AIIM Market Intelligence

Delivering the priorities and opinions of AIIM's 80,000 community

Industry
Watch

Winning the Paper Wars
- capture the content and mobilize the process troops

About the Research

As the non-profit association dedicated to nurturing, growing and supporting the Information Management community, 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. We would like these research findings to be as widely distributed as possible. Feel free to use this research in presentations and publications with the attribution – "© AIIM 2013, www.aiim.org"

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Process Used and Survey Demographics

While we appreciate the support of these sponsors, we also greatly value our objectivity and independence as a non-profit industry association. The results of the survey and the market commentary made in this report are independent of any bias from the vendor community.

The survey was taken using a web-based tool by 562 individual members of the AIIM community between May 10, and June 26, 2013. Invitations to take the survey were sent via e-mail to a selection of the 80,000 AIIM community members.

Survey demographics can be found in Appendix A. Graphs throughout the report exclude responses from organizations with less than 10 employees, and suppliers of ECM products or services, taking the number of respondents to 455.

About AIIM

AIIM has been an advocate and supporter of information professionals for 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.

About the Author

Doug Miles is head of the AIIM Market Intelligence Division. He has over 25 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, Records Management, SharePoint, Mobile, Cloud and Social Business. Doug has also worked closely with other enterprise-level IT systems such as ERP, BI and CRM. Doug has an MSc in Communications Engineering and is a member of the IET in the UK.

Winning the Paper Wars
- capture the content and mobilize the process troops

Table of Contents

Industry
Watch

Winning the Paper Wars
- capture the content and mobilize the process troops

Introduction

Fighting the paper invasion is a constant battle for any organization. Scanning paper records to keep down the sprawl of file cabinets and archive shelves has been common practice for many years. But what about the hundreds and thousands of external paper documents that pour through the door every day and bog down our active business processes. They create many more problems than paper records - slowing down response, restricting access, and making additional demands for re-keying, copying and filing.

Almost all business improvement initiatives can be augmented by a paper-free project, and as we will see in this report, the paybacks can be dramatic in terms of improved response times and greater productivity of back-office staff. Extending capture to mobile devices provides even closer coupling to back-office workflows. And yet the progress being made towards paper-free processes is very slow. Most organizations have yet to address more than 5% of the possible processes that could be given the flexibility, visibility and efficiency that are characteristic of electronic workflows.

In this report, we look at the reasons for this poor progress, measure the adoption of digital mailrooms, chart the progress of mobile capture, and show which processes are the most effective for paper-free working. We also measure specific improvement factors that can be used to build a business case for greater investment in the battle against paper and make recommendations on how to move the business forward.
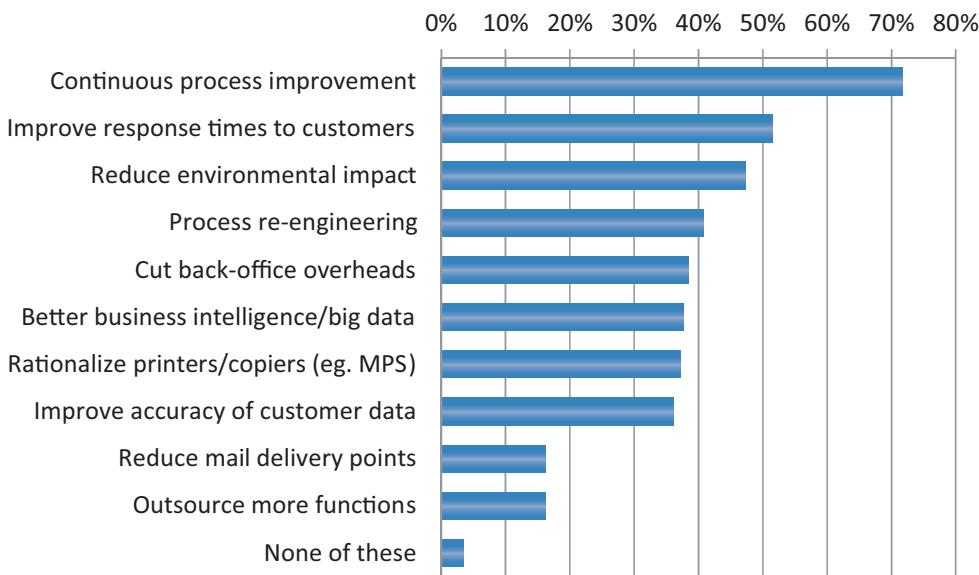
Key Findings

- **74% of respondents have business improvement campaigns that would benefit from paper-free initiatives.** Only 24% have a specific policy or maxim to "drive paper out of the business".

- **The amount of paper flowing through business processes is decreasing in 41% of organizations.** But for 19% it is actually increasing.

- **On average, respondents feel that driving paper out of the process would improve speed of response to customers, citizens or staff by a factor of 4.0x.** Those with more experience of paper-free processes report an even greater speed-up of 4.6x.

- **On average, respondents feel that driving paper out of the process would improve the productivity of process staff by 29.7%,** rising to 35.4% for those with more experience.

- **Nearly half (47%) of organizations have made only 5% progress towards processes that could be paper-free.** 18% haven't even started yet.

- **Two-thirds of those adopting paper-free processes report a payback within 18 months.** 50% see payback in a single 12-month budgeting period.

- **HR, accounts payable and customer correspondence are the most popular paper-free processes, with 70% reporting that AP and AR have "Excellent" or "Good" ROI.** "Contracts and procurement" is also proving to be a successful candidate.

- **Physical signatures and legal admissibility are given as the biggest paper-free concerns amongst staff, with Legal Counsel, and to an extent Finance, being most resistant.** Yet overall, even Legal Counsel are 37% pro and 26% against, with most line-of-business and C-levels broadly in favor.

- **31% scan pre-process, with 10% using digital mailrooms. 26% use paper in the process and then scan for archive after the process.** Consistent across all sizes of business, but digital mailroom is twice as popular in Europe (14%) compared to North America.

- **Nearly a third of organizations are processing electronic documents, forms and PDFs separately from scanned paper.** 20% print them out - including 13% who print them out and then scan them back into the capture system.

- **As regards benefits of paper-free processes, "Better records for audit trail or compliance" beats "Faster response and improved productivity".** Better monitoring of process status and workflow is also a significant benefit.

- **15% are currently using smart devices to scan or capture forms - more likely by their own employees than by customers (9%).** 22% would like to do so.

- **Spend in the next 12 months is set to increase strongly for mobile capture, with OCR, BPM/workflow and AP/AR also set for a steady increase.** Spending on scanners, MFPs and outsourcing will generally be flat, although outsourcing is set for a steady increase outside of North America.

Paper-Free Business Initiatives and Drivers

We know that business improvement campaigns come and go depending on the latest guru methodologies, but most are based on sound principles of good management, i.e., delivering improved customer service at lower cost. Only 4% of organizations in our survey are not running any of the ten campaigns we listed.

Figure 1: Which of the following business improvement campaigns are currently running in your organization? (Check all that apply) *N=451*

Some respondents indicated that they are subjected to all of these mandates. In particular, half of our respondents are tasked with improving response times to customers, and just under half with reducing their environmental impact. When we asked, "Is paper-reduction part of the campaigns you are running?", 74% of our respondents said, "Yes".
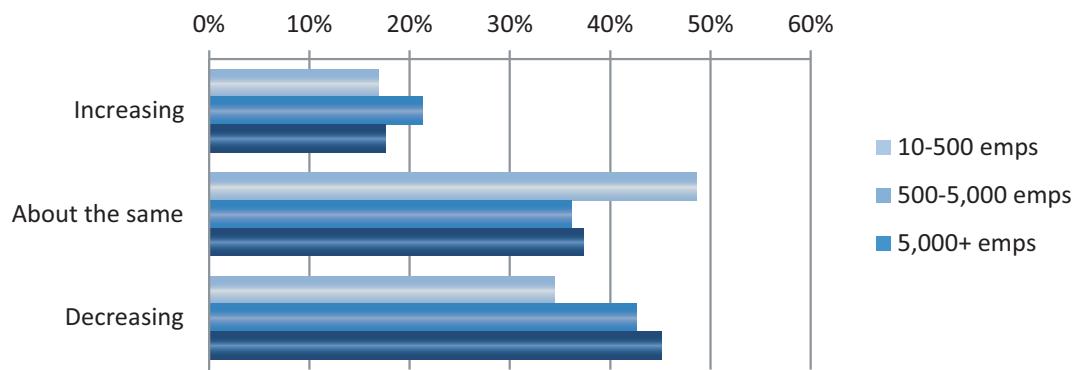
However, when we went further and asked, "Do you have a specific policy or maxim to drive paper out of the business?" only 24% said, "Yes". Now we could take this as an encouraging sign that paper-reduction is high on the agenda in nearly a quarter of organizations. On the other hand, if paper-free thinking can help with all of these business improvement campaigns, would it not be sensible to give it its own stage?

Figure 2: Business Improvement campaigns *(N=452)*

	10-500 emps	500-5,000 emps	5,000+ emps
Paper-reduction is part of these campaigns	72%	78%	72%
Have a specific policy to 'Drive paper out of the business'	22%	20%	31%

We have asked many times in AIIM surveys about the increase or decrease in paper records and in the amount of printing and photocopying in the office, but this time we asked respondents specifically about the amount of paper that is flowing through their business processes. The good news is that for 41% of organizations, process paper is decreasing. The bad news is that for 19% it is still increasing. How can this be? It is most likely that additional regulatory requirements, or a need for more management feedback, have added another form or tick-list to the process. This is precisely why we need such constant vigilance to stop paper leaking in to the process.

Figure 3: Would you say that the amount of paper flowing through your business processes is increasing or decreasing? (N=449)


Mid-sized organizations are slightly more likely to report increasing paper, but the largest organizations are making the most progress towards reduction (45%).

Drivers and Issues

We all know that paper-based processes are difficult to manage, harder to access remotely and prone to delays. When we asked users to prioritize these issues, the handling issues of paper came to the top – re-keying of data, searching for copies (and failing to find them) and filing. Next comes the problem of storage space, and then the inability to readily monitor workflow progress.
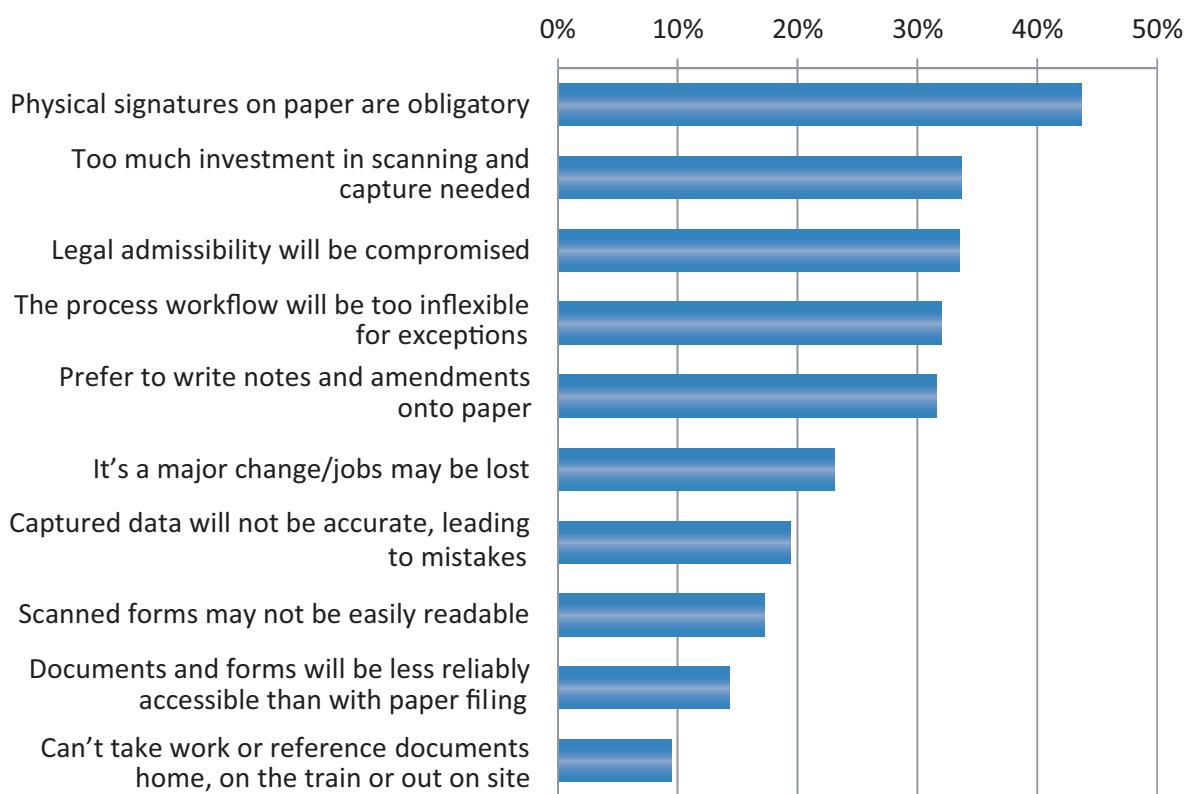
Figure 4: What would you say are the biggest issues caused by paper-based processes in your organization? (Max THREE) (N=449)

A number of additional issues were highlighted such as difficulty of version control, lack of disaster recovery, cost of paper supplies, and the endless chase for "wet-ink" signatures.

Looking at the other side of the coin, we asked our respondents about the biggest objections or concerns regarding paper-free processes.
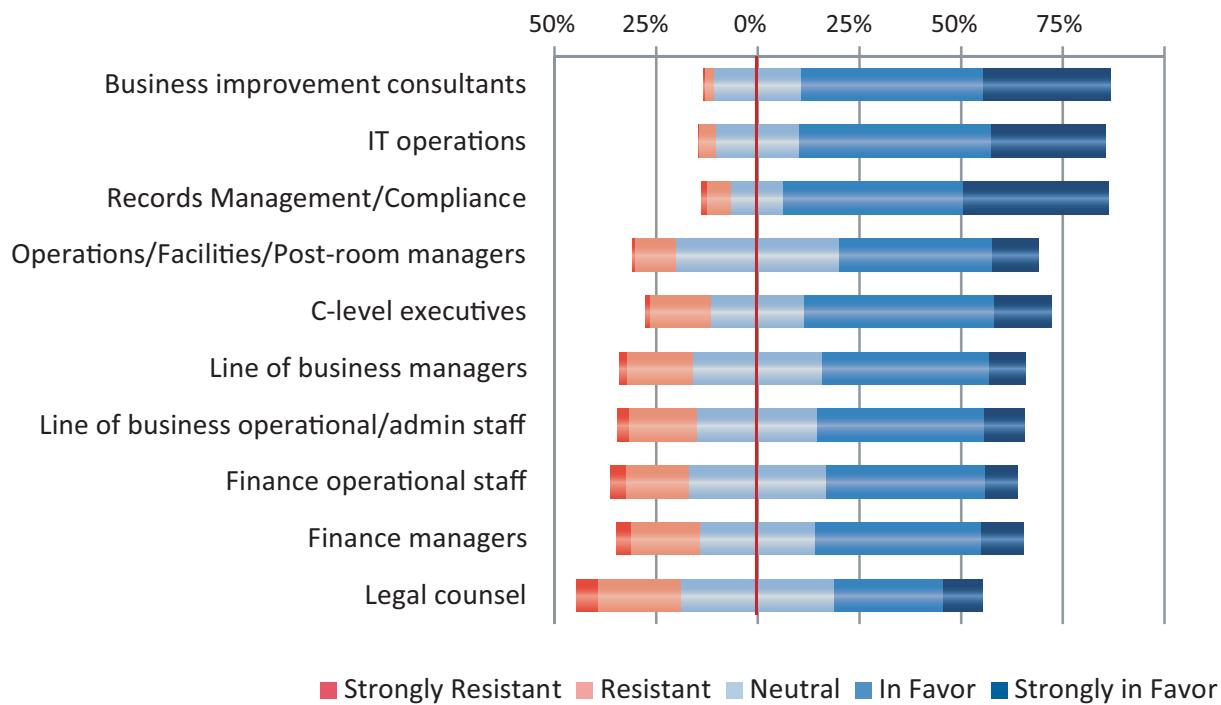
Figure 5: What do you think are the main concerns about work-flowed, paper-free processes? (Max THREE) (N=418)

Concern	Percentage
Physical signatures on paper are obligatory	~44%
Too much investment in scanning and capture needed	~34%
Legal admissibility will be compromised	~34%
The process workflow will be too inflexible for exceptions	~32%
Prefer to write notes and amendments onto paper	~31%
It's a major change/jobs may be lost	~23%
Captured data will not be accurate, leading to mistakes	~19%
Scanned forms may not be easily readable	~17%
Documents and forms will be less reliably accessible than with paper filing	~14%
Can't take work or reference documents home, on the train or out on site	~10%

Perhaps not surprisingly, the age-old issue of physical signatures rises to the top, followed at number three by legal admissibility. Given that the laws on this have been standardized in most jurisdictions for ten if not twenty years, this is disappointing. Having said that, those who operate in a consumer environment have always struggled to replace signatures on financial agreements and loan applications (although electronic agreement seems to be acceptable for online web purchases no matter how much money is involved), and as we will see later, this is a driver for mobile capture applications. Cost of equipment, inflexible workflows, and ease of mark-up are more understandable objections, as, of course, is the two-edged one of potentially disruptive business change.

To investigate where the biggest pockets of resistance reside, we asked which departments or job functions are the most strongly resistant and which are the most in favor.

Figure 6: How would you describe the attitudes of the following staff in your organization to replacing paper in your key processes? *(N=418)*


Business improvement consultants
IT operations
Records Management/Compliance
Operations/Facilities/Post-room managers
C-level executives
Line of business managers
Line of business operational/admin staff
Finance operational staff
Finance managers
Legal counsel

■ Strongly Resistant   ■ Resistant   ■ Neutral   ■ In Favor   ■ Strongly in Favor
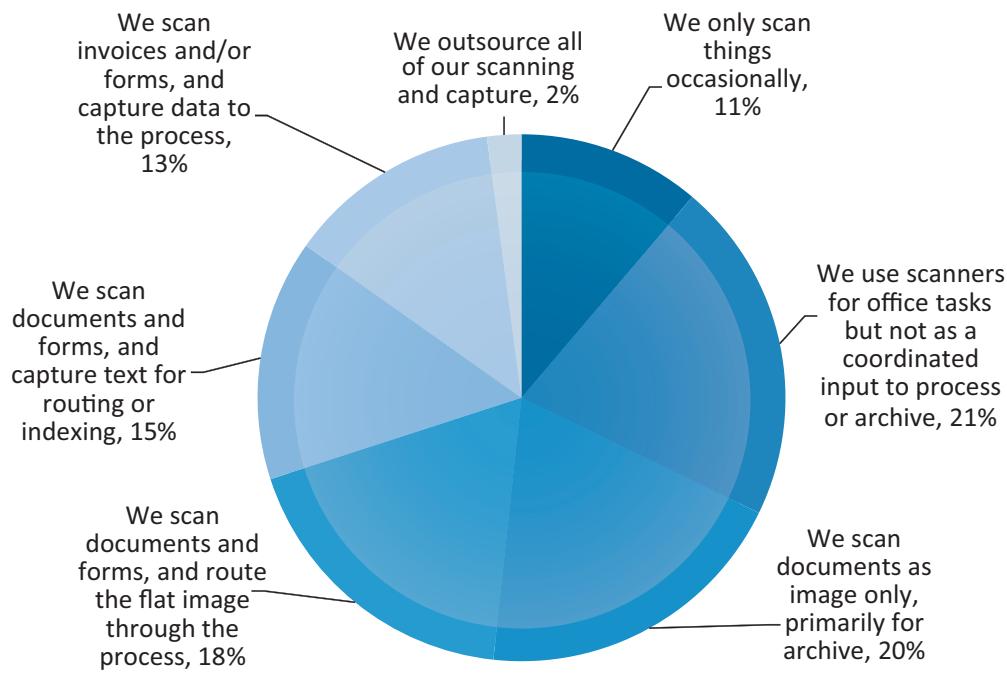
Not surprisingly it is the Legal Department that has the more deeply entrenched opposition, although even there the net overall view is positive: 37% in favor compared to 26% against. Financial managers and general administrative staff can also be resistant, but contrary to popular opinion, C-level executives are four times more likely to be in favor of paper-free processes than against – although if your board is in the 16% who are resistant, your chances of making any progress are slim. Business Improvement, IT and Records/Compliance are likely to be strongly in favor.

Paper-free processes can make a huge contribution to business improvement campaigns, but management initiative is needed to overcome objections, particularly regarding the legal situation. C-level executives need to make their positive views more strongly known.
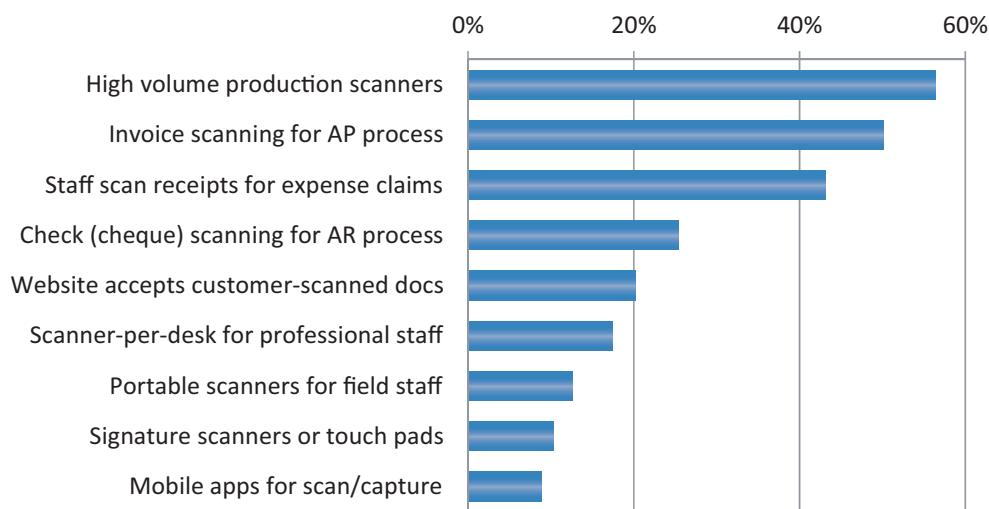
Capture Maturity

The highest level of capture maturity (in paper-input terms) is the almost "dream scenario" whereby forms or invoices are scanned at-the-door, the document type is automatically recognized and routed, the data is captured, it is verified against transactional content in the ERP or finance system, and the invoice or, say, loan application is passed for payment in a "hands-free" or light-touch way. The reality is that although 70% or so of businesses are scanning as part of the process – rather than for ad hoc office tasks – only 13% are using OCR to extract data from the document or form and using it within the process. 15% extract some data from the form, but use it only for routing or indexing, and 18% scan the form but then manually route it as a "flat image" through the process. The remainder only scan for archive and this is mostly done at the end of the process, although it may be that "follower documents" such as passports and birth certificates are split out at the start of the process and scanned for archive straight away, while the rest of the paper form is routed through workflow. It is not unknown for the follower documents to be photocopied at, say, branch level, and the copies passed to head-office where they are scanned.

Figure 7: How would you describe the level of image capture maturity in your business unit? *(N=420)*

- We scan invoices and/or forms, and capture data to the process, 13%
- We outsource all of our scanning and capture, 2%
- We only scan things occasionally, 11%
- We use scanners for office tasks but not as a coordinated input to process or archive, 21%
- We scan documents and forms, and capture text for routing or indexing, 15%
- We scan documents and forms, and route the flat image through the process, 18%
- We scan documents as image only, primarily for archive, 20%

As might be expected, larger organizations are more likely to invest in more sophisticated capture and OCR equipment, but even in the largest organizations, the level of full data capture only rises to 16% (from 11% of the smallest) and automated routing or indexing rises from 12% to 19%.

Contrasting with the potential reluctance of the Finance Department to embrace paper-free processes, the two most popular applications of capture are financial: invoice scanning for the accounts payable process (AP), and employees scanning receipts for expense claims, with nearly half of organizations using one or both of these applications. If we compare this back to Figure 6, we would have to say that the majority of paper-free AP applications do not actually capture data from the invoice, merely workflow a scanned image rather than the paper copy itself – with all of the visual matching and additional keying that will likely be involved.
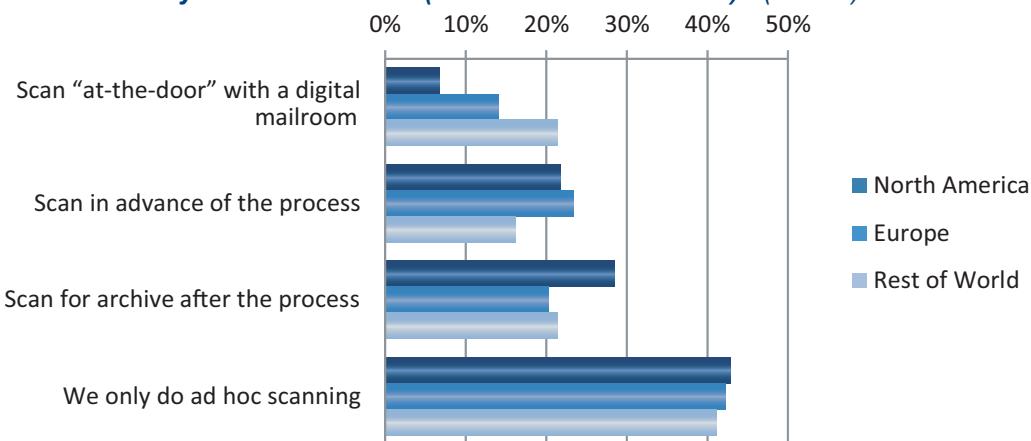
Figure 8: Which of the following do you use in your business unit? *(N=397)*

- High volume production scanners
- Invoice scanning for AP process
- Staff scan receipts for expense claims
- Check (cheque) scanning for AR process
- Website accepts customer-scanned docs
- Scanner-per-desk for professional staff
- Portable scanners for field staff
- Signature scanners or touch pads
- Mobile apps for scan/capture

Digital Mailroom

The volume of process input items received by mail each day varies considerably, but 40% of the organizations in our survey are processing more than 1,000 items per day, and 13% more than 10,000 items. Whether mail is sorted and delivered by hand, or handled through a digital mailroom, a quarter of organizations would expect delivery to the desk (or "desktop") within 2 hours, and half within 4 hours. Most of the remainder - those with perhaps multi-site mail distribution – have the more leisurely expectation of 24 hours.
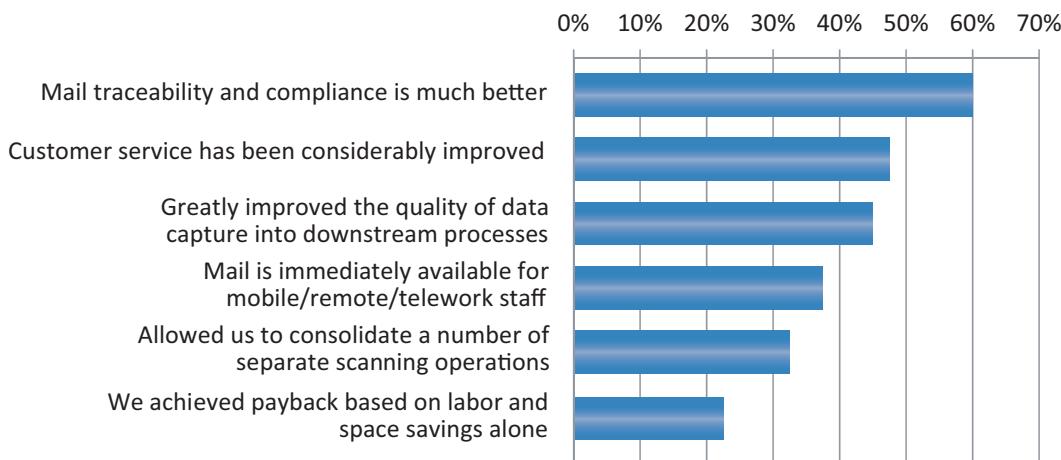
Despite the benefits of scale offered by a digital mailroom, only 10% of organizations in the survey have adopted this approach. Intriguingly, this varies little by size of organization, but considerably by geography, with organizations in Europe having twice the take up of North American businesses – and the rest of the world has a higher adoption beyond that. This may be due to the benefits of consolidating administrative processes in lower-waged areas of Europe which are still well-served by mail deliveries, or it may reflect the fact that most of the large floor-standing mailroom scanners are manufactured in Europe – 41% of those who have a digital mailroom use these high-volume scanners compared with multiple desktop units or distributed capture devices at branch offices.

Figure 9: Which of the following best describes how you mostly deal with inbound documents and forms in your business unit (in-house or outsourced)? *(N=429)*

When it comes to user experience of digital mailroom implementations, the consolidation aspect crops up, but the biggest benefit is mail traceability and compliance – electronically routed mail can be more easily traced and tracked and is less likely to get lost or delayed than paper deliveries. If inbound documents are delivered to the process in hours rather than days, customer service is going to be improved, and there is more flexibility for remote or teleworking staff. Centralizing the capture services is also likely to allow for more sophisticated equipment, thereby improving the quality of captured data for downstream processes.

Figure 10: Which of the following comments would you apply to your digital mailroom implementation? (Check all that apply) *(N=40 Digital mailroom users)*
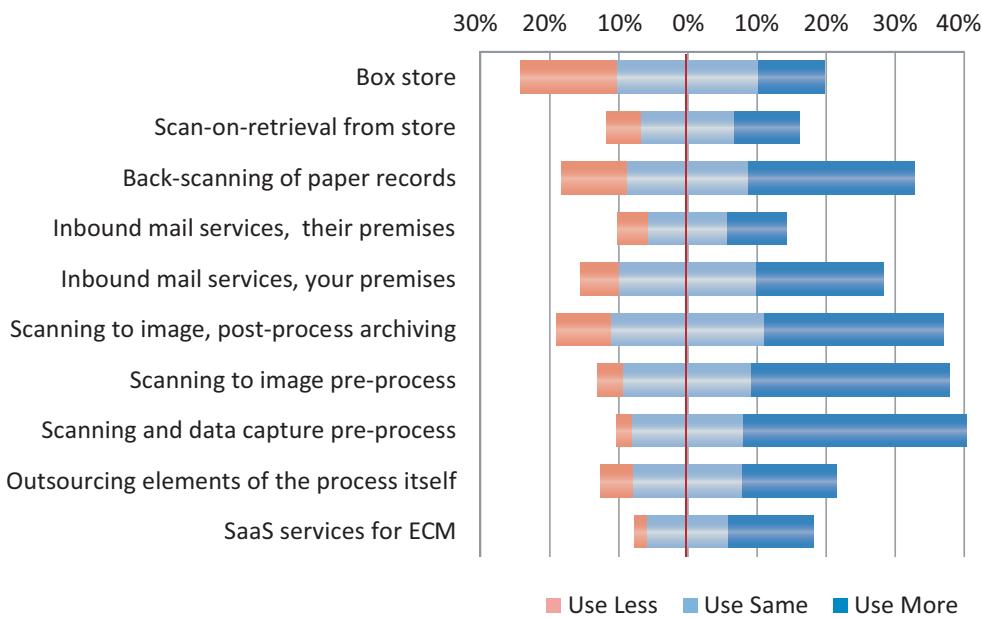
Despite the obvious attractions, only 5% of digital mailroom users outsource their inbound mail scanning.

Outsourcing

Scanning for archive – particularly back-file scanning of records - has been a popular outsourced activity for many years. There are variants of this, including scan-on-retrieval from the paper box-store, and scanning on exit from the process. Most Document Process Outsourcers (DPOs) would like to provide their services for a much greater part of the process chain, and inbound mail services is a good starting point – although in Figure 10, this could apply to a manual mailroom as much as a digital one, and there are on-premise and off-premise options. There is growth indicated in outsourcing elements of the process itself, and taking the process further as more of an end-to-end solution. In our view, this can be a good way to overcome internal roadblocks that are holding back paper-free initiatives – especially if the DPO can bring industry-specific experience to reassure cautious business managers.

Figure 11: What use do you make of outsourced document services and what are your plans?
(N=379 Line length reflects "Don't use")
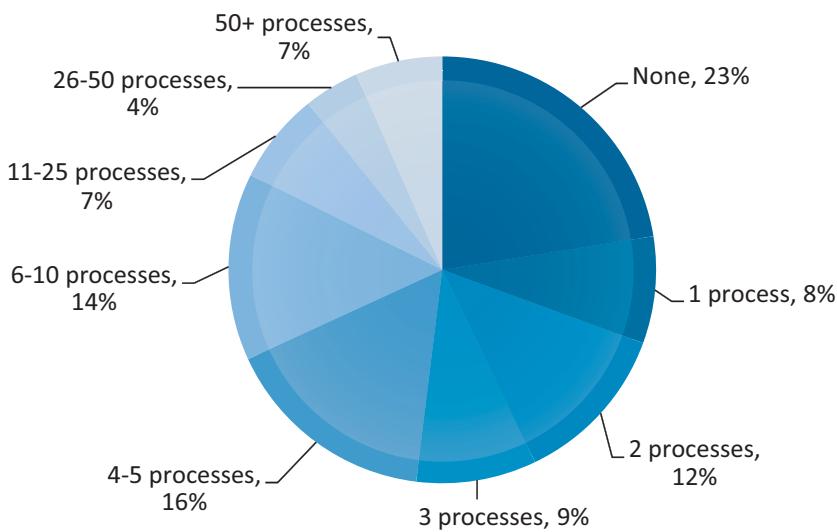
Paper-Free Processes

Despite the ready availability of simple scan-based processes, such as employee expense claims, 23% of organizations still have no paper-free processes – and this is not just small organizations: 29% of mid-sized companies are all-paper, compared with 25% of smaller businesses, and even amongst those with over 5,000 employees, 13% have no paper-free processes.
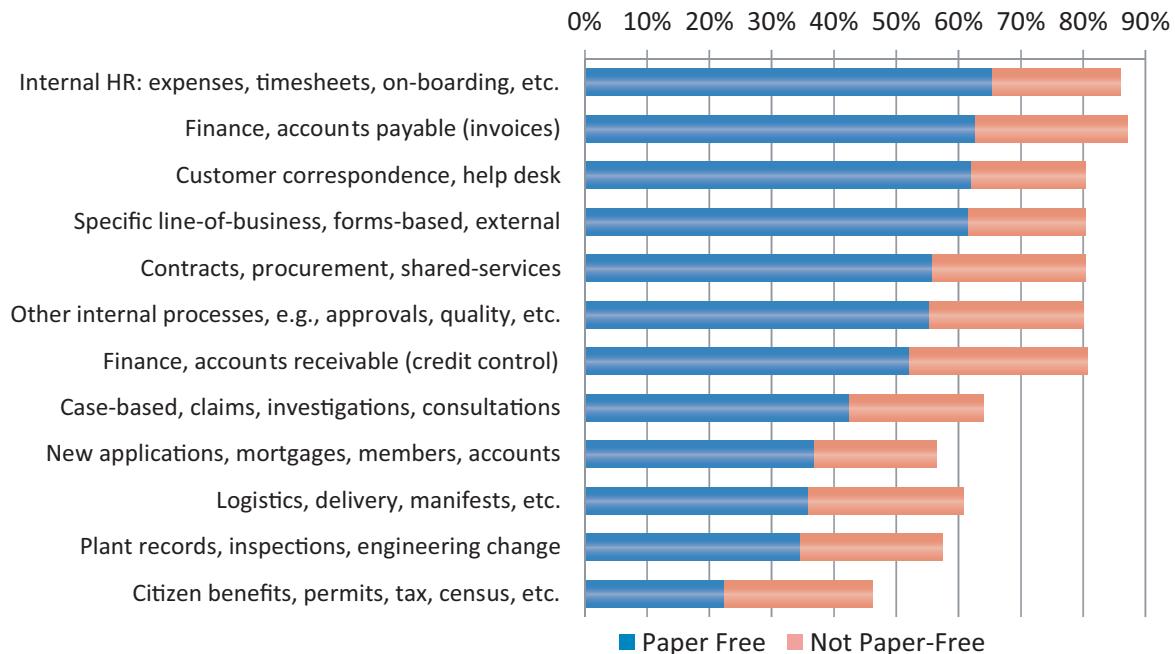
If we take a cut-off point of 5 or less paper-free processes as an indication of still having a long, long way to go, around two-thirds (64%) of the largest organizations fall into this group, rising to three-quarters (77%) of small and mid-sized businesses. We know that in these very large organizations, especially government agencies, there can be hundreds if not thousands of processes that could potentially be made paper-free, so we are still very much at the start of this journey.

Figure 12: Other than archiving, how many of your key document or forms-based processes have you capture-enabled or made paper-free? *(N=408)*

- 50+ processes, 7%
- 26-50 processes, 4%
- 11-25 processes, 7%
- 6-10 processes, 14%
- 4-5 processes, 16%
- 3 processes, 9%
- 2 processes, 12%
- 1 process, 8%
- None, 23%
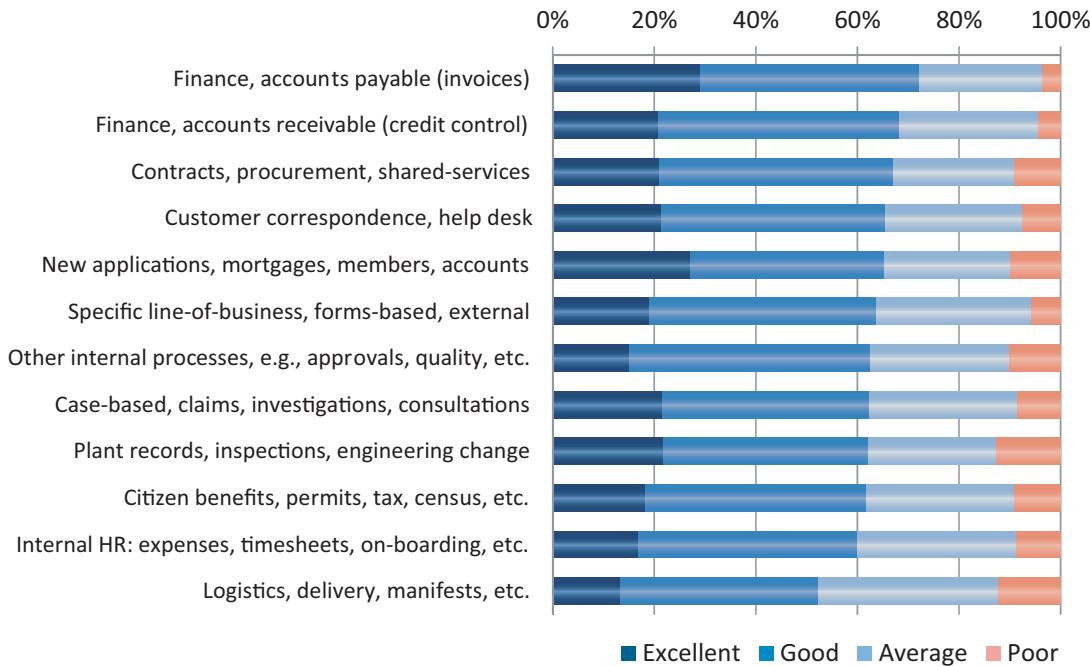
Often, these general figures reflect very different progress in different departments, and this local thinking can also limit the benefits of scale that come from feeding multiple line-of-business processes from a central scan and capture system, with electronic routing. As we see in Figure 12, many potential applications are industry-specific, whereas HR, AP and customer correspondence, the three most popular, are more universal. Note: care is needed with the numbers here. Earlier in the survey (Figure 7), 50% said they have a paper-free AP process, whereas in Figure 12 this has risen to 65%. This is likely to be because those who have no paper-free processes have opted out of this question completely.

Figure 13: Have you made any of the following processes capture-enabled or paper-free
(N=408, line length indicates N/A)

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%

- Internal HR: expenses, timesheets, on-boarding, etc.
- Finance, accounts payable (invoices)
- Customer correspondence, help desk
- Specific line-of-business, forms-based, external
- Contracts, procurement, shared-services
- Other internal processes, e.g., approvals, quality, etc.
- Finance, accounts receivable (credit control)
- Case-based, claims, investigations, consultations
- New applications, mortgages, members, accounts
- Logistics, delivery, manifests, etc.
- Plant records, inspections, engineering change
- Citizen benefits, permits, tax, census, etc.

■ Paper Free ■ Not Paper-Free

We also asked users to rate the success or ROI of different paper-free processes, and normalized the result to account for greater or smaller take up. Finance and procurement have been the most successful, but the majority of implementations (60%+) are rated "Excellent" or "Good" with very few (5% or less) showing up as poor.

Figure 14: If you have made the following processes paper-free, how would you rate the success or ROI of the project? *(N=408)*


Finance, accounts payable (invoices)
Finance, accounts receivable (credit control)
Contracts, procurement, shared-services
Customer correspondence, help desk
New applications, mortgages, members, accounts
Specific line-of-business, forms-based, external
Other internal processes, e.g., approvals, quality, etc.
Case-based, claims, investigations, consultations
Plant records, inspections, engineering change
Citizen benefits, permits, tax, census, etc.
Internal HR: expenses, timesheets, on-boarding, etc.
Logistics, delivery, manifests, etc.

■ Excellent ■ Good ■ Average ■ Poor

The majority of paper-free projects have been very successful, particularly AP, AR, procurement, help desk and account opening.

Implementation

Whilst it is easy to imagine that most capture processes are implemented as part of an ECM suite, or perhaps with a standard capture system extended to BPM and workflow, the reality is that they are just as likely to be part of an enterprise process application such as finance or HR, or to have been developed or integrated in-house.
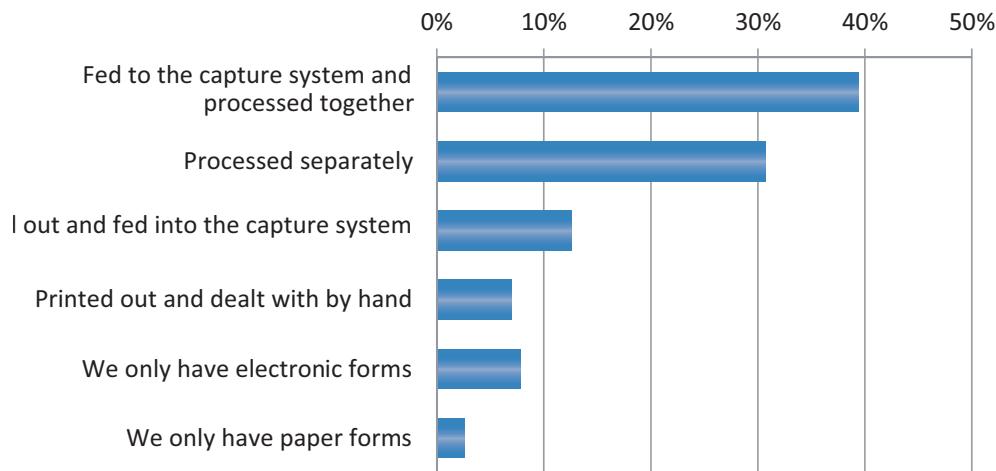
Figure 15: How are these capture processes mainly being implemented and interfaced? *(N=276 multiple choice)*

Standard feature of specific process application (e.g. finance system, HR, etc.)
As part of an integrated ECM suite
Developed/assembled in-house largely as one-off
Multiple capture applications interfaced separately to each application
Standard capture platform interfaced separately to each application
Standard capture platform integrated to separate workflow/BPM system
Standard capture platform with built-in workflow/BPM
Outsourced/SaaS

Historically, it is likely that capture systems have been set up to deal primarily with paper input, but these days, inbound documents are just as likely to be electronic (including fax). Ideally, it should not matter what media they arrive on, all forms and correspondence should be dealt with through the same process. Many capture systems will not be capable of ingesting PDF files or fax input and this leads to the pragmatic, if less than ideal, solution of printing out the electronic document and scanning it back into the capture system, as practiced by 13% of our respondents.
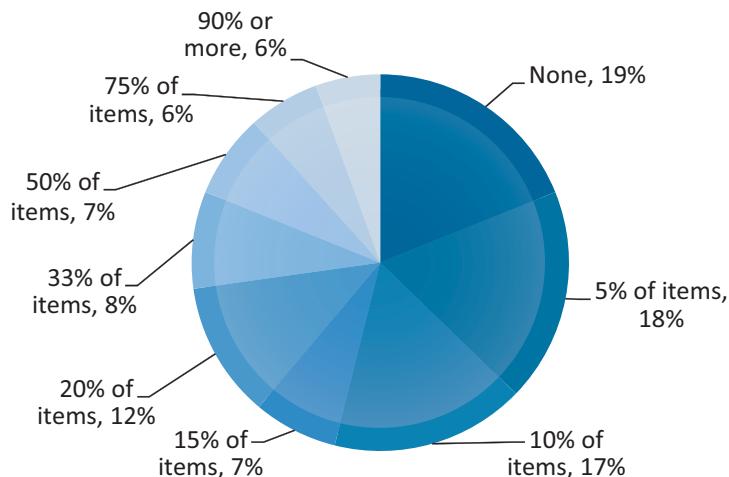
Another aspect shown in Figure 14 is that many capture systems have been implemented as single point-solutions, each feeding a single process application. This is likely to lead to longer replacement cycles and less up-to-date technology, whereas consolidating around a standard capture platform feeding multiple applications will allow the technology to be regularly updated in a single place.

Figure 16: How are you dealing with electronic document types, PDFs or web forms feeding into the process? *(N=276)*

We talked earlier of the dream scenario where forms, applications or invoices could flow through the process hands-free or at least with very low human involvement (low-touch). We asked those with experience of capture-based, paper-free processes if any of their processes were achieving hands-off throughput, and if so, what proportion of items are actually going straight through. 27% of respondents reported that for some processes a third of items are going straight through. Other answers varied from 5% to 90%.

Figure 17: Are any of your processes achieving "hands-off" or very low-touch throughput, and if so what proportion of items are going straight through? *(N=180, excl. 96 Don't Know)*

As we might imagine, these light-touch results produce the maximum levels of productivity benefit, and they were reported across a number of applications, not just AP.
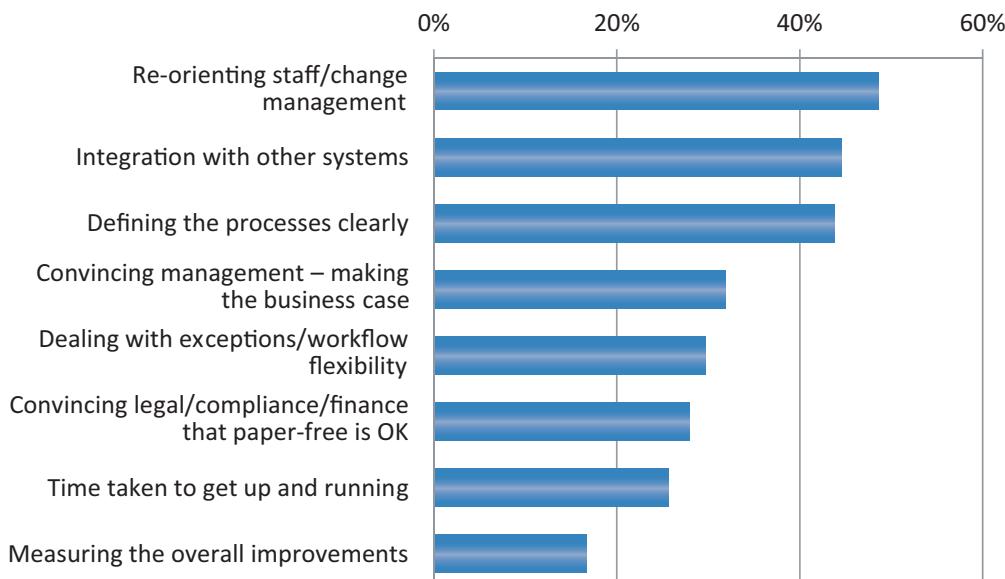
Project Issues

Upfront, the two biggest issues are going to be making a convincing business case to management, and convincing Legal, Compliance and possibly Finance that going paper-free is fully compliant and is acceptable in court. Getting input from external auditors may be of help here.

Technically, the biggest issue will be integration with other systems, particularly transaction systems such as ERP. Using fully-fledged capture products or ECM systems will likely make this easier than in-house development, as these systems are likely to have off-the-shelf integrations with the more popular finance and ERP systems. Consolidating capture systems will also assist here as system connections may not need to be replicated for additional processes.
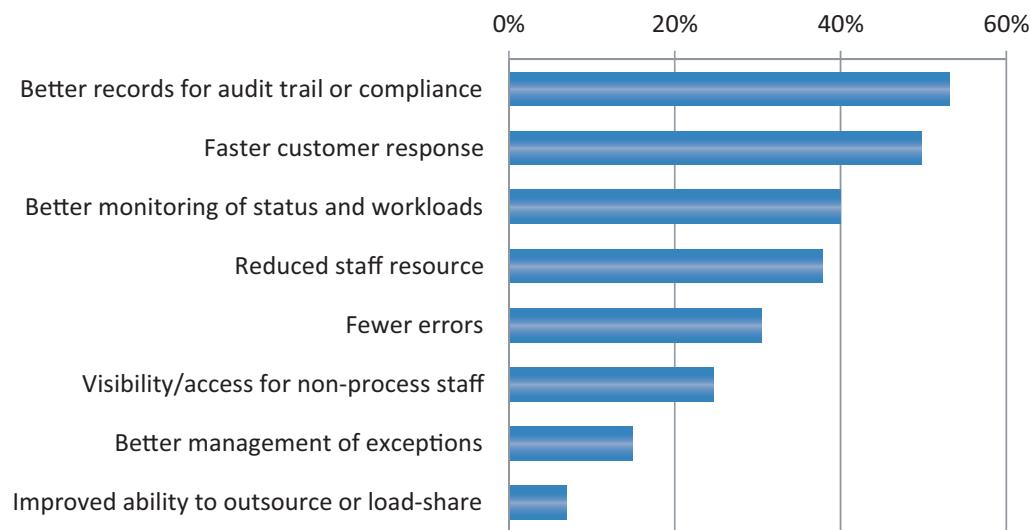
Going paper-free will inevitably involve changes to the way things get done, so change management and re-orientation of staff are bound to be issues. Defining the processes clearly both before and after the change will be important - and is frequently not as easy as it looks. Handling exceptions is always the most difficult aspect of setting electronic workflows, and flexibility is always important here.

Figure 18: What were the main difficulties you encountered in these projects? (Max THREE) (N=276)
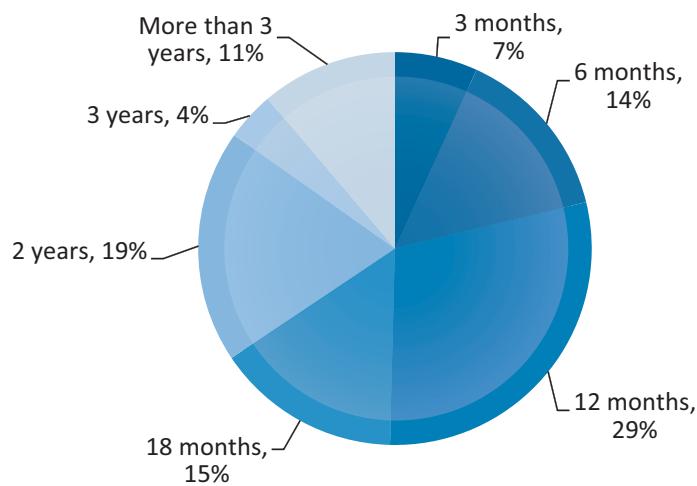
Benefits and ROI

Surprisingly, the biggest benefit reported from our respondents was not productivity, but compliance and better records for audit trail. Faster customer response (whether internal or external) was the second prime benefit, followed by the greater ability to monitor workflow status and workloads, which is part of reducing the staff resource. Visibility and access for other non-process staff is not scored so highly (although respondents were limited to a choice of three) but having said that, eliminating paper is the only way that remote, teleworking or mobile staff can be given the ability to monitor, participate or reference in-process work.

When it comes to the payback period for paper-free processes, AIIM has consistently measured strong results over many years. Two-thirds of organizations report a payback period of 18 months or less, with half achieving it within 12 months - a single budgeting period.
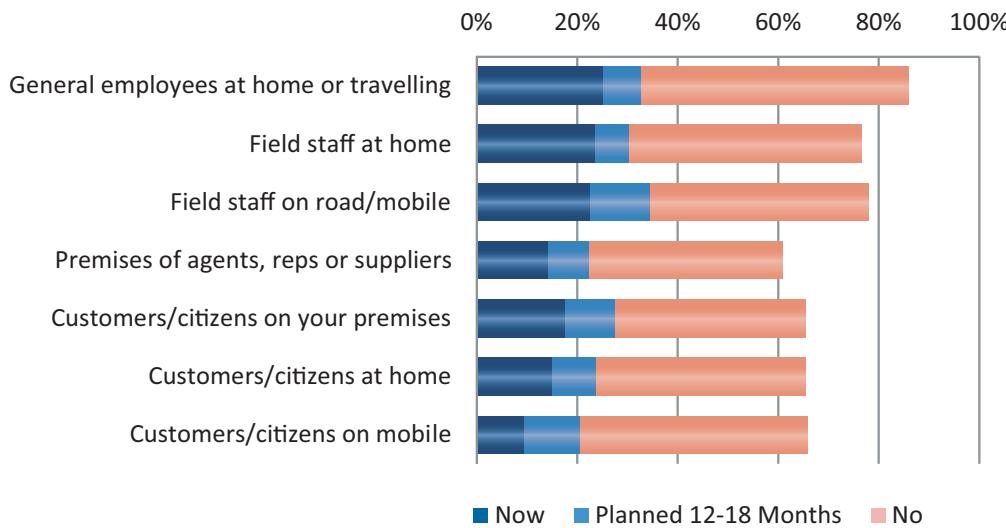
Figure 20: Overall, what would you say has generally been the payback period for these paper-free process projects? (N=180, excl. 96 Don't know)

Once change issues and rear-guard battles are overcome, the benefits and returns from paper-free process investments are consistent and considerable, with payback likely to be within 12-18 months.

Distributed and Mobile Capture

The discussion between centralized capture on production-level scanners versus distributed capture on MFPs and desktops has raged for the past seven or eight years. Centralized systems have become more capable, especially as regards their data recognition and speed of throughput, but at the same time the bandwidth issues of connecting over the network to distributed and remote scanners have largely gone away, so both models can be combined. However, the needs of the workforce – and indeed the customer – have expanded further, to include home devices, mobile phones, and, of course, the tablet.

Figure 21: Are forms and documents currently captured in any of the following places for use in your key business processes? *(N=340, Line length reflects N/A)*
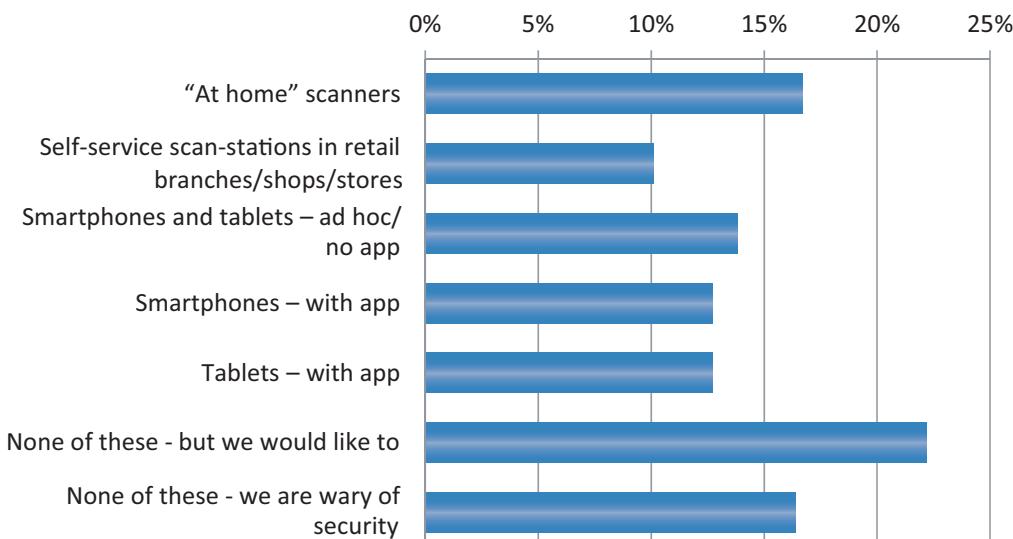
We can see in Figure 20 that around a quarter of organizations already have some capture taking place by their employees either at home or travelling – and in fact the paper-free expenses process is likely to be a part of this. Less than 20% have any kind of customer or citizen capture-processes, but this looks set to grow quite rapidly. The essential benefit of mobile capture is that the process kicks off immediately without waiting for back-to-base uploads or postal delays. If the customer is doing the capture, costs fall, and any errors or omissions can be spotted immediately.

Devices and Security

When it comes to the devices used, around 15% are currently using smart devices, but a further 22% would like to do so. Beyond that, 16% are backing off due to security issues.
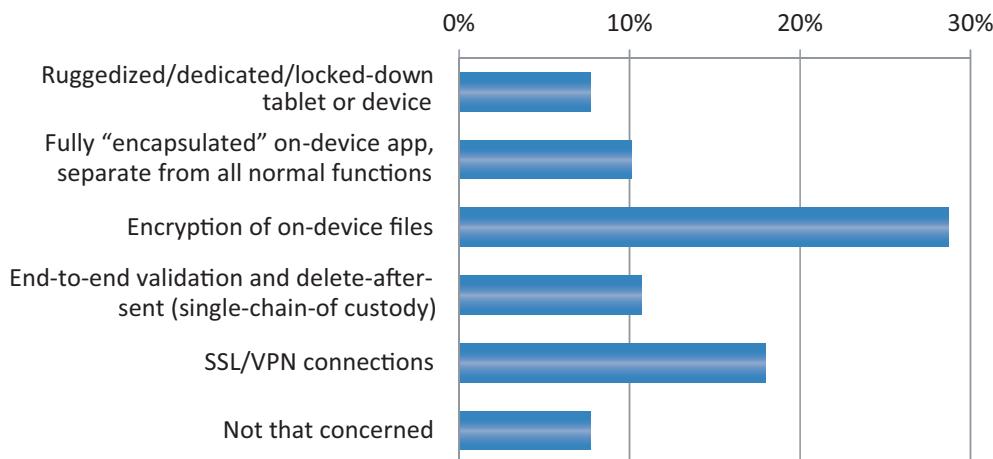
Figure 22: Do your agents/customers/citizens/suppliers currently use any of the following devices to scan and/or capture forms and documents for use in your key business processes?
(N=229, further 117 None of these/not applicable.)

It has to be said that the 14% using smartphones and tablets with no specific app are plainly running a considerable security risk that scanned content will remain on the device. We explored this further by asking the whole sample what they would consider to be the minimum level of technical security they
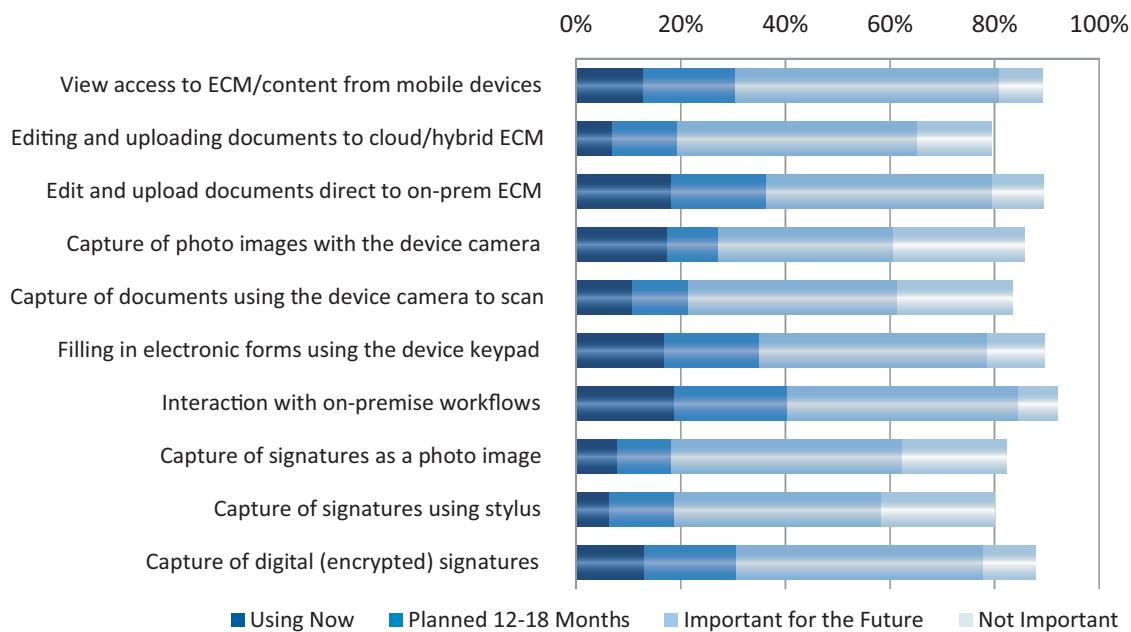
would be comfortable with for mobile capture in their organization. 47% would look to encapsulation and/or encryption on the device to avoid access from other on-device applications. From the integrity of the process as much as the security view, end-to-end validation with delete-after-sent is also important. 18% would be happy with SSL connection over VPN, despite the implications for access through the firewall from other apps on the device, and 8% are not that concerned about security.

Figure 23: Which of the following levels of security would be the minimum you would need before embarking on mobile capture? *(N=280, excl. 58 N/A)*

Mobile capture in its widest sense includes content creation on the device, and the use of electronic forms to directly capture data. Pen-stroking of signatures is also an important application, and can include the biometrics of how the signature is drawn rather than simply the bitmap of the result. Of course, basic signature applications have been in use for courier deliveries for a number of years.

Figure 24: Going forward, how would you rate the importance of the following mobile-enabled functions to your organization? *(N=362)*
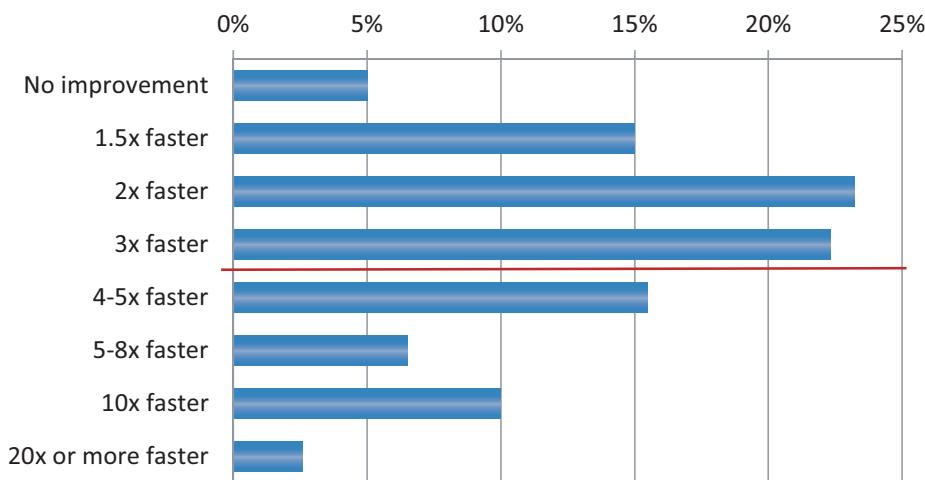
Looking across this wide range of mobile capture possibilities, electronic forms and interaction with on-premise workflows stand out as key requirements for the future, along with digital signing – which is often used as part of process approval. Combining these with access to and creation of ECM content, along with capture of both photo images and paper forms suggests that a comprehensive and secure mobile device platform is needed, but that this will open up considerable opportunities.

Mobile capture applications are poised to take off, both for employees and for customers. They are held back at the moment by security issues which can mostly be overcome by suitable mobile device management platforms.

Overall Benefits

We have looked at digital mailrooms, data capture, paper-free processes and mobile capture, and we have seen that all of these are still quite low down on the adoption curve – in the 10% to 20% region. To gauge what benefit might be gained from a combination of all three of these things, we asked existing users and potential users to quantify two of the biggest benefits: speed of response to customers (and suppliers, citizens or staff) and improved productivity of process staff.
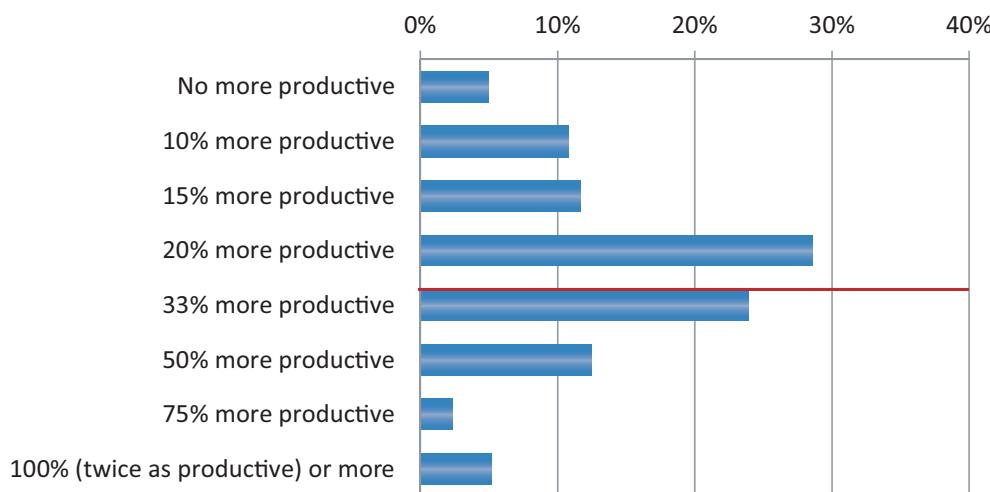
Figure 25: Taking the widest view, by how much do you think driving paper out of the process using scanning and capture, including digital mailroom and mobile capture, improves or would improve the speed of response of your organization to customers, suppliers, citizens or staff? (Think about waiting time or elapsed time in minutes, hours or days). (N=341)

On average, our respondents could see an improvement in response time of 4.0-times – reducing 1 day down to 2 hours, or 4 days to 1 day. Those with more experience of paper free processes, which we defined as those with more than 20% of their processes paper-free, put the figure at 4.6-times, indicating that the reality is better than the expectation.
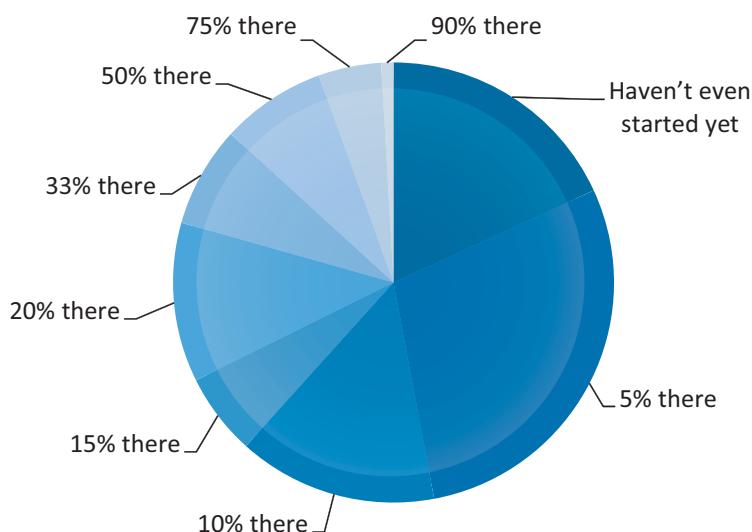
As far as productivity improvement, the average across all respondents is 29.7% improvement, rising to 35.4% for the more experienced. A one-third productivity improvement in back-office administration could reflect directly into costs, or into a much better service level.

Figure 26: Taking the widest view, by how much do you think driving paper out of the process using scanning and capture, including digital mailroom and mobile capture, improves or would improve the productivity of process staff in your organization? *(N=341)*

To confirm where most users are on this journey towards paper-free "Nirvana", we asked users to consider the number of potential processes that could be paper-free, compared to how many actually are. 47% of organizations have made no better than 5% progress towards complete paper-free operations, and 18% haven't even started yet. As we observed earlier, smaller and larger organizations are evenly matched here, with mid-sized businesses being even further behind.

Figure 27: Thinking of all the potential processes where you could drive out paper using scanning and capture, including mobile capture and digital mailroom, how far would you say you are towards that goal? *(N=341)*
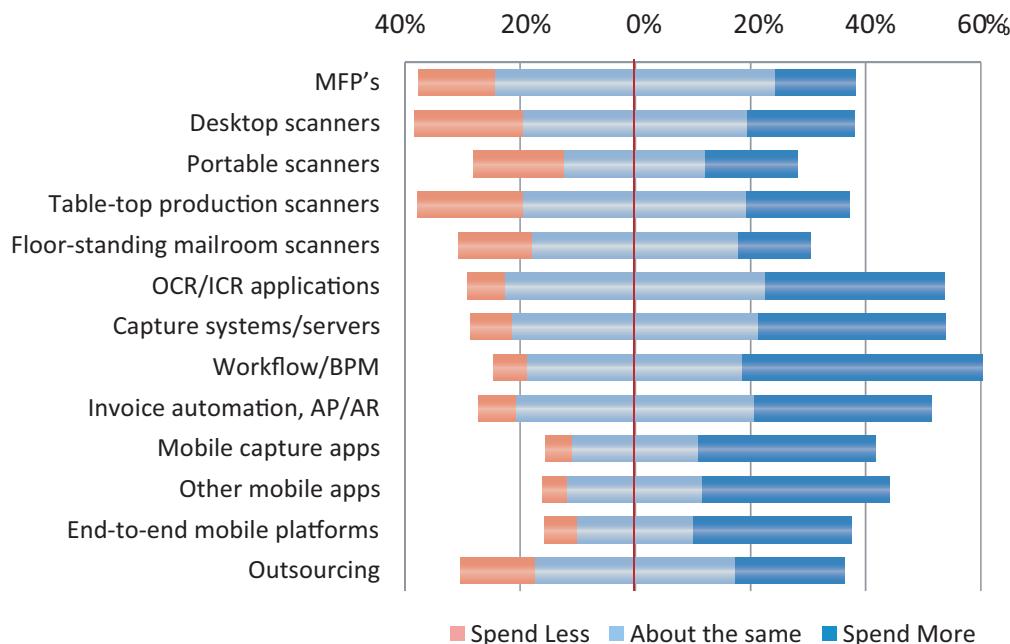
Paper-free processes, along with digital mailrooms and mobile capture can on average improve response times to customers by a factor greater than 4x, and improve productivity of process staff by a third…and yet half of organizations have made no better than 5% progress towards this goal.

Spending Plans

Given the rewards being achieved, we would expect there to be a positive spending intention across capture, OCR, workflow/BPM and mobile, and this is indeed the case as we can see in Figure 27. Scanner sales are on the whole flat, although as hardware prices continue to fall, volumes will increase. Outsourcing shows a slight net increase overall, although outside of North America there is considerably more growth indicated for outsourcing – perhaps reflecting cost-cutting (or displacement) by governments in austerity economies.

Figure 28: How do you think your organization's spending on the following products and applications in the next 12 months will compare with what was actually spent in the last 12 months? (N=335, line length indicates "We don't spend anything on this")

Spending plans for the next 12 months look to be very positive, particularly for OCR, workflow/BPM and mobile capture, with scanner sales and outsourcing being mostly flat.

Conclusion and Recommendations

Offices have always been magnets for paper. Even if internal records are scanned and archived electronically, external forces throw more paper at us, particularly the forms and documents that kick off our core processes. To fight the paper wars, managers need to take the up-front decision that paper-free is the way to go, and mould that policy into key business initiatives and process re-designs.

The advantages and ROI of paper-free working have been well demonstrated in the results of this survey, and we have also addressed some of the issues that create resistance or inertia. One thing is certain: to maximize the potential benefits from a mobile and connected workforce, and from customers wanting to deliver electronic content upfront, every manager has to look at every process with the question, "How can I make this paper-free?"

Recommendations

- Question long-held assumptions that paper is essential in your business for legal compliance. Research others in your industry. Consult your auditors.

- Highlight the role that paper-free processes can play in your key business improvement initiatives.

- Audit those existing processes that utilize scanning and electronic workflows. Ensure that they are taking full advantage of the possibilities of OCR, data capture and integration with core enterprise processes.

- Look at the range of capture systems in use with a view to rationalizing around a single, highly capable system, able to service multiple applications.

- Position that central system right at the door as a digital mailroom, defending offices from paper and ensuring the quickest possible conversion to electronic.

- If you are unsure of your expertise, or need some external influence to kick-start paper-free processes, consult a document process outsourcer and tap into their experience in your industry.

- Extend the paper-free concept further to the point of origination, whether that is a branch office, a shop or the mobile devices of your employees and customers.

- Above all, question how your organization is going to remain competitive in a mobile, always on, dispersed-workforce world if it clings to its paper-laden processes. Most businesses have hundreds of processes. It will be a long journey, but the benefits are clear, and the sooner you get started the faster you will realize the returns.

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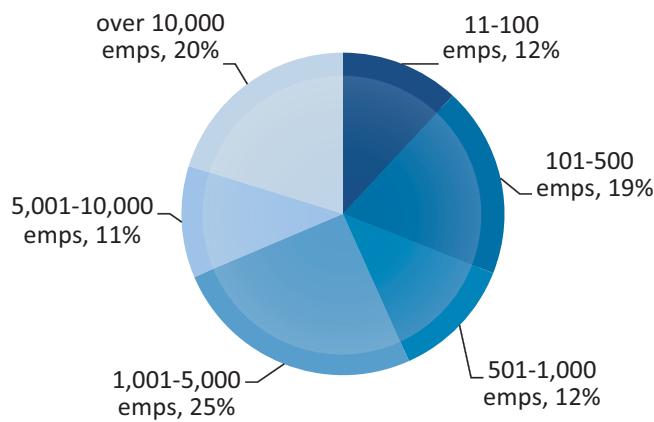
Appendix 1 - Survey Demographics

Survey Background

562 individual members of the AIIM community took the survey between May 10, and June 26, 2013, using a Web-based tool. Invitations to take the survey were sent via email to a selection of the 65,000 AIIM community members.
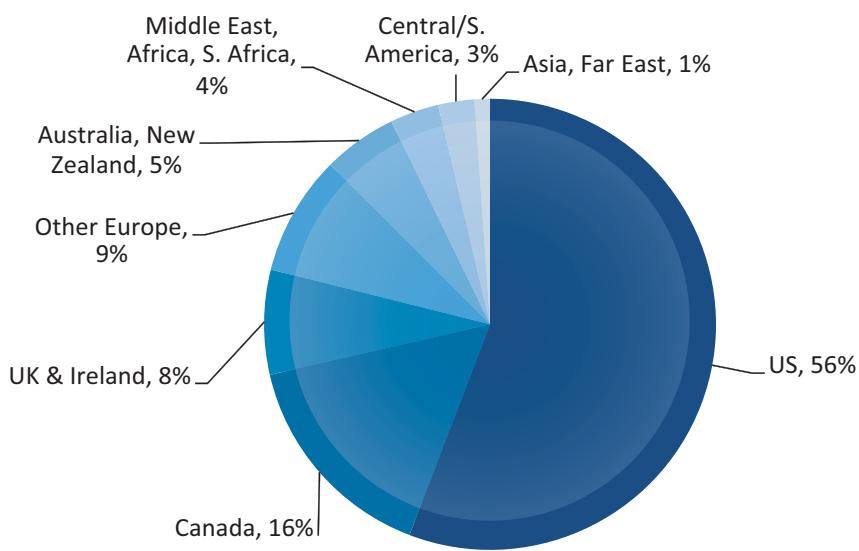
Organizational Size

Survey respondents represent organizations of all sizes. Larger organizations over 5,000 employees represent 31%, with mid-sized organizations of 500 to 5,000 employees at 37%. Small-to-mid sized organizations with 10 to 500 employees constitute 31%. Respondents from organizations with less than 10 employees or from suppliers of ECM products and services have been eliminated from the results.

over 10,000 emps, 20%
11-100 emps, 12%
101-500 emps, 19%
5,001-10,000 emps, 11%
501-1,000 emps, 12%
1,001-5,000 emps, 25%
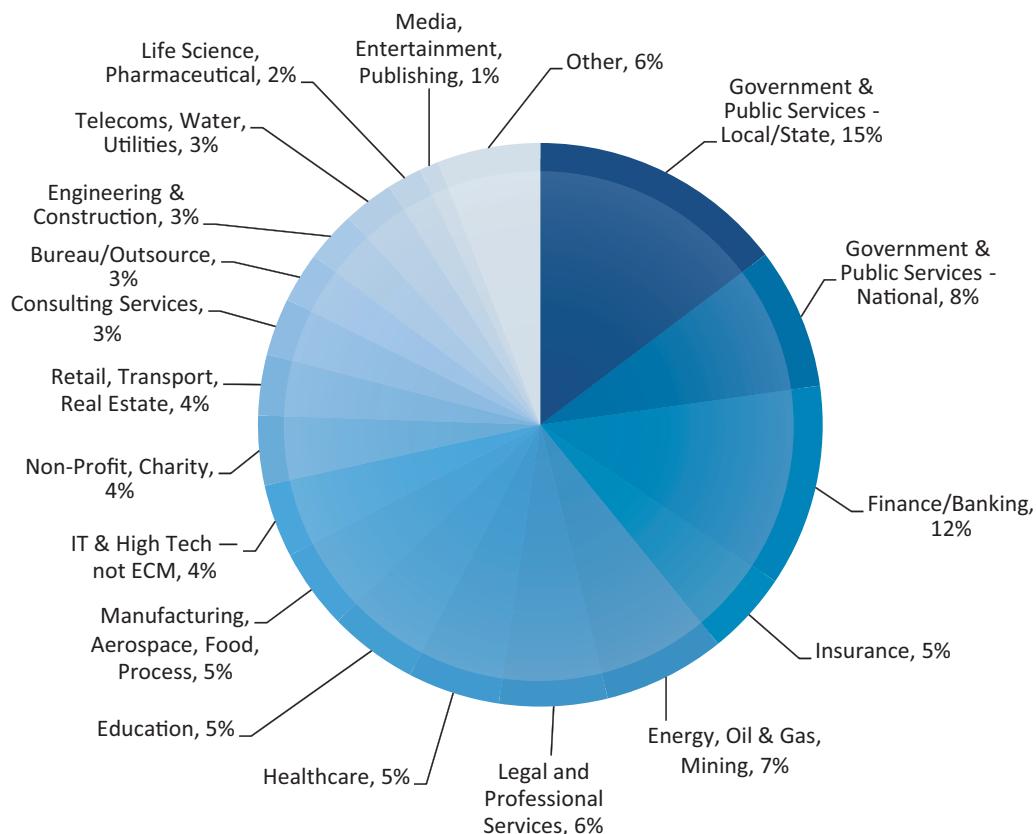
Geography

72% of the participants are based in North America, with most of the remainder (17%) from Europe.

Middle East, Africa, S. Africa, 4%
Central/S. America, 3%
Asia, Far East, 1%
Australia, New Zealand, 5%
Other Europe, 9%
UK & Ireland, 8%
US, 56%
Canada, 16%
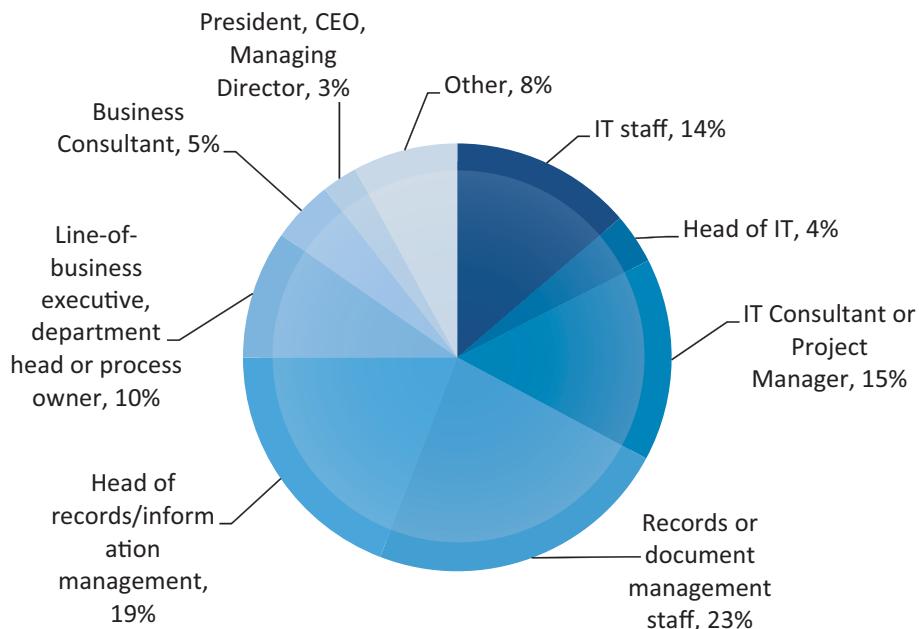
Industry Sector

Local and National Government together make up 23%, Finance, Banking and Insurance represent 17%. The remaining sectors are fairly evenly split. To avoid bias, suppliers of ECM products and services have been eliminated from all of the results.

Media, Entertainment, Publishing, 1%
Life Science, Pharmaceutical, 2%
Other, 6%
Government & Public Services - Local/State, 15%
Telecoms, Water, Utilities, 3%
Engineering & Construction, 3%
Bureau/Outsource, 3%
Consulting Services, 3%
Government & Public Services - National, 8%
Retail, Transport, Real Estate, 4%
Non-Profit, Charity, 4%
Finance/Banking, 12%
IT & High Tech — not ECM, 4%
Manufacturing, Aerospace, Food, Process, 5%
Insurance, 5%
Education, 5%
Healthcare, 5%
Legal and Professional Services, 6%
Energy, Oil & Gas, Mining, 7%

Job Roles

33% of respondents are from IT, 42% have a records management or information management role. 18% are line-of-business managers.

President, CEO, Managing Director, 3%
Business Consultant, 5%
Other, 8%
IT staff, 14%
Head of IT, 4%
Line-of-business executive, department head or process owner, 10%
IT Consultant or Project Manager, 15%
Head of records/information management, 19%
Records or document management staff, 23%

Appendix 2 - Selective Comments

Do you have any general comments to make about your capture systems and mobile deployments? (Selective)

■ Why are we paperbound? Individuals seem afraid of change and management don't seem to be able to promote the benefits.

■ We have been using high capacity scanners for about five years and our paper files have dramatically dropped since.

■ If we are not considering mobile interfaces for most of our processes and applications going forwards, then we will be missing out on how most people will expect to operate within the next decade.

■ The Government spends a great deal of time and effort managing paper documents. Hopefully, those at the helm will initiate the necessary changes needed to go paperless.

■ We are buried in a sea of paper and look forward to formalizing a project to go paperless. Step by step, department by department.

■ Management wants paperless but everyone is unwilling to give up "their" paper. Hence, no real commitment. We have only had success with "new" processes where we started as paperless. Even then you have to be constantly on guard against individuals sneaking paper into the process.

■ Unfortunately some people do not appreciate the importance of these systems. They are reluctant to change old practices.

■ They love the idea but it costs too much - hard to come up with cash, even with ROI numbers, huge commitment. Staff prefer paper - hard to change.

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ABBYY is a world leader in document recognition, data capture and linguistic technologies and services. With 14 global offices and a research and development team comprising 700 linguistic and software scientists, ABBYY's innovative culture has earned it over 250 major awards and partnerships with most major manufacturers of document capture and mobile devices. Its products serve over 30 million individuals worldwide and include ABBYY OCR applications, ABBYY data and document capture solutions and development tools that support a variety of platforms and computing environments, including mobile and cloud scenarios.

- **ABBYY FlexiCapture 10** is the next generation of intelligent, accurate and highly scalable data capture and document processing software. It helps organizations from any industry, or those operating as a service provider or outsourcer, significantly increase efficiency by automating paper-based business processes. Forms, invoices, purchase orders, remittances, applications, contracts, letters and many other types of documents are just some examples of documents that can be automatically processed.

- **FlexiCapture** provides a single entry point to automatically transform the stream of different forms and documents of any structure and complexity into business-ready data suitable for onward processing in backend systems (e.g., database, ERP, ECM, DMS, BPM, SharePoint, workflow, etc.). With its unrivalled document classification features based on Intelligent Document Recognition (IDR) technology ABBYY FlexiCapture also makes a perfect choice for digital mailroom projects.

- **ABBYY Recognition Server** is a server-based OCR solution for document capture and PDF conversion. It allows organisations to efficiently convert extensive volumes of paper documents into searchable and re-usable digital files. The application supports scanning of documents (in batches) and includes ABBYY's leading full-text OCR technology for document conversion and extraction of metadata. Organizations benefit by having useable digital content for electronic archives, document management systems (DMS), enterprise content management systems (ECM), enterprise search and other document-based business processes.

- **ABBYY FineReader Engine** is a range of Software Development Kits (SDKs) to integrate ABBYY's multilingual OCR, data and document capture technologies into server and desktop applications, as well as mobile and cloud infrastructures.

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Alfresco is the open platform for business critical document management and collaboration. By automating document-intensive business processes and enabling large-scale collaboration, Alfresco helps companies to service customers better and adapt more quickly to rapid market changes. Every day, over 7 million business users in 75 countries rely on Alfresco to manage 4 billion documents, files and processes - behind the firewall, in the cloud and even on their mobile devices.

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• Sell more products and services
• Improve the quality of the information that flows into their business systems

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• **Content Integration**
   Storage & retrieval of design & content: ensure key documents and templates are available throughout your organization reducing cost by re-using content

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   Manage the communication lifecycle: engage with your customers using relevant communications, improving relationships and profitability

• **Document Output Management**
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ibml's SoftTrac® Capture Suite provides a comprehensive end-to-end capture solution. Its powerful modules enable organizations to scan pages on ibml ImageTrac and TWAIN scanners, automate document classification and metadata extraction during scan time, centralize administration and control, and analyze scanner and operations performance.

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ibml's SoftTrac Capture Suite complements ibml's category-leading ImageTrac scanners. ibml's ImageTrac® family of production document scanners are proven to lower operating costs, accelerate turnaround, and eliminate downstream exceptions in the most demanding document imaging, document management, and ECM environments.

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- Analyze and refine process flow for consistency and maximum productivity

- Establish flexible workflows and advanced case management that keep document driven tasks moving smoothly even when exceptions arise

- Reduce unnecessary operational costs due to inefficiency

- Improve your customer experience and pave the way for greater profitability

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Digital imaging at the point of content/document creation is your first step to automate your paper-centric processes. See more at: http://www.aiim.org/Training/Certificate-Courses

The AIIM Capture Training Program is available as on online course, a public classroom course or as a private class.

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Courses Modules Include:

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- Business benefits of capture solutions

- Scanner options and configuration

- Building a business case

- Indexing strategies and role of database

- Diagramming business processes

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