

Information Management Advice 22 Records Management Using SharePoint 2010 - considerations

Introduction

The purpose of this Advice is to provide some practical help in relation to the use of the Microsoft tool, SharePoint.

What is SharePoint?

Microsoft SharePoint 2010 is a software product with a range of uses, including website development, content management and collaboration. SharePoint allows users to collaborate on the creation, review and approval of various types of content, including documents, lists, discussions, wiki pages, web pages and blog posts.

SharePoint 2010 is not a recordkeeping system (i.e. a system purposely designed to capture, maintain and provide access to records over time). When implemented “out of the box”, SharePoint 2010 has limited capacities for capturing and keeping records in a way that supports their ability to function as authentic evidence of business.

See the section below on “*Designing a SharePoint implementation*” for advice on options for implementing SharePoint 2010.

What is an Electronic Records and Document Management System (EDRMS)

An EDRMS is a robust electronic records management system, specifically designed to manage records over time, maintain metadata and links between records, integrated or interfaced with:

- Standard office applications (MS Word, Excel, PowerPoint, Images)
- Standard electronic messaging systems, such as email clients
- Other mainstream applications already installed, e.g. imaging systems
- Particular business information systems (BIS) used by business units. These may include supporting document/content management solutions such as Microsoft SharePoint 2010

Using SharePoint 2010 as a Records Management System

As an “out of the box” product, SharePoint 2010 (SP2010) does not provide the full range of recordkeeping functionality required to enable you to comply with recordkeeping standards as laid down by the State Archivist. As a stand-alone product SP 2010 does not offer complete Electronic Document and Records Management System (EDRMS) functionality. However, if used in conjunction with third party tools and with suitable configuration, it is possible that compliance could be achieved. For example, SP 2010 can be integrated with an existing EDRMS to provide enhanced portal and collaboration tools while still using an EDRMS to manage physical and digital records. EDRMS vendors such as Objective, TRIM, and Open Text provide integration options with SP 2010 for this purpose.

Implementation Considerations

Solutions need to be carefully assessed and questions you should consider asking your vendor include:

- How much does it cost – does it provide value for money?
- How easy and expensive is it to integrate – does the third party solution require an integrator / consultant to implement?
- What is the impact of the solution – does it alter the underlying infrastructure of SharePoint 2010?
- What are the upgrade implications for the EDRMS and SharePoint 2010?
- Is it scalable – can the solution meet potential future demand?
- What is the exit strategy – will the third party solution hinder migrating records to another platform from SharePoint 2010?
- What is the long-term support plan – is the third party well enough established to provide ongoing support or can the organisation manage support for it?

An EDRMS may be supported by other document/content management solutions, such as Microsoft SharePoint 2010.

SharePoint 2010 as an EDRMS - Functionality Considerations

In SharePoint 2010 there is no single records management model. Instead there are different choices and options. However, without a single records management model it may not be easy for implementers to decide upon and to sustain a coherent approach to records management across the organisation. Information managers need to ensure that vendors configure SharePoint 2010 to provide specific records management functions whether through configuration of SharePoint 2010 or use of add on software.

For SharePoint 2010 to achieve EDRMS functionality, it requires customisation to provide functionality in the following areas:

- Management and tracking of both physical and electronic documents and records (audit trails of access and use etc.)
- Records disposal functionality
- Records and document classification structure, for the application of disposal, whether it be in the form of classification, taxonomy, folksonomy, thesaurus

- Recordkeeping metadata for paper and electronic records (document loaned to, external organisation etc.)
- Bar-coding
- Records Management functionality for paper records, booking records in and out, creation of boxes etc.
- Security on individual records and files, SharePoint 2010 security is similar to active directory, there is no inherited control of security or ability to apply Tasmanian Government Information Security Classification labelling – this can be manually managed or added with a third party add-on
- Conversion of record types, other than those created with MS Office products, to long term, open preservation formats - all systems require this ability
- Reporting for records management purposes
- Electronic recordkeeping storage for automated workflows which would enable documents to be captured as records as part of normal business processes

Key Areas that will need to be filled by add-on software or complex configuration to achieve compliance are:

- Native security classification and access control – despite having item level security SharePoint 2010 is unable to impose classifications on information, or to control access effectively
- Physical and hybrid information management tools – SharePoint 2010 is focussed on electronic records and is unable to manage paper and other physical format information effectively
- Ease of email capture – despite SharePoint 2010 supporting email enabled lists and libraries, third party Outlook add ins are still required to simplify user capture of email and required metadata capture

SharePoint 2010 when combined with effective third-party providers can be an effective information management tool, particularly for smaller organisations with less complex corporate records management functions, where the majority of the information is digital content, generated by MS Office, collaborative sites or directly using web sources. It is not suitable for complex recordkeeping environments where there are a lot of paper and other physical format records.

SharePoint 2010 is a collaboration tool in that it is good for creating a collaborative working space for a geographically distributed project team to work on similar things, including wikis and blogs. Information Managers need to review the ongoing management considerations of configuring SharePoint 2010 with add on software for use as a compliant recordkeeping system. Considerations include:

- Structure and management around it to establish and enforce adequate standards for a Government agency to use, for example integration with business systems requires standardised metadata across business and recordkeeping systems
- Once customised it requires resources to support the system and the various add on tools which are required to provide security, email integration, management of a classification structure etc.
- Upgrading an off the shelf system once it has been extensively customised becomes a major project and makes a standard upgrade very complex as all of the integrated products need to be tested against the upgrade and perhaps upgraded themselves

For more information on the considerations of implementing an EDRMS see National Archives of Australia publications Implementing an EDRMS Checklist, Key Considerations, Lessons from Agencies and Case Studies. ¹

¹ <http://www.naa.gov.au/records-management/publications/index.aspx>

It is worth noting that many of the concepts on which records management is based in SharePoint 2010 (content types, document sets, routing rules, and the records centre) are unique to SharePoint 2010 and hence not necessarily shared by the wider information management community.

Here are some more detailed comments regarding particular aspects of SharePoint. These have been identified by the UK National Archives in "Records Management in SharePoint 2010 – Implications and Issues".²

1. Deletion of records

Microsoft states the following in regard to deletion of a "team site" in SharePoint 2010:

"When you delete a [team] site collection, you are deleting a hierarchy of sites that comprise the collection. When you delete a site collection, you permanently destroy all content and user information..."

This means that a "team site" and its content cease to exist within SharePoint 2010 - deleting documents, including any records which had been "declared in-place". Users may not know what has been lost as no audit trail would be available for the deleted content other than the action to delete a team site. Team site deletion must be restricted and controlled with a clear policy and firm administrative controls within SharePoint 2010.

2. Metadata management

SharePoint 2010 has a number of issues in relation to management of metadata for records. For example, records sent to the record centre can lose the metadata relating to their previous location. This issue can be resolved within SharePoint 2010 but must be configured to do so.

3. Export of metadata

Records exported from SharePoint 2010 can lose their contextual metadata creating significant records management risks. This can lead to difficulty in managing records out of SharePoint 2010 without losing their context.

4. Disposal

Within SharePoint 2010 disposal is usually associated with key dates of the record (e.g. date created, date last modified). This means it is not possible to create disposal triggers for related records (which have different content types) using an external event as the trigger for disposal (e.g. end of financial year).

Owing to this, it is likely that complex processes will need to be developed to establish disposal for related records of differing content types; or to allow external events to trigger disposal. Without this, records will be disposed of on an ad-hoc basis outside of defined disposal policies. This creates an environment where disposal would quickly become unmanageable, and a risk of records being disposed of improperly.

5. Email

Integration with MS Outlook is not supported by SharePoint 2010, meaning storage and management of emails in context with associated records cannot be performed out-of-the-box. However, third party solutions can provide options to allow MS Outlook integration.

² <http://www.nationalarchives.gov.uk/documents/information-management/review-of-records-management-in-sharepoint-2010.pdf>

SharePoint Online

SharePoint Online is a cut-down version of the full SharePoint product. The advantages to this are that the full version of SharePoint is a complex product, and hence SharePoint Online can focus the user on what is actually needed.

However, the key areas that SharePoint Online doesn't support are:

- Business Connectivity Services (connecting to outside data sources and systems) Records Centre functionality
- Much of the Business Intelligence and Performance Point functionality
- Advanced search features

The Implementation of SharePoint 2010 with an EDRMS can provide an organization with a platform to support Web 2.0 and collaboration business activities and records management features.

Designing a SharePoint implementation

SharePoint 2010 must be configured or enhanced with add-on software to ensure that it can create, capture and keep records in a way that supports their ability to function as authentic evidence of business. This section of the Advice examines the different ways in which SharePoint's features and functionality may be extended to facilitate good recordkeeping.

I. Configuration versus customisation

SharePoint 2010 must be configured to provide or extend certain recordkeeping features and functionality. However, care should be taken to avoid customising a SharePoint 2010 implementation (e.g. by making direct changes to the database schema, modifying files on the file system or excessively modifying the out of the box templates).

If customised rather than configured, a SharePoint 2010 implementation may become unsupported. This will make it difficult, if not impossible, to update SharePoint 2010 or upgrade to a newer version, thereby risking the integrity and long-term management of the records managed in the SharePoint 2010 implementation.

While licence costs for SharePoint 2010 may be relatively inexpensive, the costs of configuration could be substantial. As a SharePoint 2010 implementation often consists of a series of collaboration sites, any estimation of costs should consider that each site may need to be specifically configured to meet the particular recordkeeping requirements of the relevant business area.

Detailed and complex configuration is required to provide certain recordkeeping features and functionality. Records management staff should ensure that they have a thorough understanding of what SharePoint 2010 can and cannot do before undertaking or requesting any configuration. Public offices should only consider undertaking this type of configuration if their IT staff have the capacity to develop and maintain the configured features and functionality over time.

Detailed and complex configuration might also be undertaken if an agency wishes to significantly tailor its SharePoint 2010 implementation to meet its own particular organisational needs. Some examples of more complex configuration include the creation of application sites, which are "stand alone" sites dedicated to managing a particular type of content, and project sites, which may incorporate a range of project management features.

Some configuration can be avoided by implementing add-on software or integrating SharePoint 2010 with a separate EDRMS.

2. Add-on software

There are numerous software products available that extend the features and functionality of SharePoint 2010. Organisations may choose to implement one or more products to enhance SharePoint 2010's existing recordkeeping features and functionality or to provide specific additional records management capabilities (e.g. the ability to easily capture email records).

Add-on software ranges from web parts and „apps“ that provide one or two additional features or pieces of functionality to extensive software suites that aim to make a SharePoint 2010 implementation compliant with records management standards (e.g. ISO 16175 Information and documentation – *Principles and functional requirements for records in electronic office environments and Modular requirements for records systems*.³

When assessing add-on software it is important to consider:

- how easy the software is to implement and how much it will cost to implement, including whether a consultant will be needed to implement the software ?
- the impact of the software, and whether it alters the underlying infrastructure of SharePoint 2010 (i.e. whether it customises, rather than configures, SharePoint)?
- whether the software is scalable and is likely to be able to meet potential future demand?
- the financial stability of the software company, and whether or not they are likely to continue to exist and be able to provide support over the life of the software?
- the extent and degree to which the software company works with Microsoft, and whether they are likely to provide updated versions of their software promptly when SharePoint is upgraded.?

Implementing add-on software may hinder future upgrades to newer versions of SharePoint 2010. The more products implemented, the more complex an upgrade – each add-on product will need to be tested against the upgrade and perhaps upgraded itself.

3. Integration with a separate EDRMS

SharePoint 2010 can be integrated with an electronic document and records management system (EDRMS). This approach often appeals to organisations that are already using a particular EDRMS, especially if the EDRMS has previously been integrated with other business systems in use within the organisation.

While integrating SharePoint 2010 with an EDRMS might be perceived as a relatively straightforward way of ensuring that records in SharePoint 2010 are managed as authentic evidence of business, there are a number of points to consider:

- An integration will require ongoing synchronisation. If changes are made to the way in which either SharePoint 2010 or the EDRMS is configured, the integration may require additional testing and adjustment. Additional testing and adjustments will also be required if either SharePoint 2010 or the EDRMS is upgraded to a newer version.
- Providing two repositories of information may be confusing for users when searching for records. This confusion can be mitigated through training and other change management initiatives.

³ http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=55791

Alternatively, an integration could be designed so that records are managed in the EDRMS but accessed, together with other content, through SharePoint 2010 (i.e. without having to use the EDRMS and possibly without users realising that the records are stored in a separate repository).

- Maintaining both SharePoint 2010 and an EDRMS will require an organisation to employ staff with skills in both products, or advice and assistance on both products from external service providers.
- Maintaining two products instead of one can result in substantial additional costs for an organisation, including costs for licences, infrastructure, support and maintenance.

4. Documenting design and configuration decisions

It is possible to implement SharePoint 2010 so that particular features are enabled or disabled and configured in different ways. It is critical to make records of all design and configuration decisions to promote the longevity and sustainability of a SharePoint 2010 implementation, and to support future upgrades, enhancements and migrations. Functional and technical documentation should include details of the SharePoint 2010 features enabled and disabled, and how they were configured, as well as any rules embedded in the implementation.

It is also important to document any add-on software implemented, including the version implemented, where the software was applied, and how the software was configured.

Agencies should ideally document all such decisions before rolling out SharePoint 2010 to users.

Making decisions about shared or network drives

SharePoint 2010 is often implemented as a replacement for the use of shared or network drives. Following an implementation, an agency might choose to:

- bulk migrate all records to SharePoint 2010 and then delete them from the drives. See *Advice 42 Structuring shared network drives for recordkeeping*, available on the TAHO website
- migrate records to SharePoint 2010 as needed and then delete them from the drives
- make the drives 'read only'
- allow users to continue to keep and edit working documents on the drives
- remove all user access to the drives.

Decisions about shared or network drives should be accompanied with the necessary change management.

Further Advice

For more detailed advice please contact

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Acknowledgements

Records Management in SharePoint 2010 - Implications and Issues, UK National Archives. ⁴
Microsoft Sharepoint and EDRMS, Advice by State Records of South Australia (July 2011) ⁵
The SharePoint Cloud: Benefits of Office 365, (CMS Wire 12/5/2011) ⁶
Is there a sustainable and scalable records management model in Sharepoint 2010? by James Lapin (AIIM, 28/7/2010) ⁷
Implementing SharePoint 2010 as a Compliant Information Management Platform Wise Technology management 2010
SharePoint 2010: recordkeeping considerations Guideline by State Records of New South Wales (no. 26, 2012) ⁸

Information Security Classification

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

Document Development History

Build Status

Version	Date	Author	Reason	Sections
3.0	March 2015	Christine Woods	Template	All
2.0	2013	Grace Nieuwenhuizen	Update to SharePoint latest version	Designing a SharePoint Implementation
1.0	2012	Allegra Huxtable	Initial Release	All

Amendments in this Release

⁴ <http://www.nationalarchives.gov.uk/documents/information-management/review-of-records-management-in-sharepoint-2010.pdf>

⁵ <http://www.archives.sa.gov.au/content/digital-records-management>

⁶ <http://www.cmswire.com/cms/enterprise-collaboration/the-sharepoint-cloud-benefits-of-office365-011210.php#null>

⁷ <http://thinkingrecords.co.uk/2010/07/28/does-sharepoint-2010-have-a-sustainable-and-scalable-records-management-model/>

⁸ <http://www.records.nsw.gov.au/recordkeeping/advice/designing-implementing-and-managing-systems/sharepoint-2010-recordkeeping-considerations/introduction>

Section Title	Amendment Summary
All	Document imported into new template
Designing a SharePoint Implementation	Update to include section on how to configure SharePoint 2010 for records management

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