
Information Management Frameworks & Solutions for Office 365, SharePoint, & Hybrid Environments
The Ever-Changing Landscape

Modern day organizations handle records management in much the same way they did decades ago. When a record was created, records managers would classify it, file it and store it, having a high level of control over the lifecycle. Many organizations continue to take the same approach with records management in the digital world as they did in the physical world, even with the advent of enterprise content management (ECM) solutions. This has a significant impact on end users who are forced to execute unfamiliar and at times, confusing, records management tasks, into new ways of working that don’t suit these old-fashioned requirements.

As electronic information grows, records managers are still trying to maintain the same level of control and oversight, but in today’s digital environment, this model is no longer effective or realistic. It’s time to evolve with the digital world, and this guide is designed to show records managers, information managers, IT administrators and organization leaders how it can be possible to use Microsoft Office 365, SharePoint or a hybrid deployment to manage information.

The records management landscape is changing and growing dramatically, which is both a challenge and opportunity for records managers. The global electronic document management market is poised to grow to $6 billion by 2024, spurred by the growing use of cloud and hybrid computing, BYOD initiatives, and big data (Global Market Insights, 2017).
How NARA Has Changed The Game For Federal Records

New Federal Record Compliance Milestones

The National Archives and Records Administration (NARA), the archival authority of the US federal government, has published their Managing Government Records Directive which lays out three critical targets for next generation of federal records management compliance.

The first was enforced in 2016 when NARA implemented the federal records regulation that all email communication is managed electronically. By 2019 all public sector organizations will have to manage their permanent records electronically. Finally, by 2022, NARA will no longer accept any federal records into their archives in physical format. This includes legacy content.

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What this means is that agencies will be able to transfer physical items to NARA up to 2022, but after that, if they’re still holding them, the cost and process to digitize records before they are transferred to the archive.

Failing to transfer physical information prior to the Dec. 31, 2022, cut-off could have significant financial impact to agencies, both from a digitization perspective, but also an ongoing storage and management perspective.
Federal Records Modernization Initiative (FERMI)

Another important NARA federal records management modernization initiative agencies should track is the Federal Electronic Records Modernization Initiative (FERMI), which has two essential outcomes.

1. To proactively address changing trends in electronic records management by setting policies for new solutions and services—what they are calling the Universal ERM Requirements.

Previously, NARA had adopted the DOD 5015.2 standard. While the DoD’s record management standard is extremely comprehensive, it also hasn’t been updated in a very long time. It is important to note that NARA has NOT unendorsed the DOD 5015.2 standard.

The Universal ERM requirements outline high-level requirements for records management systems, and agencies can use them as a checklist when researching solutions for compliance. These new requirements are a big step towards modernization, in that they look at a variety of records formats including web records, social media as well as traditional documents and emails.

NARA is also developing detailed use cases for implementation to support these requirements so that agencies understand how the requirements should be implemented in practical terms. Use cases for email records have already been released, with others to follow as they are developed.

2. To help agencies obtain electronic records management solutions and services fitting their needs through an improved procurement process.

While NARA and the General Services Administration’s Unified Shared Services Management Office worked together to develop the Universal ERM requirements, GSA’s Integrated Workplace Acquisition Center incorporated these requirements into Multiple Award Schedule 36.

Additionally, Special Item Number 51600 has been created specifically for electronic records management systems. Under this SIN, contractors and vendors can certify that they meet the requirements of the standard, and agencies can purchase records management solutions confident they will be compliant.

Managing the lifecycle of electronic records that have been born digitally is important for agencies’ records management modernization efforts.
Information managers have many and varied responsibilities including: establishing business policies, classifying and tagging content, defining business rules and taxonomy structures, and designating actions to push information through its lifecycle. Information managers are also under pressure to constantly prove value across the business, but they face some intense challenges in doing so.

**Corralling the Information Explosion**

The volume of information available to the world is growing exponentially. **Approximately 90 percent of the data that exists in the world today was created only within the past two years** (Marr, 2015). That is equal to more than 1.7 quadrillion bytes of data being created every minute worldwide (Domo, 2017).

Part of this growth is due to the amount of information being created by users in their day-to-day jobs. Every email, document, Skype message, calendar item, and spreadsheet created by every information worker needs to be appropriately managed.

However, **with so much data being created every day, there is no way information managers can evaluate it with the same level of oversight as the days of paper and filing cabinets.** That means organizations usually turn to technology tools and services to keep up with data creation.
Finding and implementing the right technology infrastructure to handle records management isn’t easy either. Achieving and maintaining compliance requires significant IT investment on behalf of the whole organization. Usually, effective records management that meets all the organizations’ requirements call for multiple systems which need to play nicely together and seamlessly integrate. Easier said than done...

To make matters worse, information managers need to be fluent across all of these systems in order to ensure nothing pertinent slips through the cracks. This means that information managers not only need to be information experts, but now they also need to be technology experts as they are responsible for vast amounts of data, spread over multiple systems that require technical expertise, on top of managing their physical files.
Frequently Changing Global Regulations

Just as technology tools are changing, regulations and compliance standards are increasingly important as governments continue to globally mandate digital transformation. Regional and national standards apply to both the commercial and public sectors in addition to international standards, such as ISO 15489, which outlines global best practices for information creation, capture and management.

The stakes are higher than ever for information managers. With regulations that change frequently, more opportunities for potential litigation, and devastating fines for non-compliance, managing data correctly has never been more important.

Complications of Collaboration

With the advent of collaboration tools like SharePoint and Office 365, Microsoft has taken a fresh and innovate view, both for how users can work, and how information can be managed. One of the biggest benefits of Office 365 and SharePoint for end users is the seamless collaboration functionality, whether your model is on-premises, a hybrid deployment or moving all into Office 365. With tools like Skype, Teams, Groups, and more available at end user’s fingertips, it’s now easier than ever for people to work together. However, any information manager will attest that these tools can be challenging in terms of records and information management compliance.

New communication tools mean new data is being created and captured all the time, which poses scary challenges for information managers.

- How do we classify all these pieces of data?
- How do we have oversight of these pieces of information?
- How can we accurately capture everything we need to stay compliant?
- What would the lifecycle of this type of information look like?

Collaboration tools can sometimes leave information managers in the dark, with little visibility, control, or input as to how information stemming from collaboration tools is being classified and stored.
Over-Reliance on End Users

Thirty to forty years ago, successful records management relied on employees to put paper records in an official file and follow the appropriate process to keep their information available and secure.

In today’s digital world, that same basic premise persists. We haven’t changed much, we just ask the end user to electronically ‘put something in a file’ by declaring it as a record. The days of physical records may be over, but the pressure on end users is still the same, if not worse.

Successful records management in the digital workplace still usually relies on users declaring records and tagging them with the appropriate metadata. This process is oftentimes outside of the user’s standard routine, which means to maintain compliance, users need to know exactly when something stops being a document and becomes a record then stop what they are doing, navigate to the content, and manually declare their records.

While the process of declaring records isn’t necessarily difficult for users, it is complex and interrupts productivity. So frankly, sometimes users just don’t do it. Without employee participation, that leaves the organization at a huge risk.

There shouldn’t be a reason for end users to declare records at all—the content should be managed appropriately whether it’s been declared or not. Relying on end users is particularly impractical when now, technology exists that can automate the process of information management from start to finish.

As information managers need to oversee the exponential amount of data within the organization and master the content systems in digital records management, they must guide end users along the records management journey. Since information has become digital, relying on end users shouldn’t be part of the strategy anymore.
Even though information managers face a lot of challenges in their roles, these challenges are not insurmountable, especially when the right technology infrastructure and frameworks are in place.

This chapter will explore why a risk-value framework is essential to modern day records management and how to implement one within your organization. Then how diving into Office 365, SharePoint and third-party solutions can create the technology infrastructure necessary for modern day records management.

Balancing Risk & Value

To ensure compliance, information managers can ease the burden on end users by creating a risk-value framework upon which records management policies are implemented.

Back when everything was physical, it was easy to manage each piece of content individually because the volume could be controlled. Nowadays, with information growing exponentially, it’s practically impossible to have the same level of oversight as the sheer volume of data is too great.
A risk-value framework helps information managers assess which content is the most valuable, and at the same time, presents the most risk. An example of this might be documents that contain personal or sensitive information, or information that is valuable commercially. This kind information is usually easily identified as it is the information that needs to be kept for the longest period of time. This guides the information manager where to dedicate their resources.

**On average, 80 percent of time should be spent managing the information that is the highest risk and most valuable.** This in turn, allows the information manager to determine where end user input should be required. Information that’s low risk and low value should have the least end user oversight. Conversely, high risk, high-value content may require more input from the end user.
CHAPTER 3

Framework for Information Management

Meeting End Users Where They Work

Today’s technology means there is no need to interrupt end users in order to achieve compliance. By developing classification and retention rules that eliminate extra effort from end users to declare records, then it’s possible for information managers to manage information from the point of creation, by stealth. This means the technology works around users, rather than users working around the technology.

This approach applies to all information sources, but it is most beneficial to start with the riskiest systems, like collaboration tools. From there, a framework can be established where content is created, classified, distributed, used, archived, and then disposed of according to the organization’s needs.

Start the records management process as soon as information is created to reduce demands on end users, and improve efficiency across the organization. By using flexible technology to define a clear lifecycle that’s evident from the moment content is created, the organization’s information will be tidier and more streamlined.

This makes it easier for users to search for and find the data they need by automatically and regularly removing redundant information to ensure consistency when metadata is applied. This means there is less system ‘noise’ for end users to deal with when searching for or accessing information as this consistent and reliable metadata can be used for everything from workflows to information aggregation.
Office 365 and SharePoint offer a plethora of cutting edge collaboration and productivity tools for users, in addition to helpful features for information managers. While these solutions are usually seen as IT’s domain, it is important for information managers to be involved in cloud computing decisions when it comes to content creation and information management.

**Office 365 & Records Management**

The great thing about using Microsoft cloud solutions like Office 365 for records management is the ability to reach users where they’re already working and centrally manage records across the network. This is in stark contrast to records management processes of the past that encouraged users to file their information away in a physical archive or system that wasn’t part of their day-to-day business activity.

Cloud-based solutions are easy to scale and leverage to roll out risk reduction strategies. It has almost reached the point of being a ubiquitous presence, to the point where it’s harder to avoid than to embrace them!

With the records management features of Office 365, Microsoft has changed the game again. They have taken a fresh look at records and information management and have provided tools and concepts that are new, easy-to-use and span across Office 365. This integration is extremely advantageous for records management as opposed to having to be restricted to differing levels of management across different silos.
The Labels Concept

The labels feature in Office 365 is a good starting point for information managers. With labels, end users can manually apply a label to their documents, allowing information managers to classify data across Office 365 for governance, and enforce retention rules based on that classification. For example, a user may apply a label called ‘Contracts’ to a document, which will ensure that document is retained until the retention period has expired (e.g. 7 years).

Labels create a chain that links information managers to end users and to Office 365, establishing a streamlined process for records management. Information managers can define the labels and policies, then publish the labels for use. End users then use the labels to classify documents.

And finally, Office 365 automatically enforces the retention rules set by the information manager, or alternatively, automatically labels sensitive information based on criteria set by the information manager. Ultimately, labels give information managers the ability to universally set information management policies and use Office 365 to enforce those policies across a wide array of systems.

But labels don’t always need to rely on end user application; Office 365 can automatically detect sensitive information based on keyword criteria and automatically apply the appropriate label, using a policy. Here’s how:

From the Security and Compliance Center, in the classification menu in Office 365, information managers can create a ‘policy’ to auto apply a label, without user intervention. The information manager assigns search criteria to the policy, allowing the policy to crawl the Office 365 environment for documents.
that match the defined criteria. When it finds these documents, Office 365 will apply the label, which in turn may have been linked to retention or disposal outcomes. It is important to note that auto application of labels through the use of a policy is only available to organizations with an E5 license.

Limitations of Labels

When it comes to records management, Microsoft Office 365 and SharePoint provide a strong foundation for simple records retention. However, organizations with more complex information management requirements will find they need to extend the out-of-the-box functionality to fully manage the information lifecycle. As useful as the labels feature of Office 365 may be, there are some limitations of which to be aware.

One Label, One Action

For example, only one label with one outcome can be applied to each piece of information. This means that each piece of data can result in only retention, disposal or declaration, which limits actions for information that might be more complex, or where information needs to follow a multi-step lifecycle. An example of lifecycle actions might be to declare a document as a record, making it immutable one year after it was last modified, and then destroying the record seven years later.

Limited Triggers

In addition, the triggers for actions related to labels are limited. Retention or disposal can only be applied based on date created, date modified or the date the label was applied, and there isn’t a way to expand that criteria beyond those predefined options.

This could leave organizations short if they need event-based retention, or must apply retention based on other metadata fields. For example, an organization may only want to retain data until the expiration of a certain contract or a number of years after an employee has left the organization.
Labels Only Support Single-Level Classification

Currently, Office 365 labels only support a flat hierarchy. This means that information can only be organized in a single-level classification scheme or taxonomy—subcategories within a classification cannot be created. Organizations that wish to use a more traditional classification schema or file plan will be required to either create more labels within this single-level structure or the structure may not be suitable at all.

Organizations that have invested in building out classification or taxonomy schema using a managed metadata service in SharePoint, cannot port or transfer this into a labels environment. Moving from managed metadata concepts to labels requires significant reworking both due to the flat structure of labels and the lack of import functionality to bring in existing taxonomies.

Reliance on End Users

As with traditional records management, using labels still relies on end users to apply the label to the content. In addition to relying on end users to modify their typical behavior, end users can also become frustrated when they accidentally apply a label with a records declaration action. The user loses the ability to modify, update, or edit the content as the document becomes an immutable record.

Auto-Labelling Limitations

Organizations with an Office 365 E5 license can use policies to auto-apply labels, but this does not apply to labels with a record declaration action. In other words, if an Office 365 label will result in making a document an immutable record, it can only be applied by end users. Going through the process makes an item immutable, but it’s important for organizations to maintain a record of the business decision or action at a particular point in time. For example, an organization can go back and confirm exactly what was included in a policy document from years before. It is important to note that not all organizations have access to an E5 license meaning these important features will not be available.

Access Limitations

End users can find themselves unable to add labels if their organization has disabled the modern user interface in SharePoint Online as the classic user interface doesn’t allow users to add labels. End users are also unable to apply labels within most Office applications—currently Exchange is only supported.
Overcoming Office 365 Limitations

While the innovations for information management in Office 365 is exciting, for organizations with more complex requirements or those in highly-regulated environments, there are still some gaps in end-to-end lifecycle management. AvePoint’s information management solutions for on-premises, online or hybrid implementations allow organizations to meet these challenges head on, without the need for end user intervention or involvement.

Automated Classification Schemes

AvePoint Cloud Records enables information managers to define the appropriate terms in a file plan or classification scheme and apply them to content. This means information is automatically designated for capture, retrieval, maintenance, disposal and preservation of records in Office 365 or SharePoint on-premises from a single interface.

In addition to making the tasks associated with classification and taxonomy more streamlined, the single interface also allows information managers to oversee the process from start to finish, removing any declaration and classification burdens for end users.

AvePoint Cloud Records Interface
Intuitive Retention and Disposal Rules

With AvePoint Cloud Records, information managers can also establish business rules and set actions to manage how and when preservation and disposal activities are implemented. Rules can be based on a variety of criteria, from date to metadata, to type of action. To ensure the rules are enacted in ways that best meet the needs of the organization, these business rules can be applied automatically or manually. Multiple rules can also be applied to terms in your classification scheme or file plan, allowing an information manager to build out a lifecycle for the content to follow.
Native Functionality: One Foot In, One Foot Out

AvePoint’s Hybrid SharePoint Study shows only 22 percent of SharePoint users are all-in the cloud, according to data shared by Microsoft in 2017. Labels only apply in Office 365, and it’s not possible to have overarching and consistent processes when working in a hybrid environment. This means an information manager must manage essentially two different systems, both of which use different models to apply information policies.

Here, There, and Everywhere

When working in an on-premises or hybrid environment, an information manager needs to navigate to the appropriate repositories and find the right settings to complete classification and taxonomy tasks.

What’s more, they need to do this separately for each SharePoint site collection, every site within the collection, and document every library within the site.
Of course, you may then need to configure content types in each of these site collections, which can lead to administrative burden down the road, particularly if the value or retention time of your information changes. That’s a lot of work!

**Obscured Oversight of the Information Lifecycle**

Using SharePoint on-premises or a hybrid deployment doesn’t support the establishment of a central set of business rules, classification scheme or file plan. This means organizations won’t be able to implement their classification rules across certain types of information and information managers will have limited visibility and reporting capabilities.
Hybrid & AvePoint Cloud Records: Keeping a Foot in Both Camps

A Single Pane of Glass

Whether your content is stored in the cloud, on-premises or in a hybrid deployment, AvePoint’s records solutions allow an information manager to use a standard set of policies and processes to manage all information consistently, regardless of where it’s stored. The solution provides a single pane of glass—on-premises, hybrid or in the cloud—for holistic oversight and management. For an information manager, this means not having to manage multiple systems, interfaces or log-ins—but oversee everything from just one place.
**Streamlined Auditing & Reporting**

Tracking progress is much easier using Cloud Records, too. With a flexible and comprehensive set of auditing tools, information managers can create reports and monitor rules to provide a greater understanding of how the organization is meeting compliance needs.

Reports can be configured by different criteria, such as by user or by action, and can help the organization anticipate upcoming actions.

Intuitive auditing and reporting lets information managers be more proactive in managing information outcomes across the business. These reports are also available in a comprehensive dashboard that gives the information management broader insight into what’s happening with their information, across their environment.

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Removing Silos for Electronic & Physical Information

Organizations may still require hard copies of certain information or rely on legacy information from previous years. Unfortunately, Office 365 or SharePoint on-premises don’t have the capability to manage physical content, and lack an easy way to unite paper copies with digital information being created across an organization.

Rather than streamlining how the business manages information, this convolutes the process and forces information managers to straddle cloud technology and the physical record-keeping practices of the past.

Even in the digital age, many organizations still use paper copies of records in some form. AvePoint’s Cloud Records takes this into consideration, allowing information managers to centrally track hard copy records as well. Within Office 365 or SharePoint on-premises, information managers can monitor location information, box management and new content uploads.

Business rules and taxonomy for physical information are the same that’s used for electronic records to maintain consistency between the varying formats. Physical information can also be included in reports, ensuring the organization has a holistic view across the network.
Managing Content for the Long Term

With the rapid release cycle and development of technology solutions, it’s no surprise that information managers have concerns about being able to keep content in the long term. Some organizations even consider anything that needs to be held for more than 7 years as long term!

Organizations may need to transfer records to an archival authority, like NARA, or may want to retain it in a format they’re confident they’ll be able to read in the future. Neither Office 365 or SharePoint on-premises has native capability to export or retain content in a long-term preservation format.

Organizations who need to hold their information for the long term, or even may have to transfer it to an archival authority, can use AvePoint’s Cloud Records to manage this process. Cloud Records can export content to a long-term preservation format that is accepted by archival authorities across the world for ingest into a digital archive. This feature can also be used where there is a requirement to transfer information to different organizations or to a secondary or cheaper storage.
Airways New Zealand: Office 365 Compliance Done Right

The Challenge

Airways New Zealand is an enterprise owned by the New Zealand government. They are subject to the government’s Public Records Act (PRA) as well as strict regulations across the civil aviation, health and safety industries.

Starting in 2015, the enterprise started its move from an aging on-premise infrastructure to the cloud while achieving compliance with strict civil aviation and government regulations such as the new Public Records Act of 2005 (PRA), as well as the Health and Safety Reform Bill of 2016.

The Office 365 environment provided Airways New Zealand with a challenge to ensure electronic records were compliant and meeting Archive New Zealand’s Mandatory Standards for Public Records. Protecting against the loss of records from unintentional user errors like accidental deletion, was also mission critical for the government entity.

Compliance wasn’t the sole ambition for the Airways New Zealand Digital Information team. They also needed to increase audit reporting efficiencies, end-user adoption and maintain an organized collaboration environment.
“Our role is helping people be proactive in Office 365,” said Jenny Ryan, a Digital Information Analyst with Airways New Zealand.

To do this, Airways New Zealand examined a variety of third-party solutions before ultimately turning to AvePoint.

**The AvePoint Solution**

Once in Office 365, Airways New Zealand knew they would need to supplement the native backup capabilities.

“The backup provided out-of-the-box might have been fine if we weren’t a government department, but we need to have the ability to restore item level email and OneDrive content, in addition to documents stored in SharePoint,” said Ryan.

This provided an immediate win when an employee left the company with critical information still living on their OneDrive. Thanks to the Digital Information Team’s vigilance, AvePoint Cloud Backup was able to recover important documents that otherwise would have been lost.

As a public-sector leader that undergoes frequent audits, Airways New Zealand wasn’t satisfied that Office 365’s native functionality could achieve the Public Records Act Mandatory Standards.

They closely examined the metadata required and determined that business activity, access, and record class data are required by the Archives NZ and made those default fields so that working with AvePoint’s Cloud Records rules they can apply archiving and disposal routines to move content in a very automated, efficient and disciplined process.

Additionally, Cloud Records has dramatically improved the appeal of their reporting compared to the native “spreadsheet dump” functionality.
The Digital Information Team discovered their users loved Office 365 Groups and had created more than 280. The team is in the process of implementing AvePoint’s Cloud Governance and GroupHub solutions to organize, delete, manage and clean up the Airways New Zealand Airways Groups environment, before using the Cloud Governance tool to allow users to create their own, PRA compliant Groups without needing to involve the Digital Workplace team.

“We want to make it easy to use a compliant environment,” said Ryan. “Our plan is that if someone wants a SharePoint site or Group, Cloud Governance can help them fill out a questionnaire to label everything for them and get approval, so they can self-serve to improve productivity.”

The Bottom Line

Airways New Zealand wanted an easy-to-use compliant environment. They are looking forward to saving time and the ability to do things they could not do before, with more reporting, capacity and flexibility. Airways New Zealand aims to be a prime example of compliance done right thanks to AvePoint solutions.
REFERENCES


