



# Managing Content Beyond the Corporate Walls: Working in the Cloud

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As the non-profit association dedicated to nurturing, growing and supporting the user and supplier communities of ECM (Enterprise Content Management) and Social Business Systems, AIIM is proud to provide this research at no charge. In this way the entire community can take full advantage of the education, thought-leadership and direction provided by our work. Our objective is to present the “wisdom of the crowds” based on our 193,000+-strong community.

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## Process used and survey demographics

The survey results quoted in this report are taken from a focused survey on Working Beyond Corporate Walls. Two hundred and three responses were collected from individual members of the AIIM community using a web-based tool. Invitations to take the survey were sent via email to a selection of AIIM's 193,000+ registered individuals.



## About AIIM

AIIM has been an advocate and supporter of information professionals for nearly 70 years. The association mission is to ensure that information professionals understand the current and future challenges of managing information assets in an era of social, mobile, cloud and big data. AIIM builds on a strong heritage of research and member service. Today, AIIM is a global, non-profit organization that provides independent research, education and certification programs to information professionals. AIIM represents the entire information management community: practitioners, technology suppliers, integrators and consultants. AIIM runs training programs, which can be found at <http://www.aiim.org/Training>.



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## Introduction

Organizations are faced with the challenge of providing a flexible and secure environment supporting the agile needs of their remote workforce, partners, and clients. In fact, AIIM Research found that **30%** of respondents are seeing increasing use of unofficial cloud content management and file shares. Only **5%** indicated they have an “official” cloud-based option. **19%** prevent access to non-approved sites.<sup>1</sup> Not only does this create additional information silos – that for the most part are unseen by the business – the also present a risk factor from a security, and compliance view.

In today’s business model, organizations must provide support and flexibility in addressing the needs of a growing mobile workforce, and interactions with external partners, suppliers, and clients. In short, today’s business model must look beyond corporate walls and extend their business processes and access to business information in an effective, and secure manner regardless of device type. In this way, cloud applications can be leveraged to enhance and extend business processes beyond their corporate walls and support the increasing use of mobile devices.

This paper presents the challenges and benefits of implementing an integrated cloud solution that provides the flexibility, agility, and security business organizations need to increase operational efficiency, and responsiveness.

## Key Findings

### Access Management

- **The majority of respondents (82%) cite they are still accessing content from corporate file shares and virtual drives.** 74% are accessing their content from a corporate ECM system.
- **iPhones (61%), iPads (53%), and Android Smartphones (49%) are the most commonly used mobile devices used for accessing documents.** On the desktop, Windows PCs dominate while Macs fall way behind.
- **The majority (67%) of respondents are looking at cloud to provide device agnostic access on a 24/7 basis.** 51% say they see the driver for cloud as being a way to improve collaboration with 26% citing business continuity as a driver.

### Information Capture

- **When looking at multi-channel inbound content, 42% of respondents say things are adhoc in their organization and it is a struggle to match their on-premise and cloud content.** For 32%, capture and processing of content is done on-premise and then moved to the cloud.
- **In an effort to streamline operations, auto classification and workflow are being used to identify and route content to on-premise applications (30%).** For 28%, there is a distributed capture network in place that feeds a single process or case file on-premise.
- **When asked about the deployment of capture in the cloud, 36% say they have something in place now for documents and 32% for reports.** An additional 40% have plans related to capturing documents, reports, and spreadsheets in the cloud.

### Information Practices

- **Looking at changes in content management practices over the next 5 years, 64% say they will be implementing a hybrid platform of on-premise and cloud.** For 14% of respondents, there will be a move to a private hosted cloud.
- **Focusing on managing corporate electronic records for meeting compliance requirements, 54% say they use on-premise systems.** Use of a hybrid on-premise and cloud platform is the method of choice for 25% of respondents.

### Preparedness

- **Disparate systems are a challenge for most organizations and 30% of respondents say they are migrating to a single system.** For 26%, the method of choice is to use clouds services and for 20% it is File Sync and Share

- **The exponential growth of content is being addressed by implementing ECM/RM systems to replace their file shares according to 52% of respondents.** Automation of retention policies and deletions is the direction for 35% while 35% indicate they will move to a hybrid model for storage.

### Strategic Direction

- **Moving to the cloud is on the scope for 54% within the next two years, with 23% of those respondents saying it will happen within 6 months.** One quarter indicate they have no plans to move to the cloud at this time.
- **Turning focus to capture in the cloud, 44% say this will happen within 2 years with 185 of those respondents citing it will happen within 6 months.** At this time, 35% say they have no plans to implement capture in the cloud.

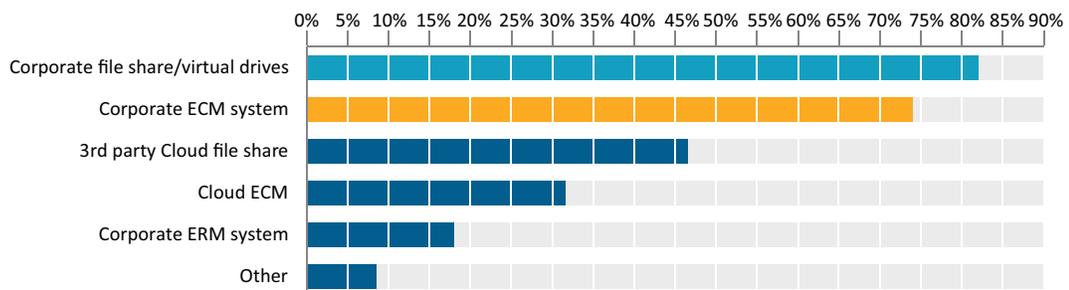
Based on these key findings - with 82% of respondents citing they are accessing information from corporate file shares and increasing use of mobile devices - it is clear that today's business organizations are challenged to provide flexible (mobile) access to the content their knowledge workers and mobile workforce need in order to drive their business or complete their tasks. As a result, businesses are seeking solutions to the problem of extending access and process engagement beyond their corporate walls securely, while at the same time, providing support for mobile device use, enabling not only access to content, but the ability to capture and interact with content as well. Failure to provide efficient, device and platform-agnostic content solutions across the enterprise creates a risk potential for poor customer service due to an inability to act quickly, and they will fall behind their competitors.



## Access Management

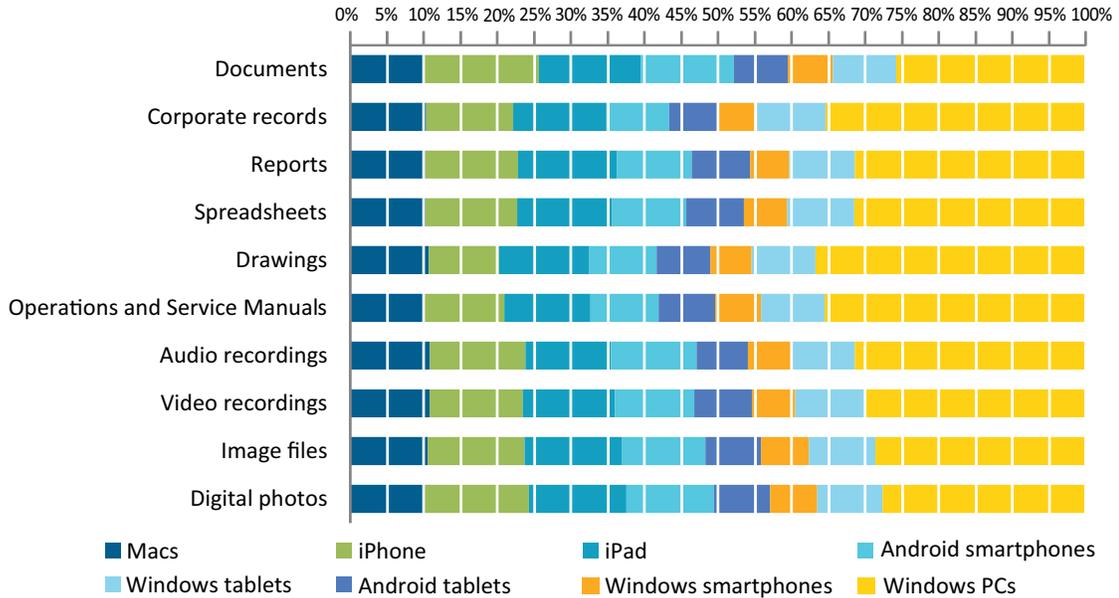
Discouragingly, when looking at the current state of content access, the majority of respondents (82%) cite they are still accessing content from corporate file shares and virtual drives while 74% are accessing their content from a corporate Enterprise Content Management (ECM) system. For some, access is gained through custom web applications, and still for others, in paper form requiring the user to be located on-premise. Not only does this indicate a siloed information management environment, it presents challenges to the ever-increasing need to access content remotely from a variety of devices rather than from PCs only within the corporate walls, and potential risk that vital information may not be found. (Figure 1)

**Figure 1. In which of the following locations do users access content in your organization?**



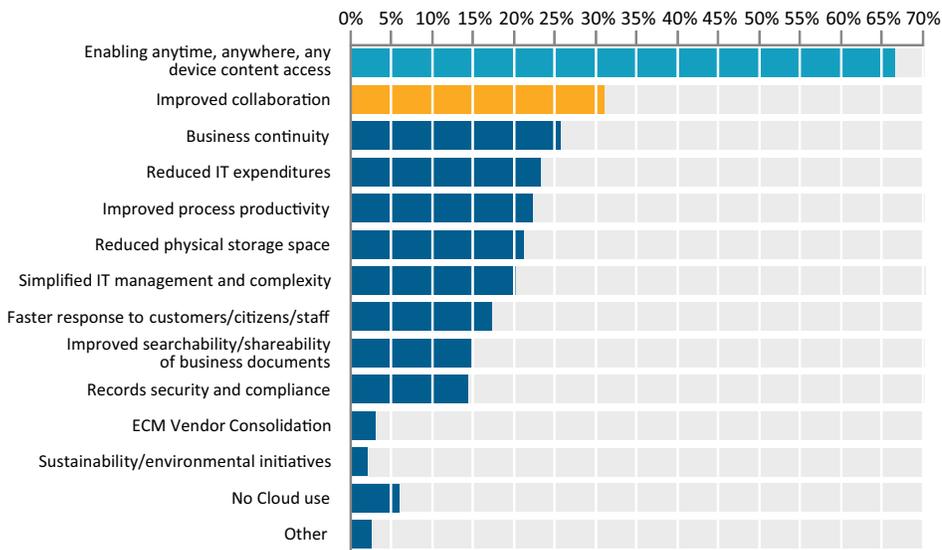
When looking at the device types used to access business content, it is not surprising that Windows PCs are the dominant devices of choice. Given this data, one might think that Windows devices would also be preferred for mobile access, yet iPhones (61%), iPads (53%), and Android Smartphones (49%) are the most commonly used mobile devices used for accessing documents – reinforcing the need for device agnostic access. (Figure 2)

**Figure 2. Which of the following devices do employees and field staff in your business unit use to access the following?**



Our research confirms that for the majority (67%) of respondents are looking at cloud to extend their reach and provide device agnostic access on a 24/7 basis. Fifty-one percent say they see the driver for cloud as being a way to improve collaboration with 26% citing business continuity as a driver. (Figure 3) The message is clear that organizations are working to find ways that securely provide access to content and improve operational interactions without the restrictions and limitation of having to be behind the corporate walls.

**Figure 3. What would you say are the three biggest drivers for moving content to the cloud in your organization?**



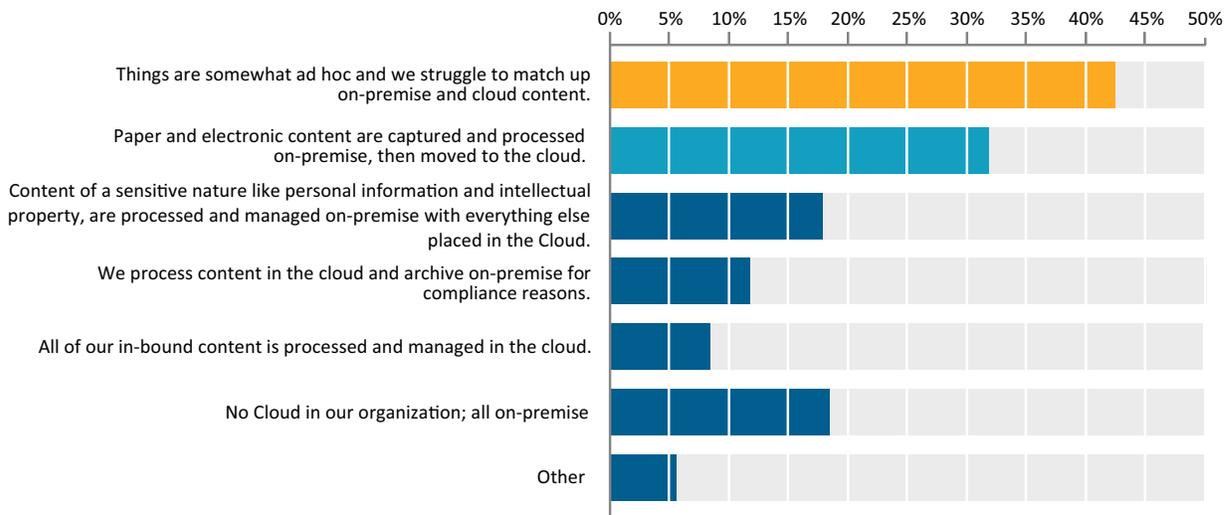


## Information Capture

Access is not the only aspect of business operations that must be extended. Capture of information – an essential part of an information ecosystem and process trigger – must also be a consideration. In this context, the amount of information, information sources, and point of capture become key to operational efficiency. Yet, when looking at multi-channel inbound content, 42% of respondents say things are ad hoc in their organization and it is a struggle to match their on-premise and cloud content while for 32%, capture and processing of content is done on-premise and then moved to the cloud. (Figure 4)

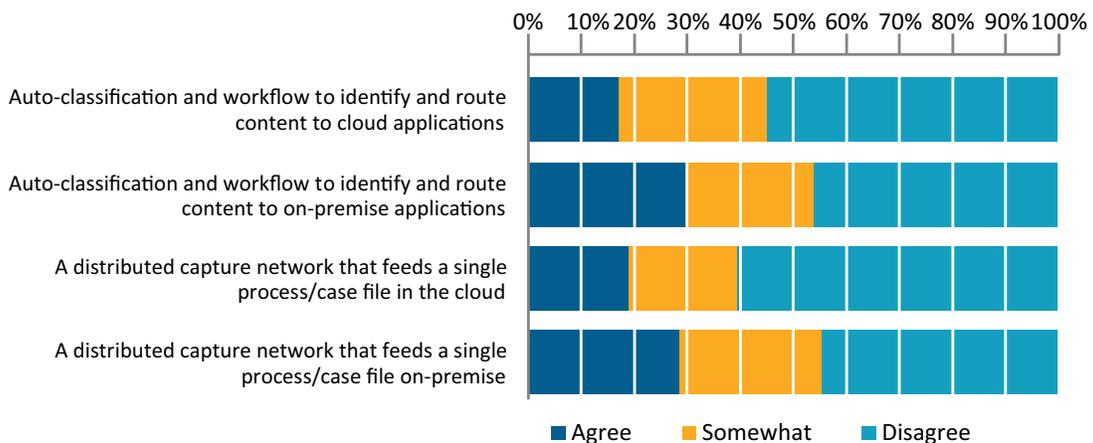
This is an example of how information and process centric projects typically occur in isolation, emphasizing the need for a more holistic approach. In other words, when we change the way we manage information, it typically affects related processes, and when we change something in process, it will likely affect the interaction with related information.

**Figure 4. How do you deal with multi-channel inbound content?**



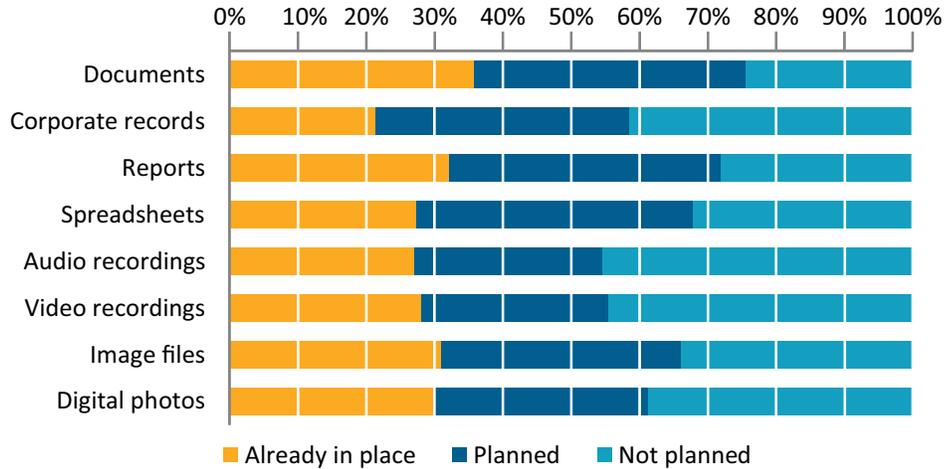
Continuing along the lines of bringing information and process closer together, and the need to capture information at the first touch point, there is the challenge of accurately and consistently identifying the information, classifying it, and applying appropriate metadata in order to process it more effectively and efficiently. Thirty percent of our respondents indicate that auto classification and workflow are being used to identify and route content to on-premise applications in an effort to streamline operations. Additionally, 28% say there is a distributed capture network in place that feeds a single process or case file on-premise. (Figure 5)

**Figure 5. We use automation in the following areas:**



This leads us to ask about the deployment of capture in the cloud, which could bring capture at first touch point closer to reality using multiple devices. Thirty-six percent of our respondents say they have something in place now for documents and 32% have these capabilities in place for reports. An additional 40% have plans related to cloud capture for documents, reports, and spread sheets. (Figure 6) Keeping this in mind, there is a stronger need to link information and process when conducting a project, in order to identify the opportunity, modify business processes accordingly, and implement appropriate technologies.

**Figure 6. What is your plan to deploy and capture content in the Cloud?**

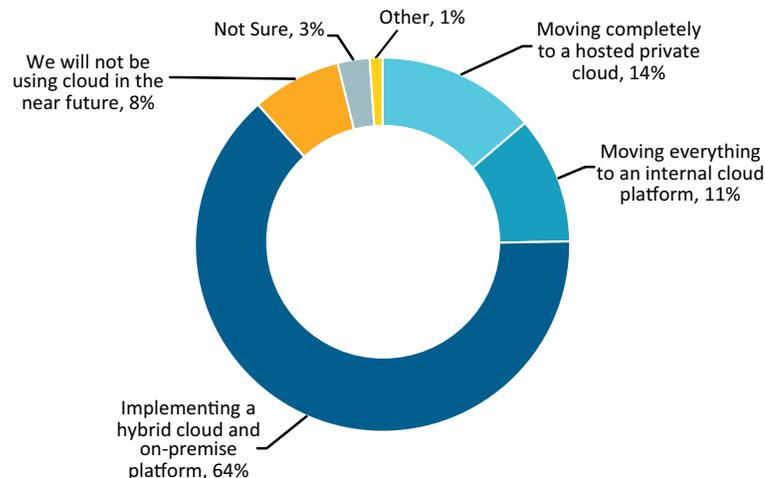


## Information Practices

Turning our attention to changes in the way content is managed within an organization, there is an expectation set that change will happen quickly – say within weeks to move content from an on-premise system to the cloud – but this is unreasonable when looking at the whole picture and all of the elements needed to be successful. While there are short-term changes and gains that are possible it is reasonable to expect that an overarching program may take several years to complete.

Looking at changes in content management practices over the next 5 years, 64% of our respondents say they will be implementing a hybrid platform of on-premise and cloud. For 14% of respondents, there will be a move to a private hosted cloud. (Figure 7)

**Figure 7. How do you see your organization changing its content management practices within the next 5 years?**

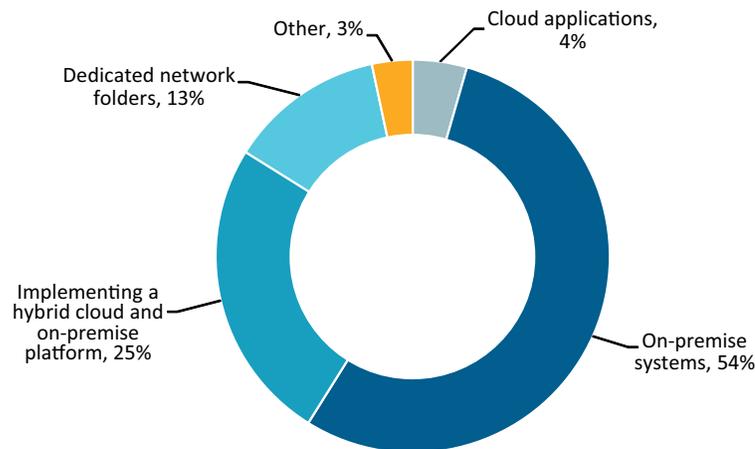


Of course this is based on the scope of the program - whether departmental or across the enterprise – and the level of training, and process change required in achieving the desired goals. Additionally, there are factors related to what is driving the change that impact the focus, speed, and approach taken. For example, changes in regulatory requirements like those seen in the financial sector through the Sarbanes-Oxley Act in the United States, had a major impact on the way information and content are managed. These changes also required near immediate change by financial institutions worldwide, in order for them to comply.

This type of compliance consideration will impact the decision to use an on-premise, pure cloud (whether public or private), or hybrid approach to extending the information ecosystem beyond corporate walls. This is seen as a major shift in ECM practices where traditionally, all content was managed on-premise. Cost is often the initial benefit cited for cloud use. Low to no IT costs, storage on demand, and of course, device agnostic access. Yet not all content may be suited to cloud when it comes to managing corporate records and meeting compliance requirements.

Focusing on a subset of information, corporate records, while these often have their own specific governance and practices, they must be included on the overall information management discussion. In these cases, emphasis is placed on compliance with regulatory, legal, and fiscal management requirements. Focusing on managing corporate electronic records for meeting compliance requirements, 54% of our respondents say they use on-premise systems. Looking at cloud for records management, use of a hybrid on-premise and cloud platform is the method of choice for 25% of respondents. (Figure 8)

**Figure 8. How is your organization currently managing corporate electronic records for meeting compliance requirements?**

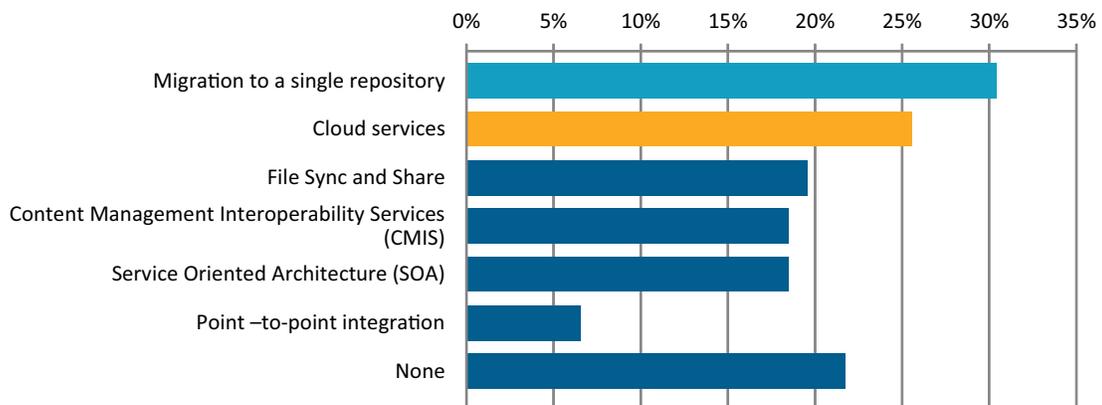




## Preparedness

Maintaining levels of compliance, business continuity, and disaster recovery, require a strategic initiative to manage information in a way that there is linkage between disparate systems, with practices in place enabling full recovery should the need arise. This need could come in the form of natural or human disaster. There is also the need to prepare for audits and discovery efforts in times of litigation that decrease the risk of an inability to produce required information in a timely manner. Disparate systems are a challenge for most organizations and 30% of respondents say they are migrating to a single system of record to address these challenges. For 26%, the method of choice is to use clouds services and for 20% it is File Sync and Share. (Figure 9)

**Figure 9. What action is your organization taking to consolidate disparate content repositories?**

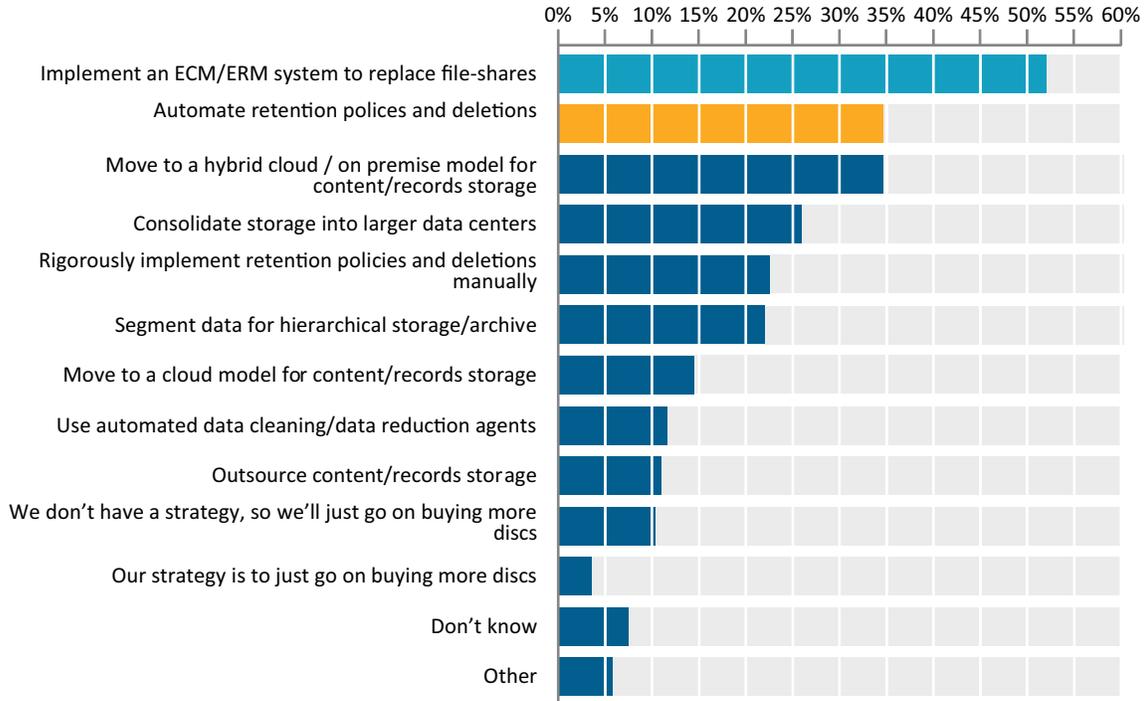


Not only are disparate systems a challenge, the exponential growth of information as a whole is an even more challenging element of information management. Organizations are creating information at a growing rate, in many forms that not only include documents; it also includes graphics, and digitally created audio, video, and photographic information. The challenge is not limited to how to store it there must also be consideration to eliminating redundant, out-dated, and trivial (ROT) information.

In short, this is taking inventory of your information assets to identify what is being managed, what has value, and what can be defensibly discarded. At the same time, think about the information that is embedded in documents, files, reports, etc. that have additional value beyond their original intent. For example, in social casework, there may be two different departments and caseworkers, working with the same client. The information held by caseworker A may be relevant for caseworker B, but only if it is know this information exists. Therefore, it is important to not only identify information but also to attempt exposing it to those who may have a need for it. Upon completion of the inventory, retention policies and deletions need to be made not only to the content but also on the specific content elements that could include social media, text messages, and other business related content items making up the vast and exponential growth of content assets.

According to 52% of our respondents, this exponential growth of content is being addressed by implementing ECM/RM systems to replace their file shares. Disposition is being addressed by the automation of retention policies and deletions for 35% while 35% indicate they will move to a hybrid model for storage. (Figure 10)

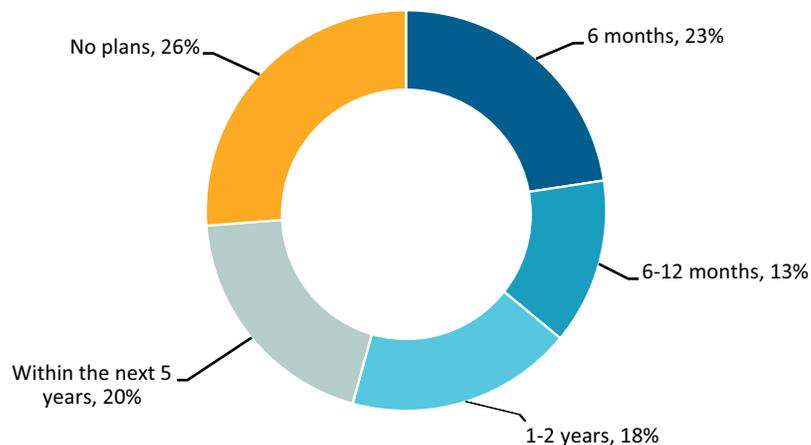
**Figure 10. Which of the following strategies have you adopted to deal with storing your growing volume of information?**



## Strategic Direction

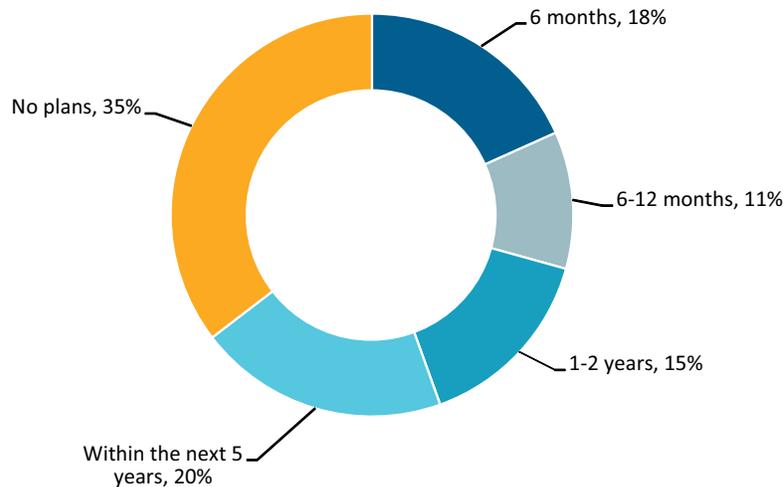
The realization that staying within the corporate walls is no longer an option is clear. Flexibility, mobility, and expandability are key for today's businesses, and cloud is a viable option to make this happen. Moving to the cloud is on the scope for 54% of our respondents within the next two years. Twenty-three percent of those respondents say it will happen within 6 months. Typically, there is a subset that will fall behind and wait as seen with 25% of our respondents who indicate they have no plans to move to the cloud at this time. (Figure 11)

**Figure 11. Our organization is planning to move content to the cloud within**



So if there is this focus on moving information to the cloud, what happens to capture and will there be a similar move to capture in the cloud? Fort-four percent of our respondents say this will happen within 2 years with 18% of those respondents citing it will happen within 6 months. At this time, 35% say they have no plans to implement capture in the cloud. (Figure 12)

**Figure 12. Our organization plans to capture content in the cloud within**



## Conclusions and Recommendations

The need and growing demand for organizations to support information capture and access, and process interaction beyond the corporate walls is clear. Maintaining disparate systems, network drives, and file-shares is proving to be ineffective, and an increasing challenge, especially related to compliance, security, and business continuity. Organizations need look towards consolidating their on premise content management systems and moving content capture, access and business processes to the Cloud, creating a hybrid content management environment with a flexible architecture that manages any type of content regardless of size or platform.

Additionally, the exponential growth of information spanning the enterprise is placing a strain on organizational infrastructures in relation to maintaining ROT information housed in siloed repositories. Not only does this represent a cost factor to maintain, it also represents a risk factor to have it and additional costs to sort through it in times of litigation and audit. This emphasizes the need to implement a means for disposing of ROT information properly. It also emphasizes the benefit of automating the retention and disposition processes in an effort to standardize and establish consistent, defensible practices based on business rules and proper information governance.

It is also evident there is a growing realization that information capture at first touch point is a sound strategy to bring information into the ecosystem in a more efficient, secure and manageable way. This in turn not only makes the information available to access, it also serves as the trigger for various business processes and actions to be taken.

With this in mind, we see that the majority of respondents are moving toward cloud use in some form over the next 2 years for storage and access, and nearly half moving their capture processes there as well. While this may seem a simple task, it requires thorough planning to ensure success and minimize the risk of non-compliance. It also requires consideration of impact to current business processes. In other words, governance over the tools, and methods to be used going forward. We recommend that you consider the following:

### Access Management

Identify content creation sources. Who is creating the content? Who is using the content, and how it is being used? How is it accessed and how does the user community want to access it? Once done, look towards giving your business-users flexible, easy to use, transparent access to content from any device, regardless of type, location or security need, which integrates with multiple business applications and workflows to support a multitude of business processes.

## Information Capture

Look at the points of capture and assess how content can be brought into the information ecosystem earlier in a process. Look at ways you can utilize the cloud not only for sharing but also as a content capture entry point for your business processes.

## Information Practices

Solicit feedback from the user community regarding how they are using and wish to see cloud-based applications today – authorized or not. Additionally, consider the types of mobile device available to use and develop governance policies and practices to enable their use while also managing your information securely.

## Preparedness

Incorporate ways to control access and implement monitoring capabilities to prevent unauthorized access, recording all activities related to business content. Design plans to support business continuity and disaster recovery by moving content to the Cloud in way that on-premise content systems work in tandem with Cloud content systems ensuring that if one system fails the other is not effected to minimize operational disruption.

The growing demand to extend business operations beyond the corporate firewall requires significant changes be made in the content management ecosystem. This means breaking from the traditional on-premise behind the corporate walls environment to more platform and device agnostic systems that work within and beyond the firewall.

Evaluate your organizational strengths and weaknesses, and develop clear business requirements from which you can derive functional and technical requirements that will deliver the desired results and maximize your investment. Prepare to enhance your future content management environment not only by adding cloud as a component, but also consider the use of content analytics and process automation to enhance data extraction, content classification, and automate content management process as well as managing system to system interactions.

## References:

- 1 AIIM Industry Watch “Content in the Cloud - making the right decisions.”

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