

# INFORMATION MANAGEMENT

IN

## 2016 AND BEYOND

- SHAREPOINT
- ECM
- CONTENT ANALYTICS
- MOBILE AND CLOUD
- PAPER-FREE
- INFORMATION GOVERNANCE
- DATA PRIVACY

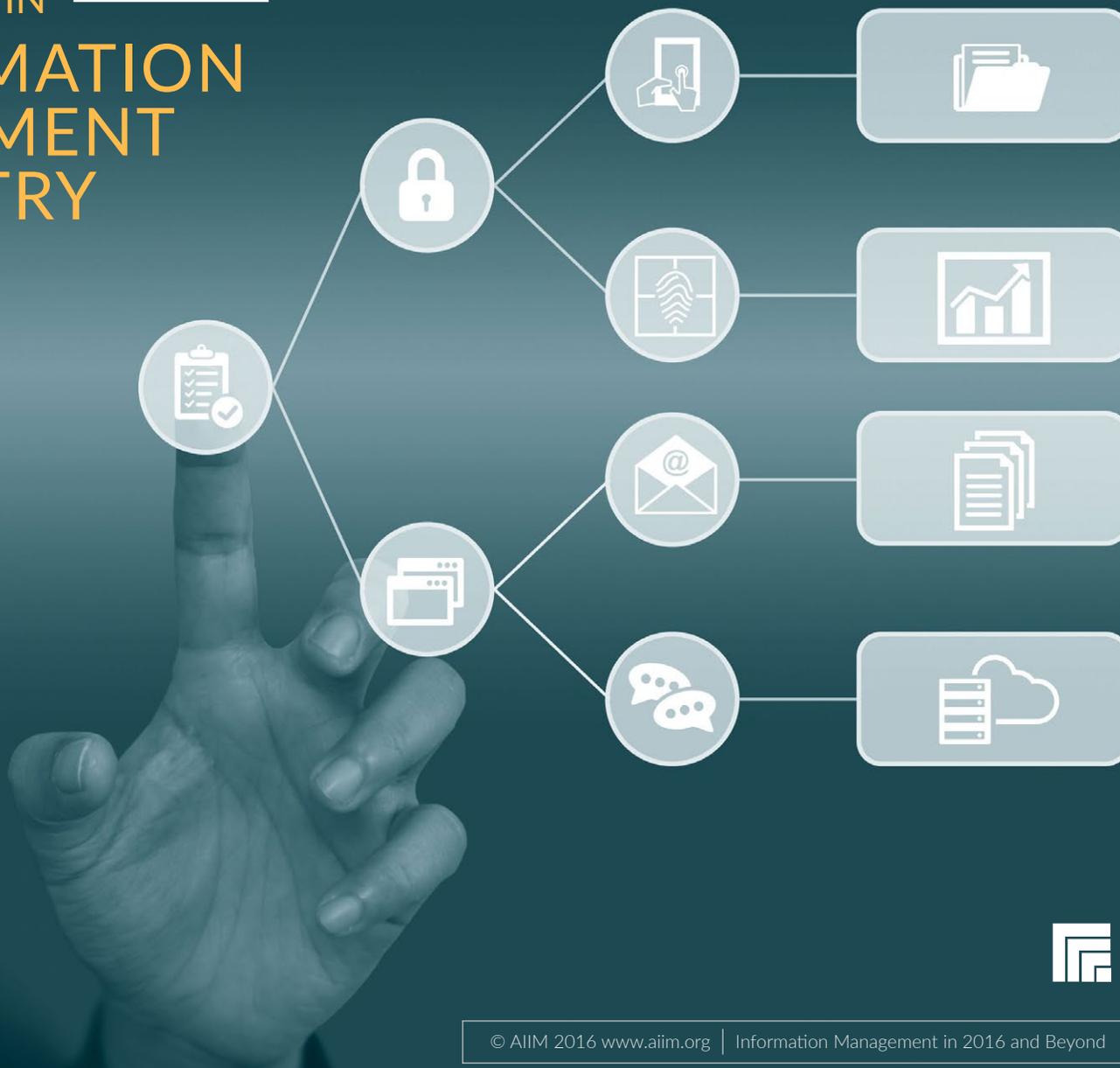


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# INTRODUCTION

## CHANGES IN THE INFORMATION MANAGEMENT INDUSTRY



## Changes in the Information Management Industry

2015 brought about some interesting changes in the information management industry. Mergers, and acquisitions like that found in Dell and EMC, and partnerships formed like that of IBM and Box, potentially change the technology landscape of information management and impact the way organizations operate. Along with watching these types of activity, AIIM Research this past year focused specifically in the areas of SharePoint, ECM, Content Analytics, Mobile and Cloud, Paper-free environments, Information Governance, and Data Privacy.

**SharePoint** is still viewed as an essential tool yet many organizations indicate their SharePoint projects are stalled and failing to meet expectations. This is perhaps due to a lack of focus and direction as to the business problem SharePoint will address.

**ECM** is now considered vital for businesses and down time seen as having a major negative impact. Where once ECM was a nice to have, in 2016 it is considered a mission-critical part of business operations. It is seen as the place where vital business information is housed, and access to it must be maintained at all times.

**Content Analytics** applications have also entered the spotlight in a greater way. Businesses are turning their attention to analytics for inbound routing and text recognition for content classification and metadata correction, improved search and knowledge extraction, and to provide business insight. The latter being one of extending content use to a greater audience and identifying recipients who have the need for it based on specified user/case profiles.

**Mobile and Cloud** continue to be in discussions with a strengthened tone of being part of the bigger information eco-system and IT infrastructure. Where once these were viewed as non-essential elements, businesses are now considering the risk factor of unauthorized use and the benefit of sanctioned and vetted cloud and mobile options.

**Paper-free**, while not a new concept, is gaining momentum with many organizations and for different reasons that those of the past dealing with storage alone.

Businesses have come to realize that capturing information, whether digitizing the physical or digitally born, at the first touch-point of a process, brings this information under corporate control and into a workflow sooner, more securely, and readily available for action to be taken.

**Information Governance** has taken center stage in a way it has not before, bringing about a stronger awareness amongst business leaders that more and tighter control is needed over their information and information practices than ever before. Information Governance is now seen to address the holistic organization by addressing people, process, information and technology.

**Data Privacy**, due to the number of security breaches reported in all markets ranging from healthcare, to retail, has become a hot button for many businesses and consumers. While governance and technology are essential elements of a solid information eco-system, the goal and one of the key drivers is data privacy – keeping information secure, the environment compliant with legal, industry, and regulatory guidelines, and accessible to only those who have proper authorization.

**Information Management** must look at the business, organization, and operations with a holistic view. People, process, technology, and information need to be addressed in concerted not a siloed approach. The following pages will highlight AIIM's findings in each of the areas above, and conclude with how we see the world of information management moving into 2016.

If you would like the full versions of any of the reports cited here, we encourage you to visit the AIIM website at [www.aiim.org/research](http://www.aiim.org/research) and request a copy for download.





# SHAREPOINT

AND  
ENTERPRISE CONTENT  
MANAGEMENT

## SHAREPOINT AND ENTERPRISE CONTENT MANAGEMENT



SharePoint (SP) has been with us for nearly fourteen years now. At the outset it was an intranet platform for building websites. It allowed project teams to collaborate, make announcements, exchange documents, and share calendars. Each new release at three-year intervals added new capabilities to the platform, particularly in the areas of document and records management.

Having coined the term ECM (Enterprise Content Management) in 2002, AIIM were pleased to see Microsoft use it to describe major elements of the SharePoint capability. Whether out-of-the-box SharePoint is a true ECM system remains a moot point, but it has certainly been the vehicle that took content management across the enterprise, spreading out across organizations large and small, well beyond the restricted license base of earlier systems.

And yet user adoption has always been something of an issue. Despite having ready access to SharePoint, many users cling to their file-shares, or more recently, adopt other ways of collaborating and sharing documents via web-based services. A third of the organizations we surveyed feel that their SharePoint project has struggled to meet their original expectations, and a further 26% feel progress has stalled. Is this because of poor training and governance, restricted functionality of SharePoint, or simply the inevitable result of being the first ECM system to move beyond the safer boundaries of compliance-based operations? As we will see in this report, it is likely to be a combination of all of these.

However, only a very small number of users – less than 8% - are considering replacement with an alternative product, and only 1% have actually done so. For most there is a strong commitment to making SharePoint work for them as a core platform, embedded in and connected to the enterprise. Many are working more strongly within a new information governance framework, adding third-party add-on products to remediate existing data, and to fill the functionality gaps, particularly for workflow, metadata management and collaboration. Many are also looking at the 365 cloud options to improve access from mobile, and for collaboration with external partners. And a strong overall theme is training, customization and auto-classification to improve both user acceptance and on-going data quality.

### Key Findings on SharePoint<sup>1</sup>

#### Adoption Issues and Forward Strategy

- 26% of respondents report that their SharePoint project has stalled, and 37% have struggled to meet their original expectations, a total of 63% with sub-optimum installations. 37% are moving forward, but only 11% feel their project has been a success.
- A failure of senior management to endorse and enforce SharePoint was the biggest reason for lack of success, followed by inadequate user training and a general lack of planning. User resistance and a lack of investment and expertise are also quoted.
- 53% are still seeing an increase in active users. 23% have reached an adoption plateau, or are facing user adoption issues (15%). Only 3% have reducing numbers.
- The key lessons learned are don't leave it to IT – form a SharePoint steering group. Be sure to understand the implications of metadata and taxonomy. 50% suggest building an IG policy first and then matching it to SharePoint.
- 25% are committed to building their ECM, RM and collaboration around SharePoint. For 22% it remains their ECM system of choice for the foreseeable future, and 28% will stick to it for the next few years – in total, 75% remain committed. Only 8% are looking elsewhere right now.
- At 42%, SharePoint 2010 is still the most popular live version. 22% are live on 2013. Regarding cloud, 6% are live on 365/Online, with 18% rolling out.

## Key Findings on SharePoint<sup>1</sup>

### Cloud

- **43% are happy with Microsoft's product roadmap, but 49% are concerned about loss of focus on the on-prem version.** 20% feel SharePoint is under threat from more modern cloud systems. Lack of mobile support and difficult external access has frustrated 35%.
- **For the future, 34% plan to move to SharePoint 365/Online for all (7%), most (10%), or some (17%) of their content.** Of the remainder, 15% plan to use private cloud (11% as hybrid), 14% will stay on-prem, and 36% are undecided. This represents a near doubling of cloud intentions since our last survey in 2013.

### Add On Products

- **15% use standard out-of-the-box SharePoint, and 39% have only limited customization.** A third use in-house or externally developed customization, and 36% use third party add-on products.
- **Workflow and BPM is the most popular add-on, followed by metadata and taxonomy management, collaboration tools, search enhancement and Outlook integration.** Migration tools and system health monitoring are also popular.
- **Only 7% currently have automated or assisted classification, but a further 28% plan to implement in the next 12 to 18 months.** Along with data clean-up tools, and digital signatures, this is by far the biggest rate of increase across add-on products.

### Integration

- **Only 14% have SharePoint connected to other ECM/DM systems. 13% have connections to the CRM/Service Desk, and 12% to project management systems.** Less than 10% have connections to ERP or Finance systems.
- **15% use SharePoint as their search and access portal across other repositories, but 44% are planning to go that way.** Aligning governance, security and metadata is given as the biggest problem.

### Information Governance

- **For 23%, SharePoint can match their records management needs (with careful set up), 15% are using specialist customization, and 16% use 3rd party add-ons.** 17% have a dedicated RM system but most (12%) are not connected to SP. 29% do not differentiate between records and other content.
- **48% still have work to do to align SharePoint with their IG policies, and 19% are not aligned at all.** The biggest misalignments are with legal discovery, metadata and retention/disposition.

### Spend

- **Many of our respondents expect to spend more on SP Online/365 licenses, and on mobile deployment.** A small number expect to increase spend on training and professional services - despite the good intentions expressed regarding re-energizing projects.
- **A strong net demand is indicated across a wide range of third-party add-ons,** including site governance and monitoring, records management, BPM, digital signatures, connectivity, cleanup and auto-classify.



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# ENTERPRISE CONTENT MANAGEMENT

ECM

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## DECISIONS

## ENTERPRISE CONTENT MANAGEMENT



The ECM (Enterprise Content Management) concept has been with us now for nearly 15 years, and many of the products stretch back many years before that. Some of these original ECM suites grew from imaging and workflow products, others started with basic electronic document management, adding capture and records management along the way. SharePoint grew from project collaboration and content-sharing intranets to encompass a wide range of active-content management capabilities. Faced with the demands for process management, enterprise search, access beyond the firewall, mobile device support, social interaction, and cloud deployment, the suite providers have moved to add modules and product integrations to enable wall-to-wall content management across the enterprise and beyond.

We will find in our survey results that more than half of organizations still have a vision to achieve a single enterprise-wide system to manage all of their content, but the current reality is that multiple systems and multiple content silos exist across most businesses. The much derided server file-share refuses to go away, and multiple cloud file-sync-and-share systems, often working outside of the information governance regime, are creating even more loosely coupled information silos. Meanwhile, multi-channel inbound communications and document-centric workflows add another dimension, as they are linked to capture, case management, records management and compliance.

So how do we set a strategy for the future, and do we accommodate, consolidate or federate our existing content systems? How do we align our information governance policies with this varied content landscape, and how do we support our users and business partners for remote and mobile access to both collaborative content and the corporate knowledge base.

In this report we look at how ECM systems have become mission-critical alongside the other pillars of enterprise IT, and how they need to be integrated with these other systems. We also look at how cloud and mobile strategies are playing out. Above all, we look at how all of these factors are influencing the choices for consolidation, enhancement or replacement.

### Key Findings<sup>2</sup>

#### Drivers and Adoption

- Lowering costs and improving efficiency is the main driver for ECM (40%), with compliance and risk second, dropping slightly since 2013 (33%). Collaboration (18%), and customer service (9%) vie year-on-year for third place.
- More than half of responding organizations (52%) are working towards a company-wide ECM capability, but only 14% have completed it. 16% are integrating across departments and 22% are still in departmental mode.
- 10% are looking to replace existing system(s) with a new one. 10% of the largest organizations, 13% of mid-sized and 5% of the smallest.
- 62% are still strongly reliant on their file-share. 1% have turned it off, and 15% have “largely replaced it”.

#### ECM Systems and Strategies

- 52% have three or more ECM/DM/RM systems. 22% have five or more (38% of the largest). These numbers are a few percentage points up on the 2013 survey, so no evidence of consolidation as yet.
- For 67% of organizations, ECM/DM is mission-critical, 54% for RM and 40% for capture and workflow. A third would suffer serious disruption after an outage of just 1 hour, 58% would struggle after half a day of downtime
- 54% are converging on a single-vendor ECM suite, including 21% who may well buy a new one (6% as their first ECM system). 24% are building on best-of-breed or departmental systems, and 8% are looking at a 2-tier structure.

- **88% see plenty of scope for ECM enhancement, although focus has moved on in 30% of user organizations.** 75% agree that ECM/RM is a fundamental part of their information security regime.

## Integration and Process

- **To consolidate content silos, 20% intend to migrate content to ECM, 44% will integrate ECM with other enterprise systems.** 15% will rely on enterprise search or content portals and 16% will continue with separate silos.
- **Currently, 61% have no connection between ECM and ERP.** 24% have a one-way content link, 8% a two-way link and 7% have an AP/AR transaction link.
- **30% have some degree of integrated multi-channel inbound communications, but only 5% are auto-routing to multiple processes.** 22% handle paper and electronic inbound separately.
- **37% prefer their workplace social platform to be an extension or module of their ECM system, rather than a separate best-of-breed product.** Half prefer an on-prem social platform rather than cloud-based.

## Cloud and Mobile

- **From a personal view, our respondents are largely in favor of moving ECM content to the cloud (71%), mostly as a small on-prem/large cloud hybrid.** Their organizations are less positive, with 48% in favor of cloud, 28% resolutely against, and 28% with no decision made as yet. The dominant preference is for “private cloud” (71%).

- **39% have some degree of mobile access, but only 5% have widespread access for staff and project partners.** Less than 20% have comment, edit and process interaction capability that is app-based.

## Issues

- **The biggest current issues are improving user adoption (45%) and consolidating multiple repositories (42%).** Raising the level of training and expertise figures strongly (30%), as does dealing with emails as records (32%).
- **The definition of ECM is becoming blurred, with 52% agreeing that in 5 years' time, ECM systems will be an undifferentiated part of the IT infrastructure.** Most (63%) currently see their ECM system to be “a compliant home for information” and “a platform for company-wide sharing”.

## Spend

- **Spend intentions are strong, particularly in cloud/SaaS services, and in storage.** Outsourced bureau services, and independent consultancy services show little net growth.
- **Workflow, content analytics and enterprise search have a strong net demand.** Email management, auto-classification/data remediation, and case management also show very positive spend intentions.



# CONTENT ANALYTICS

A KEY PART OF  
"BIG DATA"

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# CONTENT ANALYTICS

## A KEY PART OF “BIG DATA”



The capacity of computers to recognize meaning in text, sound or images has progressed slowly and steadily over many years, but with the arrival of multi-processor cores, and the continual refinement of software algorithms, we are in a position where both the speed and the accuracy of recognition can support a wide range of applications. In particular, when we add analysis to recognition, we can match up content with rules and policies, detect unusual behavior, spot patterns and trends, and infer emotions and sentiments. Content analytics is a key part of “big data” business intelligence, but it is also driving auto-classification, content remediation, security correction, adaptive case management, and operations monitoring.

The first step for many analytic processes is capture and recognition – from paper, from emails, and from other inbound channels. This in itself involves validation and some “intelligent guesswork” based on word matching and sentence construct. Similar principles can be applied to search and knowledge extraction, moving beyond simple keywords to contextual analysis, taking into account the significance and use of the search terms.

Humans hate filing. Even more, they hate sifting content for deletion - and they are generally bad at it. Computers are much more consistent in their application of rules, and given suitable criteria for classification, or for deletion, can hugely reduce unwanted content. This improves the searchability and business value of what remains, and also make-safe any sensitive content. Beyond this, we can use meaningful extraction of comments, opinions, diagnoses, reports, claims, social chat, and so on, to gain business insight, improve competitive advantage, or achieve fast response.

In this report we will look at the take-up of analytics applications for inbound routing and text recognition, for content classification and metadata correction, for improved search and knowledge extraction, and to provide business insight. We look at the success factors and outcomes, and the choices being made for deployment.

### Key Findings<sup>3</sup>

#### Drivers and Adoption

- **73% of respondents agree that enhancing the value of legacy content is better than wholesale deletion.** 53% agree that auto-classification using content analytics is the only way to get content chaos under control.
- **54% feel that their organization is exposed to considerable risk due to stored content that is not correctly identified.**
- **73% consider that there is real business insight to be gained if they can get the analytics right.** 63% are being held back by a lack of analytic skills and an absence of allocated responsibilities.
- **34% of responding organizations are using content analytics for process automation, information governance, contextual search or business insight.** A further 44% have plans in place.
- **17% consider content analytics to be “essential” now for their organization, growing to 59% in 5 years’ time.** Plus 28% feeling it “is something we definitely need”.
- **The biggest issues for adoption are lack of expertise (36%),** and a need to set information governance policies first (36%). 43% admit that their current capability in enterprise search is poor, 33% have problems with BI, and 19% have poor ECM.

# CONTENT ANALYTICS

## Process Automation

- 15% are using OCR data capture of inbound content for process input, 14% are auto-classifying content for archive, and 12% are auto-routing to specific processes or to case-files. 10% are triggering processes from inbound content, including 5% from mobile device input.
- 5% have fully automated filing or archiving of inbound emails, and 11% user-prompted filing. 24% have plans in the next 12-18 months.
- Benefits from inbound analytics include faster flowing processes (50%), happier staff (32%) and improved governance (20%). 18% are seeing high levels of “hands-off” processing.

## Information Governance

- 20% are already using auto-classification to assist staff with filing, metadata tagging, or records declaration, and 17% have immediate plans. 18% are using automated or batch agents to correct metadata for improved searchability, to better align metadata between repositories, or to detect security and compliance risks.
- Improved search is the biggest benefit of auto-classification (reported by 52%) along with better staff productivity (40%), and improved compliance and governance (31%). Defensible deletion and recovered storage space are also reported (19%).

## Contextual Search and Curation

- Only 35% have contextual search, including 11% across multiple internal sources and 7% across external sources. 8% rely heavily on their contextual e-discovery tools, although a further 10% have them but don't use them.

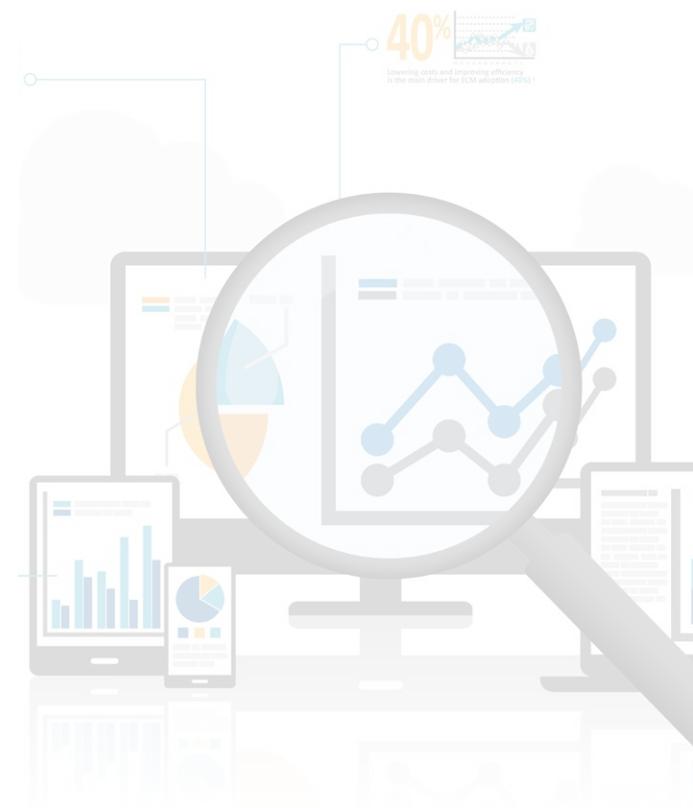
- 19% have some automated curation tools to create custom libraries and alerts, although 9% are from internal sources only. 6% have manual curation processes. 59% have neither, but feel it would be useful.

## Business Insight

- 24% have at least one “big content” project for business insight, with 10% having several. Improved product or service quality is the strongest objective, followed by core investigations and research, and then detection of non-compliance.
- Nearly half have used in-house development, and 17% external custom. 27% have used cloud or SaaS products and 27% products from their ECM vendor.
- 34% have achieved ROI in 12 months or less, and 68% in 18 months or less.

## Spend

- Most of our respondents expect to spend more on content analytics in the next 12 months. Strongest growth is in enhanced or contextual search, analytics for business insight, and automated classification tools or modules.



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# MOBILE AND CLOUD

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DRIVERS FOR

## CHANGE IN THE ECM WORLD



## DRIVERS FOR CHANGE IN THE ECM WORLD



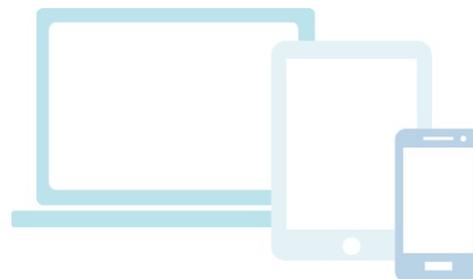
Mobile and cloud are the twin drivers for change in the ECM world. Mobile access to content on the move, mobile interaction with content, capture to process, remote workflows, and cloud-based collaboration. All of these are moving at a pace, as many organizations overcome their security worries. However, there are still many issues to resolve between traditional back-office systems and new cloud-based solutions.

There are many different flavors of cloud-stored content: thin hybrid models with collaboration-only content in the cloud, thick hybrids that retain small amounts of sensitive content on-prem, so-called private clouds which often are

just virtualized on-prem servers, and genuine multi-tenanted cloud. How attractive are these, and how do users rate their economic and collaborative benefits?

Mobile devices are the new window onto content and process, but users are still concerned about who might be peering in. Online-only content access is quite limiting, but does containerization fix the problem of device-stored content? We know that mobile devices can capture forms, photos, video and voice, but to what extent are these integrated with back-office processes and applications?

In this report we will look at the current and future adoption of cloud applications in general, and content applications in particular. We ask the early adopters about issues, benefits and ROI. Content access and collaboration on mobile is a big driver for cloud, but there are also big opportunities for approval workflows and direct links to back office processes. Are mobile security fears creating a risk that late adopters will be left behind the competitive edge?



### Key Findings<sup>4</sup>

#### Cloud Policies and Adoption

- 16% of responding organizations are unequivocal about cloud for all core IT applications, 42% will review each application for cloud on its merits. 13% have a wait and see policy. Only 10% say “No cloud”.
- 87% of individual respondents are positive about moving ECM/DM content to the cloud, compared to 42% of the organizations they work in. Those with an IT role are more conservative than those from records or information management, with business managers being most positive.
- 75% feel security by cloud providers is likely to be better or the same (27%) as their own servers. 38% of the largest organizations feel their own security is better, compared to 15% of the smallest. IT staff are less confident of their own security (19%).
- The preferred “cloud” hosting model for 34% is virtualized servers in their own data centers, with a further 25% opting for private cloud on outsourced servers or IaaS (Infrastructure as a Service). 16% prefer defined server hosting by their ECM supplier, with just 18% prepared to go for multi-tenant/public cloud hosting.
- 26% of surveyed organizations are using some form of cloud ECM or DM, 27% of non-users are likely to deploy cloud content systems within the next 2 years, plus 21% in the next 4 years.

## Cloud ECM Users

- **47% of those with cloud ECM/DM are using a stand-alone cloud system, including 17% where it is their only ECM.** Equal numbers (11% each) are settled on thick and thin hybrid cloud models, and 26% are only slowly migrating their content.
- **A third of those using ECM in the cloud are also live with approvals, forms and workflows for process management.** There is a strong appetite from a further third to implement workflows in the next 12 months.
- **35% of cloud ECM users have had problems with enforced upgrades, poor availability and content migration.** 25% had issues with SLAs, privacy and costs. 10% report data or security breach issues.
- **The two biggest operational benefits are more effective collaboration, and more modern and flexible applications (both 58%).** Extending access to partners and customers (47%) and teleworking for staff (42%) come next.
- **44% of cloud ECM users have benefited from a cost reduction compared to on-prem, although only 18% have reduced staffing.** A further 24% have saved less than planned, but are still cost neutral or better.

## Mobile Policies

- **30% of responding organizations are live with BYOD (although two thirds of these are not yet running smoothly), 30% are in planning or roll-out.** Just 19% are sticking with company owned devices, of which two-thirds will be business use only.

- **76% of respondents agree they need to embrace mobile applications or be left behind.** 10% have identified big threats to their current business model from mobile, and 18% are awake to the possibilities.
- **Only 9% are reviewing every process to take account of mobile, with 33% picking off the most obvious processes or those coming up for review.** For 37%, policy is somewhat ad hoc, and 22% aren't looking at it at all.
- **Only 5% have anything that looks like a "CMOO" (Chief Mobile Officer),** but 71% agree that there should be a single person responsible for mobile innovation.
- **Only 17% have a mobile information governance policy that is appropriate to business needs. 22% have a very restrictive policy.** 35% do not cover mobile in their IG policies, and 18% have no IG policies at all.

## Content Access on Mobile

- **39% have no access to on-prem/ECM content, and 28% rely on browser-view.** Only 15% have a dedicated app with offline content access, and are able to comment, edit and approve on mobile.
- **Onsite access to drawings and manuals is the most popular process use for mobile devices (27%),** followed by expense receipts (18%) and then field-staff report back (17%).
- **Photos are the most popular content captured (40%),** then notes (29%) and scanned documents (27%). Only 24% are using electronic forms on mobile.

- **The two biggest benefits are staff mobility and speed of data availability.** Poor connections, lost devices and multiple device support are the biggest issues.
- **48% report ROI on 12 months or less.** 76% in 18 months or less.

## Spend

- **Responding organizations are likely to increase spend in all cloud content areas compared to on-prem ECM.** Strongest growth is in mobile access apps.



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# PAPER FREE

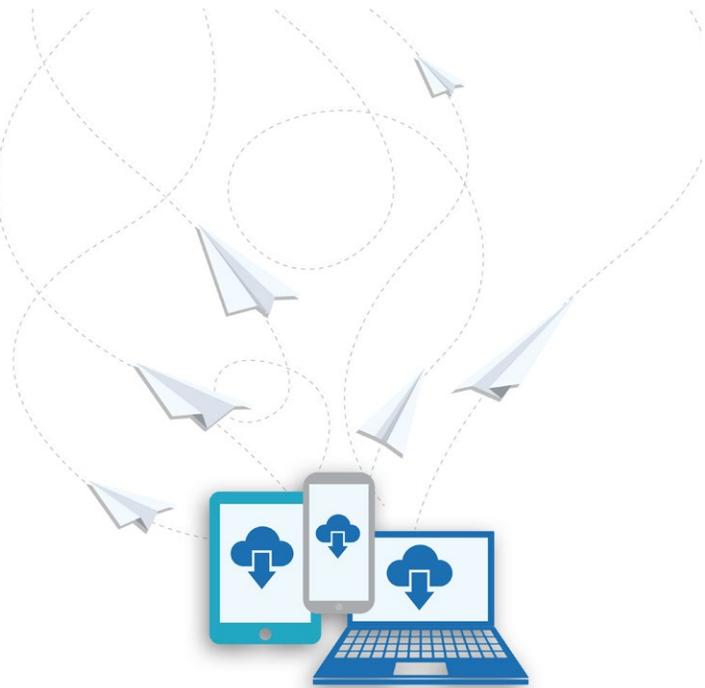
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BEING

EFFICIENT,  
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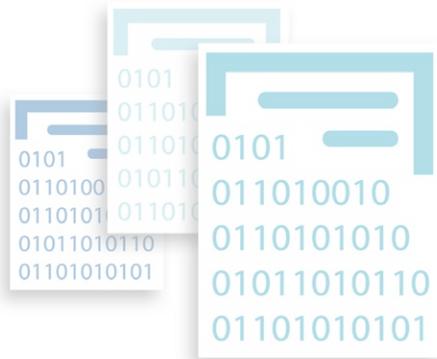
## BEING EFFICIENT, EFFECTIVE AND RESILIENT



For more than 25 years, AIIM has advocated the reduction of paper in business, initially to save office space and improve records retrieval, but in the past 10 years more focused on removing paper from business processes in order to improve productivity, accessibility and compliance. Despite the widespread acceptance that reducing and removing paper is a best practice, there is a huge difference between the best performers and the laggards. Piles of paper contrast with clear desks; post bags and delivery vans contrast with mobile capture, warehouses full of boxes contrast with electronic archives, and forms-based processes contrast with automated workflows.

Even amongst those who have transformed their back-office processes, there is still much work to be done to capture multi-channel customer communications and unify front-office response. The early movers in digital mailrooms and mobile capture are achieving strong competitive advantage by capturing as close to the origin as possible. Meanwhile, the efficiency, effectiveness and resilience of all offices could be greatly improved by removing those legacy hiccups of approval signatures and mark-up copies that still cause paper to pile up on the desk.

In this report, we take an in-depth look at the amount of paper in the office, the impediments to removing it, the take up of digital mailrooms and multi-channel capture, and the increasing exploitation of mobile and cloud. Above all, we look at the progress towards paper-free processes, the triggers and decision-making processes, and the issues, benefits and ROI.



### Key Findings<sup>5</sup>

#### Paper in the Office

- Only 17% of respondents work in what could be described as a paper-free office. 31% admit their office is piled high with paper documents and paper processes. 40% still use paper for filing “important stuff”, and 56% are wed to signatures on paper for contracts and order forms.
- 20% report that their consumption of paper is increasing, but for 49% it is decreasing, including 11% where it is decreasing rapidly. This 2015 net of 29% compares with 23% net in 2014 and 3% net in 2011.
- 55% report that paper flowing through their processes is decreasing including 12% rapidly decreasing. This net of 45% compares with 21% in 2014 and 21% in 2011.
- The number of organizations actively looking at every process for paper elimination has grown from 9% in 2014 to 16% in 2015, including just 3% who feel they have reached the limit. 36% feel they are making good progress, with just 7% sticking with paper processes – down from 11% in 2014.
- Lack of management initiatives is given equal weight to staff preferences (49%) as the reason there is still so much paper around. 39% feel there is a general lack of understanding of paper-free options.

#### Capture

- 41% are using OCR in some form. 23% are capturing process data including 9% using intelligent/adaptive workflows. 16% are not using OCR, but workflow flat images, and 18% scan primarily for archive.

- **The biggest driver for scanning and data capture is improved searchability and shareability (53%).** Higher productivity, reduced storage space and faster response are all key drivers. 27% have an environmental policy to reduce paper usage.
- **40% of organizations report that more than half of their invoices are now delivered electronically - but 35% agree that most get printed anyway.** 31% agree that most of the paper documents they retain are only there for the signatures, and that most of the documents they scan are unchanged from printer to scanner.

## Digital Mailroom and Multi-Channel Inbound

- **26% scan in advance of the process, including 7% using a digital mailroom and 11% with multi-channel capture.** 22% scan to archive after the process – much more so in North America (26%) compared to Europe (10%) where digital mailrooms (10%) and multi-channel (14%) are more popular.
- **A hybrid of centralized and distributed is the most popular digital mailroom scenario (40%), with a further 25% using only centralized floor-standing scanners.** Faster turnaround to customers (54%), improved mail productivity (48%) and improved data capture quality for downstream processes (41%) are given as the biggest benefits.
- **40% admit that they deal with multi-channel content in an ad hoc way. 35% are likely to print electronic inbound and process as paper.** 32% deal with paper and electronic through the same workflow, but just 3% have a comprehensive multi-channel system across paper, electronic and social.

## Process Optimization and Workflow

- **In 40% of organizations, line of business heads and departmental managers are deemed responsible for “radical process review”.** For 14%, the head of IT is tasked. 33% place responsibility with a central efficiency department or the main board.
- **For 14%, the rate of converting key processes to paper-free is moving quickly or even completed (4%), and for 48% the rate is increasing slowly.** 15% admit they are stalled after the first few, and 37% are making little progress or have as yet no projects (11%), including 7% of the largest organizations.
- **36% have no access to workflow capability, plus 13% who have it but don't use it.** 34% make use of basic workflows in imaging systems or SharePoint, 17% have full workflow/BPM.
- **The biggest benefits reported from paper-free processes are faster customer response (43%), then productivity and compliance, then better monitoring of the workflow.** The biggest lessons learned were to establish executive buy-in, and to gather input from all stakeholders in advance.
- **59% achieved a payback in less than 12 months from their paper-free projects, including 26% in 6 months or less. 84% achieved payback in less than 18 months – the highest we have ever recorded.**

## Mobile Capture

- **24% are not looking at any mobile projects and 39% are still in the planning stage.** 12% see mobile access, data capture and forms input as a required option for any process update.

- **For those with mobile capture projects, speed of data availability and keeping paper out of the process have been the biggest benefits.** Connection bandwidth, connection security and device security have been the biggest issues. .

## Cloud and Outsourcing

- **11% are already using cloud products for capture, and 17% have plans in the next 12-18 months.** 21% are unlikely to use cloud (down from 25% in 2014) and 49% still have no policy or decision on cloud capture (21%) or cloud in general (28%).
- **Data capture is the biggest growth area for outsourcing, along with managed capture services. Archive scanning and back-scanning still have growth – as does shredding.** Box storage is still popular, but in decline. Managed print services and outbound print are stalled.

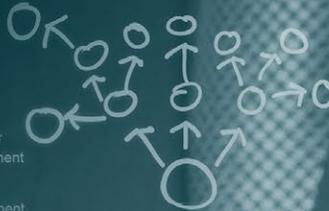
## Opinions and Spend

- **80% agree that paper content and processes are a huge impediment to remote access and teleworking.** 72% feel that “business at the speed of paper” will not be acceptable in 5 years' time.
- **57% say they are committed to digital transformation, and paper-free is an essential starting point.** 79% agree that all businesses should have an e-signature mechanism.
- **Workflow/BPM and mobile data capture are set for the strongest growth. Capture, OCR and AP are still strong, then mobile image and MDM.** Some MFP growth is likely, but scanners are mostly flat - although this is an improvement on 2014 projections.

# INFORMATION GOVERNANCE

LINKING

CONTENT SECURITY,  
ACCESSIBILITY, ENQUIRY,  
& LIFE-CYCLE  
MANAGEMENT



Customer  
Management  
Standard  
Development  
Consistency  
Business  
Optimal



Success  
Business

Innovation  
Branding  
Solution  
Marketing  
Analysis  
Ideas  
Success  
Management



Solution



## LINKING CONTENT SECURITY, ACCESSIBILITY, ENQUIRY, AND LIFE-CYCLE MANAGEMENT



In just a few short years, the somewhat closed world of records management has moved center stage by linking up all aspects of content security, accessibility, enquiry, and life-cycle management under the umbrella of information governance. This is not just a terminology change, it reflects the importance to the business of governance in all areas, and the need to work together with IT, Legal, and Operations to set policies and instigate good practices. The driver in the first instance is to protect content from the massive new threats, and the very visible impact of leaks and breaches. Part of that threat involves the increasing volumes of content, most of which add no value to the business, cluttering up servers and adding to data center costs. Meanwhile, litigation and compliance are becoming increasingly expensive in potential fines and damages, but also in the cost of legal processes for defense. But information

governance policies are also required to support the needs of local, remote and mobile staff for collaboration and knowledge exploitation, and to extend that content access to partners and customers.

As we have found in this report, there are huge volumes of content in most organizations that are not under any form of information governance, retention management or e-discovery, particularly emails, but also file-shares, cloud shares and even a high proportion of SharePoint and ECM systems. Even if day-forward policies are adopted to classify and tag this content, the volumes involved, and the change in staff attitudes needed, represent a huge hurdle to jump. Automated processes or prompted assistance are likely to provide the only enduring solutions. Tagging and classifying the existing content to add value and remove ROT (redundant, obsolete and trivial content) would be quite impossible without automated agents working on rules-based algorithms that match the defined governance policies.

In this report, we take an in-depth look at the scale of IG issues, the drivers to bring it under control, the effectiveness of automated classification, and the impact on risks and costs.



### Key Findings<sup>6</sup>

#### IG Drivers and Issues

- In the light of recent leaks, hacks and email issues, IG is very high on the senior management agenda for 28% of organizations, and 53% have new IG initiatives. 57% of respondents say senior management are only interested when things go wrong
- 51% have had data-related incidents in the past 12 months, including 16% suffering a data breach – half from external hacking and half from staff. Staff negligence or bad practice is the most likely cause of data loss (20%).
- 41% describe their email management as “chaotic”. Of the rest, 16% have fixed delete-all policies and 19% keep all emails. Only 24% apply value-based retention policies.
- 45% of respondents agree that the lack of information governance leaves their organization wide open to litigation and data protection risks. 22% reported negative financial impact from cases that hinged around electronic records, compared to 9% with positive impact.
- 60% of respondents agree that automation is the only way to keep up with the volumes of electronic content. 21% are already using automated declaration or classification of records, and 26% have new projects under way.

- The biggest drivers for IG are compliance (61%) and preventing data losses (51%), then creating searchable knowledge (48%) and reducing storage requirements via defensible deletion (35%).

## IG Maturity

- The volume of paper records is increasing in 33% of organizations, and decreasing in 39%. This net difference of 6% decreasing compares to 10% increasing in 2014. The largest organizations (5,000+ emps) are making most progress (21% net decreasing).
- 14% have a mature view of information governance across all electronically stored information with a further 22% recently re-aligning to that view, and 22% planning to adjust in the next 12 months. 31% still have divided responsibilities between IT and RM, and 12% are still in the paper-only world.
- 15% of organizations have enterprise-wide IG/RM policies, plus 28% with mixed maturity across departments or regions. 36% of the smallest organizations have no IG policies, or just have vague plans, but the same is true for 10% of the largest.
- Information retention, access security and data protection are covered by most IG policies, but only 47% cover mobile access and mobile devices, including BYOD (39%). Only 36% have specific policies for cloud-based content sharing.
- Enforcing the IG policy once created is the biggest issue for 41%. Getting the right people interested and involved, particularly senior management is the next issue (39%).

## Storage Reduction and Data Retention

- As well as replacing file-shares with ECM, 22% are considering a cloud model to reduce storage costs, and 25% are automating retention, deletion and data cleaning. 25% will just go on buying more discs.
- 37% are seeing storage volumes and costs increasing, 7% rapidly, but 42% are holding costs level. 20% are achieving reduced costs, including 10% with reduced volumes.
- Only 11% of network file-shares, 30% of SharePoint/ECM systems and 37% of scanned image archives are being operated with effective retention period management. But this only rises to 67% of dedicated RM systems, compared to 74% for paper records.

## Automating IG

- 18% are using automated classification at the point of ingestion to ECM/RM or email systems, and 15% within a workflow or process. 8% are trawling legacy content for metadata improvement and 13% processing migrated content.
- 34% feel that automated classification is more consistent than humans, including 20% who feel it's more accurate too. 48% prefer the idea of machine prompt with human review.
- The biggest benefits given for auto-classification are improved searchability (63%) then improved productivity (43%). Defensible deletion and compliance are cited by 37%, and adding value to dead content by 30%.

## Cloud

- 30% are committed to cloud for records storage, with a further 36% waiting for security and reliability to mature. Only 10% say definitely not. Adoption is remarkably consistent across different sizes of organization.
- Cost saving is the biggest driver for cloud (66%), then business resilience (49%). Easier cross-enterprise access and adoption is cited by 42%.

## E-Discovery

- 50% rely on manual search for e-discovery across electronic and paper records. 14% have a dedicated e-discovery application within or across systems.
- 54% of the largest organizations will have multiple legal holds applied per year. But so will 11% of the smallest.
- Only 37% of SharePoint systems are operating with legal hold, and 20% of file-shares, cloud or otherwise. Only 50% of email servers or email archives have legal hold.

## Spend

- Data clean-up and migration tools show the greatest increase in organizations intending to spend more. Then automated classification and email management. RM and compliance staff levels are set to increase, as is spending on IG training.

# DATA PRIVACY

## THE GOVERNANCE OF PERSONAL DATA

**LOGIN**

USERNAME  
JMooney

PASSWORD  
\*\*\*\*\*

SUBMIT

**LOGIN**

USERNAME  
Lisa-Kingstone

PASSWORD  
\*\*\*\*\*

SUBMIT

**LOGIN**

USERNAME  
BmyBaybe

PASSWORD  
\*\*\*\*\*

SUBMIT

**LOGIN**

USERNAME  
Mansell457

PASSWORD  
\*\*\*\*\*

SUBMIT



## THE GOVERNANCE OF PERSONAL DATA



Until recently, the protection and security of information on identifiable individuals had taken a relatively low profile. Most countries, regions and states have data protection legislation but they vary considerably in the level of protection decreed. Exposure of personal information or data breaches were relatively rare, and state surveillance of such information was generally covert and not acknowledged by governments.

All of this has changed quite dramatically in the last few years. The amount of personal data stored by companies and governments has soared, and the value of that data to thieves and fraudsters has multiplied as more and more personal business is transacted on the internet. Identity theft has become a major new crime. Alongside that we have the Snowden revelations and recent terrorist activities intensifying the debate over levels of state interception, with questions raised on the status and use of data encryption.

In addition to the disruption to business and the impact on customer loyalty that data breaches create, many jurisdictions are looking to bring their data protection legislation into line with the new, internet-based world – although unfortunately, not in line with each other. There are also concerns that traditional views of data collection permissions based on consent are out of line with big data capabilities, and that responsible data use is the important factor. These new regulations are likely to increase the demands on business, and have a considerable impact on IT infrastructures, particularly on outsourcing, cloud storage and web-based applications.

Ensuring data privacy has never been easy. The increasing use of cloud and mobile devices for content access and collaboration puts additional demands on security and protection. As we will see, insider threats from staff members are more likely than attacks from external hackers, and the likelihood of data loss through staff negligence is higher still. Creating balanced responsibilities with cloud providers and outsourcers is difficult, particularly when huge corporations are involved. Encryption is important, but using and managing it brings its own problems.

In this report, we take an in-depth look at how well personal data is protected, what the consequences are of data breaches, how the new rules apply (including the new European regulations), what impact they could have, and what steps users are taking in preparation.

### Key Findings<sup>7</sup>

#### Governance of Personal Data

- The operations of 38% of organizations surveyed are highly dependent on sensitive personal content, eg, healthcare, financial, claimant, etc. 33% have some sensitive customer or client data. 20% have just basic HR content.
- 36% of smaller organizations, 43% of mid-sized and 52% of large organizations have reported a data breach in the past 12 months. 19% reported a loss due to staff intent and 28% from staff negligence, compared to 13% from external hackers.
- 26% suffered loss or exposure of customer data and 18% lost employee data. As a consequence, 10% received action or fines from the regulator, 25% saw a disruption to business and 18% a loss of customer trust.
- 24% of respondents feel that their senior managers do not take the risks of data privacy breaches seriously. 13% consider that operational considerations override compliance.
- 34% feel that social networks undermine data privacy rules and 43% agree that over-zealous ID checks have a negative impact on customer experience. 68% would like to see governments encourage stronger, tamper-proof encryption.

#### Security and Cloud

- 72% of respondents feel that security measures taken by cloud providers are better (44%) or the same (28%) as their own. 15% don't use cloud or SaaS because of data protection concerns.

- **31% need cloud data centers to be in-country or in-region. 18% would use a hybrid model to protect PII.** 73% would like to see cloud providers do more to re-assure data controllers.

## Storing Data on Europeans Outside of Europe – Safe Harbor

- **Of the 15% of responding organizations storing data on Europeans outside of Europe, most are storing HR records (53%) or using offshore data centers (24%).** 24% use SaaS payroll or HR apps, and 18% use SaaS for CRM or sales.
- **46% are (or were) using Safe Harbor agreements to comply with data protection requirements for European citizens, although not exclusively.** Standard Contractual Clauses are used by 62%, and individual consent by 46%.
- **11% consider the recent European Court ruling on Safe Harbor to be a disaster. 67% are placing increased reliance on other measures.** 33% are waiting for a renegotiation of Safe Harbor, or clarification through the GDPR

## Storing Data on Europeans Within Europe - GDPR

- **37% of those storing Europeans' data are not familiar with forthcoming General Data Protection Regulations, including 11% who (mistakenly) think it will not apply to them.** 11% are making changes now, and 12% are already in good shape.
- **The right to be forgotten raises the biggest issue for 41% of our respondents, as will email addresses being considered personal data.** Being able to provide an electronic copy of personal data is an issue for 36%, and data export restrictions for 32%.

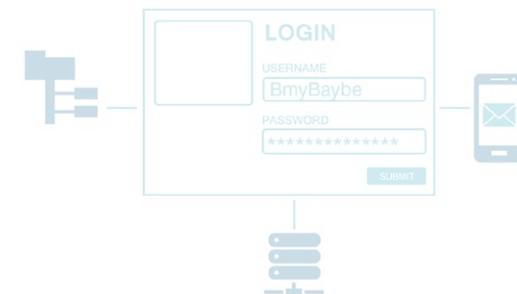
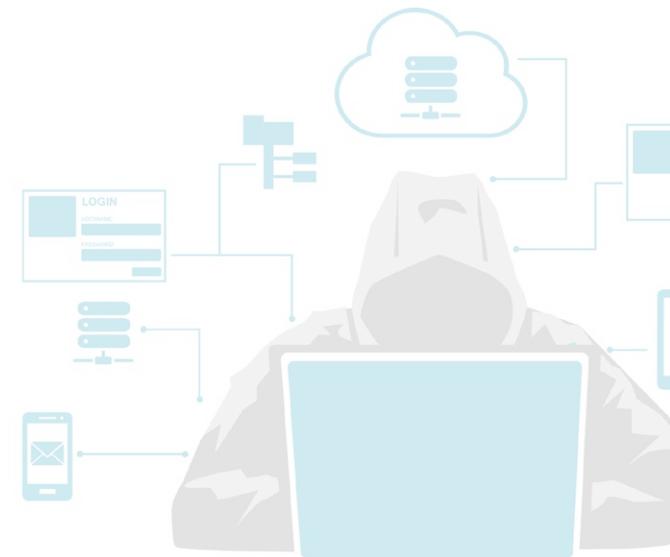
- **35% are expecting GDPR to have a financial impact, including 9% where it will be considerable.** 39% are of the opinion that harmonizing European regulations will cost businesses less in the long term.

## Encryption and Correction

- **62% do not encrypt email addresses, and 25% do not encrypt credit card data.** 64% claim to encrypt all PII, rising to 75% for sensitive personal data.
- **Persuading staff when and how to use encryption is the biggest issue, then dealing with forgotten passwords or lost 2-factor devices.** Dead or inaccessible content is cited as an issue by only 10% of organizations.
- **20% rely on metadata and content types to drive security, but half admit to poor metadata standards.** 18% are already using metadata correction tools, with a further 13% having immediate plans to do so.
- **46% rely on passwords to secure content in place.** Only 7% use in-document security.

## Spend

- **Mobile device security is set for the biggest spend increase, along with data security products and then encryption.** 14% plan to increase spend on external staff training.



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# CONCLUSIONS

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AND

## REFERENCES



# CONCLUSIONS

Operational requirements for better information management practices are increasing due to challenges in meeting rapidly changing regulatory, legal, and industry requirements, and the need for strengthened security and access controls.

User demands for business information systems to mimic those used in our personal lives, finds business organizations seeking ways to enhance the customer and employee experience through the incorporation of mobile devices for the purpose of capturing information, engaging in operational processes, and collaborating with business colleagues. This leads to the discussion of paperless processes, a elusive goal for many organizations, though progress is being made.

Increased focus on intelligent information management practices has organizations assessing what information they hold, where it is being used, and how it could be used. This brings attention to the use of content analytics to help identify and classify information in ways that support sound management practices while at the same time making this information findable and available beyond its original purpose.

While SharePoint remains a discussion point for many organizations, there are still gaps to be filled in this platform. As SharePoint 2016 enters the market and increased emphasis is placed on cloud based apps like Office 365, organizations are still struggling to find the right blend to meet their needs. While talk of enhancements surface, it is still obvious that there is a strong need and opportunity for add-on products to enhance SharePoint and bring interoperability to a level that is both rapidly installable and usable.

2015 also saw an increased emphasis on the need for data protection and information governance. The reality is settling in that while technology provides some great capabilities, the focus must be

on people, process, and policy first with technology in place to support them. How information is captured, managed, and protected begins with knowledge of operational, legal, regulatory, and industry requirements. Policies, procedures and training on the need for and adherence to these policies and practices is essential. Technology then becomes the tool to enable the user community to comply with these rules.

## Looking at 2016

In my view, in the year ahead, it is likely we will see continued merger and acquisition activities within the supplier communities. There will be extensions of supplier services, beyond what they are normally recognized for providing. This will be due to a need to reposition themselves as part of a more holistic solution rather than a “box” solution.

Emphasis will turn more toward information and content reuse as well as the design aspect of content creation. The mantra of write-once reuse-many will grow louder as businesses learn how to intelligently use their information assets for maximum gain. In parallel, use of content analytics technologies will grow in an effort to properly identify current information assets, and remove ROT (Redundant, Out-dated, and Trivial) information that takes up resources and potentially places the organization at risk. These technologies will also be leveraged to uncover and identify opportunities as well as enhance the customer experience through automated distribution and recommendations.

Information governance, security, and data privacy will continue to be on the operational radar in an effort to prevent data breaches, strengthen compliance positioning, and ensure the integrity of corporate information assets is maintained. As organizations push in this direction, gaining

greater control, operational processes will become more digital in nature and less paper intensive. Capture of information, both digital and physical, will increasingly occur at first touch-point where it will be classified, stored and injected into relevant automated workflows for processing.

2016 will sharpen organizational focus on what, when, where, how, and why information assets are created and used. Creation for the sake of creation will fade, as businesses come to realize that a multidimensional approach to information management – from creation to destruction – can reap greater rewards than imagined. As data mining brought about a new era of business intelligence, so too can an information management ecosystem that is planned, designed and maintained.

## References

- 1 AIIM Industry Watch titled ["Connecting and Optimizing SharePoint – important strategy choices"](#)
- 2 AIIM Industry Watch titled ["ECM Decisions - strategic options for managing, accessing and preserving content"](#)
- 3 AIIM Industry Watch titled ["Content Analytics: automating processes and extracting knowledge"](#)
- 4 AIIM Industry Watch titled ["Mobile and Cloud: accessing, capturing and processing content"](#)
- 5 AIIM Industry Watch titled ["Paper-Free Progress: measuring outcomes"](#)
- 6 AIIM Industry Watch titled ["Information Governance: too important to be left to humans"](#)
- 7 AIIM Industry Watch titled ["Data Privacy: living by new rules"](#)

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