The Digital Office
- improving the way we work

About the White Paper

As the non-profit association dedicated to nurturing, growing and supporting the user and supplier communities of ECM Enterprise Content Management, AIIM is proud to provide this research at no charge. In this way, the entire community can leverage the education, thought leadership and direction provided by our work. Our objective is to present the "wisdom of the crowds" based on our 80,000-strong community.

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Process used and survey demographics

The survey results quoted in this report are taken from a survey carried out between 10 July and 13 Aug 2015, with 202 responses from individual members of the AIIM community surveyed using a Web-based tool. Invitations to take the survey were sent via email to a selection of AIIM's 80,000 registered individuals. 69% of respondents are from North America, 17% from Europe, and 14% from elsewhere. They cover a representative spread of industry and government sectors. Results from organizations of less than 10 employees, and suppliers of ECM products and services have not been included, bringing the total respondents to 173. Full demographics are given in Appendix 1.

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 a series of training programs.

About the author

Doug Miles is Chief Analyst at AIIM. He has over 30 years' experience of working with users and vendors across a broad spectrum of IT applications. He was an early pioneer of document management systems for business and engineering applications, and has produced many AIIM survey reports on issues and drivers for Capture, ECM, Information Governance, Records Management, SharePoint, Big Data, Mobile and Social Business. Doug has also worked closely with other enterprise-level IT systems such as ERP, BI and CRM. He has an MSc in Communications Engineering and is a member of the IET in the UK.

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Introduction

Habit and history define how most office workers go about their jobs: chairing and attending meetings, sharing and approving documents, filling in forms, filing things. We use scanning and digital copies, but paper is often the first resort rather than the last. We have collaboration systems and communications systems, but just how well do these digital alternatives match up to office worker's needs, how intuitive are they to use, and how much productivity are we losing?

Core business processes are steadily being transformed to digital. We capture incoming forms and documents into ECM (Enterprise Content Management) and BPM (Business Process Management) systems, and follow well defined workflows for claims handling, loan applications, payment handling and so on. We call these "back office" systems, and they have produced steady increases in productivity over the years. More recently, CRM systems, help desks and the web have improved the efficiency of the "front office," customer-facing employees.

But in the "middle office", where projects and staff are managed, products and services are developed, logistics are organized, and business decisions are made, improved productivity can be elusive. Of course we have email, and mobile, and teleconferencing, but we also still have printers and photocopiers and filing cabinets. We sit in face-to-face meetings, and we hand around documents, and we tick forms, and we sign things. The middle office has yet to be transformed.

There are collaboration services, and document sharing solutions, and workflow products, but in most organizations, these are non-connected, overlapping, and often difficult to use. Staff receive little guidance on what to use for any given need, and managers divide between picking their favorites on a "flavour of the month" basis or sticking with time-honoured ways. Meanwhile, IT struggle to keep a lid on unauthorized usage, while working hard to maintain security and compliance.

In this report, we take a snapshot of the modern office, and look at the issues raised around sharing, filing, and approving documents. We look at collaboration needs, and the desirable features of a standard collaboration platform that would transform how we get things done in a truly digital office.

Key Findings

The Digital Office

- 34% of respondents admit that their offices are piled high with paper, with most of their "important stuff" referenced and filed as paper. Only 16% run a clear-desk, mostly paper-free office.

- 45% are reliant on paper for signed documents and 26% admit that their MFPs are mostly used for printing and copying rather than scanning. 56% have an ECM or SharePoint system, but staff mostly use the file-share for "day-to-day stuff".

- 60% of individuals resort to paper copies to take to a meeting, and 52% will print items to read offline or out of the office. 52% prefer a paper document for marking up changes, and 51% resort to printing to add a signature.

- 55% do make use of shared folders for meeting support documents, and 35% use open documents to collect input during meetings, but only 22% use automated circulation of agendas and minutes. 34% store personal meetings notes in a cloud application.

Collaboration and Workflow Support

- 52% of respondents are using cloud file-shares, nearly half (24%) without the support of IT. 74% use project sites in ECM or SharePoint to share documents.

- 17% have very little IT support for collaboration, and for 42% it is a fragmented mixture. 24% have a single collaboration platform, but only 6% are supported for both internal and external collaboration.

- 29% have office workflow, but for many (12%) it's not simple to set up. 25% have workflow or BPM for core processes, but only 4% find it simple enough for office use.

Document Collaboration and Mark-Up

- 55% still use email round robin commenting, and 29% still make some use of paper for mark-ups. 46% do use single shared copies - 33% on-premise and 13% in the cloud.

- Nearly everyone (90%) uses Track Changes in Word, but nearly half (40%) feel it has shortcomings. 33% need to mark up PDF documents, but nearly half feel Acrobat mark-up tools are poor. Only 6% have a dedicated mark-up/collaborative editing application.

- The biggest issue, reported by 39%, is not having a simple way to share documents with customers and partners. Next comes collating comments from multiple marked-up copies, and then the lack of a simple way to set up single-copy shared documents for ad hoc collaboration.

Document Sharing and Filing

- 58% of respondents admit that they store local copies on personal PCs and share via email. 71% share via the network drive, and 15% via a cloud file share.

- The biggest issue reported is that users aren't prepared to tag and file content reliably (59%), and prefer file shares to ECM systems. However, 48% of respondents feel their users aren't given an easy choice of where to file things, and 31% feel that their ECM or SharePoint systems are too cumbersome.

- 17% have a declared policy of tiered content management across different use types, and 21% are working towards that. 28% use multiple locations or systems but with no guidance policy, rising to 41% of the largest organizations. 28% are wed to file shares.

Approvals, Signatures and Forms

- 58% use PDF forms for electronic completion, and 28% include data collection, but only 10% are using e-forms on mobile.

- 27% admit to editing signature images into PDFs. 26% have password-controlled e-signing and 12% are using digital signatures.

- 53% are looking for a simple but robust way to sign internal documents. 40% want a simpler way to sign contracts, etc., with customers. And 32% need to extend approvals to mobile devices.
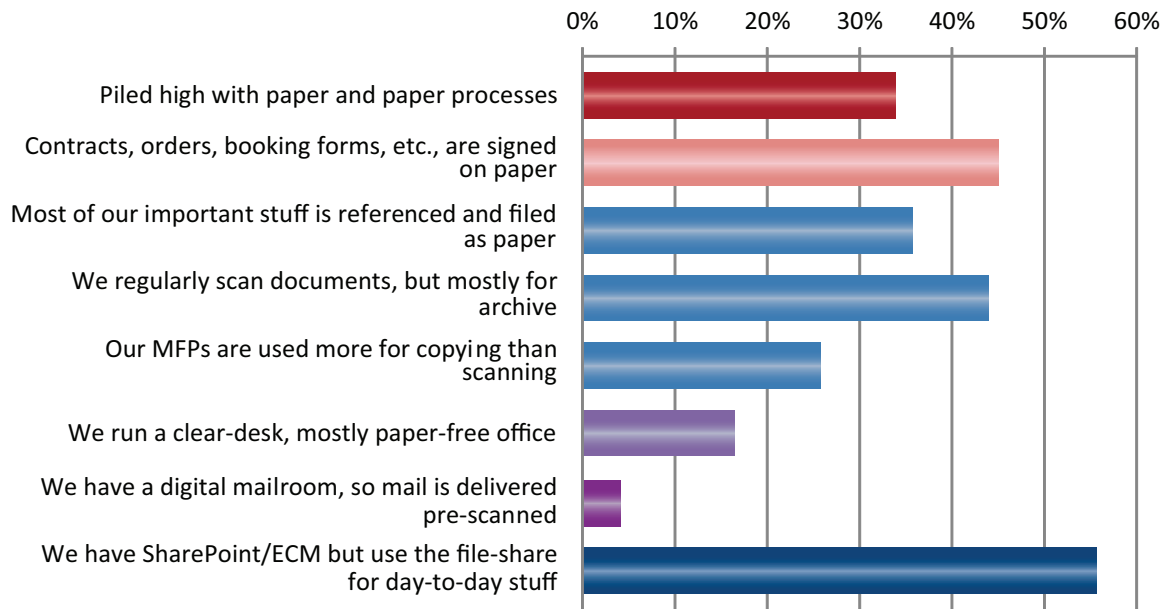
Collaboration Products

- Simple office workflow is the key feature requested by 76% of those surveyed, along with defined personal and shared content management. 50% need cloud and mobile content sharing, but synchronized to back-office ECM/RM systems.

- 9% are likely to invest in a standard office support/digital collaboration system, rising to 15% of mid-sized organizations, and 18% are looking to consolidate multiple existing solutions to a standard platform. 17% consider they already have one (30% of largest orgs).

The Office

The paperless office has been both a dream and a myth for over 30 years. Nearly every document is now originated digitally, but most end up on paper at some stage in their lifecycle. At least the phenomenon of secretaries (remember those?) printing emails to put in the boss's in-box has gone, but even the smallest office has at least one printer, albeit probably an MFP. Photocopying may be declining, but a quarter of our survey respondents admit that the MFP is used more for copying and printing than scanning. Just 16% of respondents run a clear-desk, mostly paper-free office.

One of the reasons offices are still mired in paper is that we don't provide staff with obvious alternatives. Contracts, orders and booking forms are still likely to be signed on paper (45%). "Important stuff" tends to be referenced and filed as paper (36%), and only 4% of organizations head off paper at the door by using a digital mailroom to scan inbound mail. We will return to the usability of ECM systems in general, and SharePoint in particular, but most office users will not take the time or effort to use them, preferring the often chaotic file share, or the seemingly more accessible paper copy.

Figure 1: Which of the following best describes your office or typical offices in your organization? (Check all that apply)? (N=171)
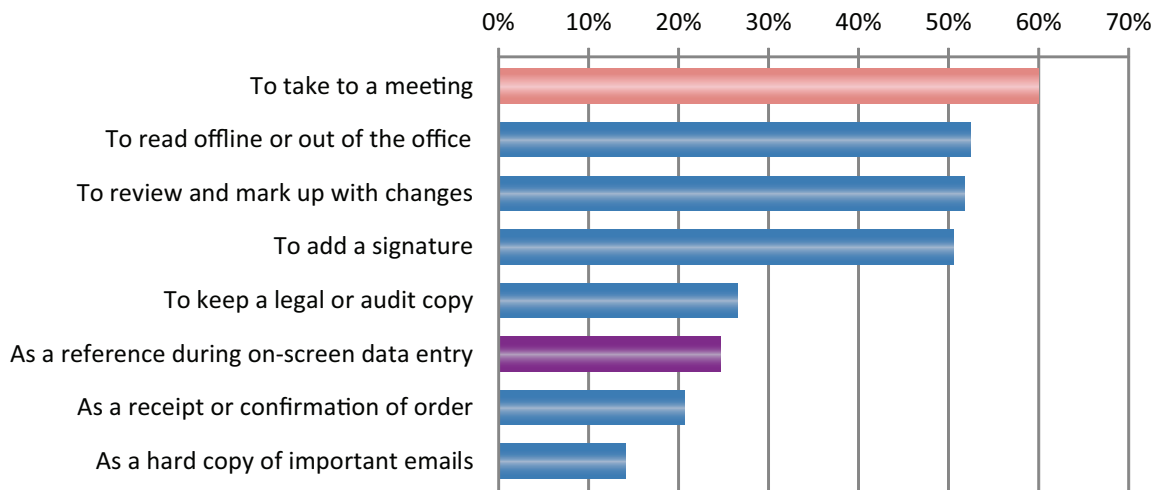

Bar chart showing, top to bottom:
- Piled high with paper and paper processes
- Contracts, orders, booking forms, etc., are signed on paper
- Most of our important stuff is referenced and filed as paper
- We regularly scan documents, but mostly for archive
- Our MFPs are used more for copying than scanning
- We run a clear-desk, mostly paper-free office
- We have a digital mailroom, so mail is delivered pre-scanned
- We have SharePoint/ECM but use the file-share for day-to-day stuff

Personal Paper Use

We often hear that "people like paper", and in the middle office, we have less ability to force a change of behavior than we might have in a more regimented environment. Things are changing, but completely paper-free workers are still considered to be evangelists – or perhaps pioneers would be a more encouraging description. When we asked each respondent what they personally resort to paper for, 60% habitually take paper documents to a meeting – doubtless to find that the meeting organizer has also printed copies in case they didn't.

52% prefer paper for offline reading and marking up changes. The former is excusable, though less so in the age of tablets and ultra-books, but as we will see, communicating suggested changes to documents in a collaborative manner is difficult enough digitally. Handwritten scrawls and annotations on paper are labor intensive and error-prone. Signatures crop up again for 51%, and that age-old issue of legal admissibility, solved 20 years ago by standards and laws, is still an issue for 27%.

Observation in any office will also confirm that workers without dual-screens tend to print out paper copies in order to reference them while entering data to another on-screen application.

Figure 2: For which of the following purposes do you personally resort to printing paper copies? (N=170)

Bar chart showing, top to bottom:
- To take to a meeting
- To read offline or out of the office
- To review and mark up with changes
- To add a signature
- To keep a legal or audit copy
- As a reference during on-screen data entry
- As a receipt or confirmation of order
- As a hard copy of important emails

Meetings

Meetings are changing. Conference calls are ubiquitous, and it's good to see that 42% of our respondents use video links for remote attendees (and 19% have access to virtual presence systems). However, there is still a meetings protocol (or there should be) that involves distributing briefing documents and agendas beforehand, taking minutes and notes during the meeting, and circulating these afterwards. 59% of our respondents generally use shared folders (cloud or otherwise) to share meeting support documents, and a surprising 35% use open documents to collect input during meetings.

Unfortunately, only 20% make use of email or calendaring options for single-button document circulation to the meeting attendees, and conferencing platforms such as GoToMeeting or Webex do not have integration with the shared document folder (nor do they prompt the organizer for an agenda beforehand and minutes afterwards).

34% of our survey take paper-free personal notes in Evernote, OneNote, Google Docs, etc., and although these are most likely to be stored in the cloud, there is often little IT supervision for the security of what could potentially be very sensitive content.

Figure 3: Do you and your colleagues regularly use any of the following for meetings?) (N=172)
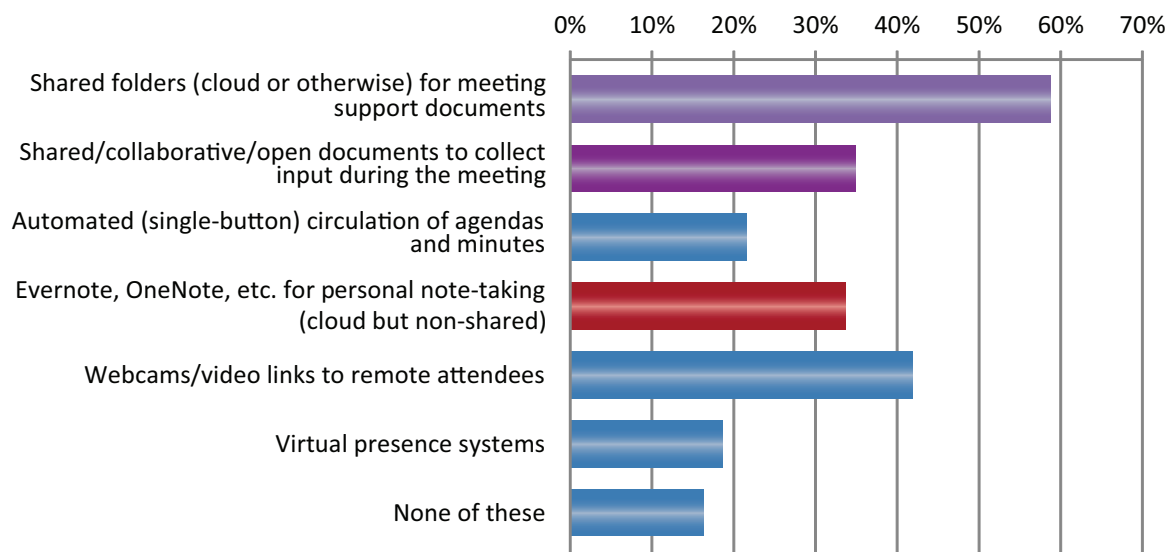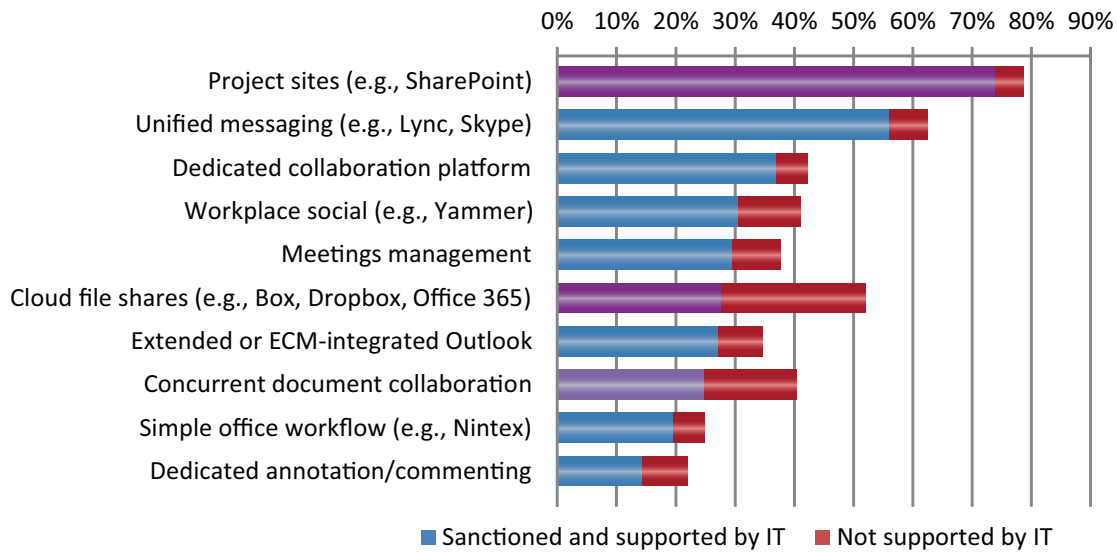

Collaboration and Workflow Support

SharePoint was originally introduced as a collaboration platform, and Team Sites has been the mainstay of many collaborative projects since. As an ECM or even a records management system, SharePoint functions reasonably well, but for quickly collecting and sharing documents, it can feel cumbersome. 79% of our respondents have access to a SharePoint system or similar (Figure 4), but as we saw earlier (Figure 1), 56% of offices prefer to use the file-share for day-to-day documents.

Messaging or text chat is also popular (62%), with Lync (now Skype for Business) often used for internal conversations, and Skype for those outside. These products can be used for document exchange, and for conference calls, and can be set to store a record of conversations, albeit un-catalogued in any way.

There may be some debate in terminology between a "dedicated collaboration platform" and a "workplace social" solution, with Jive and Yammer being perhaps the best-known examples of each. As we will see later, the functions expected in a collaboration platform will tend towards document and content sharing, alerting, and workflow, as opposed to posting-threads and commenting, but there is increasing overlap.

There are even more products that started life providing cloud file-share-and-sync but would now claim to be collaboration platforms, including cloud versions of office editing suites such as Office 365 and Google Docs, and ex-consumer products such as Dropbox. A distinctive aspect here is that 52% of our respondents use them, but 24% admit that they are not sanctioned or supported by IT. These also overlap into concurrent document editing which is generally supported to a greater or lesser degree by these cloud applications. Concurrent editing can be good for brainstorming, and avoids the issue of leaving checked-out locks, but there is often a danger of creating unwieldy documents full of formatting issues.

Figure 4: Which of the following collaboration support products do you and your colleagues use? *(N=173)*

Project sites (e.g., SharePoint)
Unified messaging (e.g., Lync, Skype)
Dedicated collaboration platform
Workplace social (e.g., Yammer)
Meetings management
Cloud file shares (e.g., Box, Dropbox, Office 365)
Extended or ECM-integrated Outlook
Concurrent document collaboration
Simple office workflow (e.g., Nintex)
Dedicated annotation/commenting

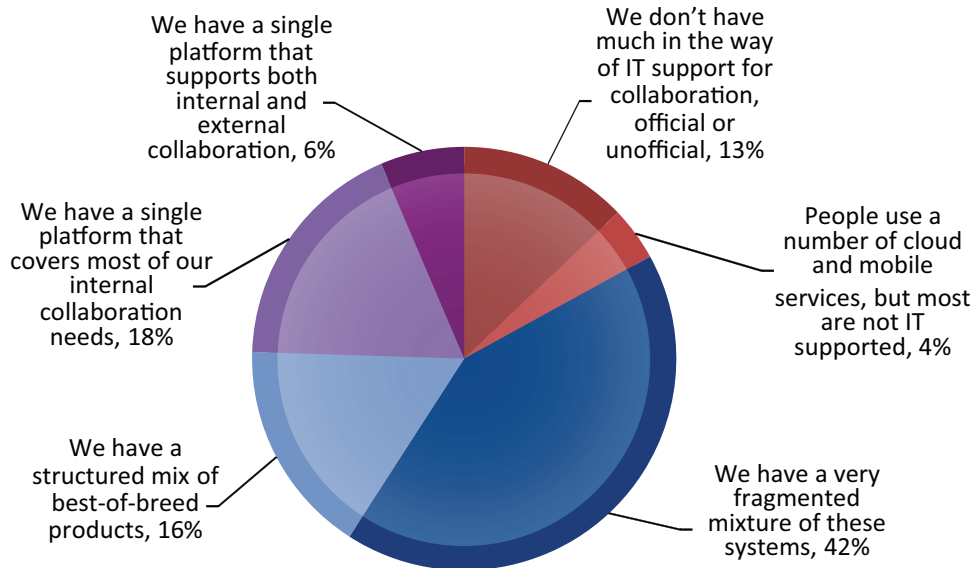■ Sanctioned and supported by IT   ■ Not supported by IT

Maturity of Collaboration Support

Any CEO would agree that effective internal collaboration is a vital element of staying competitive and maximizing employee contribution. Collaboration with external project partners and suppliers is of increasing importance in this outsourced and globalized world. However, when it comes to taking the lead on collaboration support tools, is that an HR initiative, or for line of business to choose, or should IT be driving changed habits and new ideas?

In most organizations, there is no answer to this. Given that many of these tools can be acquired in limited form for free, and upgraded quite readily with a company credit card, it should be no surprise that 42% of responding organizations have a very fragmented mixture of tools and services, and 17% have no official provision at all. 16% have a structured mix of best-of-breed products, although as we saw earlier, there is likely to be considerable overlap of functionality. Only 24% have a single platform, and within those, only 6% are covered for both internal and external collaboration.

Figure 5: How would you describe the overall provision of these collaboration enablers? *(N=171)*

We have a single platform that supports both internal and external collaboration, 6%

We don't have much in the way of IT support for collaboration, official or unofficial, 13%

We have a single platform that covers most of our internal collaboration needs, 18%

People use a number of cloud and mobile services, but most are not IT supported, 4%

We have a structured mix of best-of-breed products, 16%

We have a very fragmented mixture of these systems, 42%

Looked at across different sizes of organization, larger organizations (>5,000 employees) are more likely to have a structured mix of best-of-breed (22%), although 46% still have a very fragmented mix. The smallest organizations (10 to 500 employees) are a little more likely to have a single platform (9%).

Workflow Support

Early versions of SharePoint had a fairly simple workflow system that was widely used for vacation booking, purchase approvals, etc. Each new version has added capability, but also complexity, and there is little chance now that the average office worker or manager could set up even a simple data collection form or approvals workflow. Many organizations, especially larger ones, have BPM systems and workflows that are used for core business processes, but as we can see in Figure 6, of the 25% of respondents who have such systems (43% of the largest), only 4% feel it is simple enough for office use.

Even with "office workflow" systems, 29% have them, but 12% feel they are not simple to set up, and only 7% support external and mobile access to workflows. There are products that allow simple workflows to be created in the cloud, or to be used as add-ons to SharePoint. The most common application of a workflow is likely to be an approval loop for a document or form, so a mechanism to link-in some degree of document control (which could be the ECM system itself) is important. The ability to scan supporting paper documents or forms would also be useful.

Figure 6: Do you have simple-to-use workflow support for basic or ad hoc office processes? *(N=169)*
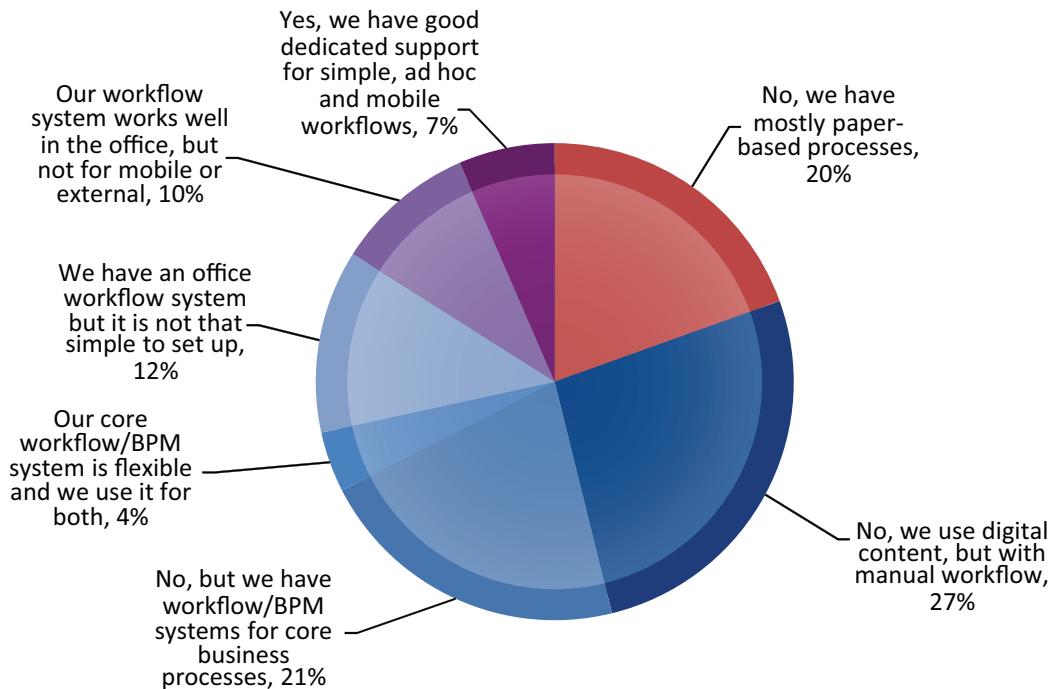

Document Collaboration and Mark-Up

We mentioned earlier the issue of hard-to-interpret, hand-annotated mark-ups, but 29% of our respondents still use this way to communicate changes, distributing multiple copies of the original. These are often faxed or scanned back to the originator, further degrading the readability. Creating a revised version of the document will then involve trawling through sheets of potentially conflicting changes, and manually incorporating them into the master copy. The Track Changes functionality in Word and other editors is much more reliable for readability of the annotations and comments, but still replicates the mechanism of distributing multiple copies, and then collecting together and collating the marked-up versions. This is the most popular mechanism amongst our respondents.

Much better is to use a single shared copy of the original, and have multiple mark-ups applied to that. 46% do use this approach, including 13% who use a cloud copy of the document rather than an on-premise copy. The Track Changes approach generally results in a mix of suggested edits and comments. This can also be extended to concurrent editing where each commenter actually edits the text – or more often, adds more text to move the document forward. In many applications, this would not provide the degree of attribution as to who made which changes, and even with Track Changes, the sequence and history of revisions can be important from a legal point of view.

Figure 7: Which of the following apply to your document sharing and mark-up processes? *(N=157)*
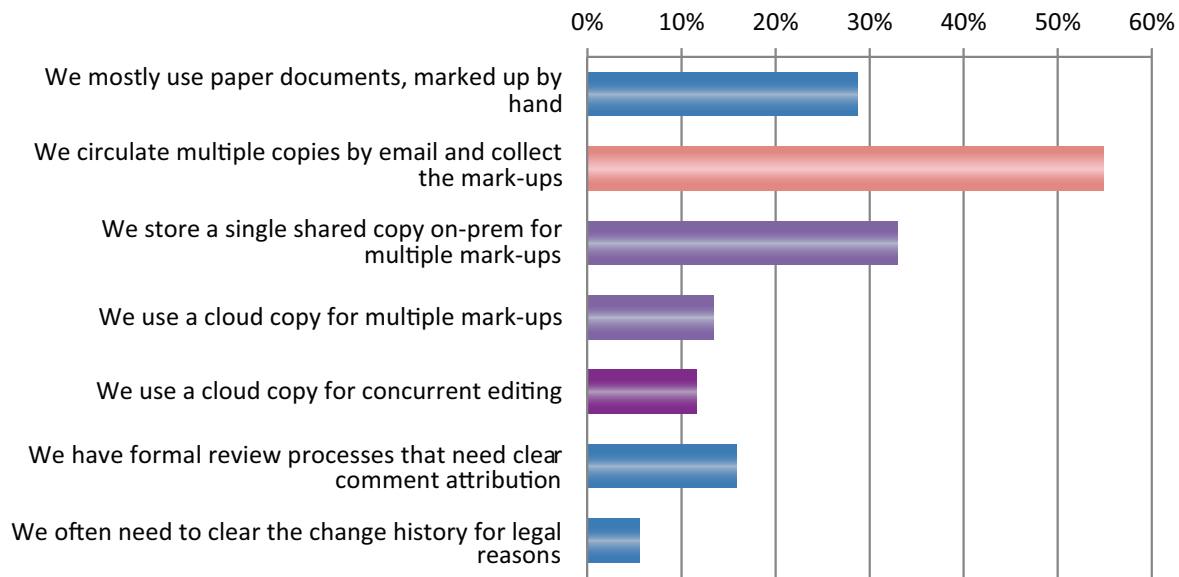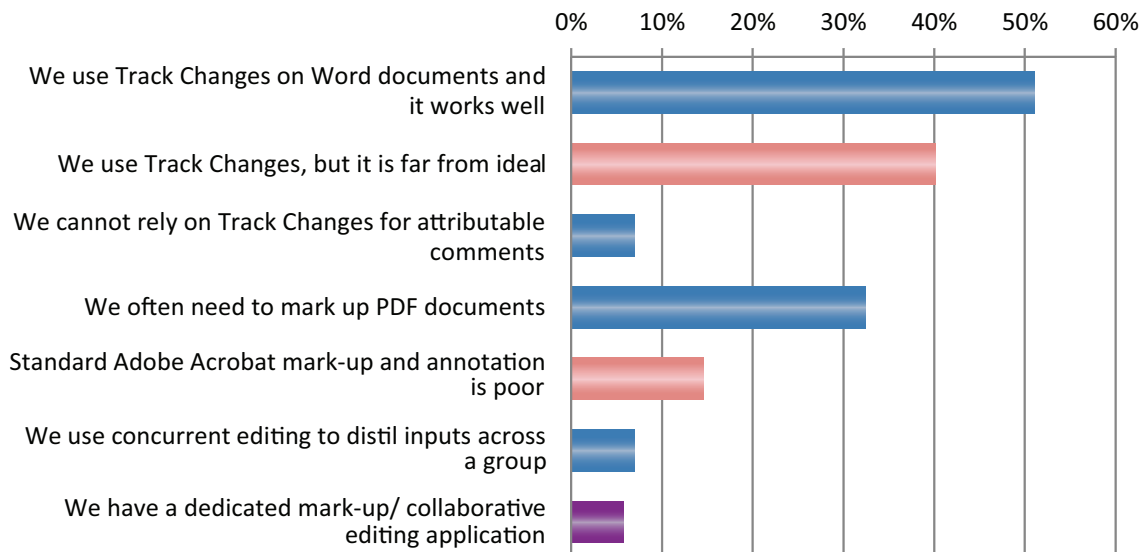

Sharing and Mark-Up Tools

Despite the fact that mark-up and commenting have been a requirement from the first days of word-processing, it is somewhat surprising that the tools are so widely considered inadequate. Around half of users of Track Changes in Word feel there are shortcomings – particularly in the ability to compare, attribute, and selectively accept changes. Comment and mark-up in PDF documents is even more poorly served in Adobe Acrobat, with 15% out of the 33% who use it considering it to be "poor".

There are more specialized mark-up and commenting applications available, and these are in use by 6% of our respondents.

Figure 8: What are your biggest issues with document sharing and mark-up? *(N=157)*


Sharing and Mark-Up Issues

Access to a simple way to share documents outside of the organization with customers and partners is the biggest need reported by our respondents, and this is behind the usage of file-share and sync products such as Dropbox and Hightail, albeit that they originated as consumer tools, and are frequently not sanctioned by IT. A similar need exists for a simple and ad hoc way to set up a single-copy shared document for commenting – and this is an example of where SharePoint and many other ECM systems are clumsy.

In the absence of a single shared copy, once comments have been added to multiple documents, unpacking and overlaying them is difficult, and re-typing or cut-and-pasting comments and text edits is considered to be tedious and error prone.

Looking back at earlier comments about using paper for travelling and for mark-up, these two combine in the need for a simpler way to annotate documents on a mobile device, and this would also play towards some form of standard mark-up application across multiple document types..

**Figure 9: What are your biggest issues with document sharing and mark-up?** *(N=157)*
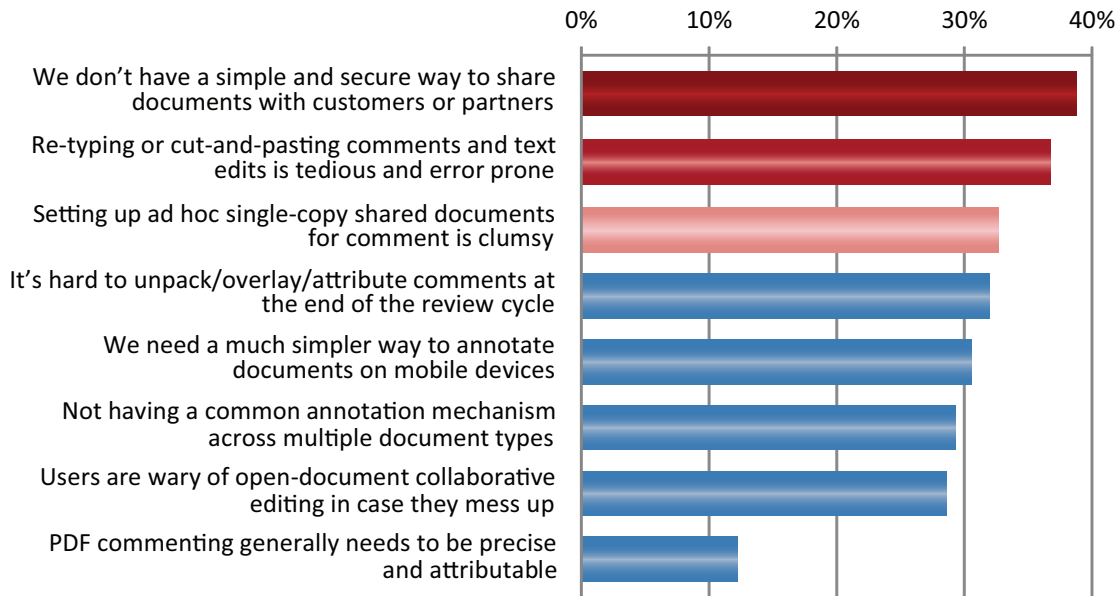
Document Sharing and Filing

Local PC drives and network file-shares are still in wide everyday use (71%) for work-in-progress documents and shared workgroup content. The latter is understandable, but the fact that 58% store shareable content on their individual PCs and laptops is a concern for all the usual reasons of security, backup, and restricted access from others.

The cloud is making inroads, with 15% using a generic cloud file share for content sharing, and 20% use cloud SharePoint or Office 365. More popular are on-premise SharePoint (44%) and other corporate ECM (20%). Larger organizations are more likely to utilize on-premise or cloud SharePoint (59% and 33% resp.). Cloud file shares are more popular with smaller organizations (23%).

Figure 10: How do you file and store work-in-progress documents and other shared workgroup content? (Check all that apply) *(N=158)*
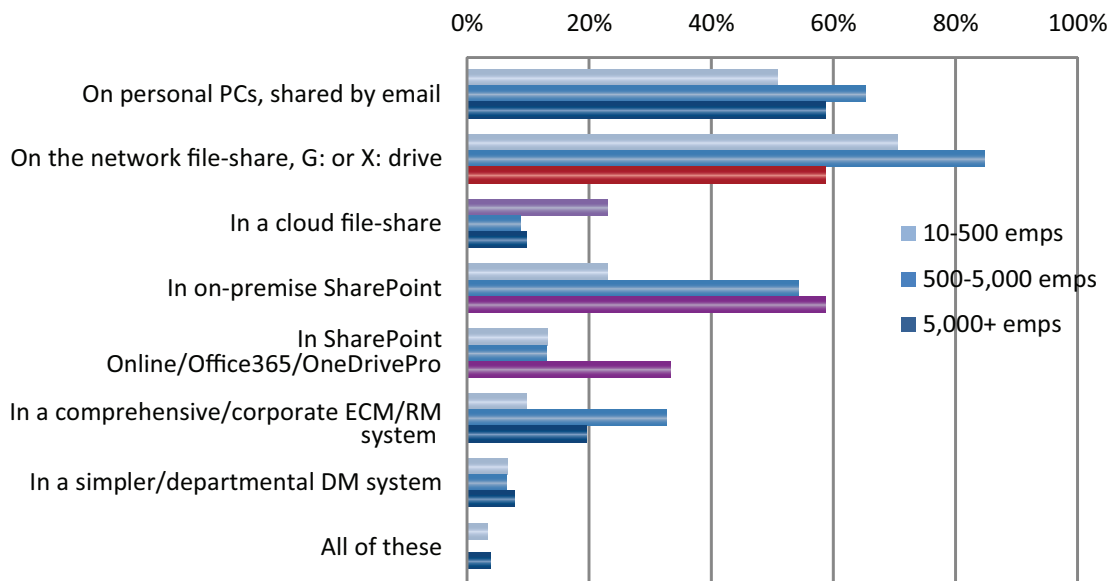
Document Filing Issues

It is no surprise that users hate filing, and are not very good at it. It is also no surprise that they prefer the lax regime of the file share to the more defined filing requirements of an ECM system. But a significant 44% of our respondents feel that we don't give users an easy choice of where and how to file their stuff. In particular, 31% feel that ECM or SharePoint systems are too cumbersome - and this is from the AIIM community who are likely to be more forgiving than general business people.

Another common theme is the difficulty of searching and accessing documents from mobile devices, and sharing them outside the firewall.

Figure 11: What are your biggest issues with filing and document sharing? (N=153)
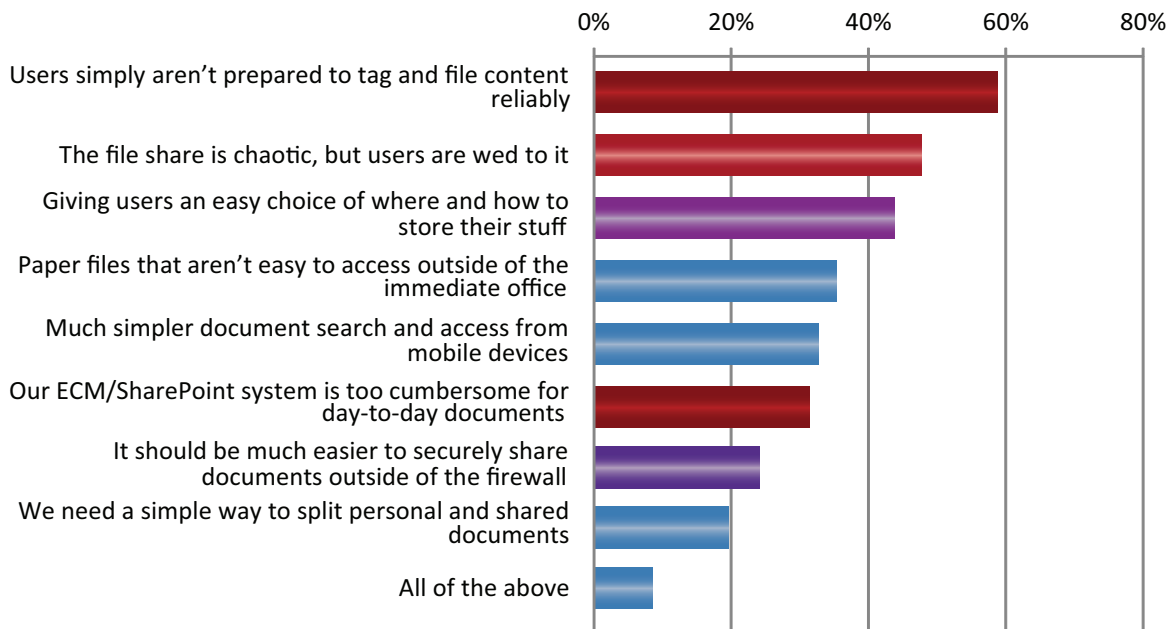

Tiered Document Management

A number of organizations are now taking the view that content management needs to be provided on a spectrum, with high security long-term needs at one end, through project teams and ad hoc file sharing, to personal filing at the other. They then set a policy as to which support systems should be used at each level, so it might be a file-share-and-sync product or a workplace social platform for immediate or short term needs, SharePoint or similar for longer term projects and intranet publishing, and a heavyweight records management system for long term archive and retention management.

We can see in Figure 12 that smaller organizations are more fixed on the file share, but also that 41% of the largest organizations use multiple content management systems, but have no agreed policy on which to use for what. Encouragingly, 22% of large and mid-sized organizations do have a tiered content management policy in place, with many others in the process of agreeing one.

Figure 12: Have you adopted a policy of tiered content management systems, e.g., personal content; internal/external collaboration; project team shares and sites; and formal records management? *(N=156)*
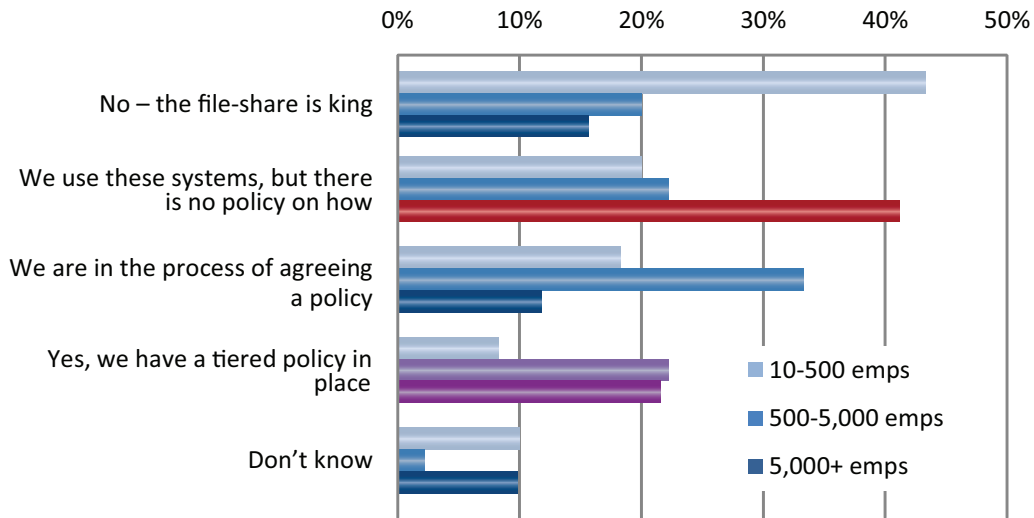

Hybrid Content Systems

One of the big issues with a tiered system is how to migrate content from one to another – in particular, moving content that is resident in the cloud into an on-premise ECM or RM system for longer-term records retention. The same applies in reverse, where on-premise content needs to be "published" into a cloud collaboration system for wider access.

The most obvious mechanism here is that the on-premise ECM system extends seamlessly to a cloud system, and 55% would like this to be the case, including 21% who would want them to be the same system. Many of these are likely to be SharePoint users who would have hoped for a transparent hybrid scheme between on-premise SharePoint and Office 365. Unfortunately, Microsoft has been slow to provide this, although improvements are promised in the next release. Other respondents are more aware that an office/cloud collaboration system needs to be much more user-friendly than an on-premise ECM, and so various synchronization or selective migration arrangements might be more appropriate. 8% quite rightly suggest that an automated hybrid transfer based on content type would likely solve the issue, without undue reliance on the human factor.

Figure 13: How would you expect content used in an office/cloud collaboration system to connect with content in your main ECM/SharePoint system? *(N=156)*
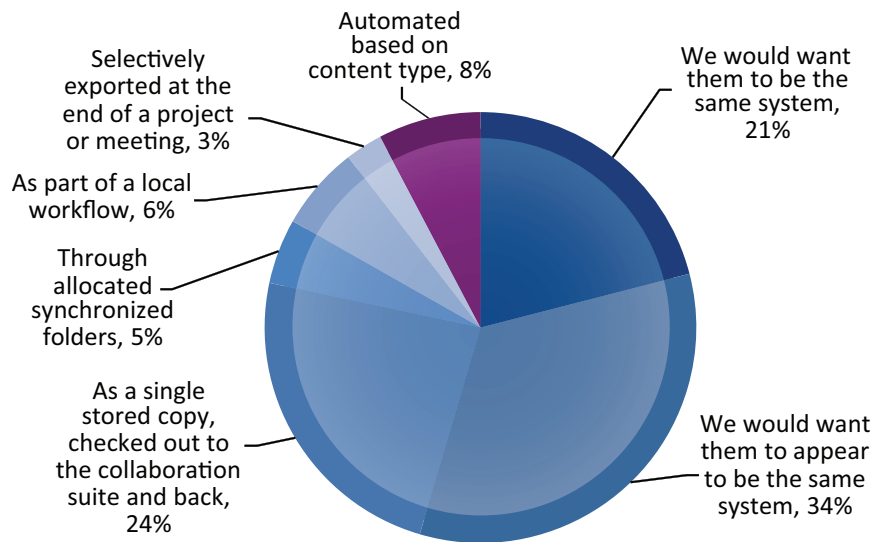
Approvals, Signatures and Forms

We looked at simple office workflows earlier, and we know that many of these are likely to be simple document approvals, albeit that the document in question might represent a proposal or bid for many tens of thousands of dollars. The next category of workflow is likely to involve a form where additional information needs to be collected against specific questions. These may be internal, or external, but we are trying to differentiate here between ad hoc or low-level administrative requirements, and high volume core business processes for claims, applications or registrations.

Beyond basic paper forms, PDF forms are the digital mainstay. 58% of our respondents regularly use them, with electronic completion and return by email. Adobe have also offered active PDF forms for many years where the entered data is collected into an XML file for subsequent collation. Although meeting an important need in most organizations of immediate validation of entry and avoidance of tedious data re-keying, the implementation of this facility has always been overly complex, and has tended to change with each new version of Acrobat.

The more modern equivalent is mobile e-forms distributed to tablets and phones, and although 10% are using this, it is not yet at the level where an office manager or administrator could create a mobile application to replace even the simplest of tick forms with a tablet-based e-form.

The fall back for all of these options is the paper form, with or without an OCR capture process to extract the data. 28% have an OCR capability, but it could probably be described as fine for use in mainstream business processes, but not simple enough for ad hoc office use. With no OCR, we are back to inefficient hand re-keying of data from the paper form to whichever system – or often systems – that need it.

Figure 14: Which of the following do you regularly use? (N=116)
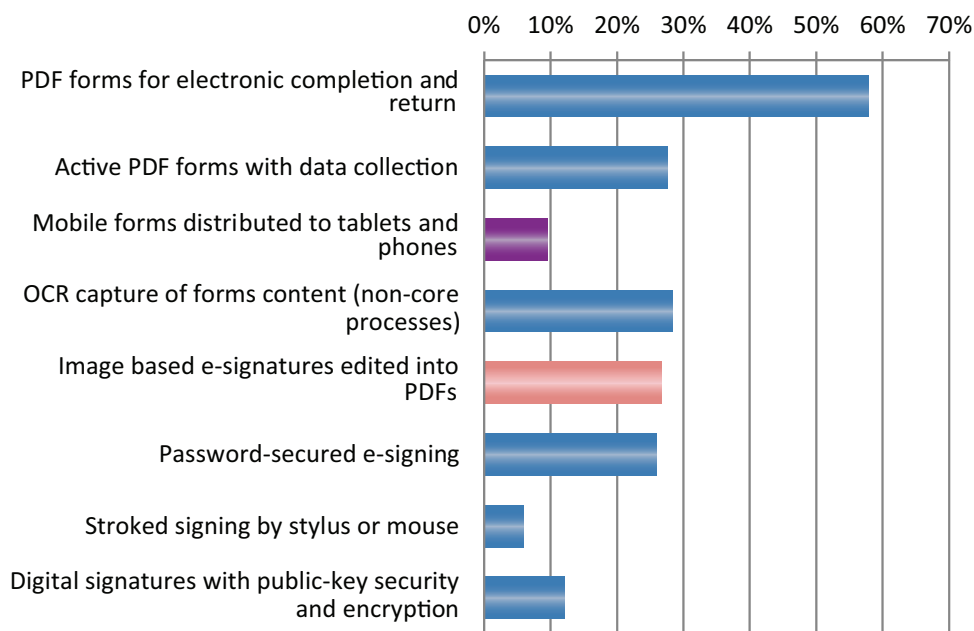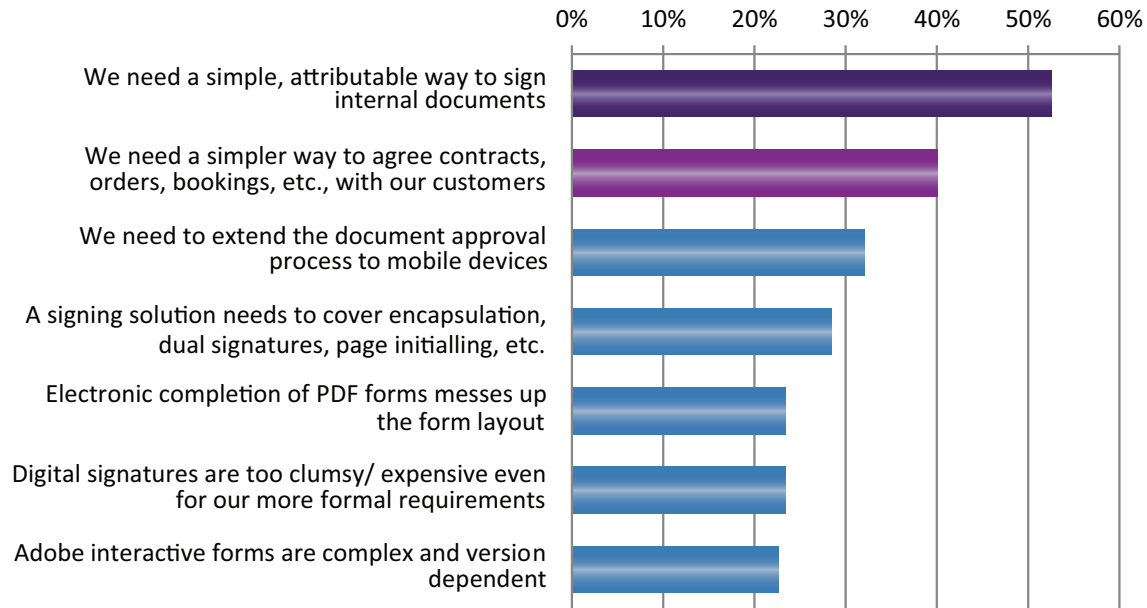

Signatures

So many digital transformation projects fall over at the point where a signature, or worse, multiple signatures need to be added to a document. A so-called "wet signature" is often deemed to be the only legal option, despite the fact that the representation of a signature as a bit-mapped image is enshrined in most legal jurisdictions. However, it has to be said, that there are a number of ways to add an electronic signature to an electronic document, some of which are more defensible than others.

Including a simple signature image into a PDF document is a regular option for 27% of our respondents. Digital signatures (used by 12%) better support the need for enforceability and non-refutability, yet are often considered to be expensive and overly complex. They also do not play so well between trading partners or customers in that they have to be set up beforehand.

In between these extremes are a number of other electronic signing options, as highlighted in Figure 14, including stroked signing on a tablet, and most recently, biometric signing using a smartphone.

Figure 15: What are your biggest issues around signatures, approvals and forms? *(N=137)*

Signature Issues

Office users are looking for a simple, but attributable way to sign internal documents (53%). This should not be difficult to set up within the business and there are various products that can do this. They also need a way to agree contracts, orders, bookings, etc., with customers (40%). This is harder to solve as nothing has emerged that is standardized across and between businesses. Both Word and Acrobat have a basic digital signature facility, but it is not obvious how to use it. The third basic requirement is the need to sign-off approvals on a mobile device.

Figure 16: What are your biggest issues around signatures, approvals and forms? *(N=137)*
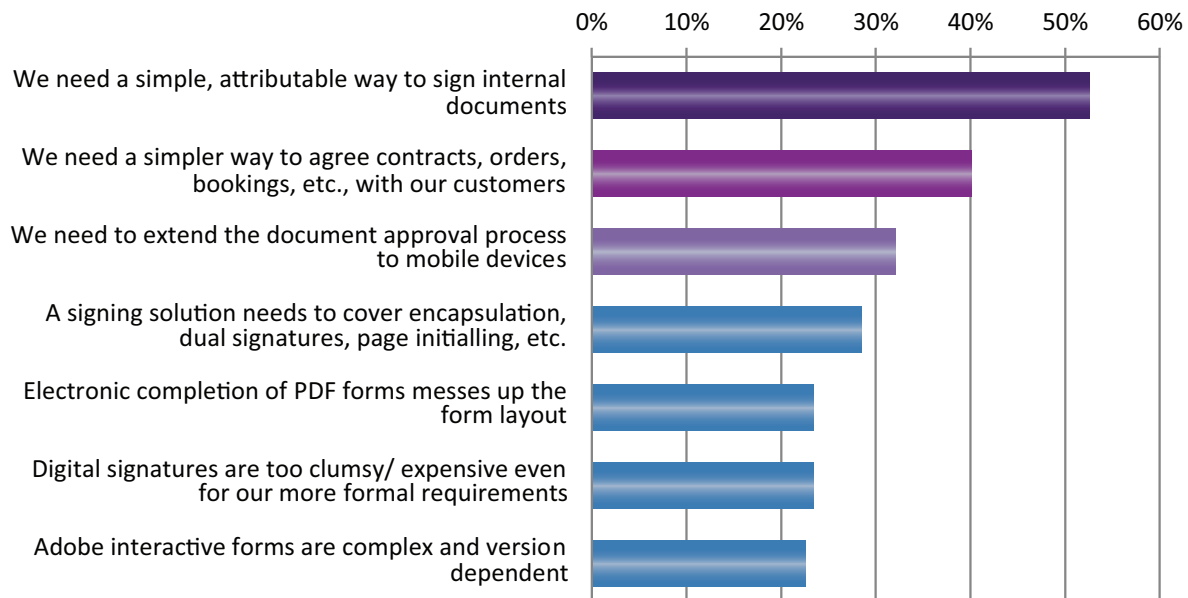
Beyond these simple requirements, there are a number of more complex issues around encapsulation, dual signatures, and the page initialling that some countries use. We do not have the space here to cover this in more depth.
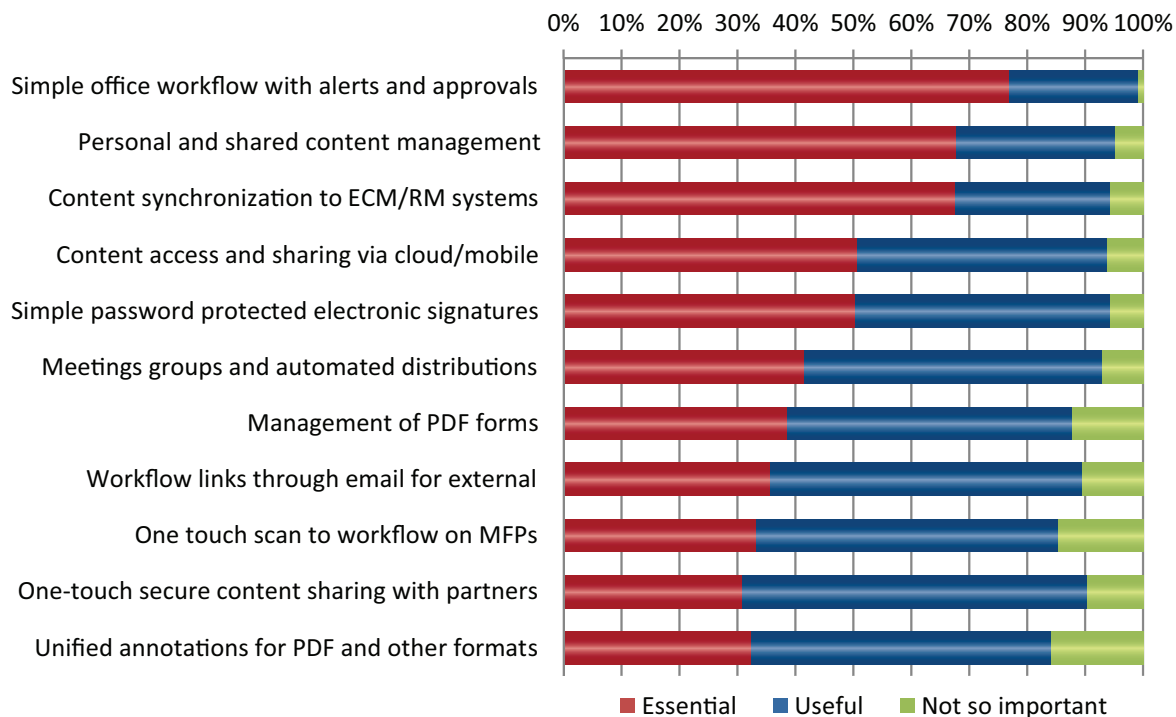
Collaboration Platforms

We discussed earlier that the IT industry has yet to fully align a given set of functions that provide file-sharing, commenting, discussion threads, meetings support, scanning, office workflow, and signature approvals into a fully-fledged product that might be called a dedicated collaboration platform, or even, a digital office. Symptomatic of this is that products are arriving in this area from a number of different backgrounds – sync-and-share, concurrent editing, team sites, social workplace, unified communications, and content management. The vendors are all frantically adding functionality to move their products into the centre ground as a true "platform".

When we asked our respondents what they see as the most important ingredients of such a platform, the biggest common ground is simple office workflows and approvals – a function that is by no means common across any of the existing contenders. This comes higher than the more expected content aspects that include a simple personal and shared content management mechanism, synchronized with the corporate ECM/RM systems, and the ability to access content from the cloud and on mobile.

Next comes the need for a simple password protected signing system that can be inclusive across the business, but has a sufficient degree of security based on logins and passwords. This would go along with better management of PDF forms, to make it so much easier to set up a simple forms-based data collection and approval for basic HR/Finance needs or short projects.

More specific workflow functionality would include automated management of meetings groups and distributions, links through email for external partners, one-touch scan-to-workflow on MFPs, and one-touch content sharing with external partners.

Figure 17: What functionalities would you expect in a comprehensive collaboration platform? (N=150)

Legend: Essential (red), Useful (blue), Not so important (green)

Categories (top to bottom):
- Simple office workflow with alerts and approvals
- Personal and shared content management
- Content synchronization to ECM/RM systems
- Content access and sharing via cloud/mobile
- Simple password protected electronic signatures
- Meetings groups and automated distributions
- Management of PDF forms
- Workflow links through email for external
- One touch scan to workflow on MFPs
- One-touch secure content sharing with partners
- Unified annotations for PDF and other formats

Collaboration Platform Plans

Having set the scene for what seems to be an eminently useful and much needed product, we asked our respondents if their organization is likely to make an investment in this area. According to the responses in Figure 18, 17% overall feel they already have one, rising to 30% of the largest organizations. Amongst the mid-sized, 15% are looking to invest in this product area, compared to 9% overall. For the rest, most (46%) feel they have a mix of solutions that satisfy this need already, with half looking to consolidate, and the other half likely to leave things as they are. 22% accept that they might need to look at this in the future.

Overall, this seems like a lacklustre enthusiasm for collaboration tools that would improve the functioning and productivity of the digital office, but may be due to a combination of factors. As we know, getting those in the "middle office" to change their ways of working is harder than in more proscriptive areas. The product offerings themselves are in a state of flux, with a mix of new entrants and existing players, and there is a fierce acquisition environment.

As yet there is no emerging product, from a big brand player, that sets the expectation, validates the product positioning and defines the scope.

Figure 18: How likely do you think your organization would be to invest in a comprehensive office support/digital collaboration platform? (N=147)
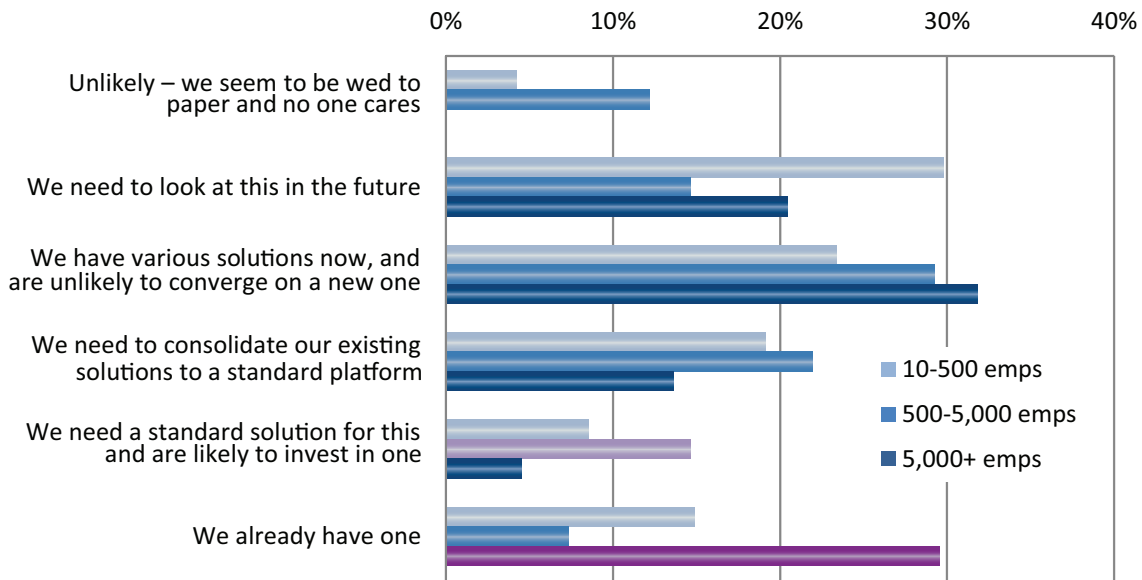
Sourcing a Collaboration Platform

A further factor can be seen in Figure 19. Who in the business decides or initiates such a project? Would it be from the top, from central IT, from departments and lines of business, or as an additional service from existing outsource partners? On balance, our respondents feel it is more likely to be from IT (38%), rather than as a board-level initiative (23%), and with all of the other projects on their agenda, and the difficulty of choosing between solutions, and probably overturning those already favoured by each department or manager, is an easy one to defer.

Figure 19: How would your organization most likely acquire an office support/digital collaboration platform? (N=150)
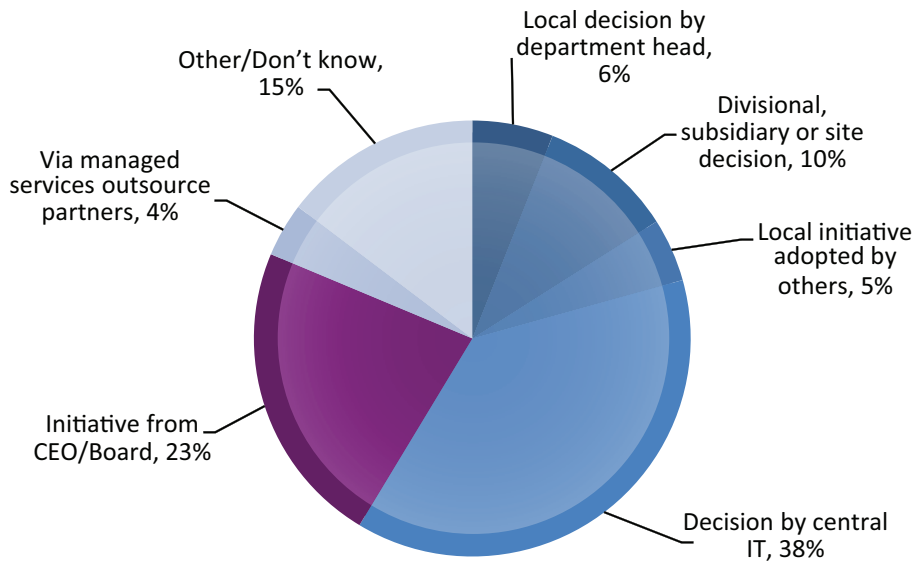
Managed Content Services

In our discussions of the digital office, it is relevant to look at the more general office infrastructure that already exists, and the degree to which different services are outsourced to external partners, particularly in larger organizations. Handling of paper and box storage of paper records is likely to be outsourced in around half of organizations and 28% of large and mid-sized use managed print services (MPS) to handle their printers and copiers.

There has been a recent increase in take up of an extended model to include in-office scanners and the provision of downstream content management, known as managed content services (MCS). Already in use by 15% of mid-size and large organizations, this could become the home of digital office services. It would also tie in with inbound mail services and archive scanning.

Figure 20: Which of the following office services do you mostly outsource? (N=148)
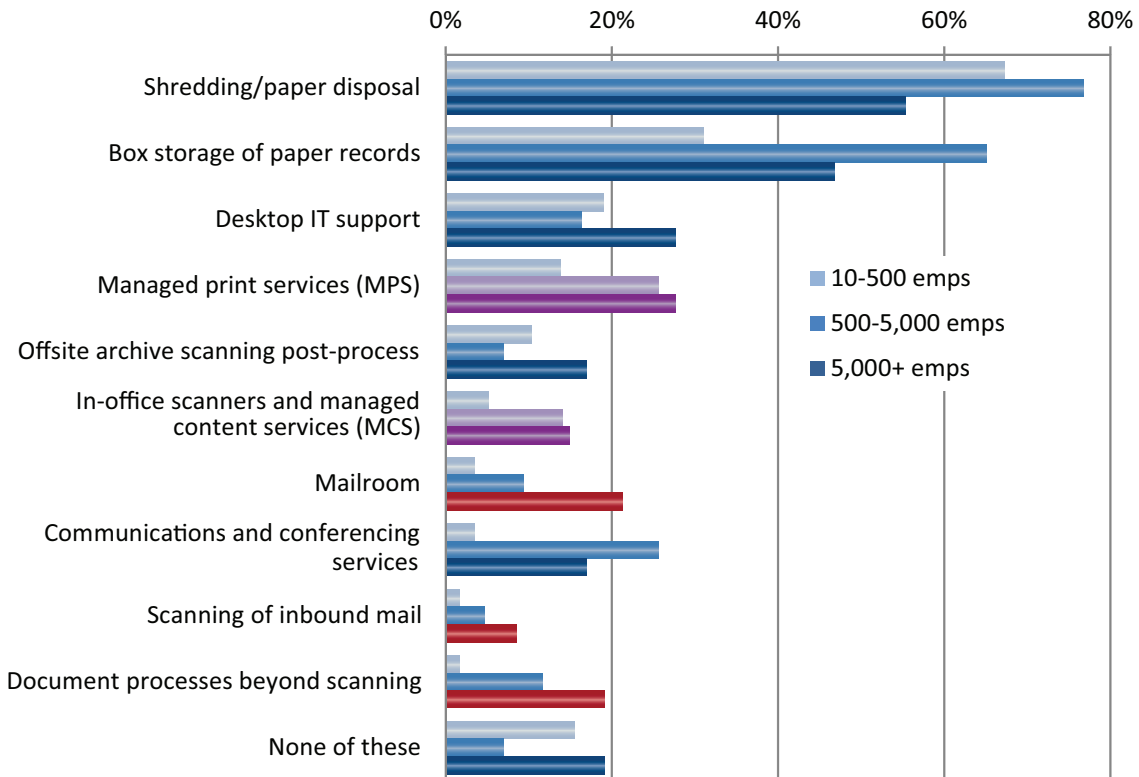
Conclusion and Recommendations

Despite the computing advances for office workers over the past thirty years, our survey has still surfaced many issues and shortcomings that impact productivity and hamper collaboration. We no longer have to travel to meetings, but that doesn't make them any more effective. There is still too much paper clogging things up. Electronic documents are filed, stored and shared in a host of different ways, many of which are inaccessible, unsearchable, and unmanaged. Accessing documents on mobile, and sharing documents outside of the business is still problematic – and is being solved by users outside the control of IT. In the document creation phase, commenting and marking up changes is not as simple or robust as it should be, and we still don't have a simple and widely accepted standard for signing documents and contracts.

A number of product types play to these issues: ECM and team collaboration systems, cloud file-shares, workplace social platforms, conferencing and unified communications, scan-to-workflow, forms management, e-signatures, and document collaboration products. Vendors from each of these areas are moving quickly to capture the centre ground, but this in itself is confusing users, who are accumulating a set of overlapping capabilities, with little in the way of internal policies as to which to use for what purposes.

In our survey, "simple office workflows with alerts and approvals" was the most commonly requested capability, featuring above personal and shared content management, content synchronization with ECM, and content access via cloud and mobile. Add one-touch scanning, signature management, meeting automation and workflow of forms through and outside of the business, and you have a product capability that would go a long way to creating a much more productive digital office.

Recommendations

- Take a look at offices within your organization (and those outside), and observe how technology is used, and where it seems to be genuinely improving efficiency. Pay particular attention to the minor office workflows that might not warrant the term "business process", but are nonetheless part of every office workers day.

- If your offices are overflowing with paper, check that MFPs are being fully exploited for their scanning capability, and that users understand how to route scanned images to appropriate locations or workflows.

- Set paper-free processes and electronic-only filing as your objective. If the signature issue is standing in the way, check out the full range of available e-signature solutions, and challenge objections from legal advisors.

- Audit the content management and collaboration support products in both official and unofficial use. Find out which functionalities are being used by which departments or projects. Pay particular attention to mobile access for content and approvals, with extension to third parties.

- Check your policies and guidelines on use of content systems, and also the levels of training you give to new and existing office staff. Consider adopting a tiered content management policy. Enforce an "able to telework" policy on both administrators and managers as part of business continuity planning.

- If the needs of your "middle office" are not being met by your existing content management platforms and BPM systems, or if you have a disparate mix of workplace social, cloud sharing and document collaboration systems, look to an integrated collaboration platform that is specifically orientated to provide a full range of office productivity solutions.

- If you already use service partners for existing office services, explore the option of managed content services (MCS) to include the elements of the digital office described in this report.
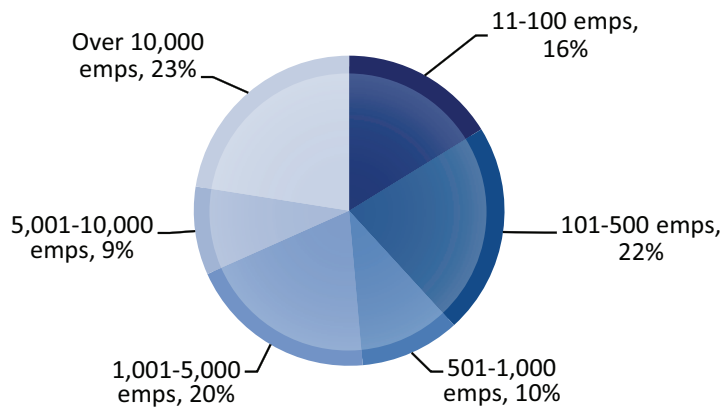
Appendix 1: Survey Demographics

Survey Background

The survey was taken by 204 individual members of the AIIM community between 10 July and 13 Aug 2015, using a web-based tool. Invitations to take the survey were sent via email to a selection of the 150,000 AIIM community members
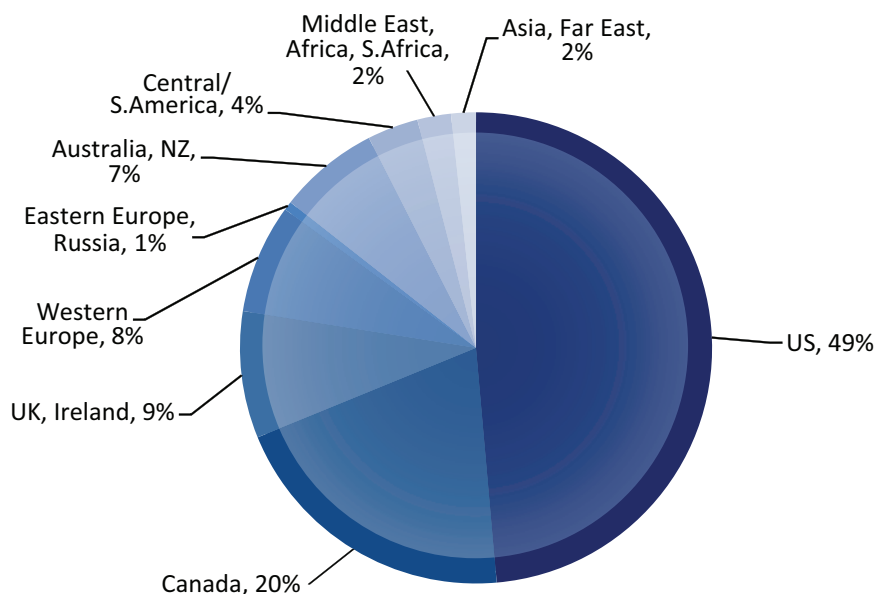
Organizational Size

Organizations of less than 10 employees and suppliers of ECM products and services are excluded from all of the results in this report, leaving 173 respondents. On this basis, larger organizations (over 5,000 employees) represent 32%, with mid-sized organizations (500 to 5,000 employees) at 30%. Small-to-mid sized organizations (10 to 500 employees) represent 38%.

Over 10,000 emps, 23%
11-100 emps, 16%
5,001-10,000 emps, 9%
101-500 emps, 22%
1,001-5,000 emps, 20%
501-1,000 emps, 10%

Geography

US and Canada make up 69% of respondents, with 17% from Europe and 14% elsewhere.

Middle East, Africa, S.Africa, 2%
Asia, Far East, 2%
Central/ S.America, 4%
Australia, NZ, 7%
Eastern Europe, Russia, 1%
Western Europe, 8%
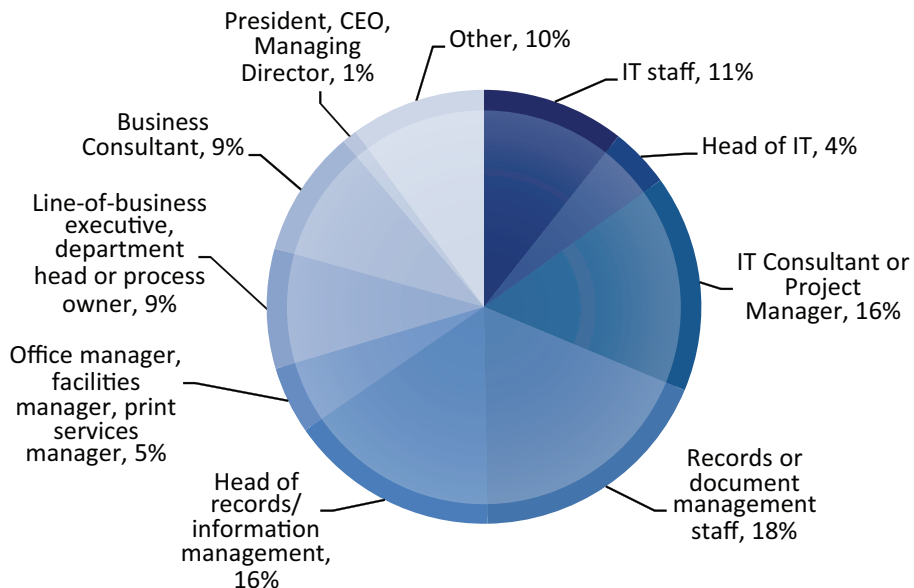US, 49%
UK, Ireland, 9%
Canada, 20%

Industry Sector

National and local government, and public services, represent 120%, finance, banking and insurance 16%, energy 8% and healthcare 8%. The remaining sectors are evenly split.

Media, Entertainment, Publishing, 1%
Non-Profit, Charity, 1%
Manufacturing, Aerospace, Food, Process, 2%
Life Science, Pharmaceutical, 2%
Retail, Transport, Real Estate, 2%
Engineering & Construction, 3%
Telecoms, Water, Utilities, 4%
Legal and Prof. Services, 5%
IT & High Tech , 5%
Education, 5%
Consultants, 5%
Document Services Provider, 6%
Healthcare, 8%
Other, 8%
Government & Public Agencies - National/ International, 10%
Government & Public Services - Local/ State, 10%
Finance, Banking, Insurance, 16%
Energy, Oil & Gas, Mining, 8%

Job Roles

31% of respondents are from IT, 34% are from records or information management, and 35% general business.

President, CEO, Managing Director, 1%
Business Consultant, 9%
Line-of-business executive, department head or process owner, 9%
Office manager, facilities manager, print services manager, 5%
Head of records/ information management, 16%
Other, 10%
IT staff, 11%
Head of IT, 4%
IT Consultant or Project Manager, 16%
Records or document management staff, 18%

Appendix 2: General Comments

Do you have any general comments to make about your office collaboration platforms? (Selective)

- I think outsourcing will be an option in years to come as the level of skill and cost seem to outweigh keeping staff in house.

- Getting all users to a competent level with existing office automation tools would be a good start. Many still can't work with marked up documents never mind a full workflow.

- We have some useful systems but people do not seem to know how to use them or use them consistently. When I've sought training, I found that there were too many choices or what you could do so it offered little clarity.

- I strongly believe that education and training are key to any organization adopting any collaboration technology. Without a proper explanation and clear direction on when to use what and where the idea of enterprise collaboration will not be adopted by all, only a few.

- We are just starting to explore options, but expecting to run into blockages by staff who do not want to change any of their current paper processes.

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This research was underwritten by Xerox and the Xerox Global Workflow Automation Business.

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- Collaborating with each other through a unified sharing capability.
- Synchronizing work automatically across corporate and personal devices.
- Remaining productive away from the office, even when working unconnected.

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- Maintaining files securely behind the corporate firewall or on a Xerox-hosted private cloud.
- Centrally managing user accounts and access for maximum control.
- Leveraging their company's corporate directory services, mail system, and storage infrastructure.
- Supporting Bring Your Own Device (BYOD) and mobile productivity without compromising corporate assets.
- Gaining insight into how work gets done with a range of reporting capabilities and analytics.
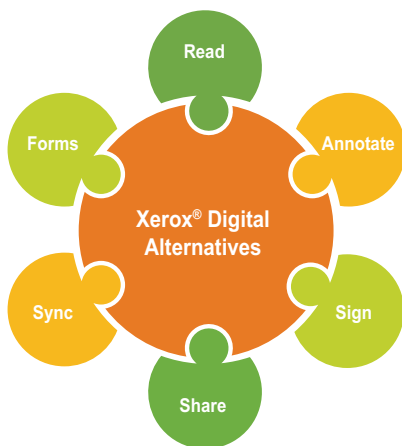
Read and Review
Save any file type for later reading. On or off the corporate network.

Annotate and Comment
Highlight, circle, sketch, type and sign. All changes are automatically saved and synchronized across all of your devices.

Complete and Sign Forms
Complete forms quickly and easily with intelligent form field recognition and electronic signature support.

Share
Share documents with selected team members or an entire meeting attendees' list instantly.

Sync Across Devices
Store and access documents from any of your connected devices.

Work Online or Offline
All features except Sync available to users at all times.

No dependency on Internet access.

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