADA project will involve these 3 stages.

Stages used in the TADA project

The stages will not be approached in a completely linear way. Where possible, steps will be collapsed. For example, it is possible to complete some aspects of Stage 2 while completing Stage 1.

Stage 1

Stage 1 of the methodology will involve identifying and documenting the role of the organisation, its structure, the business, regulatory and sociopolitical environments in which it operates, and the major factors affecting recordkeeping practices. It provides contextual information about factors that will influence the ABA's need to create and maintain records.

Stage 2

Stage 2 will involve developing a conceptual model of what the ABA does and how it does it, by examining its business activities and processes. The analysis is to understand how records relate to the ABA's business and will contribute to decisions about their creation, capture, control, storage, disposal and access.

The conceptual model (the business classification scheme) developed in Step B can then be used as the basis for developing an ABA specific functions-based thesaurus for records, that will conform with ISO 2788-1983, Standard for the Establishment and Development of Monolingual Thesauri. It is expected that, once staff have been consulted and are comfortable with the thesaurus, it will form part of the pilot of the records/document management system. If this system is not operational, it can be used within electronic directory structures.

Stage 3

Stage 3 will involve conducting risk assessments, identifying the ABA's requirements to make and keep evidence (in its broadest sense) of its business activities and to document the requirements in a structured and easily maintainable form. This evidence will ensure that individuals and organisations are accountable to government, courts of law, shareholders, clients, community interest groups and future generations.

The nature of the ABA and the context in which it operates will dictate whether it needs to create and keep evidence of its activities. These recordkeeping requirements will be identified in Stage 3 by analysing the ABA's business needs, legal and regulatory obligations, and broader community expectations. Stage 3 also involves an assessment of the organisation's exposure to risk if the evidential requirements are not addressed.

Stage 3 also involves creating a records disposal authority for the ABA's records, which then needs to be authorised for use (by law) by the National Archives. This can be incorporated into the electronic record/document management system to enable sentencing at creation.

The documentation compiled during Stages 1-3 (Steps A-C of DIRKS) can also assist, to some degree in identifying:

- other recordkeeping requirements, such as access, content, form and quality (part of Stage 3 not covered by appraisal)
- requirements for an EDMS/RMS (step D)
- the need for policies and procedures for recordkeeping (Step E).

However, these will not formally be part of this project. In addition, the analysis will only cover the ABA, not the Australian Broadcasting Control Board or the Australian Broadcasting Tribunal.

See milestones below and the project Work Plan for information about expected time for completion of the stages.

Expected benefits

General

- Tools to improve creation, capture and access to relevant information (which may facilitate efficiency and effectiveness of program delivery, policy formation and decision making)
- Streamlining of business processes and linkage to recordkeeping needs
- Improved capacity to explain and provide evidence of ABA's actions and decisions when required
- Identification of main strengths and weaknesses in recordkeeping practice at the ABA
- Definition of responsibilities for recordkeeping

Thesaurus

- Faster and more efficient retrieval and access to records
- Facilitation of document sharing
- Greater consistency and control of the language used for file titling and indexing paper and electronic records
- Mapping of records to disposal classes so that sentencing can happen at creation

Records Disposal Authority

- Decreased FOI and discovery compliance costs
- Knowledge of what records need to be created and managed so that ABA can be more accountable.
- Documentation of legal and regulatory requirements and community expectations which may improve compliance
- Understanding of evidence-related risks which can lead to decreased exposure to unacceptable risks
- More appropriate management of records consistent with retention requirements
- Improved retention of and access to corporate memory
- Ability to continue transferring records to the National Archives of Australia or destroying them legally (decrease storage costs)

Assistance with EDMS

- Improved integration of electronic recordkeeping with other business systems, applications and technologies
- Compliance with Government information management and technology (IM&T) initiatives
- Documentation for assessing systems against recordkeeping requirements, or developing new recordkeeping systems at a later date (Steps D-H of DIRKS)

Supporting documentation

- Identification of strategies, such as policies, procedures and guidance to support recordkeeping tools and address recordkeeping problems

Staff resources and training

Project coordinator

Janet Knight has been appointed for a 6 month temporary period to conduct the project on a full time basis.

Assistance from information management staff

In addition, it is expected that assistance will be required on a regular basis from information management staff within the ABA with knowledge and experience in:

- the functions and activities performed by the ABA
- the records management practices of the organisation
- current tools, such as the existing thesaurus and disposal authority.

Staff members with these skills may be called upon to discuss ABA recordkeeping issues, comment on drafts and assist in staff training/consultation. They will also be kept informed about the progress of the project so that they can keep the tools up-to-date when the project has been completed.

It is estimated that 2 information management staff will be required for an average of 1 day each per week for the 6 month period. However, their involvement will be on an irregular basis.

The following timetable estimates the level of involvement in each part of the project:

Date	Task
29 Jan - 2 Mar	- Comment on Management and Work Plans (1/2 day each) - Be interviewed regarding current recordkeeping (1/2 day each) - Comment on Stage 1 documentation (1 day each)
2 Apr - 4 May	- Comment of Business Classification Scheme (BCS) (1/2 day each) - Assist in writing and delivering workshops on BCS (2 days each) - Comment on Stage 2 documentation (1 day each)
7 May - 18 May	- Assist in writing/delivering workshops on thesaurus (2 days each) - Comment on thesaurus guidelines (1 day each)
18 May - 15 Jun	- Help identify stakeholder interests and interview (2 days each) - Comment on maintain/dispose forms (1 day each)
18 Jun - 29 Jun	Comment on draft of disposal authority (1/2 day each)
2 - 9 Jul	Handover of project (1 day each)

*Note: where possible, time will be saved on some stages by merging them slightly. For example, business activities and recordkeeping requirements (stages 2 and 3) can be partly identified in Stage 1.

Supervision

Jenny Brigg, Project Manager, IT Infrastructure Upgrade Project, will supervise the conduct of the main project to compile a thesaurus and disposal authority. John Evans, Special Projects, will supervise any input into the electronic records/document management project.

In addition, a project officer from the National Archives of Australia is assigned to the project to advise and check on each stage to ensure compliance with the DIRKS methodology. Geoff Smith has been appointed the contact person at National Archives, Sydney Office.

Staff and stakeholder involvement

The project will require additional staff resources due to the staff and management participation required. For example:

- In Stage 1 assistance may be required from the librarians in gaining access to suitable sources. Short interviews with be conducted with records managers and corporate managers regarding recordkeeping, risk management and corporate goals.
- Stage 2 involves discussions a few representatives of each business unit (about 1-2 hours per unit) to confirm that the range of the unit's activities has been adequately identified. This may be able to be combined with other UPIT consultations.
- Half day training sessions in Sydney and Canberra will be run for all staff on use of the thesaurus. These may need to be followed up with individual hands-on training (1 hr) in renaming files and using electronic tools (these can be incorporated with EDM training if the system is implemented or can be done using Windows Explorer).
- Stage 3 involves short discussions with stakeholder groups and with those responsible for risk management within the organisation. It may also involve some additional feedback from key staff.
- Half day training will be run for records staff in the use of the records disposal authority.

Related projects

This project has a number of overlaps with other information management projects.

- AIMS - Some of the information captured in the AIMS databases are also records and need to be managed and disposed of according to the disposal authority.
- E-Dime web review - The terms in the thesaurus can be used in the metadata (descriptive information) that supports the Web pages. The metadata makes the web pages more accessible.
- Government Online Strategy - The strategy encourages electronic commerce. The TADA tools can streamline the process of making ABA records available on the web site (use of thesaurus terms; movement of recordkeeping metadata to AGLS metadata). Information obtained on the web site may also be captured into ABA's databases or the electronic records/document management system.
- Electronic Transactions Act - IT requirements and verification procedures need to be examined. These issues are as relevant to the TADA project as records must be authentic and accurate.
- Pilot of electronic records/document management system - The thesaurus and disposal authority will be used in the EDMS. When files are created and titled disposal decisions can be attached to them immediately.

Reporting arrangements and quality control

Janet Knight will report to Jenny Brigg on a fortnightly basis about the project's progress. She will also report informally to John Evans about EDMS/RMS as required.

When relevant to the progress of the project, reports will be submitted to

- IT Infrastructure Project (UPIT) reference group, which has branch representation, and
- the working group examining additional implementation issues for the information system, which reports to the UPIT reference group.

Regular reports will also be given to the Information Management Steering Committee and published on the records management section of the Intranet. There may also be formal reporting to the Chief Information Officer when this position is filled.

The National Archives of Australia requires certain documentation to be submitted at the end of each stage of the project for quality checking (and for authorisation of the disposal authority). The documentation can also be submitted to interested parties and placed on the Intranet.

Other resources required

Other resources, besides staff resources that will be required, are:

Estimated cost	Reason
$960 + $96 (GST) = $1056	Purchase of Hierarch thesaurus compilation software
$1200 (4 x $280 - for economy air fare same day; $40 per day x 2 for travel allowance over 10 hrs)	Travel costs to Canberra for Janet Knight. 1. UPIT tune up 2. Business Classification Scheme workshops 3. Thesaurus training 4. Consultation/training regarding the disposal authority.
Total = $2256	

Milestones

Commencement date: 10 January 2001

Cessation date: 9 July 2001

Date	Task
10 - 25 Jan	Compile Management Plan and Work Plan
29 Jan - 2 Mar	Stage 1 Preliminary Investigation
5 - 30 Mar	Checking of Stage 1 by National Archives Stage 2 Analysis of Business Activity
2 Apr - 4 May	Revision of Stage 1 Compilation of draft thesaurus
7 - 18 May	Thesaurus consultation and completion Checking of Stage 2 by National Archives
18 May - 15 Jun	Stage 3 Identification of Recordkeeping Requirements Compilation of records disposal authority

Date	Task
18 - 29 Jun	Revision of Stage 2

RDA Consultation and completion |
| 2 - 9 Jul | Seek records disposal authority authorisation from National Archives

Finalise project |

Note: As required feedback and involvement in EDMS/RMS selection and development and identification of the need to develop policy and guidelines will be built into this timetable. Stages may also be collapsed slightly, which will affect exact timing.

Barriers and risks

1. Change management

One of the main difficulties in a project of this nature is managing change. The project impacts on every individual in the organisation who creates or receives records (including e-mail). Users need to adjust to a shift in the way records are classified (moving from classifying by subject or not at all to classifying by functions and activities using the thesaurus terms), which can take time to learn. In addition, some staff may experience difficulties in adjusting to the new processes and use of the new technology.

Suggested solution: Spend a significant part of the project dealing with change management issues and reassess these at each stage of the project.

Change management issues can involve:

- ensuring that the project is seen as an integral part of the AIMS project, with presentations and staff discussions focussing on both areas
- having a project sponsor and using members of the Information Management Steering Committee to champion the project
- keeping staff informed about the progress of the project using discussions, meetings, staff newsletters, the Intranet site and other sources to promote its aims and objectives
- having regular consultation sessions with staff, such as informal one-to-one discussions, briefings and training (integrated with AIMS where relevant)
- setting up suitable feedback mechanisms - such as a system to register issues, workshops, help desk, quality controllers
- when complete, making accessible via intranets - eg thesaurus and schedule, policy, guidelines, quick reference guides, templates
- assisting in the creation of suitable tools to assist in the use of the thesaurus and disposal authority eg. policies, and guidelines, quick reference guides
- identifying the need for training in records management tools as part of induction training

2. Managing expectations

Alternatively, it is sometimes the case that some users expect too much of the final results of the project, particularly as technology is involved. As a result, if the solution is not what they expected, they may react negatively.

Suggested solution: When communicating with staff make it clear exactly what the new system will and will not do.

3. Monitoring

From preliminary discussions with staff, it appears that previous use of a thesaurus and use of the records management system were sporadic, and deteriorated over time. This will need to be more tightly controlled for the project to succeed.

Suggested solutions: Define mechanisms such as induction and training, refresher courses, monitoring regimes and quality control and reinforce the support of senior management. Development and implementation of these is beyond the scope of this project.

4. Time factor

There is a great deal to achieve in the 6 months of this project. Despite best intentions, the project plan may blow out. For example:

- the ABA is often assigned new responsibilities, such as control of data casting. If this happens within the 6 months, revision of and additions to thesaurus terms and disposal authority entries may be needed
- staff may wish to consult more than what is built into the project plan
- each stage is reliant on the National Archives' approval which could be delayed due to their internal resources
- there is also no scope in the project plan for contingencies such as illness.

Suggested solution: Where possible, variations will be made to the methodology to save time but not encroach on quality (for example, some of the identification of business activities and recordkeeping requirements for Stage 2 and 3 can be done in Stage 1). In addition, the project plan should be reviewed at the end of each stage to ensure the project is still on track. Supervisors and committees should be kept will informed of any problems with timing. Any changes to the project plan can then be negotiated. In addition, the staff who are to be inheriting the tools should be kept informed of the progress of the project so they can deal with any residual tasks.

5. Handover

This is only a 6 month appointment. However, work to maintain the thesaurus and disposal authority, keep training current and manage the rest of the EDMS implementation will continue.

Suggested solution: As recommended above, keep information management staff who will be inheriting the project involved in all phases and ensure they have an understanding of their future responsibilities.

4.10 Tools and Tips to Improve Recordkeeping Practices

4.10.1 Understanding recordkeeping systems

- Introducing the DIRKS Methodology
- Characteristics of Recordkeeping Systems
- Step D – Assessment of existing systems

4.10.2 Understanding the DIRKS methodology

- DIRKS Methodology and Manual

4.10.3 Understanding what you can achieve with DIRKS

- What can you do with the DIRKS methodology?

4.10.4 Using DIRKS to improve compliance with the State Records Act

- DIRKS and the State Records Act

4.10.5 Obtaining support for records management initiatives

- Commencing a DIRKS Project
- Step F: Obtaining IT involvement

4.10.6 Initiating change management

- Tips on Managing Change in Records Management Projects
- Commencing a DIRKS Project

4.10.7 Determining the feasibility of your planned project

- Step A - Making you DIRKS project feasible

4.10.8 Conducting interviews

- Guide to Interviews
- Sample Interview Questions

4.10.9 Developing a management plan for a recordkeeping project

- Sample Management Plan

4.10.10   Sample documentation in the DIRKS manual

- Organisation Context Document
- Sample Recordkeeping Requirements Documentation
- Step D: Sample system assessment

5. DIRKS and the State Records Act

Implementing the DIRKS methodology is not a mandatory requirement under the State Records Act 1998. It is rather a tool that can help you improve recordkeeping in your organisation.

5.1 Mandatory records management standards

Implementing DIRKS can however also help you to meet some of the mandatory requirements issued under the State Records Act.

For example, it can help you to address the key requirement outlined in section 12(1) of the Act which states 'each public office must make and keep full and accurate records' of its activities, and that outlined in section 12(2) which states 'each public office must establish and maintain a records management program'.

See Ensure the creation and capture of records to ensure the creation and capture of records

Full and accurate records must be maintained in recordkeeping systems and records management programs must develop and administer such systems. The manual provides comprehensive guidance about developing recordkeeping systems.

- See Step C – Identification of recordkeeping requirements to help identify organisational recordkeeping needs
- See Step D – Assessment of existing systems to assess the capacity of your current systems to meet your recordkeeping needs
- See Step E – Identification of strategies for recordkeeping to determine ways in which you can better meet your needs
- See Step F – Design of a recordkeeping system to develop recordkeeping systems that will meet your needs, and
- See Step G – Implementation of a recordkeeping system to roll out new or redesigned recordkeeping systems.

The manual can also help public offices to comply with the other mandatory records management standards issued by State Records under section 13 of the Act. It is particularly beneficial in facilitating compliance with the Standard on Records Management.

- See Doing DIRKS: Ensure the creation and capture of records to ensure the creation and capture of records
- See Doing DIRKS: Develop new systems with adequate recordkeeping functionality to develop new systems with adequate recordkeeping functionality
- See Doing DIRKS: Specify and apply Metadata for Managing Records and Information
- See Doing DIRKS: Manage your vital records

5.2 Maintaining accessibility to electronic records

Section 14 of the Act states that public offices must maintain the accessibility of their technology dependent records. This manual can help you to implement strategies to meet this key business requirement.

- See Step C – Identification of recordkeeping requirements to help identify those records that require longer term retention
- See Step D – Assessment of existing systems to determine the capacity of your current systems to manage records for as long as you need them
- See Step E – Identification of strategies for recordkeeping to determine different ways in which you can meet your requirements to maintain accessibility to records
- See Step F – Design of a recordkeeping system to develop recordkeeping systems that will meet your long term accessibility needs, and

- See Step G – Implementation of a recordkeeping system to roll out new or redesigned recordkeeping systems.

5.3   Disposal and archiving requirements

Under section 21 of the Act, all public offices need to have complete disposal authorisation for their records. No record can be destroyed without such authorisation. Working through DIRKS will help you to develop and implement disposal authorities which will enable you to meet this requirement.

Records that are identified as State archives in disposal documentation must be retained indefinitely. This manual can help you design strategies for records' long term retention and implement procedures to enable their transfer as State archives.

- See Create and implement a retention and disposal authority

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Tip: Further guidance

The following State Records publications can also be of assistance:

- Procedures for Disposal Authorisation
- Procedures for Transferring Custody of Records as State Archives

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5.4   Public access requirements

Under Part 6 of the State Records Act, public offices are required to provide public access to records that are over thirty years of age. Working through DIRKS can help you consider how this requirement can be managed.

•See Manage record access and security

Tip: Further guidance

The following State Records publication can also be of assistance:

- Procedures for Making Access Directions

Related Information

- State Records Act 1998

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