

Information Management Maturity Measurement

Developing IM in Your Organisation

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INTRODUCTION

About This Document

This document has been developed to use with the IM3 assessment tool developed by the Public Record Office Victoria (PROV). It contains information about each of the characteristics in the assessment, and includes:

- A description of each Information Management characteristic
- Suggestions for developing your organisation's current level of maturity, and
- References to Victorian Government and other resources.

Assessing Overall Results

The IM3 results can be used to indicate an overall status of information management in your organisation. For example:

- If the majority of characteristics (e.g. 10 out of 17) were assessed at Level 2, this may indicate an overall underdeveloped program of Information Management initiatives.
- If the majority of characteristics were assessed at Level 3 or 4, you may want to consolidate practices at these levels by consulting the relevant standards and policies.

Examine your results to see if there are any patterns or trends that can inform your planning and actions. For example:

- Are the results strong in one dimension but weak in other? For example, the PEOPLE characteristics are well developed, but all ORGANISATION characteristics are underdeveloped?
- Do the results point to an issue in a particular business function, e.g. all operational characteristics are underdeveloped, but strategic characteristics are strong?
- Do the less mature characteristics fall under the responsibility of a single area of the business or many? Do you have influence or control of these characteristics?
- Are there dependencies between the characteristics that you can identify? For example, the 'Accessibility & Discovery' characteristic is underdeveloped because it is dependent on developing 'Business Systems & Tools'?

1. PEOPLE

1.1: Information Literacy & Responsibility

About this Characteristic

Information literacy has been defined as ‘the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand’. One of the six key WoVG Information Management Principles is that ‘Information is recognised as a valuable asset’. The productive use of this asset therefore requires its practitioners be taught to understand its role and value in the organisation, and how to acquire the skills and knowledge to use it effectively.

Information Overload

It has been said that we are living in the ‘information age’, with technology and the internet providing instant access to unprecedented amounts of data. But in the workplace, the sheer volume of information available can result in:

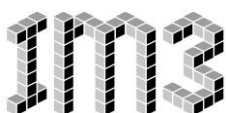
- information overload or anxiety
- disinformation or misinformation
- inadequate technological skills to access or use the knowledge, and
- difficulty locating information.

This is particularly applicable to staff working in public service, where information is central to the operation of government.

Information Literacy Skills

Information-literate workers can:

- recognise when and how much information is needed
- identify how information is organised
- effectively locate and access information
- evaluate information
- manage information, and
- understand the economic, legal, social and cultural issues in the use of information.



1.1: Information Literacy & Responsibility, continued

Developing Information Literacy

If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Educate yourself about the concept of information literacy in the workplace by reading current literature. Engage the library or records management function to provide some basic information to staff about what 'information literacy' is and the skills it involves.
2 – AWARE	Conduct an evaluation of information literacy skills required in your workplace and comparing this to the current staff skill levels. Include a description of information literacy tasks in job descriptions.
3 – FORMATIVE	Develop a central register of information sources within the organisation with accompanying access guides. Source and promote training sessions on relevant information literacy topics, e.g. how to use search engines, evaluating information and citing digital information. Ask staff from other agencies or professional organisations to provide briefings about their information sources and use.
4 – OPERATIONAL	Include topics related to information literacy on the agenda of an appropriate meeting, or start an online information literacy forum on an internal site. Source training on advanced information literacy topics, e.g. the economic characteristics of information, information value and cost effectiveness and the social context of information literacy in the workplace such as networking, working relationships and maintaining a client orientation.
5 – PROACTIVE	Meet with agencies inside and outside of your department to share learnings and experiences. Incorporate an information literacy policy or statement into strategic documents. Develop an information literacy training program specific to your organisation or work area.

Victorian Government Resources

Resource	Link
WoVG <i>Information Management Principles</i> on the Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/business-systems/information-management/
WoVG Information Management Community of Practice group on the VPS Hub	https://www.intranet.vic.gov.au/connect/wovg-information-management-community-practice

Other Resources

Resource	Link
National Forum on Information Literacy (NFIT)	http://infolit.org/about-the-national-forum/what-is-the-nfil/



1.2: Capability & Capacity

About this Characteristic

Capability is a feature, faculty or process that can be developed or improved, and the individual skills that can be applied to do this. Capability answers the questions:

- *How can we improve our practices?*
- *What competencies do current staff have that can be applied and exploited?*
- *How easy is it to access, deploy or apply any additional capability?*

Capacity is the power to hold, receive or accommodate. Capacity is really about 'amount' or 'volume'. Capacity answers the questions:

- *Do we have enough skills/knowledge/process/policies?*
- *How much is needed?*
- *Will more be needed in the future?*

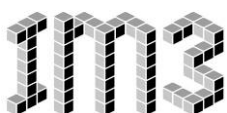
(Adapted from <http://www.innovationthatwork.com/pdf/June08newsltr.pdf>)

IM Capability and Capacity

When thinking about capability and capacity in relation to IM, some relevant questions may be:

- How much IM capability is needed in the organisation?
- What IM competencies do staff currently have?
- Will we develop the capabilities of existing staff or employ new staff?
- Are there key areas of the business where IM capacity should be extended?
- Are staff suitably equipped to work with the IM practices that we want to implement?
- How can we improve our existing IM practices?

An appropriate infrastructure is required to enable effective IM capability management to address strategic business needs. This depends on integrating processes and technology with appropriately skilled, competent and motivated people, focused on delivering clearly articulated business benefits.



1.2: Capability & Capacity, continued

Developing Capability and Capacity

If your organisation is currently at...	Then you may consider the following...
1 – UNMANAGED	<p>Undertake an analysis of the IM capabilities required in the organisation, and compare this to the current capabilities of staff with information management responsibilities.</p> <p>Prepare a statement of IM capacity required in the organisation.</p>
2 – AWARE	<p>Make the relevant human resource area aware of any gaps in IM capability and capacity.</p> <p>Redefine the role of staff identified with IM skills to give them more information management responsibility.</p>
3 – FORMATIVE	<p>Obtain funding for a specialist information management position or consultancy.</p> <p>Investigate central government services that may be available to boost your core capabilities.</p> <p>Promote the benefits of a fully resourced information management capability to management.</p>
4 – OPERATIONAL	<p>Ensure that staff with existing information management skills are provided with ongoing training to keep their capabilities up to date.</p> <p>Ensure that the IM capability and capacity statements are kept up to date to reflect any changes in the organisation requirements.</p> <p>Foster closer ties between information specialists and the Chief Information Officer (CIO) or Chief Technology Officer (CTO).</p>
5 – PROACTIVE	<p>Document and publish your strategy for management of IM capability and capacity planning to a recognised journal or forum.</p> <p>Participate in committees and forums that support and lead information management professionals across government.</p> <p>Institute a program of recognition for information professionals who have key roles to play in contributing to the success of their organisations.</p>

Victorian Government Resources

Resource	Link
<i>WoVG Information Management Principles</i> on the Victorian Enterprise Solutions website.	http://www.enterprisesolutions.vic.gov.au/business-systems/information-management/

Other Resources

Resource	Link
Description of an 'Information Management Specialist' from Queensland Government CIO	http://www.ggcio.qld.gov.au/products/ict-workforce-capability/careers-and-programs/ict-career-streams/information-management-specialist



1.3: Training, Support & Knowledge Sharing

About this Characteristic

Successful Information Management in an organisation requires that appropriate training, support and/or knowledge sharing is provided to staff. Organisations that are less mature in this area may regard technology-based training (e.g. how to use a document management system) as sufficient 'Information Management Training' for staff.

IM Skill Set

Information Management training encompasses a wide range of skills and knowledge, including:

- Knowledge of relevant legislation and standards
- General information and records management principles and practice
- The ability to analyse business processes
- Effective communication skills
- Management of information and records management projects
- Understanding the digital capabilities of business systems used across the organisation.

Training and support does not have to be traditional classroom-based training – it can be provided via a number of methods, including:

- online learning
- intranet strategies
- social network, e-messaging and or blogs
- mentoring and coaching
- provision of job aids and guides
- self-paced learning; and
- workplace practice and projects.

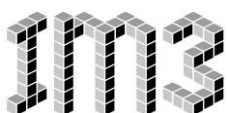
Scope of Training

Your organisation should ensure all staff are trained to understand their information and records management responsibilities. This includes:

- senior management
- ongoing and non-ongoing staff
- full-time and part-time staff; and
- contract and volunteer staff.

Training should:

- outline general information and records management responsibilities
- be tailored to work areas
- consider the organisation's culture; and
- be tailored to your business information systems.



1.3: Training, Support & Knowledge Sharing, continued

Developing Training & Support

If your organisation is currently at...	Then you may consider the following...
1 – UNMANAGED	<p>Conduct a training needs analysis with staff to identify gaps in their information management skills and knowledge.</p> <p>Approach the training function in your organisation to enquire about existing courses they may have available in this area.</p>
2 – AWARE	<p>Investigate external courses available to address the major skill and knowledge gaps (including training available from PROV).</p> <p>Include Information Management training or knowledge sharing in staff personal development plans.</p>
3 – FORMATIVE	<p>Develop customised training and/or knowledge sharing strategies for different user groups in the organisation to address the specific information management needs.</p> <p>Include Information Management training and/or knowledge sharing in orientation for new staff.</p>
4 – OPERATIONAL	<p>Incorporate appropriate evaluation methods into all IM training and knowledge sharing programs to measure effectiveness.</p> <p>Schedule an annual review of IM training and knowledge sharing programs to ensure their currency, effectiveness and relevance.</p>
5 - PROACTIVE	<p>Institute a program of coaching, mentoring or networking in the organisation to assist with the development of less experienced staff.</p> <p>Make your customised training and knowledge sharing available to other agencies and departments.</p> <p>Develop programs to educate staff about future issues and emerging areas in government information management.</p>

Victorian Government Resources

Resource	Link
PROV Recordkeeping Fundamentals online module, and self-paced modules about the recordkeeping standards	http://prov.vic.gov.au/government/training
PROV <i>Operations Management Specification</i> (PROS 10/17 S1), which outlines the requirements for an 'ongoing training and awareness programme covering essential recordkeeping procedures and responsibilities.'	http://prov.vic.gov.au/government/standards-and-policy/operations-management
<i>Information Management Roles and Responsibilities Guideline</i> (IM/GUIDE/01), Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/business-systems/information-management/



1.3: Training, Support & Knowledge Sharing, continued

Other Resources

Resource	Link
Records and Information Management Professionals Australia (RIMPA) Education and Professional Development	http://www.rimpa.com.au/professional-development/
National Archives of Australia (NAA) Training, events and development information	http://www.naa.gov.au/records-management/development/index.aspx
Standards Australia, <i>Knowledge Management: A Guide</i> , AS 5037-2005	Available from Standards Australia: http://www.standards.org.au/Pages/default.aspx
<i>Better Practice Checklist - 13. Knowledge Management</i> , The Australian Government Information Management Office	http://www.finance.gov.au/agimo-archive/better-practice-checklists/knowledge-management.html
<i>A Guide to Managing Knowledge : Turning information into capability</i> , Western Australia Public Sector Commission	http://www.publicsector.wa.gov.au/document/knowledge-management-guide-managing-knowledge-turning-information-capability

2. ORGANISATION

2.1 Governance

About this Characteristic

Central governance within agencies is needed to ensure coordination, visibility and appropriate sponsorship of information management activities. Management of the Victorian Government's information assets in accordance with agreed WoVG principles, standards and statutory requirements requires senior-level leadership and cooperation across business units.

The IMGC

The *Agency Information Management Governance Standard (IM/STD/02)* developed by DTF sets out the requirements for IM governance. Agencies must establish and maintain an Information Management Governance Committee (IMGC) to lead, monitor and report on information management activities.

The IMGC is responsible for:

- providing leadership in information management in line with (WoVG) information management principles
- building organisational capability in information management
- monitoring and reporting compliance with WoVG information-related standards
- ensuring coordination across information-related functions including privacy, freedom of information and information security; and
- providing input into WoVG information priorities via the Deputy Secretaries Leadership Group (DSLG), CIO Council and its reference groups.

Note that an existing governance body may adopt the functions of the IMGC if appropriate.

2.1: Governance, continued

Developing Governance

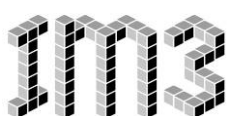
If your organisation is currently at...	Then you may consider the following...
1 – UNMANAGED	Become familiar with the <i>WovG Information Management Governance Standard (IM/STD/02)</i> to understand the role and purpose of the IMGc
2 – AWARE	Examine whether the role of the IMGc can be performed by an existing body or committee, e.g. an ITC Steering Committee, Audit Committee or Process Improvement forum. Contact colleagues in another Department to learn how they have implemented the IMGc in their organisation.
3 – FORMATIVE	Formalise the presence and role of the IMGc in the organisation by documenting the Terms of Reference, developing a standard agenda and scheduling regular meetings for the next 12 months. Gain formal approval for organisation Recordkeeping and Information Management procedures from the IMGc.
4 – OPERATIONAL	Institute a programme of review for the organisation IM policies and procedures that is incorporated in the compliance auditing documentation, to ensure procedures are relevant to key stakeholders.
5 – PROACTIVE	Prepare a report for the Executive or DSLG on how the IMGc has provided IM leadership in the department in line with WovG Information Management principles and standards, with relevant examples.

Victorian Government Resources

Resource	Link
<i>Agency Information Management Governance Standard (IM/STD/02)</i> on the Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/business-systems/information-management/
<i>Information Management Roles and Responsibilities Guideline (IM/GUIDE/01)</i> on the Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/business-systems/information-management/
PROV <i>Strategic Management Specification (PROS 10/10 S1)</i> , which outlines the responsibilities, accountabilities and authorities for organisation recordkeeping functions	http://prov.vic.gov.au/government/standards-and-policy/strategic-management

Other Resources

Resource	Link
National Archives Australia (NAA) explanation of 'Information Governance'	http://www.naa.gov.au/records-management/strategic-information/information-governance/index.aspx
Podcast on Search Content Management.com, 'Best practices in implementing an information governance policy', (15 mins), Jonathan Gourlay interviews Barclay Blair, Via-Lumina Group	http://searchcontentmanagement.techtarget.com/podcast/Best-practices-in-implementing-an-information-governance-policy



2.2 IM Strategy & Vision

About this Characteristic

An Information Management Strategy is an organisation's vision for its information management, and the systematic approach to achieving this vision. It acknowledges the extent to which a modern organisation depends on information, and considers how this valuable asset should be managed.

"A culture of information management is one that recognizes the strategic value of information to the institution and promotes and facilitates good information management practice."

(Hanson, Terry "Making the Case for the Information Strategy", *Research Bulletin 12*, 2011. Boulder, CO: EDUCAUSE Center for Applied Research, 2011)

Symptoms of Poor Strategic Management

Kate Walker, CEO of RIM Professionals Australia, has outlined the following signs that Strategic Management has not been successfully combined with Information Management in an organisation:

- Organisational knowledge is not leveraged to maximum competitive effect
- Storage media and IT infrastructure is swamped with uncontrolled content
- Innovation is stifled by poor collaboration and restricted knowledge sharing
- Employee productivity is crushed by information fatigue
- Processes are inflexible, hampering business reorganisation and outsourcing
- Data leaks, litigation and compliance infringements damage the business.

(Walker, Kate "When strategic management meets information management", *IQ – The RIM Quarterly*, Vol 29, Issue 4, November 2012)

IM Strategy Content

The content of a formal IM Strategy may include:

- Vision and objectives for the organisation's information management approach
- Links to corporate and strategic objectives
- Organisational SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)
- A statement of current situation, including identification of information assets and types
- Environmental analysis, including all applicable policy, standards and regulation
- Detail about standards adopted in your organisation such as records management, metadata and security and access controls
- Key strategies to achieve the 'future state' information management
- A high-level implementation and action plan, including identifying who is responsible for information and records management

Importantly, the IM Strategy must be endorsed by senior management.

Legislation

Legislation specific to your organisation or its business will need to be reflected in your information management strategy. At a minimum, this should include:

- *Public Records Act 1973*
- *Privacy and Data Protection Act 2014*
- *Health Records Act 2001*

2.2: IM Strategy & Vision, continued

Developing IM Strategy and Vision

If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Investigate what an IM Strategy involves and what it might contain. Identifying whether your organisation already has an IT Strategy in place and how much this contributes to or suggests an overall IM Strategy.
2 – AWARE	Look at examples of IM Strategies that have been developed by other agencies, departments or organisations.
3 – FORMATIVE	Seek support to draft an IM Strategy for your organisation. This may involve developing a funded business case which assesses and identifies resource requirements for the implementation of the Strategy.
4 – OPERATIONAL	Ensure that the objectives and requirements of the IM Strategy are being supported through the business, particularly in the Information Technology area, and addressing any gaps.
5 – PROACTIVE	Ensure that the IM Strategy is assessed on an annual basis. Make sure that plans for key inter-organisation and cross-jurisdictional strategic projects, programmes and systems include information management requirements.

Victorian Government Resources

Resource	Link
PROV <i>Records Management Strategy Guideline</i> (PROS 10/10 G5), which outlines the steps involved in developing and implementing a Records Management Strategy	http://prov.vic.gov.au/government/standards-and-policy/strategic-management

Other Resources

Resource	Link
Hanson, Terry 'Making the Case for the Information Strategy' (Research Bulletin 12, 2011). Boulder, CO: EDUCAUSE Center for Applied Research, 2011 – with a focus on IM in universities	http://www.educause.edu/library/resources/making-case-information-strategy
<i>Guidelines for Developing an Information Management Strategy</i> , A report prepared by Coopers & Lybrand and the JISC's Information Strategies Steering Group	http://web.archive.org/web/19980125112630/www.jisc.ac.uk/pub/infstrat/
Australian National Audit Office, <i>Recordkeeping including the Management of Electronic Records</i> , Audit Report No. 6, 2006–07, 2006	http://www.anao.gov.au/uploads/documents/2006-07_Audit_Report_61.pdf
National Archives Australia (NAA) 'Strategic Information and records management'	http://www.naa.gov.au/records-management/strategic-information/index.aspx
AIIM ([American] Association for Information and Image Management), '8 Factors to Consider When Creating an Information Management Strategy'	http://www.aiim.org/pdfdocuments/40480.pdf



2.3 Strategic Alignment

About this Characteristic

The requirements and objectives in the IM Strategy must align with the organisation's other management systems and business strategies. For example:

- Information Technology
- Security
- Risk
- Occupational Health & Safety
- Recordkeeping, and
- Environmental Management.

Inclusion in Projects & Programs

It is also a requirement of the PROV *Strategic Management Specification (PROS 10/10 S1)* that records management requirements are incorporated in all key inter-agency, intra-agency and cross-jurisdictional strategic projects, programs and systems.

Relationship of IT and IM Strategies

The relationship between it an the organisation's IM Strategy and IT Strategy can be confusing, as they address many of the same areas. The following quote suggests the relationship of these two strategies:

*"The concept of an IT strategy cannot be divorced from the broader notion of an information strategy. The former is a necessary component of the latter...It follows that the IT strategy should be designed to facilitate the objectives and requirements of the information strategy...
...then this would suggest that the [IM strategy] stands as the relatively fixed statement of principles, whilst the [IT strategy] would be somewhat more nimble as it responds to circumstances and opportunities. The IT strategy, then, might take the form of a rolling program covering no more than three years, based on the broader strategic principles, managed and monitored...through the governance machinery."*

(Hanson, Terry "Making the Case for the Information Strategy" Research Bulletin 12, 2011, page 10. Boulder, CO: EDUCAUSE Center for Applied Research, 2011.)

2.3: Strategic Alignment, continued

Developing IM Strategy and Vision

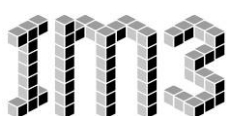
If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Identify what strategic plans and documents are already in place in the organisation.
2 – AWARE	Finalise the organisation's information management goals and objectives so they can be aligned with other strategies. Identify how specific information management goals can be aligned with or incorporated into other strategies.
3 – FORMATIVE	Work closely with the IT area to identify synergies and dependencies between the IM and IT strategies. Liaise with other areas of the business to see how the organisation's information management goals and objectives can fit into their strategic plans, rather than setting a separate strategic vision.
4 – OPERATIONAL	Ensure that the information management strategy and vision is incorporated into and aligned with all strategic plans across the business, especially into high-level corporate strategic planning.
5 - PROACTIVE	Consider expanding the 'general' IM Strategy into several information sub-strategies that address particular business streams or processes.

Victorian Government Resources

Resource	Link
PROV <i>Strategic Management Specification</i> (PROS 10/10 S1)	http://prov.vic.gov.au/government/standards-and-policy/strategic-management
PROV <i>Records Management Strategy Guideline</i> (PROS 10/10 G5), which discusses how the Records Management Strategy links to other business strategies. (See Appendix 2 of the Guide - 'Key Related Business Strategies').	http://prov.vic.gov.au/government/standards-and-policy/strategic-management

Other Resources

Resource	Link
Hanson, Terry "Making the Case for the Information Strategy" (Research Bulletin 12, 2011). Boulder, CO: EDUCAUSE Center for Applied Research, 2011.	http://www.educause.edu/library/resource/making-case-information-strategy



2.4 Management Support & Leadership

About this Characteristic

The success of an organisation's Information Management Strategy and practice relies upon the support of all levels of management and strong overall leadership and advocacy. This includes ensuring the link is made between information management capabilities and wider strategic objectives.

There are significant risks associated with knowledge and information mismanagement, therefore ownership and leadership needs to be clear within departments and across government.

Management Questions

Consider the following questions in relation to information management and leadership in your organisation:

- Does senior management actively support information and records management policies and practices?
- Do middle managers actively encourage staff to comply with information and records management policies and practices?
- Has a robust information and records management culture been instilled into your organisation?
- Have sufficient funding and other resources been allocated for information and records management?

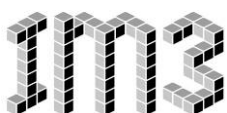
(Australian National Audit Office, *Recordkeeping in Large Commonwealth Organisations*, Audit Report No. 7, 2003-04, 2003, 'Recommendation 3')

Role of IMGC

The Information Management Governance Committee (IMGC) has an important role in sponsoring and promoting IM in the organisation. The IMGC must be chaired by an executive-level officer and includes the following functional representation:

- Department or Agency CIO (or equivalent)
- Chief Information Security Officer (CISO); and
- Senior line-of-business representatives with significant information assets under their management.

(See also characteristic 2.1 *Governance*).



2.4: Management Support & Leadership, continued

Developing Management Support & Leadership

If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Identify possible actions that could be taken to increase support and leadership for Information Management in the organisation, and raise the topic with an appropriate manager.
2 – AWARE	Review whether Information Management interests are currently represented on any executive level strategic, risk or quality forums, and identifying where there are opportunities for representation.
3 – FORMATIVE	Formalise Information Management representation on appropriate executive level meetings. Review whether current senior executive employment agreements/contracts, job descriptions and performance plans document organisation-wide and strategic responsibility for recordkeeping.
4 – OPERATIONAL	Ensure that a senior executive, designated by the head of the government organisation, has been assigned organisation-wide and strategic responsibility for Information Management and recordkeeping, and that this responsibility is documented, communicated and assessed on an annual basis.
5 – PROACTIVE	Encourage cultural change through promoting an understanding Information Management at executive level, and recognising and rewarding good behaviours.

Victorian Government Resources

Resource	Link
PROV <i>Strategic Management Specification</i> (PROS 10/10 S1)	http://prov.vic.gov.au/government/standards-and-policy/strategic-management

Other Resources

Resource	Link
Australian National Audit Office, <i>Recordkeeping in Large Commonwealth Organisations</i> , Audit Report No. 7, 2003-04, 2003	http://www.anao.gov.au/uploads/documents/2003-04_Audit_Report_7.pdf



2.5 Audit & Compliance

About this Characteristic

This characteristic addresses both:

- how your organisation complies with information and records management standards, policies and procedures, and
- to what degree staff perform tasks in accordance with these standards.

Compliance must be monitored to ensure that appropriate records are created and effectively managed. Regular audits can identify gaps or problems and help to develop strategies to address these issues. All audits and reviews of organisation functions and activities include an assessment of the organisation's compliance with its information management and recordkeeping policy and procedures.

Assessing Compliance

To assess your organisation's compliance look for:

- established monitoring and compliance programs
- benchmarks for quantitative and qualitative measurement
- reporting arrangements; and
- evidence of follow-up action.

Management have a key role in ensuring that all staff are aware of their responsibilities, trained appropriately and carry out their duties accordingly.

Recordkeeping System Compliance

Requirements around compliance auditing of recordkeeping systems are outlined in the *PROV Operations Management Specification*, which requires that 'recordkeeping frameworks, procedures and practices must be audited at least every two years to ensure the organisation is operating in compliance with its' recordkeeping procedures.'

2.5: Audit & Compliance, continued

Developing Audit & Compliance

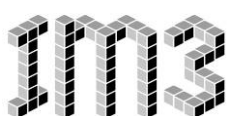
If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	<p>Identify the key IM compliance points that should be audited.</p> <p>Identify the audit measures that should be in place to ensure compliance.</p>
2 – AWARE	<p>Provide information to supervisors/managers about how to conduct regular checks of files and content to confirm that appropriate procedures are being followed.</p> <p>Consult with divisional executives and key stakeholders to establish the audit schedule for specific areas, divisions, sections or business units.</p>
3 – FORMATIVE	<p>Formalise the audit program in a document, and gain endorsement from the senior executive with Information Management responsibility.</p> <p>Develop a an audit schedule and distribute to all staff.</p> <p>Ensure that compliance requirements are being communicated throughout the organisation and are consistently applied to Information Management and recordkeeping activities.</p>
4 – OPERATIONAL	<p>Ensure that corrective actions address the root causes of any non-compliance, and that such actions are undertaken in a systematic and timely fashion.</p> <p>Include references to better practice Information Management and recordkeeping in staff performance agreements.</p>
5 - PROACTIVE	<p>Examine how audit results can influence Information Management legislation, policies and standards.</p> <p>Explore opportunities to improve compliance in high-risk areas (e.g. web-based technologies).</p> <p>Benchmark compliance practices against other agencies and organisations.</p>

Victorian Government Resources

Resource	Link
PROV <i>Operations Management Specification</i> (PROS 10/17 S1)	http://prov.vic.gov.au/government/standards-and-policy/operations-management
Victorian Auditor-General's Office (VAGO), <i>Records Management Checklist</i> (to audit your recordkeeping practices against PROV standards)	http://www.audit.vic.gov.au/reports_publications/reports_by_year/2008/20080730_records_checklist.aspx

Other Resources

Resource	Link
Standards Australia, <i>Australian Standard Records Management</i> , AS ISO 15489.1, 2002, '6: Policy and responsibilities'	Available from Standards Australia: http://www.standards.org.au/Pages/default.aspx
State Records NSW, <i>Monitoring recordkeeping performance</i>	http://www.records.nsw.gov.au/recordkeeping/advise/monitoring/monitoring-recordkeeping-performance



3. INFORMATION LIFECYCLE & QUALITY

3.1 Asset Management

About this Characteristic

Information assets are critical to decision-making and service delivery in government. Like other assets, information needs to be managed, maintained and have its value maximised. A custodianship program is a powerful way to achieve better information management and use by:

- clearly assigning and recording responsibilities,
- educating staff on their responsibilities, and
- identifying high value and high risk information assets.

Information Asset Custodian Standard

The *WOVG Information Asset Custodianship Standard* requires that each department/agency:

- identify their significant information assets
- establish and maintain an Information Asset Register (IAR) register of these significant information assets
- develop an organisation-specific custodianship model which articulates key responsibilities in the management of significant information assets
- assign these responsibilities and accountable individuals against the information asset in their register; and
- educate staff on their roles and responsibilities.

A 'significant information asset' is a discrete collection of data or information, stored in any manner, which is recognised as valuable to the organisation. For example:

- Information assets that are mandated by legislation to be accessible.
- Assets that are sensitive and could cause embarrassment, damage or legal consequences if accessed or used inappropriately.
- An asset of valuable to the public.

3.1: Asset Management, continued

Developing Asset Management

If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Familiarise yourself with the WOVG standards on information assets and custodianship. Start to identify the significant information assets in your organisation.
2 – AWARE	Begin to develop an Information Asset Register (IAR). Nominate appropriate information custodians and information owners for each asset.
3 – FORMATIVE	Communicate the existence of the IAR and role of custodians and owners throughout the organisation. Ensure that Custodians and Owners understand their responsibilities, and register and maintain information assets through their lifecycle.
4 – OPERATIONAL	Develop a forum for Information Custodians and Owners to share their experience and knowledge, and promote standards. Ensure that custodians are actively with information users to improve the usability and sharing of their information assets.
5 – PROACTIVE	Ensure that information assets that are jointly owned by multiple organisations or agencies have formally documented custodial responsibilities. Review and update the Information Asset Register (IAR) on a regular basis.

Victorian Government Resources

Resource	Link
<i>Information Asset Custodianship Standard</i> (IM/STD/01), Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/busines-systems/information-management/
<i>Information Management Roles and Responsibilities Guideline</i> (IM/GUIDE/01), Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/busines-systems/information-management/
PROV <i>Strategic Management Specification</i> (PROS 10/10 S1). Section 2.1: Responsibilities, Authorities & Accountabilities	http://prov.vic.gov.au/government/standards-and-policy/strategic-management

Other Resources

Resource	Link
A factsheet about identifying and classifying information assets from the Queensland Government Chief Information Office	http://www.qgcio.qld.gov.au/products/qgea-documents/548-information/2347-information-assets-and-their-classification
A practical guide to information that should be captured in an Information Asset Register from the Queensland Government Chief Information Office	http://www.qgcio.qld.gov.au/products/qgea-documents/548-information/2343-information-assets-register-guideline-is44-toolbox



3.2 Policies & Procedures

About this Characteristic

While there are whole-of-government standards about information management and recordkeeping, your organisation should develop and promote its own information management policies and procedures. These policies and procedures will provide the basis for staff to create and manage authentic, reliable and usable information assets and records for business and accountability purposes.

Note that:

- A *policy* is a concise document that identifies responsibilities and rules.
- A *procedure* provides step-by-step details regarding how to do something in accordance with the rules.

IM Policy vs. IM Strategy

The Information Management Strategy and Information Management Policy are two related but different initiatives and documents.

- A *strategy* defines the overall character, mission and direction of an organization. The focus of a strategy is on an organisation's long-term relationship with its external environment, and specifies what an organization will be doing in future. Strategies are formulated and implemented with a view to achieve specific goals.
- A *policy* tells people what they should and should not do in order to contribute to the achievement of corporate goals. It explains how goals will be attained and makes the strategy of the business explicit. Specific procedures are then derived from policies.

(Adapted from Citeman.com, 'Strategy versus Policy', <http://www.citeman.com/11817-strategy-versus-policy.html>)

Characteristics of an Effective Policy

An effective information and records management policy will:

- Align with the organisation's environment, strategic direction, policy framework, and IM/recordkeeping programme
- Reflect current business and legislative needs
- Be endorsed and actively supported and resourced by the senior executive
- Be implemented and communicated regularly across the whole organisation
- Cover all systems that contain records
- Cover all practices associated with records
- Be linked to related business policies and programmes
- Be supported by sets of procedures, guidance, and tools
- Enable compliance assessment to be monitored; and
- Be assessed regularly.

Content of an IM Policy

An information and records management policy should contain:

- A expression of commitment to effective information management
- Information and records management principles to be followed
- The responsibilities for information and records management, and
- Principles for developing and implementing more detailed processes and procedures.

These policies must cover records of all formats (for example, paper, email, websites, online transactions and other systems) and be accessible to all employees.

3.2: Policies & Procedures, continued

Developing IM Policies & Procedures

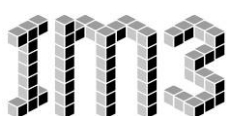
If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Analyse any existing IM strategy documents to identify policies that need to be developed.
2 – AWARE	Consult with relevant managers and stakeholders to start to provide an understanding of what should be included in an Information Management Policy, and how the policy will fit with information and recordkeeping practices across the organisation.
3 – FORMATIVE	Ensure that policies are supported by documented and practical procedures for staff.
4 – OPERATIONAL	Ensure that policy and procedures are distributed and available to all organisation staff. Ensure that breaches of policy are actively addressed and rectified.
5 – PROACTIVE	Plan for periodic reviews and updates of the policy and procedures to ensure relevance and effectiveness. Assess the application of policies to confirm that they adequately meet the organisation's information management needs and requirements.

Victorian Government Resources

Resource	Link
<i>WoVG Information Management Principles & Standards</i> on the Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/business-systems/information-management/
Resource	Link
PROV <i>Records Management Policy Guideline</i> (PROS 10/10 G1) contains information about developing and implementing a Records Management Policy	http://prov.vic.gov.au/government/standards-and-policy/strategic-management

Other Resources

Resource	Link
Standards Australia, <i>Australian Standard Records Management</i> , AS ISO 15489.1, 2002, '6.2: Policy' and '2.2: Records management policy statements	Available from Standards Australia: http://www.standards.org.au/Pages/default.aspx
National Archives of Australia, 'Information and records management policy – template'	http://www.naa.gov.au/records-management/information-governance/key-documents/policy.aspx
State Records NSW, 'The NSW Government Information Management Framework'	http://www.records.nsw.gov.au/recordkeeping/advice/digital-business/nsw-government-information-management-framework



3.3 Meeting Business Needs

About this Characteristic

One of the six WoVG Information Management Principles is that *'Information meets business needs'*. The rationale for this principle is that 'the way that information is developed and managed should be based on its strategic importance. Users should assess if [information assets are] fit for purpose. A key factor in this decision is often data quality.'

Information Needs Analysis

To ensure that staff have access to information that meets their needs now and in the future, an information needs analysis can be conducted. This will provide you with a framework with which you can more pro-actively plan for the future. An information needs analysis aims to answer two main questions:

- What information do we have now?
- What information do we want to have?

The shortfall between these two questions will provide you with the necessary direction to focus your energies.

Determining Needs

Techniques for conducting an information needs analysis may include facilitated discussions, surveys, interviews, workplace observation and task analysis, involving key staff groups in the organisation. Key staff does not only mean executives and management, but those directly involved in the most important day-to-day business activities.

Examples of questions that will help to determine the information needs of particular groups are:

- What type of information is needed? What is required in the short, medium and long term?
- Are there gaps in the current information?
- Do you know where information can be found?
- How can existing information be used better?
- How often is stored information accessed? If information is not frequently used, it should be disposed of? If used often, it should be analysed to determine why, how often, how and by whom it is used?
- Are there any concerns about sharing information?
- How is current data obtained and used and should the source base be widened for the future? What information might be available in the next three to five years?
- How quickly might information be needed in the future and what would be the best way of ensuring needs are met on time?
- How can the organisation ensure information it receives and provides is of consistently high quality?
- Is the information presented in the required format?
- How can better relationships be forged between those who provide information and those who use it?
- What are the likely costs involved in meeting future information needs, and can the organisation afford to meet them or afford not to meet them?

(from Aspire Training & Consulting, Module BSBINM301A Organise workplace information, <http://aspirelearningresources.com.au/assets/document/1283296030-b7inm31.pdf>)

3.3 Meeting Business Needs, continued

Risks of Not Meeting Needs

Risks and symptoms of not meeting information needs appropriately may include the following:

- Difficulty for staff to obtain a single and comprehensive source of information.
- Evidence of a misalignment between strategic business direction and systems architecture.
- Difficulties for staff in searching for and identifying information.
- Staff not being aware of available information resources.
- The proliferation of processing systems, local systems and fragmented information stores.

Better Meeting Information Needs

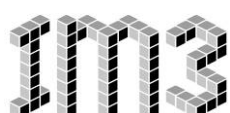
If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Conduct an information needs analysis to identify the specific needs of various user groups in the organisation.
2 – AWARE	Develop a matrix of information needs against the available/current resources, and establishing a risk-based plan to develop key information sources.
3 – FORMATIVE	Identify any information duplication or fragmented information stores in the organisation and planning for their integration or elimination.
4 – OPERATIONAL	Ensure that that there is a single point of truth for key information assets, and that information custodians manage and maintain information quality. Identify the mix of internal and external information sources to ensure that the correct balance is met.
5 - PROACTIVE	Develop data quality statements for significant information assets and put processes in place to improve data quality where needed.

Victorian Government Resources

Resource	Link
WoVG <i>Information Management Principles</i> on the Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/business-systems/information-management/

Other Resources

Resource	Link
<i>Data Quality Assessment</i> , by Arkady Maydanchik, 2007 (book)	Chapter 1, 'Causes of Data Quality problems', can be previewed at Amazon.com: http://www.amazon.com/Data-Quality-Assessment-Arkady-Maydanchik/dp/0977140024/ref=pd_bbs_sr_3/002-4402384-4616030?ie=UTF8&s=books&qid=1181219680&sr=8-3#



3.4 Accessibility & Discoverability

About this Characteristic

Another of the six WoVG Information Management Principles is that ‘Information is easy to discover’. As Government is largely a knowledge-based industry, the public, government employees and partner organisations must be able to find the information they need when they need it to function efficiently.

Discoverability

‘Discoverability’ is the degree to which something can be easily found and/or navigated. It includes concepts like:

- Metadata – Making information easier to find by applying appropriate metadata.
- Security and Privacy – Restricting access to some information due to security, privacy, confidentiality or commercial risks.
- Standards - Agencies working towards a common cross-government information directory and other mechanisms for facilitating information discovery.

Note that while search technology is an important component of an overall information environment, search technology it is not a substitute for good information management cultures and processes.

Accessibility

Accessibility encompasses the issues surrounding the availability, accessibility and affordability of information, such as:

- interoperability
- multilingualism
- open source software
- open content
- Creative Commons licences, and
- addressing the special needs of people with disabilities.

Developing Accessibility & Discoverability

If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Test the discoverability and accessibility of information in your organisation with real users and real information needs and examining the results to identify issues.
2 – AWARE	Develop standards for the organisation one area to improve accessibility and discoverability, e.g. file naming standards, document titles and labelling.
3 – FORMATIVE	Address the barriers to discovery and accessibility, e.g. existing administrative structures. Ensure your organisation’s web-based information is compliant with the Victorian Government <i>Accessibility Standard</i> (see resources following)
4 – OPERATIONAL	Implement online analytics to identify the most commonly used resources, and least used resources, and identify the reasons behind their frequent/infrequent use.
5 - PROACTIVE	Share your standards for information access and discoverability with other government and non-government organisations so they can easily access your information. Make your organisation’s information discoverable and accessible to groups who may have traditionally not had equal access to your information.



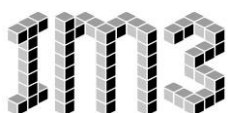
3.4 Accessibility & Discoverability, continued

Victorian Government Resources

Resource	Link
WoVG <i>Information Management Principles</i> on the Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/business-systems/information-management/
<i>Victorian Government Websites Principles and Requirements</i> (WEB/STD/1-11) on the Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/business-systems/online-and-mobile/

Other Resources

Resource	Link
Microsoft Research, 'Environmental Informatics Framework'	http://research.microsoft.com/en-us/projects/eif
Search Content Management.com, 'Build the business case for an enterprise search platform', Podcast (15 mins), Jonathan Gourlay interviews Scott Liewehr, Digital Clarity Group (user registration may be required)	http://tinyurl.com/acbbfk
UNESCO Communication and Information Programmes - Information Accessibility	http://www.unesco.org/new/en/communication-and-information/intergovernmental-programmes/information-for-all-programme-ifap/priorities/information-accessibility/



3.5 Information Use & Reuse

About this Characteristic

Another of the six WoVG Information Management Principles is that '*Information is easy to use*'.

- Information 'usability' addresses how information is collected, organised, described, presented defined and shared. The term 'usability' is often used in relation to web sites and user interface design, but can apply to any information source.
- Information 'reuse' addresses the concept of 'Interoperability', which is the ability of organisations to share data and information by the use of common standards, licences and open data.

Principles of Usability

The following are some principles of usability that can be applied to assess information sources, especially electronic information and systems.

Principle	Description
Navigation	Is the structure and organisation of the document, system or site clear to a user? Is there a site map, contents, index, search function or other finding aid? Does the structure of the information support the purpose of the information?
Control	Does the user have the freedom to control or filter the information they see? Is there the ability to undo a mistake? Can users exit the system or information when they choose to, or are they locked into a specific path?
Language	Is language clear, simple and appropriate to the audience? Does the language follow real-world conventions, making information appear in a natural and logical order?
Feedback	Is there a feedback or help function available?
Consistency	Is the layout and design of the site/page consistent? Is terminology used consistently? Can users predict the content of a page or screen by its title?
Visual clarity	Is the layout of information clear, uncrowded and pleasing to the eye? Are labelling, sub-headings or tables used to provide better access to information?

Information Reuse

The European Union has issued a directive for its member states to encourage public sector information to be made available for re-use and sharing. It is based on the recognition that "the public sector collects, produces, reproduces and disseminates a wide range of information in many areas of activity, such as social, economic, geographical, weather, tourist, business, patent and educational information." Some of the guidelines for information include:

- Documents should be available for re-use in all formats and languages available
- Information should be made available by electronic means where possible
- Practical tools should be provided to find the available material for re-use more easily, e.g. lists of information assets or portal sites.

In Victoria, agencies are encouraged to share their data between agencies and with the public via the Victorian Government Data Directory, also known as data.vic.gov.au. This is a specialised website that helps members of the public find datasets and data tools that exist on government websites.



3.5 Information Use & Reuse, continued

Developing Information Use & Reuse

If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Analyse information sources in your organisation against the usability principles detailed on the previous page.
2 – AWARE	Apply usability principles to existing information to improve use and access. Identify and list the information in your organisation that may be of use or interest to other groups.
3 – FORMATIVE	Introduce organisation standards have to facilitate standard information collection, description and organisation, and to prevent information duplication.
4 – OPERATIONAL	Share and re-use information across the organisation and with external stakeholders as appropriate. Ensure that appointed custodians work with information users to increase usability of the information.
5 - PROACTIVE	Release appropriate information and datasets to the public via the Data Vic initiative.

Victorian Government Resources

Resource	Link
WoVG <i>Information Management Principles</i> on the Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/business-systems/information-management/
Victorian Government Data Directory (owned by the State Government and administered by the Department of Economic Development, Jobs, Transport and Resources)	www.data.vic.gov.au
Department of Treasury and Finance Intellectual Property Policy and Guidelines	http://www.dtf.vic.gov.au/Victorias-Economy/Victorian-Government-intellectual-property-and-data-policies/Intellectual-Property-Policy
DataVic Access Policy	https://www.data.vic.gov.au/policy-and-standards

Other Resources

Resource	Link
<i>Digital Continuity</i> on National Archives of Australia website	http://naa.gov.au/records-management/digital-transition-and-digital-continuity/digital-transition-policy/what-is-digital-continuity/index.aspx
Europe's Information Society Thematic Portal, Directive on the re-use of public sector information	http://ec.europa.eu/information_society/policy/psi/rules/eu/index_en.htm



4. BUSINESS SYSTEMS & PROCESSES

4.1 Information Architecture

About this Characteristic

Information Architecture (IA) refers to the design, arrangement and layout of an organisation's information and the inter-relationships of information systems. An IA Plan or document outlines how an organisation's information and records must be described and organised. This makes it easier for information to be delivered in the correct context to the correct people.

Information Architecture Document

The IA document will normally contain a description of the following:

- The main business processes in the organisation.
- Which business systems store what data and records, and in what format.
- The relationships between different business systems, including the duplication or re-use of data.
- Standards to be used when labelling and categorising information, including the use of terminology and metadata.
- The design of navigation, indexing and search systems.

To ensure a high level of adoption throughout the organisation, the Information Architecture should:

- be enterprise-wide in its scope
- have high-level endorsement for its intent, application and evolution
- promote flexible, standards-based information sharing and re-use; and
- be intrinsic to governance decisions for new system initiatives and business process change management.

(Adapted from *Check-up 2.0*, National Archives of Australia, Commonwealth of Australia, 2010)

Relationship to Enterprise Architecture

In a mature organisation, there will be a close and coordinated relationship between the Information Architecture and the other strategies that make up the organisation's Enterprise Architecture. This may include the:

- Business Architecture, which articulates the functional structure of an enterprise in terms of its business services and business information.
- Information Technology Architecture, which is a blueprint of how an organization's IT and information management elements work together to efficiently accomplish the mission of the organization, including business activities, processes, data sets, information flows, applications and software.

4.1 Information Architecture, continued

Developing Information Architecture

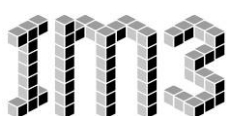
If your organisation is currently at...	Then you may consider the following...
1 – UNMANAGED	Investigate what an Information Architecture is and how it would be of benefit to the organisation. Define the organisation's information vision, objectives and principles.
2 – AWARE	Identify any architectures that the organisation already has in place, and think about how the Information Architecture would relate to this. Capture a snapshot or baseline of your organisation's current information environment.
3 – FORMATIVE	Gain the support of a senior manager to support the development of the Information Architecture. Draft an 'ideal' Information Architecture to inform your direction and goals.
4 – OPERATIONAL	Ensure that all new projects and initiatives in the organisation are informed by the vision of the Information Architecture. Ensure that the Information Architecture is maintained, managed and resourced accordingly.
5 – PROACTIVE	Share the outcomes and benefits of the Information Architecture with other departments and organisations.

Victorian Government Resources

Resource	Link
<i>Victorian Government Websites Principles and Requirements</i> (WEB/STD/1-11) on the Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/business-systems/online-and-mobile/

Other Resources

Resource	Link
Australian Government Information Management Office, Australian Government Architecture Reference Models	http://agimo.gov.au/policy-guides-procurement/australian-government-architecture-aga/aga-rm/
Australian Government Web Guide, 'Information Architecture'	http://webguide.gov.au/finding-content/information-architecture/
The Information Architecture Institute (based in USA)	http://www.iainstitute.org/



4.2 Process Improvement

About this Characteristic

Business process improvement is a systematic approach to help an organisation optimise its underlying processes to achieve more efficient results. In regard to information management, process improvement can be used to:

- identify the sources and flow of information in the organisation
- identify and eliminate information duplication
- define the logical arrangement and grouping of information
- define business contextual links between information, and
- implement preventative or corrective actions.

Process Analysis

There are two main types of analysis that can be used to identify process improvements:

- **Functional analysis** – Grouping together all the processes undertaken to achieve a specific, strategic goal of the organisation, which uncovers relationships between functions, processes and transactions.
- **Sequential analysis** – Mapping a business process in a linear and/or chronological sequence which reveals the dependent relationships between the constituent transactions.

(Australian/New Zealand, *Standard Information and documentation – Work process analysis for recordkeeping*, SA/SNZ TR ISO 26122:2012)

Business Process Management & Data Governance

Business process management can also benefit the information governance program. For example:

- *Data at the source* – The intelligent use of business process tools can help data custodians to reach back into upstream processes to fix data quality issues at the point of creation.
- *Data custodian efforts* – The data governance program will have a higher probability of success if it focuses on a high-impact business process and a handful of critical attributes.
- *Value of data governance to the business* – The business may say that IT owns the data, but they will never say that IT owns the business process. So starting from the business process is a good way to engage business users around data governance.

4.2 Process Improvement, continued

Developing Process Improvement

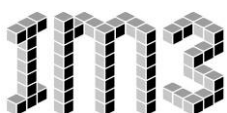
If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Identify the business processes in your organisation related to information management and documenting their current operation.
2 – AWARE	Analyse your business processes to identify points of duplication, information bottlenecks and opportunities for improvement.
3 – FORMATIVE	Select a single business processes to be the focus for improvement, and measure the results.
4 – OPERATIONAL	Ensure that any business process improvement exercises align with the organisation's strategic goals.
5 – PROACTIVE	Benchmark your business processes with other organisations to identify opportunities for further improvement.

Victorian Government Resources

Resource	Link
PROV <i>Continuous Improvement Guideline</i> (PROS 10/17 G6) for recordkeeping	http://prov.vic.gov.au/government/standards-and-policy/operations-management

Other Resources

Resource	Link
Australian/New Zealand, <i>Standard Information and documentation – Work process analysis for recordkeeping</i> , SA/SNZ TR ISO 26122:2012	Available from SAI Global: http://infostore.saiglobal.com/store2/Details.aspx?ProductID=1600278
<i>How to Map Data Governance Policies to Business Processes</i> , on Information Management.com	http://www.information-management.com/news/how-to-map-data-governance-policies-to-business-processes-10023600-1.html



4.3 Business Systems & Tools

About This Characteristic

WoVG standards do not mandate a particular business information system or records management system. However, the PROV *Recordkeeping Standard for Operational Management* does require that 'all systems which contain public records must be effectively managed over their life, from acquisition to decommissioning, to ensure the system's integrity, reliability and performance quality'. This includes business applications, websites, databases and email systems.

The Victorian Government ICT Strategy (2013 to 2014) also outlines eight principles that should govern ICT decision making in the Victorian Government, including:

- Information will be shared, open and managed as an asset
- ICT systems will be interoperable, modular and reusable, and
- ICT services will take advantage of industry capabilities, including the use of off-the-shelf products with no little customisation.

What is a Business Information System?

A business information system is any system that assists an organisation to perform its business and manage information. Examples include case management systems, staff management, pay systems, and finance systems. In supporting your organisation's business, systems that manage information need to work so that records:

- can be proven to be genuine
- are complete, accurate and can be trusted
- are secure from unauthorised access, alteration and deletion
- are findable and readable, and
- are related to other relevant records.

To achieve these characteristics, business information systems designers, owners and managers must take a systematic and consistent approach, by identifying information and records management requirements for their current and future systems.

Electronic Document Management Systems

The electronic management of records will not necessarily require the implementation of a single corporate-wide electronic document management system (EDMS). For many entities, the management of records in a corporate EDMS as well as selected electronic systems with recordkeeping functionality will best meet their recordkeeping requirements.

However, as recordkeeping should be considered in the context of an entity's broader information or knowledge management strategy, entities should consider options to connect or link those systems used to manage records to facilitate access to records and information by staff.

4.3 Business Systems & Tools, continued

Paper Records

Management of digital records will generally not eliminate the need for organisations to maintain some paper records and to use information in paper form when conducting their day-to-day business. For example:

- Records with a security classification above the security level of an entity's network and other electronic systems will need to be maintained and stored in paper form to meet Australian Government security requirements.
- Some records of historical significance will also continue to be maintained in paper form.
- Records that will lose their original functionality if converted from paper to an electronic medium.
- Original records that need to be retained to meet legal requirements, for judicial proceedings or to meet specific government policies.

For many organisations, such records will represent a small proportion of their total record population. In practice, therefore, organisations will generally need to manage their records in a combination of both paper and electronic form.

Recordkeeping policies and guidance should, as a minimum, specify the form in which records are to be maintained. Importantly, it also requires any electronic system that is used to manage records to have the necessary recordkeeping functionality.

Unmanaged Environments

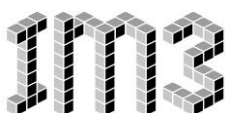
Information is likely to be held in a number of different systems, but should not exist in unmanaged environments where oversight is limited or impossible. Systems should contain both information and metadata and enable the context of each record and its relationship to other records to be understood, even if those records are held elsewhere.

Future Requirements

Organisations should also plan for technology variables that might be needed to support its information assets in the future. For example, changing access requirements, the addition or removal of information and the impact of new or amended policy.

Developing Business Systems & Tools

If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Review or audit the current business systems. Identify access, login requirements, information stored, information format, and whether the same information stored in another system within the organisation.
2 – AWARE	Speak to colleagues at other agencies to find out what business technologies they are using and their experiences with those systems.
3 – FORMATIVE	Identify where information management tools and systems could be combined or integrated across business units.
4 – OPERATIONAL	Analyse to what degree the technology is supporting the goals and aims of the organisation's information management strategy, and where there are any remaining gaps. Ensure there is a policy in place for system decommissioning or migration when a business system is no longer required.
5 – PROACTIVE	Examine and adopt improvements from other agencies about emerging IM technologies and tools.



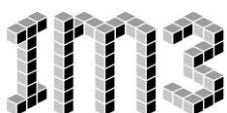
4.3 Business Systems & Tools, continued

Victorian Government Resources

Resource	Link
Victorian Government ICT Governance	http://www.enterprisesolutions.vic.gov.au/business-systems/ict-governance/
International Council on Archives, <i>Principles & Functional Requirements for Records in Electronic Office Environments</i> , Module 1: Overview and Statement of Principles	http://prov.vic.gov.au/wp-content/uploads/2011/05/ICA-M1-overview-principles.pdf
International Council on Archives, <i>Principles & Functional Requirements for Records in Electronic Office Environments</i> , Module 2: Guidelines and Functional Requirements for Electronic Records Management Systems	http://prov.vic.gov.au/wp-content/uploads/2011/05/ICA-M2-ERMS.pdf
International Council on Archives, <i>Principles & Functional Requirements for Records in Electronic Office Environments</i> , Module 3: Guidelines and Functional Requirements for Records in Business Systems	http://prov.vic.gov.au/wp-content/uploads/2011/05/ICA-M3-BS.pdf

Other Resources

Resource	Link
Australian National Audit Office, <i>Recordkeeping including the Management of Electronic Records</i> , Audit Report No. 6, 2006–07, 2006	http://www.anao.gov.au/uploads/documents/2006-07_Audit_Report_61.pdf
International Organization for Standardization (ISO), <i>Information and documentation – Work process analysis for records</i> , ISO/TR 26122, 2008	Available via the ISO website: http://www.iso.org/iso/home.html
International Organization for Standardization (ISO), <i>Information and documentation – Principles and functional requirements for records in electronic office environments – Part 1: Overview and statement of principles</i> , ISO 16175-1, 2010, '4.1: Components of successful digital business information management'	Available via the ISO website: http://www.iso.org/iso/home.html



4.4 Information Privacy & Security

About this Characteristic

The *Privacy and Data Protection Act 2014* addresses the need for an integrated, whole of government approach to data security, including protective security, as an essential part of strengthening the privacy and protected information handled by and on behalf of the Victorian public sector. The Act also outlines the Information Privacy Principles (IPPs) to protect personal information held by Victorian Government organisations.

Victorian Protective Data Security Framework (VPDSF)

The new WoVG Victorian Protective Data Security Framework (VPDSF) is currently being implemented by the Commissioner for Privacy and Data Protection (CPDP).

As part of the VPDSF, the CPDP has developed Standards which outline the Core Principles of Information Security and the requirements for Victorian Government agencies.

Victorian Protective Data Security Standards (VPDSS) Requirements

The VPDSS requires agencies to actively manage information security risk through the development and implementation of the following:

- Security Risk Profile Assessment
- Protective Data Security Plan

Developing Information Privacy & Security

If your organisation is currently at...	Then you may consider the following activities...
1 – UNMANAGED	Review the <i>Privacy and Data Protection Act 2014</i> , the VPDSF and Standards to become aware of Information Privacy and Security requirements.
2 – AWARE	Start developing a plan to meet the requirements of the VPDSF. Liaise with CPDP and other organisations to gain insight and assist with planning.
3 – FORMATIVE	Develop a plan to conduct a Security Risk Profile Assessment and develop a Protective Data Security Plan. Develop strategy to educate staff in the organisation about Information Privacy and Security.
4 – OPERATIONAL	Implement a Security Risk Profile Assessment and Protective Data Security Plan to meet requirements of the VPDSF. Actively implement Information Privacy and Security strategy in the organisation.
5 - PROACTIVE	Share the outcomes and benefits of applying the VPDSF with other departments and organisations. Prepare to review the Protective Data Security Plan every 2 years or when a significant change occurs.

4.4 Information Privacy & Security, continued

Victorian Government Resources

Resource	Link
Victorian Protective Data Security Framework	https://www.cdpd.vic.gov.au/menu-data-security/data-security-vpdsf
<i>Privacy and Data Protection Act 2014</i>	https://www.cdpd.vic.gov.au/menu-about/about-cdpd/about-cdpd-legislation
Identity and Access Management policies (IDAM POL 01-02) on Victorian Enterprise Solutions website	http://www.enterprisesolutions.vic.gov.au/business-systems/identity-and-access-management/

Other Resources

Resource	Link
Australian Government Information Security Manual (ISM)	http://www.dsd.gov.au/infosec/ism/index.htm
Protective Security Policy Framework (PSPF)	http://www.protectivesecurity.gov.au/Pages/default.aspx

