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The Paper Free Office

- dream or reality?

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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 477 individual members of the AIIM community between November 30th, 2011, and January 3rd, 2012. Invitations to take the survey were sent via e-mail to a selection of the 65,000 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 395.

About AIIM

AIIM (www.aiim.org) 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. Founded in 1943, 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, with programs and content for practitioners, technology suppliers, integrators and consultants.

About the Author

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Introduction

Since the invention of the typewriter, offices have been drowning in paper. Painstakingly typed letters with barely readable carbon copies filled desks and cabinets until the arrival of computers and photocopiers. But they just made things so much worse. Thankfully, in the email, internet and socially connected world of today, the paper letter is at last falling away. But the favourite tool of administrators the world over has always been the form. We use it to collect data, to carry signatures, to drive the business process, and to provide an auditable record of the outcome. As we shall see, each of those functions can be readily carried out in all-electronic formats, but until recently, the paper form has been somewhat stubborn in its hold on even the most modern offices.

The best way to remove paper from business processes is to head it off before it gets into the building. A digital mailroom – in-house or outsourced - transforms incoming mail into electronic format and routes it automatically to the correct process department. At the same time, recognition software can capture data from the form and link it to the enterprise processing system. Communications from customers, citizens, suppliers and partners can arrive at the business through other channels - email, fax, web or social. This needs to be fed in a uniform way through the capture system and then routed to the appropriate process alongside the scanned paper documents. Capturing content before it gets into the building makes it immediately accessible, kicks off the process early, minimizes hand data-entry, and provides complete flexibility for who does the processing, and where. And if we can directly capture data via web forms, or with mobile devices, we can finally eliminate the paper form completely.

In this report, we look at the success of paper-elimination projects, where and why paper is still leaking into the business, the features and success of scanning and capture investments, forward plans for document process outsourcing (DPO), and the potential impact of mobile devices.

Key Findings

- **There *is* less paper floating around the office – especially in the biggest organizations.** The consumption of paper and the number of photocopies is decreasing in 35% of organizations, whereas it is increasing in 32%. In the largest organizations, the net proportion of respondents posting a decrease is 15%.
- **Electronic-only filing would halve the storage space needed for paper in 5 years.** The average proportion of office space taken up by paper is now 15.3%, and it would drop to 7.4% with an all-electronic filing policy, a saving of nearly 8% in overall office costs.
- **On average, 45% of documents that are scanned are 100% "born digital"** – just as they came from the printer. And many of the rest would be all-digital if not for the added signatures.
- **77% of invoices that arrive as PDF attachments get printed. 31% of faxed invoices get printed and scanned back in.** On average, 30% of invoices arrive as PDF attachments, and 15% as faxes.
- **41% of organizations in the survey are using some form of digital-mailroom,** either as a centralized operation or distributed at branch offices. 4% are outsourced.
- **20% of organizations scan half or more of their inbound mail at or before entry.** A further 20% are more likely to scan at the point-of-process, and 29% scan-to-archive *after* the process.
- **Improved sharability and searchability is the biggest driver for investment in scanning and capture.** Followed by improved productivity and reduced storage space.
- **On average, respondents using scanning and capture consider that it improves the speed of response to customers, suppliers, citizens or staff by 6-times or more.** 70% estimate an improvement of at least 3-times, and nearly a third (29%) see an improvement of 10-times or more.
- **42% of users have achieved a payback period of 12 months or less from their scanning and capture investments.** 57% are posting a payback of 18-months or less.
- **A net of 13% of respondents plan to increase their use of bureaus or document process outsource (DPO), particularly in Europe (net 21%).** But only a net of 1% will be increasing their offshore activities.
- **38% of respondents have employees equipped to use portable devices to capture documents or forms when not at their desks.** Over 14% are using portable scanners for forms and supporting documents. 6% are using smartphones or tablets, including 4% who use OCR to capture data at the device.
- **Over half of those using portable devices capture signatures,** either by scanning (30%), stylus (11%) or using a digital signature app (21%).
- **Speed of data availability and keeping paper out of the process are given as the biggest advantages of mobile capture, f**ollowed by better data accuracy and fewer lost or incomplete forms.
- **12% of respondents are committed to a strategy of cloud deployment of capture – rising to 20% of the largest organizations.** 18% overall have firmly decided against it and 39% are waiting for a company decision on cloud in general (27%), or capture specifically (12%).
- **Spending predictions indicate a considerable increase in spend on capture software, including mobile capture and as a front-end to SharePoint.** A net of 23% of responding organizations indicate increased spend for the next 12 months. Spend on scanners is set to be stable, while spend on outsourcing is set to decrease.

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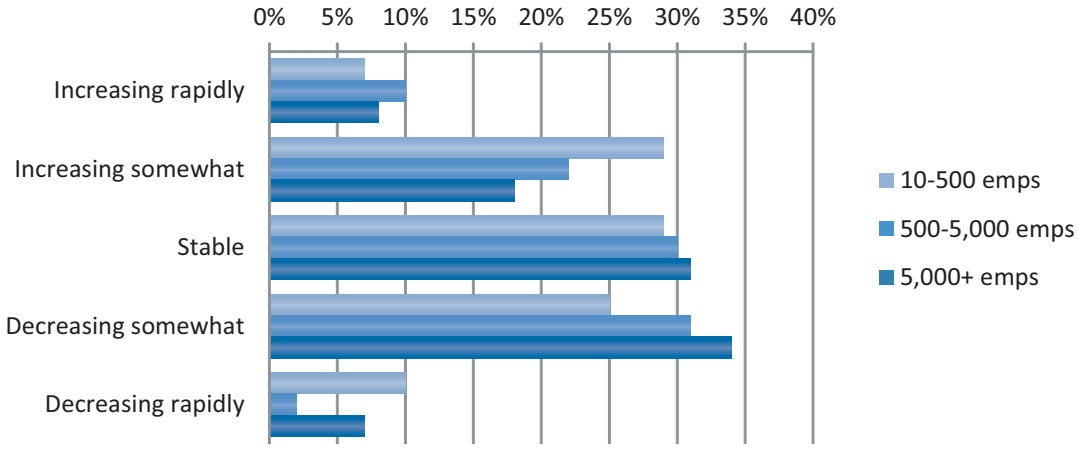
Keeping Paper Out of the Business

Paper Volumes

Overall, the consumption of paper and the number of photocopies is increasing in 32% of the organizations surveyed and decreasing in 35% - a net of 3% of organizations seeing a decrease. This is a small improvement on the 2009 survey result where the situation was more balanced. However, when we look at Figure 1, we can see that small and mid-sized organizations are making little progress, whereas a net of 15% of the largest organizations are seeing a decrease - a complete reversal of the 2009 result. This is likely to be based on wider use of scanning and capture in larger organizations, increasing mobility and hot-desking, as well as more stringent enforcement of Green IT policies.

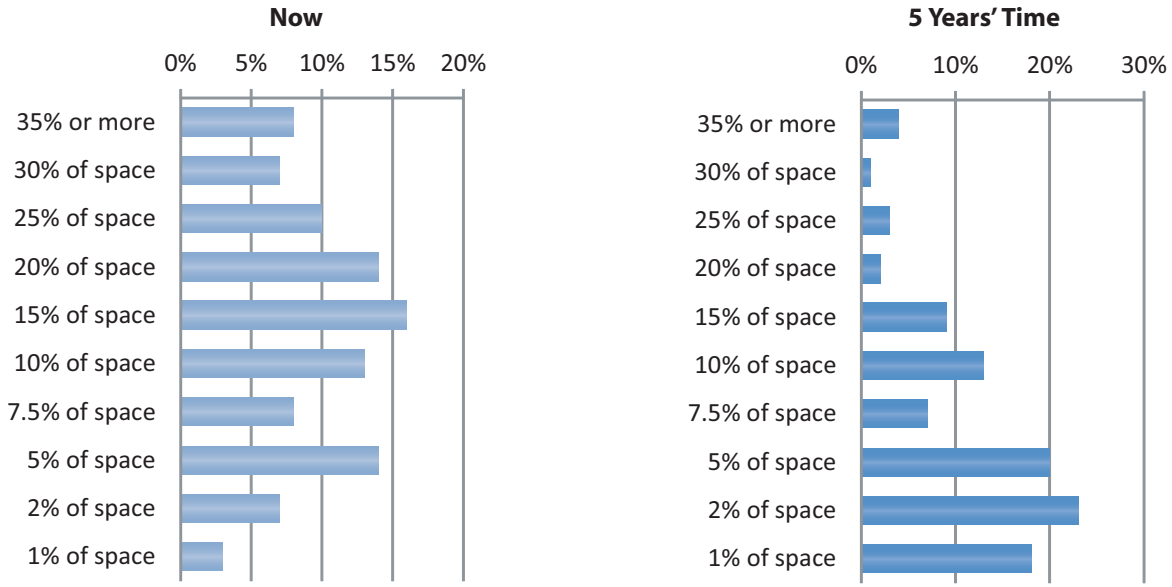
Figure 1: Would you say that the consumption of paper and/or number of photocopies in your organization is? (N=391)



Storage Savings

There is a considerable variation in the proportion of office space currently taken up by storage of paper documents from 2% to 35% or more. However, most of our respondents estimate that the adoption of an electronic-only filing culture would reduce the space needed dramatically. The average space taken up now is 15.3%, and this would be more than halved to an average of 7.4%. If this is directly reflected in office running costs, it represents a saving of nearly 8%.

Figure 2: How much of your office space would you say is currently used for storing paper documents? What do you think that figure would be in 5 years' time if you could change the culture to one of electronic-only filing? (N=387)



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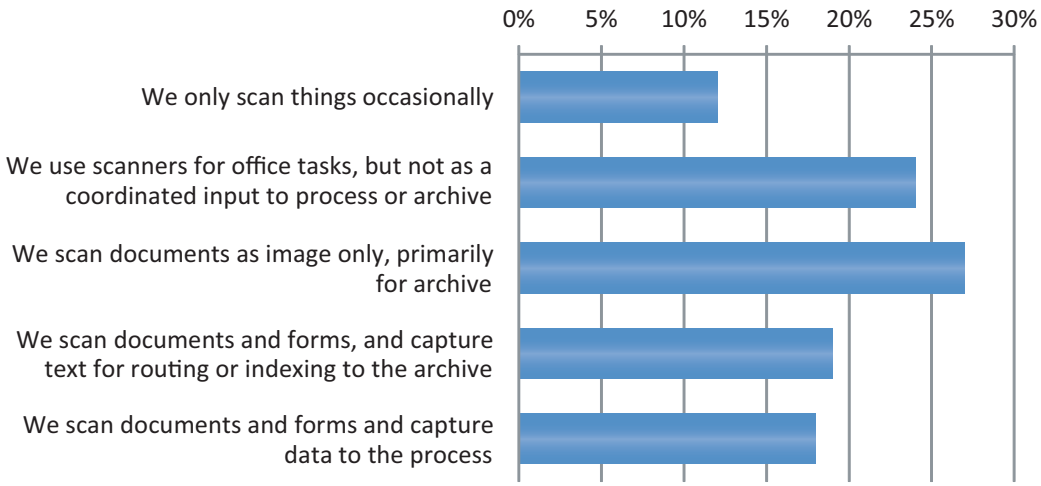
Adoption of Scanning and Capture

Even within the AIIM community, more than a third do not use scanning and capture as a routine part of the process, and only 37% actively capture data from scanned documents and forms in order to facilitate routing, or to feed the process itself.

Figure 3: How would you describe the level of image capture maturity in your business unit (across in-house and outsource)? *(N=395)*



Of those documents that are scanned, our respondents considered that on average, 45% are born completely digital – ie, just as they came out of the printer. Many more would be completely digital if not for the handwritten addition of a signature. Of course, many of these documents are originated outside of the business and mailed by physical post.

Scan-to-archive is still much more prevalent than scan-to-process. Only half of those organizations who capture text and data from scanned forms and documents actually link it into the process, as opposed to using it for routing through the process or indexing for archive.

Incoming Documents

Dealing with paper as it enters the business – or even before it enters if using DPO – will maximize the potential savings from sorting, routing, delivering and disposing of paper. As we can see in Figure 4 below, 20% of organizations have made good progress here, scanning half or more of their incoming mail on entry, with a further 25% scanning within the process department. The most interesting finding is that significant numbers of organizations are only scanning for post-process archive. Whilst they may be making savings in records storage space and improving subsequent searchability, they are not improving the efficiency of the process, nor raising the transparency of in-process documentation. Of course, the logistics of post-process scanning are somewhat different in that time lag is less likely to be critical, and it may be easier to outsource.

Figure 4: What proportion of incoming documents to your organizational unit do you scan (not including brochures, junk mail, etc.)? *(N=362)*

	% orgs third or more	% orgs half or more	Average of all mail
On Entry	25%	20%	**20.9%**
At point of process	25%	20%	**21.8%**
Post-process	40%	29%	**29.7%**

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Invoices

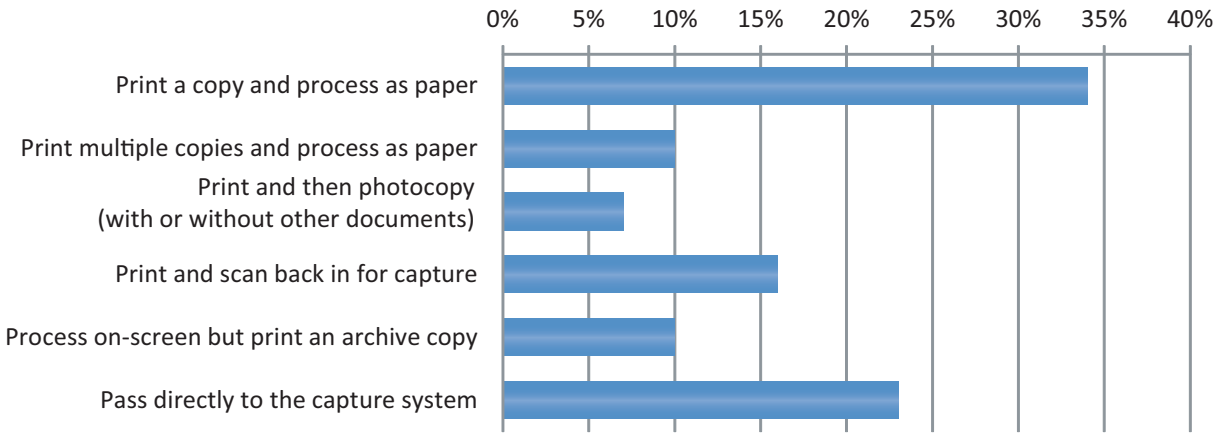
Although many of the larger companies are pressing to have all-electronic billing and payment systems, we are still a long way from this ideal. Many businesses are at least trying to save on postage costs by sending invoices as PDF files, or as faxes. However, this does not generally result in a reduction of paper within the receiving business. In total, 77% of respondents are likely to print at least one copy of a PDF invoice, and 16% admit to printing it out and then scanning it in for capture, as do 31% receiving a faxed invoice.

Figure 5: What proportion of your incoming invoices would you say arrive as: *(N=363)*

	% orgs third or more	% orgs half or more	Average of all invoices
PDF attachments	42%	32%	**30.6%**
Faxes	15%	11%	**15.4%**
EDI/e-billing	29%	20%	**21.7%**

Around a quarter of respondents are able to feed PDF invoices and fax images directly into a capture and/or workflow system. Another fairly common paper-intensive practice with faxes, especially with contracts and application forms, is to print the fax, sign it, and feed it back into the scanner or fax machine. Wider adoption of digital signature systems would save considerable time here – and given the nature of signature approvals, this is likely to be quite senior people's time.

Figure 6: How do you mostly deal with invoices and forms that arrive as PDF attachments to emails? *(N=358)*



Despite the increasing use of electronic transmission of invoices using PDF or fax, four-fifths of them get printed – and all too often, printed and fed back into a scanner.

Forms Distribution and Scanning Costs

Before we deal with the savings that can be made from scanning documents and forms prior to processing, we should consider the costs involved up to and including the scan process itself.

All paper forms incur costs of printing, distribution, mailing, collection and sorting, whether they go on to be scanned, or are used directly in the process as paper. This cost can only be avoided by direct data entry or e-forms. Our respondents report a wide range of cost estimates from 20 cents to tens of dollars per form. The average* reported cost per form or document is $3.63 and the median (half more/half less) is $2.00. (*excluding 12 over $20)

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Those forms and documents that *are* scanned pre-process will incur preparation costs and QA costs as well as the actual scan and capture process. We asked our 148 capture users to estimate their costs for this per-document, or per-form, and the results again ranged from 10 cents to tens of dollars. Here the average* was $2.84, and the median was $1.50. (*excluding 6 over $20)

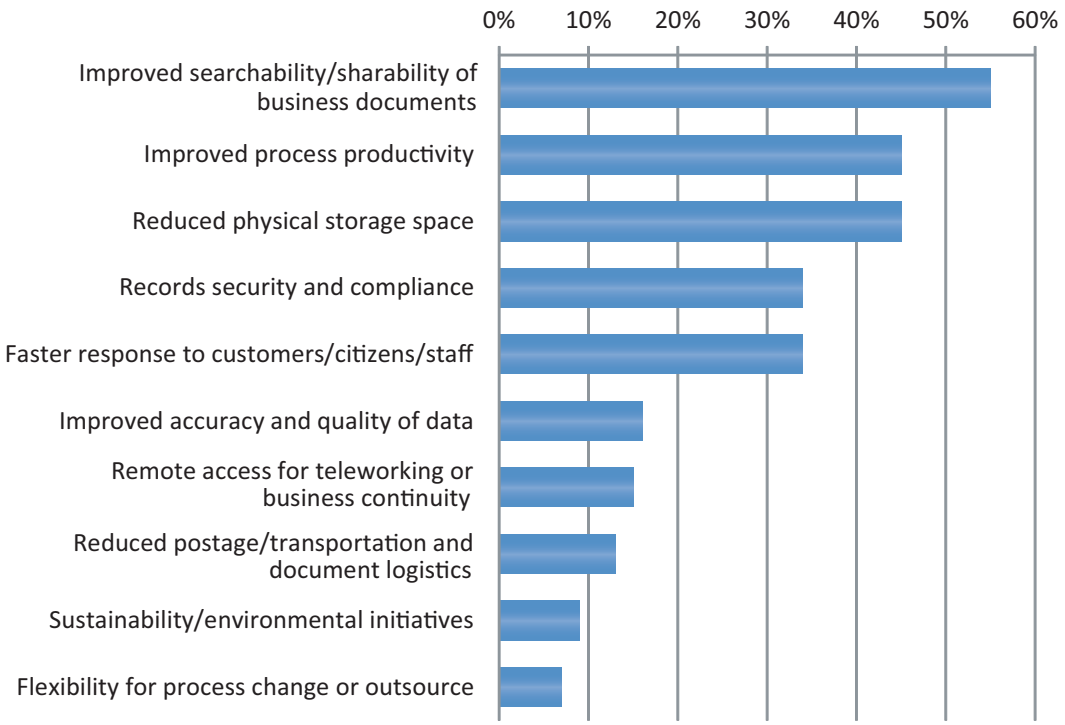
Taking these two together and picking the medians, we could say that in general, each paper form costs $3.50 in handling costs up until it becomes an image file. Of course, if the form is not scanned and captured, it will also incur manual data-entry costs and subsequent physical storage costs. Keying the data at source into a web form or a mobile device, rather than filling out a paper form, will save all of these costs.

Drivers and ROI for Capture

Document Access

Better searchability and sharability of documents is the leading driver for scanning and capture. In today's dispersed organization, the distance to a file cabinet or worse, a colleague's desk, can be very long and quite disruptive. Improved process productivity and reduced storage costs are rated as the next strongest drivers, followed by compliance, and faster response to customers, citizens and staff. Reduced postage, transportation and document logistics is a stronger driver (22%) for the biggest organizations. Remote access for teleworkers is more important for smaller organizations (22%) than for larger ones.

Figure 7: What would you say are the three biggest drivers for scanning and data capture in your organization?
(N=370)



Mobilizing documents for access and sharing is a stronger driver than direct savings in process costs.

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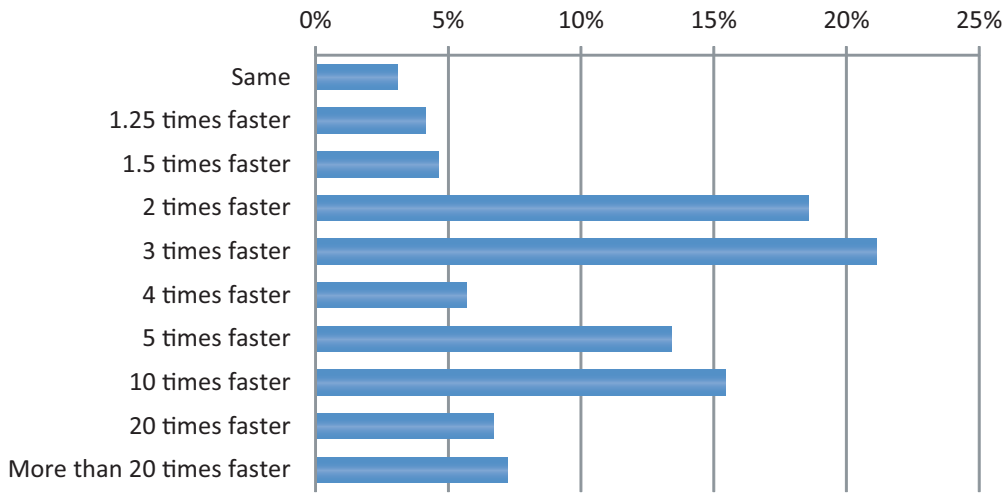
Customer Response

Speed of response to customers or citizens is a very prominent metric these days, particularly in B2C businesses or government services. Social media sites, consumer blogs and supplier star-ratings provide easy ways for customers to report on good service, and even more so on bad service. Within B2B businesses, ease of dealing with customer-facing staff is an important criterion for service level assessments. Where help-desks and call offices are centralized, immediate access to all channels of customer or citizen correspondence is vital if call targets are to be met and criticism avoided. Internally, HR departments need to match response times in other areas of the business, despite the fact that paper forms, letters and certificates are fundamental to many of their processes.

Given the pressure to react quickly to customer communications and to provide transparency within the process, converting incoming documents to electronic format, and moving all incoming communications to a uniform workflow, is likely to be a major benefit. In our survey, 70% of existing users consider that scanning and capture has improved customer response by a factor of 3, and nearly 30% are seeing response improved by a factor of 10. This would seem to be something of a breakthrough for many businesses. The average estimate was a 6.7 times faster response. In Figure 8, we can see a secondary peak at "10 times faster." This is likely to reflect the elimination of a mailing delay.

Figure 8: By what factor would you say your use of scanning and capture improves the speed of response of your operational unit to customers, suppliers, citizens or staff? (Think about waiting time or elapsed time in minutes, hours or days)
(N=194 users)



Scanning and capture can dramatically improve your customer response times – typically between 2 and 3 times faster, but in many cases 5 and 10 times faster. This is a crucial metric of business performance in today's customer-sensitive environment.

Scanning and Capture ROI

It comes as no surprise, therefore, that more than half of those who have invested in scanning and capture are seeing a payback period of 18 months or less, with 42% seeing a return within one 12-month budgeting period. A key factor within capture ROI is the degree of back-scanning required. Those reporting longer payback periods may have undertaken significant back-scanning, whereas those adopting a "day-forward" approach are achieving faster financial returns.

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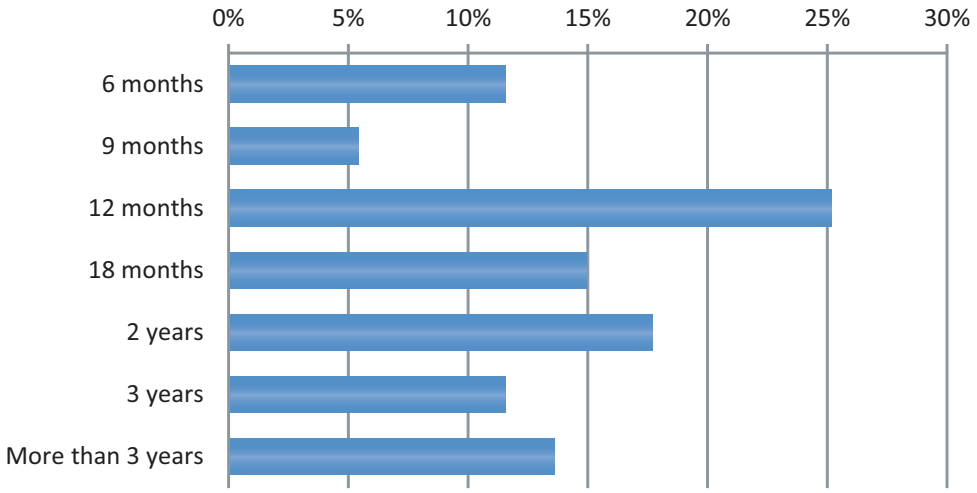
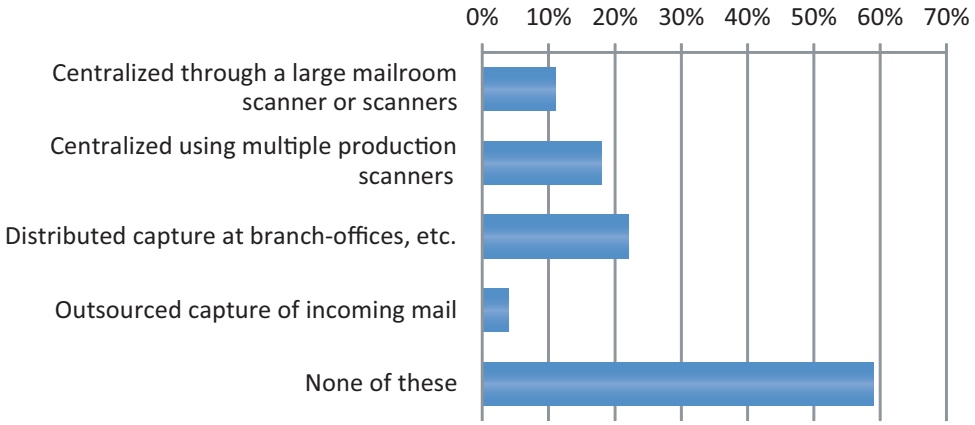
Figure 9: In general, what payback period would you say you have achieved, or are on track to achieve, from your scanning and capture projects? (N=147 users, excl. 97 Don't Know)



Digital Mailrooms

Although they may be configured in a number of ways, the "digital mailroom" term generally means that a mixture of incoming mail is scanned and routed internally, as opposed to the more dedicated sorting of specific forms or coupons for scanning to a single process. 41% of responding organizations operate some form of digital mailroom, either as a centralized operation, perhaps with high-throughput scanners (11%), or as a distributed operation at branch offices.

Figure 10: Do you operate any of the following "digital mailroom" scenarios (i.e., scanning, capture and electronic distribution of general incoming mail? (N=384)



There has been a movement over the last few years to implement scanning and capture using a distributed approach, where scanners of different types and locations feed into a common capture system, which then presents a unified connection to downstream processes. This is particularly useful for MFPs (multi-function devices) within the main office, but also at branch offices. The technology has most recently been extended to include field-based and mobile devices, as well as handling multiple-electronic file formats such as PDFs, faxes and emails.

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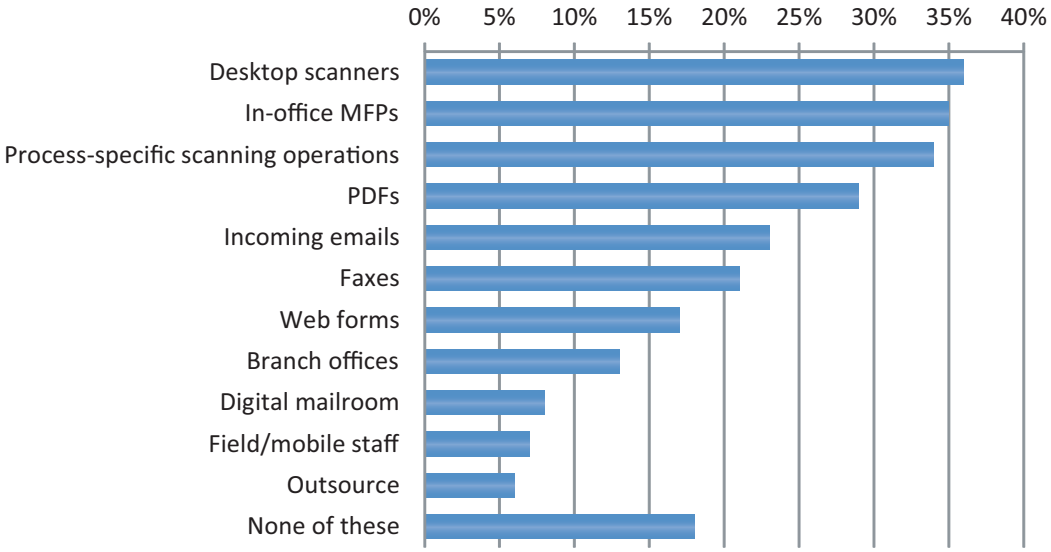
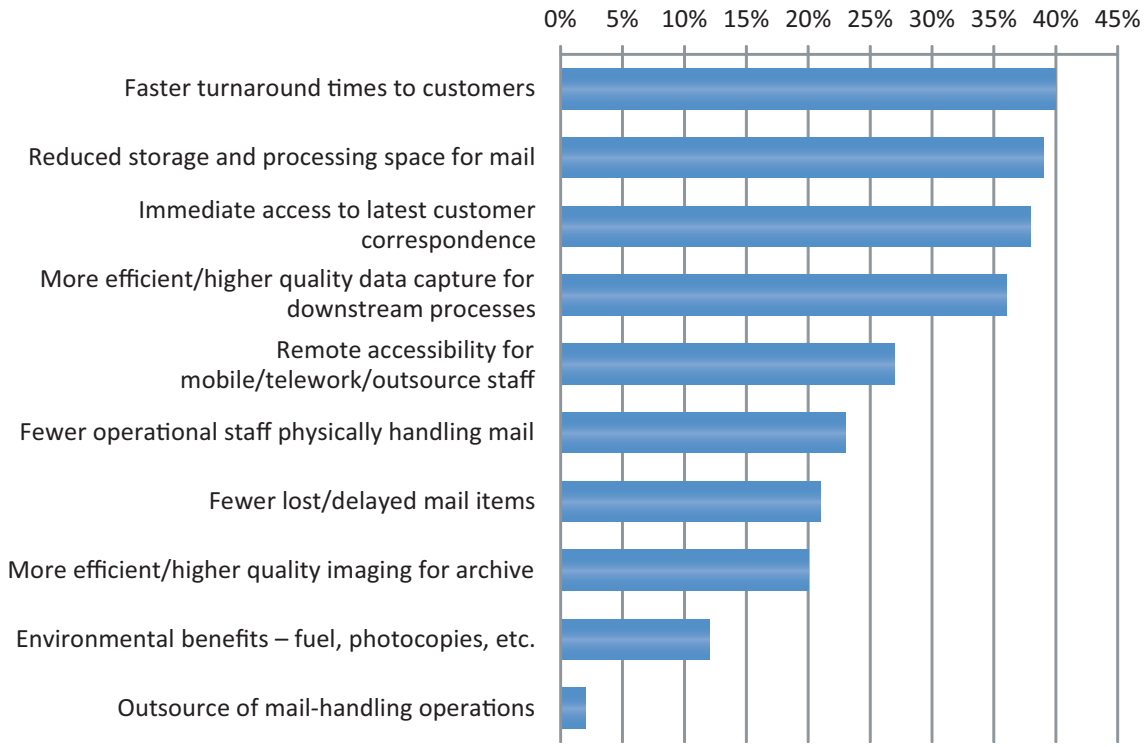
Figure 11: Which of the following do you have connected via a unified or distributed capture system (as opposed to point solutions)? (N=130 users)



The strongest benefit of the digital mailroom approach is a faster turnaround time to customers, along with the immediate availability of the latest communication, whether that is by letter, email or fax. Reductions will also be possible in the space and resource requirements for physical mail distribution. Focusing the recognition servers at a single point is also likely to be more efficient and may allow investment in better equipment, thereby improving the quality of data presented to downstream processes. Remote accessibility for mobile or teleworking staff is an important benefit, particularly during times of travel disruption.

Figure 12: Which aspects of digital mailrooms are proving the most beneficial? (Max 3) (N=130 users)



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Digital Mailroom ROI

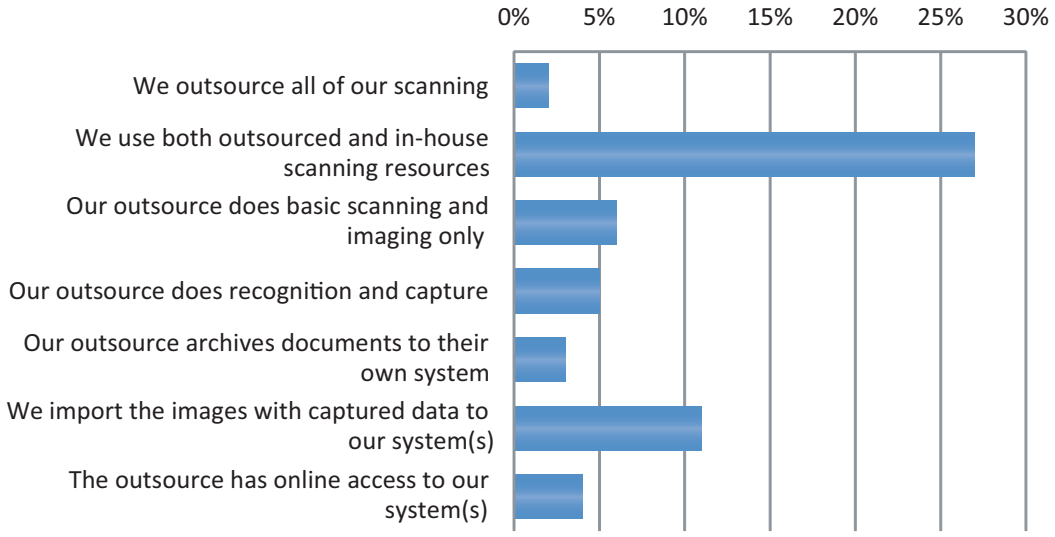
Payback periods for investments in digital mailrooms are slightly longer than for scanning and capture in general. This is probably because of the heavier-duty equipment needed, but the ROI is still 12 months or less for 37% of organizations, and 18 months or less for 53%. For some organizations, recovering mailroom space, implementing hot-desking, or restructuring operations can provide an overriding logistical reason for adopting a digital mailroom, and this is the case for 8% of our respondents.

Centralizing incoming mail handling and distributing forms and documents electronically keeps paper out at the door and provides big advantages for downstream processing.

Outsourcing/DPO

Running a scanning and capture operation may not be considered core business for many organizations, and it has certainly been the case in the past that setting up scanners and recognition systems for the best results is a somewhat specialist expertise. 37% of organizations in our survey use document process outsourcing, mostly alongside in-house. This breaks down as 25% of smaller businesses, 36% of mid-sized and 56% of the largest. In many cases, the outsource merely scans documents to an image file and passes that back on disk for archive or for import to an in-house system. Data recognition and capture may also be carried out, and in a small number of cases, the DPO will have online access to in-house systems for further process work.

Figure 13: Which of the following apply to your use of outsourcing? (Multiple)
(N=344, inc. 217 (63%) not using outsource)



Looking at forward plans for outsourcing, there is a general move to increase the amount of downstream processing carried out by the DPO. On the other hand, many users are keen to invest in more equipment in order to move things back in-house, reduce their reliance on outsource and regain control.

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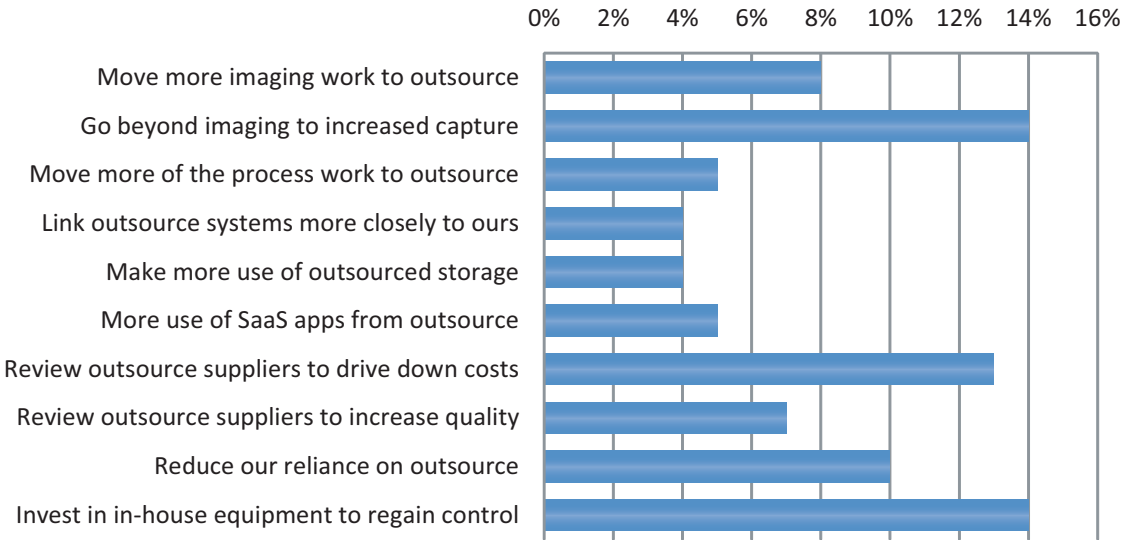
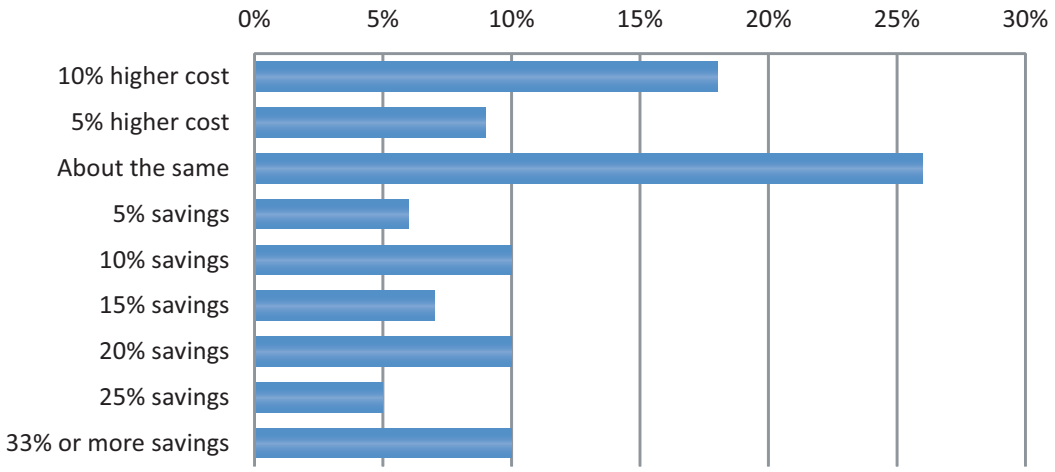
Figure 14: What are your forward plans regarding outsourcing? *(N=304, inc. 47% "None of these")*



Driving down the cost of outsource suppliers shows up as a strong priority. When it comes to cost comparison between in-house and DPO, over half of our respondents feel they are paying the same or more for the service, although a third are saving 15% or more. Obviously, circumstances will vary, but it is important to ensure that a DPO adds value or reduces risk. It would be unwise to assume that outsourcing will automatically cut costs.

Figure 15: Comparing your outsource costs, what would you say is the % difference (including staff costs, overheads and running costs) from using the outsource compared to in-house? *(N=105)*



Overall, a net of 13% of all organizations have strategic plans to increase their use of DPO, although the proportion using offshore services for reduced cost is set to fall, with a net of just 1% planning to use more offshore services. Growth projections are, however, somewhat uneven across company sizes and geographies, with the biggest strategic growth in outsourcing coming from mid-sized organizations, particularly in Europe.

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Figure 16: What are your strategic plans regarding outsourcing?
(Net % of organizations "Do More" minus "Do Less", excluding "No Change")

	All	10-500 emps	500-1,000 emps	5,000+ emps	N. America	Europe	Rest of World
Outsource	+13%	+10%	+14%	+12%	+12%	+21%	0%
Offshore	+1%	+2%	+1%	-3%	+1%	+2%	-11%

Note: this table shows a net percentage of organizations looking to grow DPO as a strategic option, not a percentage of predicted growth, nor of immediate spend (see Fig 25).

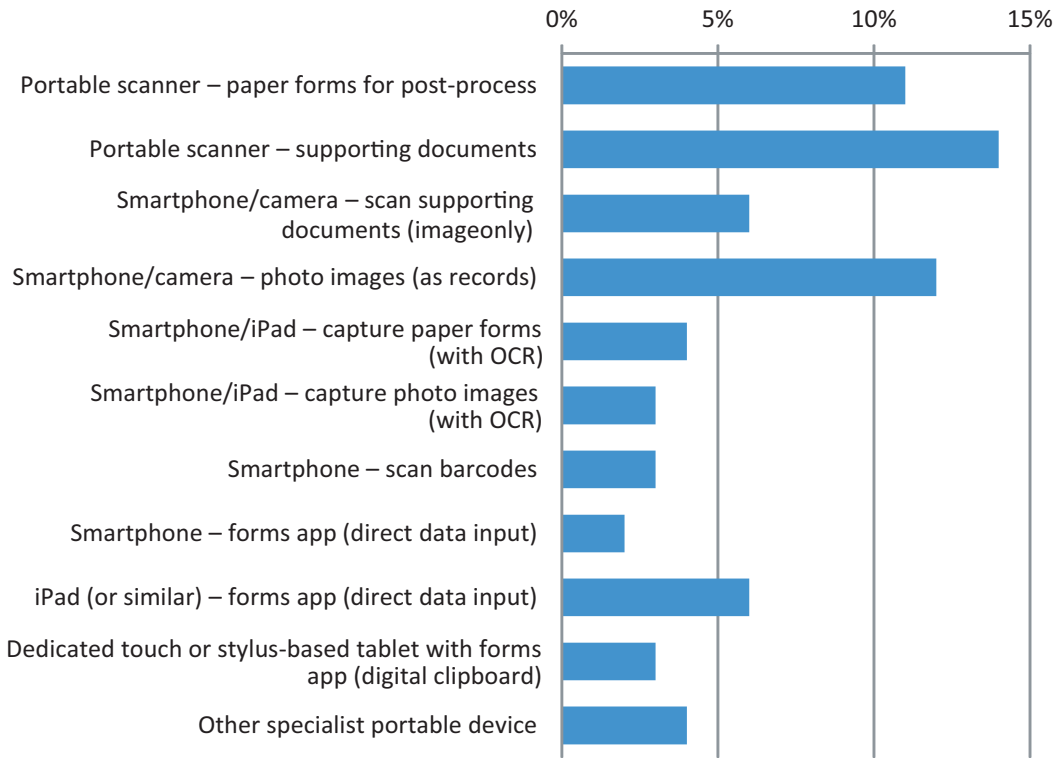
There is an appetite amongst many organizations for increased use of outsourcing and for the outsource to take on more processing aspects. Others are keen to drive down outsource costs and/or to bring capture back in-house.

Mobile Capture

Devices

When looking at their smartphone or tablet, few people would recognize it as being a capture device. Yet the combination of camera, processor, communications link and even GPS device put it firmly in contention. Include the ability to OCR text, recognize bar-codes, add notes, metadata and form fields, and file back to an ECM, records management, CRM or even an ERP system, and you have a game-changing situation. If the demand is entirely for scanning pages of agreements or contracts, perhaps at customer premises or on the road, then portable scanners can be very effective. If more of a ruggedized electronic clipboard is needed, there are specialist tablets available.

Figure 17: Do employees in your business unit use any of the following portable devices to capture documents or forms when not at their desk? *(N=350. Excl. 62% "None of these")*



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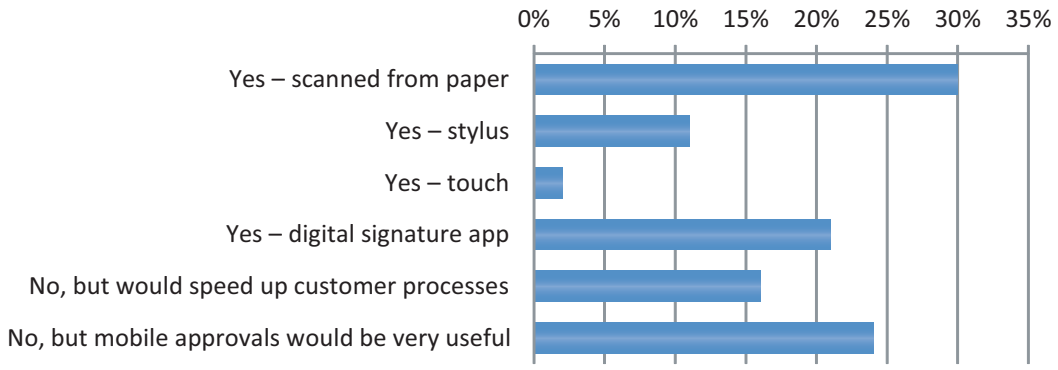
In 38% of organizations, some form of portable capture device is in use. Portable scanners are the most popular, used to capture paper forms and supporting documents such as receipts, certificates, and most recently checks (cheques). Smartphones and cameras are also useful for capturing photo-records such as insured damage or dial readings. Smartphones and tablets are also capable of OCR capture of photographed documents, as well as photo images of meter readings and license plates. This OCR capability is used by 4% of organizations.

Tablets are also poised to make a further impact in the mobile forms area, providing a simple capability to fill in e-forms on the move in a more convenient way than laptops have been able to, feeding the data directly into back-office applications, and avoiding the logistics issues of paper forms distribution in the first instance.

Signatures

Of course, many mobile capture operations revolve around signatures – process sign-offs, sales and loan agreements, delivery acceptance, patient approvals, etc. As we might expect, imaging a physical signature from paper (30%) provides the most re-assurance, but it is interesting to see that "paper free" digital signature applications (21%) are popular too.

Figure 18: Regarding portable/mobile devices, do any of your portable forms applications involve capturing signatures?
(N=137, inc. 19% "Not necessary")



Over 80% of respondents using mobile capture have applications that would benefit from mobile signature capture. Even those who have not done it as yet could see the benefit in speeding up customer-facing processes and shortening approval cycles

Mobile Benefits

Speed of data availability is the key benefit of mobile capture, along with keeping paper out of the process, better data accuracy and fewer lost or incomplete forms. Due to the cost of devices, overall payback periods are longer than other capture applications, but 51% still saw payback in 18 months or less. Security and lost devices is the biggest issue encountered, followed by user resistance – much as with any process change project. Poor 3G coverage and slow connection speed is also an issue for many, and will vary considerably depending on territory.

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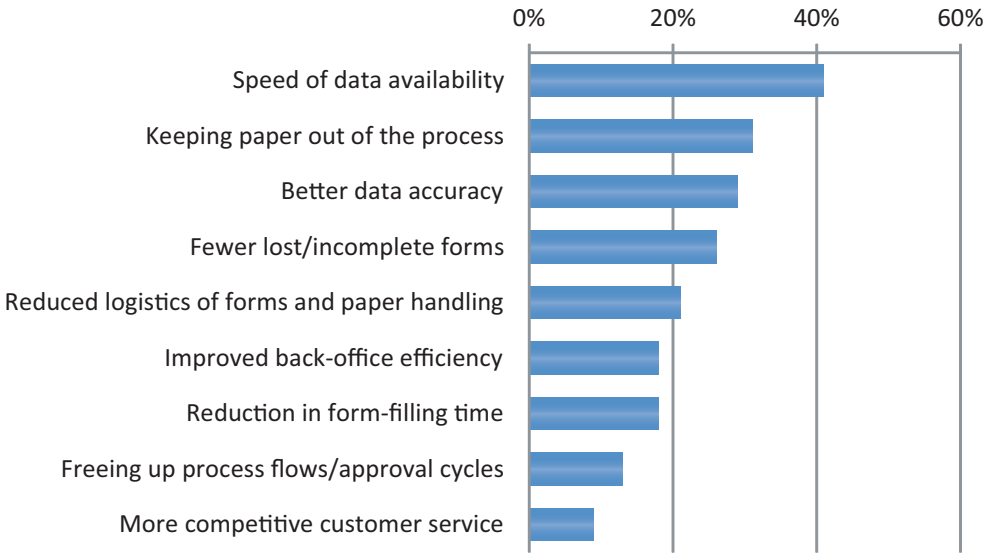
Figure 19: What have been the biggest benefits of your mobile/portable capture projects? (Max 3)

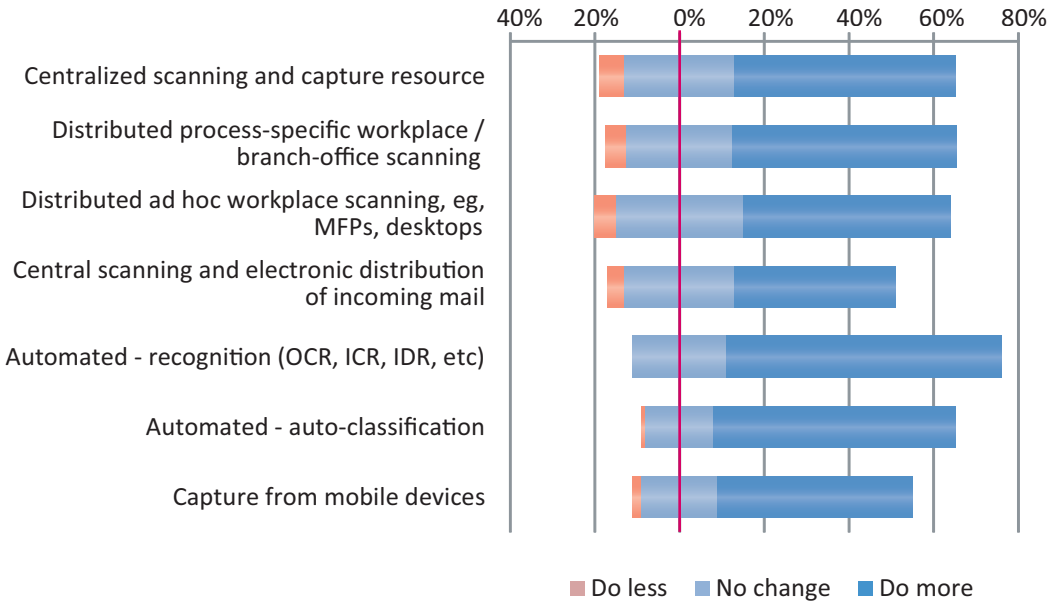


Mobile devices can have a big impact by moving capture closer to the source, either by scanning paper forms with smartphones or portable scanners, or by direct data input on tablets and specialist devices.

Scanning Strategies and Performance

We discussed earlier the provision of centralized or distributed scanning platforms, and it seems that our respondents are keen to increase their commitment to both. There is also a strong appetite for more auto-classification, and for capturing from mobile devices.

Figure 20: How would you characterize your strategy for the following?
(N=301, line length indicates "We don't generally do this")



Exploring the use of recognition technologies a little further, around a third of our respondents are using variable layout forms OCR, most likely to capture invoices from multiple suppliers. Modern systems have learning mechanisms that can detect the appropriate fields from the invoice without needing manual setup. 18% are using handwriting recognition

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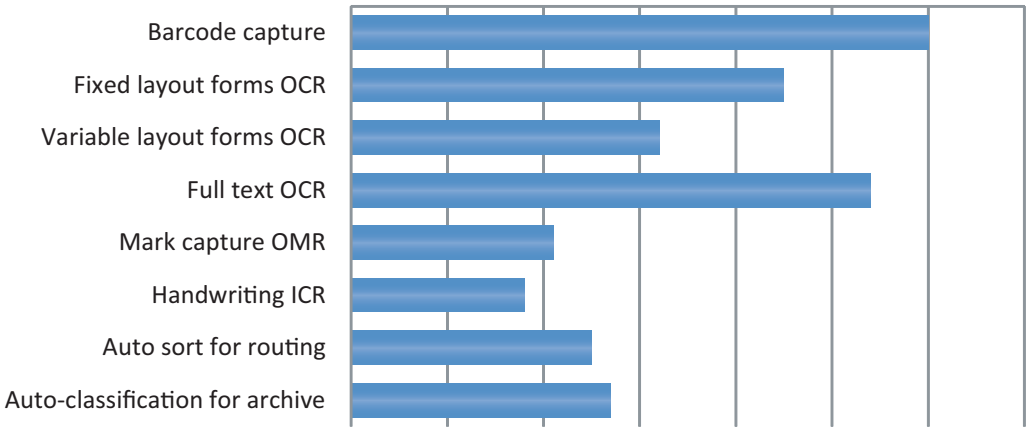
(ICR), with 70% of those finding it to be adequate or good as regards performance, compared to 89% rating full text OCR to the same levels. This is, of course, an area that has advanced considerably in the last few years.

Figure 21: Which of the following recognition technologies do you use? *(N=280)*



We also looked in some detail at the proportions of documents that are being scanned and recognized in different ways. A significant proportion of documents are being scanned double-sided, and in color.

Figure 22: What proportion of the documents that you scan are? *(N=244 with variable numbers of Don't Knows)*

	Average of all scanned docs	% companies Half or more	% of companies All (90%+)
Scanned in duplex (double-sided)	35.6%	37%	18%
Scanned in grayscale (not B/W)	33.3%	37%	20%
Scanned in color	21.2%	20%	7%
Multi-language capture	8.5%	8%	3%
Visually inspected after scanning	51.3%	56%	34%
Barcode captured	20.2%	22%	19%
Mark captured (OMR)	8%	5%	1%
Selective fields OCR'd	38.5%	18%	9%
Full OCR'd	27.6%	17%	19%
Handwriting (ICR)	6.8%	5%	3%

In terms of document handling, we can see in Figure 23 some areas where even *with* scanning, paper copies leak back into the organization. 14.7% of scanned documents are photocopied before scanning – most likely before being sent to an outsource. Around half are visually inspected after scanning, but only 33% are destroyed after scanning. 28% are shipped off-site for archive, but this leaves more than a third being stored on-site after scanning – a very cautious policy. Historically, scanned images have been stored in TIFF format, but the industry-preferred archive format is PDF-A. So far only 14% of organizations have fully adopted it even for fresh scans.

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Figure 23: What proportion of the documents that you scan are? (N=244 with variable numbers of Don't Knows)

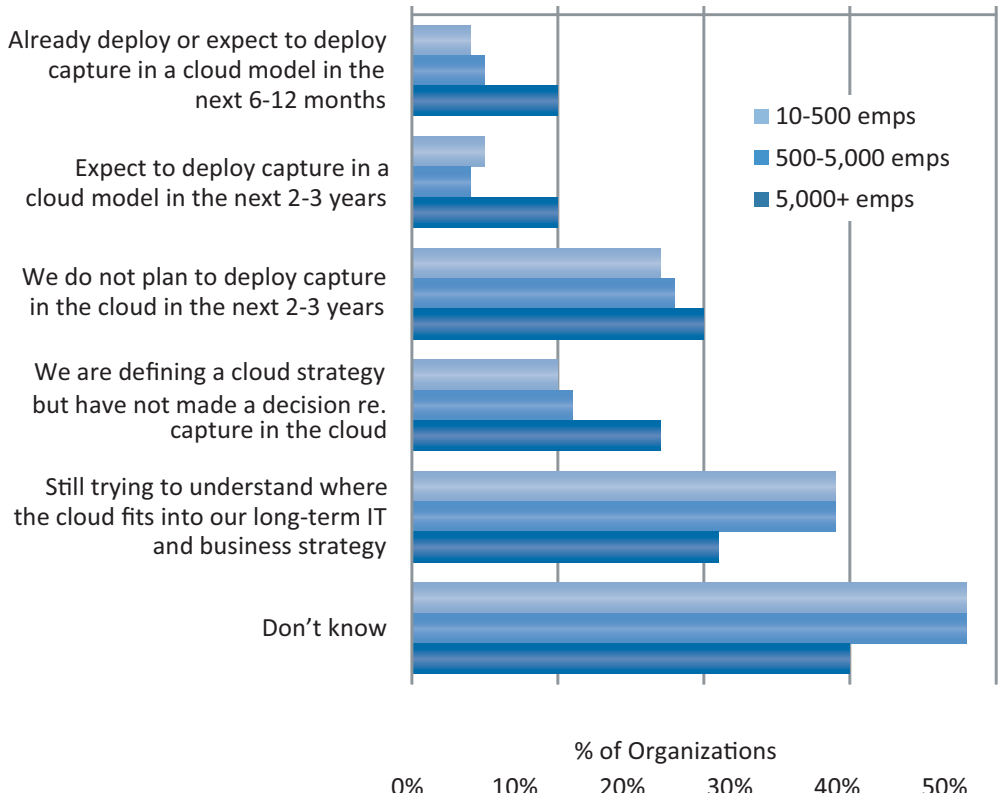
	Average of all scanned docs	% companies half or more	% of companies All (90%+)
Photocopied before scanning	14.7%	12%	4%
Destroyed after scanning	32.8%	34%	18%
Archived off-site after scanning	28.0%	26%	14%
Saved as PDF	50.1%	52%	34%
Saved as PDF-A	21.2%	22%	14%

Poor process design in many organizations is allowing paper to leak back into the building before or after scanning.

Cloud Deployment

Just as for any other IT application, capture can be deployed in the cloud, either as a SaaS model, or capturing to a cloud-based archive or ECM system. Cloud processing is particularly appropriate for mobile capture. Overall, 12% are committed to a cloud deployment of capture in the next few years, rising to 20% of the largest companies. 39% are still struggling with their strategies (small or large) and 36% of respondents don't know what their company's strategy is.

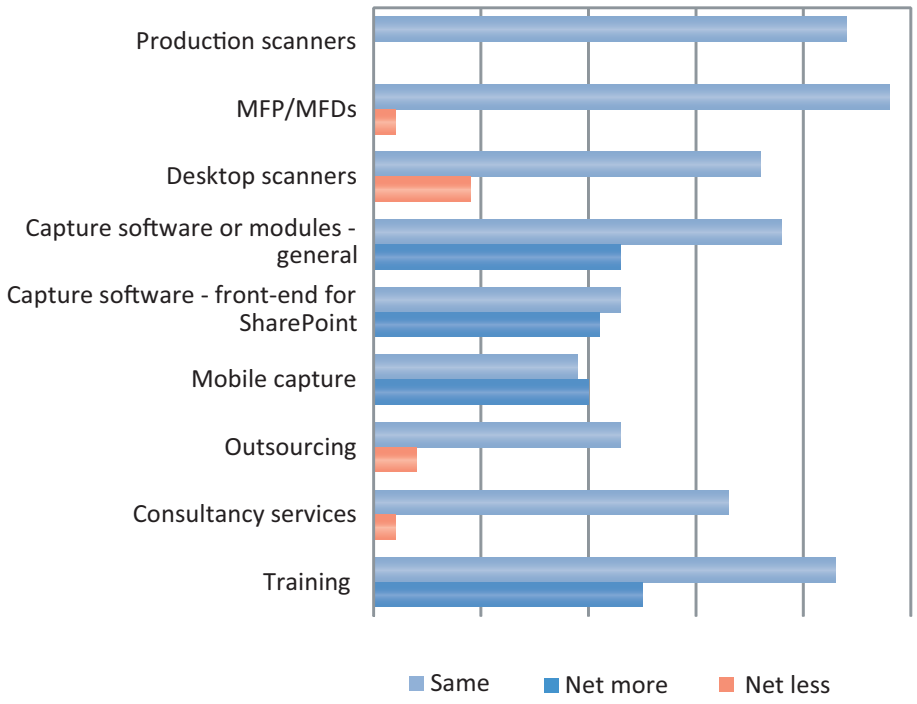
Figure 24: What is your strategy for cloud deployment of capture? (N=311, inc. 112 Don't Know)



Spending Plans

Our respondents indicate very positive increases in spend on capture software in all flavors, including front-end systems for SharePoint and mobile capture apps. On the scanner side, sale of production scanners seems steady, but overall, fewer organizations will be extending their MFP network or numbers of desktop scanners. As regards outsourcing, there seems to be some contradiction between those with a longer term strategy to do more (Fig 16, net +13%) and those intending to spend more in the next 12 months (Fig 25, net -4%).

Figure 25: What are your spending plans for the following product areas in the next 12 months compared to the last 12 months? *N=263, Net is ("More" or "Much more") minus ("Less" or "Much less")*



Most organizations are keen to continue or increase their investments in capture software, particularly as a front-end to SharePoint, and for mobile capture.

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Conclusion and Recommendations

Paper-free, paper-less, less-paper…? Yes, it seems that some progress is being made, particularly in larger organizations. We looked at the physical space savings that this can produce, and an all-electronic filing policy could save nearly 8% of office space within 5 years. And there are, of course, environmental benefits associated with less paper, less photocopying and less printing.

But the big reason to head paper off at the door is to prevent it clogging up processes and to mobilize its content. Improved access and sharability to other staff, faster response to customers, and better process productivity are the three big gains. In particular, our respondents estimated that on average their use of scanning and capture improved the speed of response to customers, suppliers, citizens or staff by 6 times or more – a dramatic improvement to competitively in a world that is only too ready to publicize poor service. Funneling incoming mail through a digital mailroom enhances this benefit, ensuring that all customer or supplier correspondence is immediately available to help desks, sales staff and teleworkers - and this concept lends itself to both in-house and outsourced provision. Overall we saw a return on investment of 18 months or less for over half of our respondents.

We also found many ways in which paper leaks back into the office. Apart from the inevitable personal printing of emails, we found procedural shortcomings where PDF and faxed invoices are printed out – and then sometimes scanned in again; where scanning takes place at the end of the process rather than at the beginning; where documents are photocopied before scanning; and where documents that have been successfully scanned are stored in the office rather than being destroyed, or at least, warehoused.

Finally, we took a glimpse at the impact of the explosion in mobile devices and their increasing capability to scan and capture paper forms, or to provide direct data input to back-office processes.

Recommendations

- Audit your processes to see where paper slows throughput, adds process steps, or restricts transparency and reporting.
- In particular, examine your customer (or supplier or staff) response mechanisms to see if physical mailings or paper processing are slowing things down, restricting visibility, or paralleling electronic communications paths.
- Look at how physical handling of incoming mail site-by-site might better be centralized, processed in higher volume, and distributed electronically.
- If you are already using scanning, consider how much "closer to the door" you could be going electronic, and how that might transform who does the subsequent processing and where they might be located.
- Evaluate the latest technology for capturing data from forms and invoices, and look to process a higher proportion of your documents automatically.
- Consider using a bureau or DPO, especially if you are concerned about capital outlay, fluctuating volumes and overall risk. Don't assume that basic DPO will be cheaper, but ensure that they add value by taking on as much of the down-stream processing as possible.
- Aim to scan documents or capture data as close to the source as possible – in the branch office, on the shop floor, in the field or at the customer's premises.
- Brainstorm how the capabilities of modern mobile devices – portable scanners, smartphones, tablets and specialist devices – could transform your processes by eliminating elapsed time, lost forms, poor data, and re-keying.
- Pick just one of these areas and test out the business case. Chances are it will show a good enough return on its own, with other applications and benefits enhancing the potential return.

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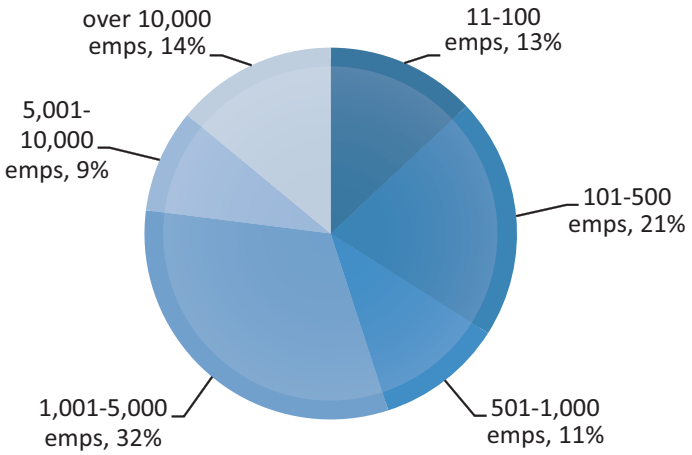
Appendix 1: Survey Demographics

Survey Background

477 individual members of the AIIM community took the survey between Nov 30, 2011, and Jan 03, 2012 using a Web-based tool. Invitations to take the survey were sent via email to a selection of the 65,000 AIIM community members.

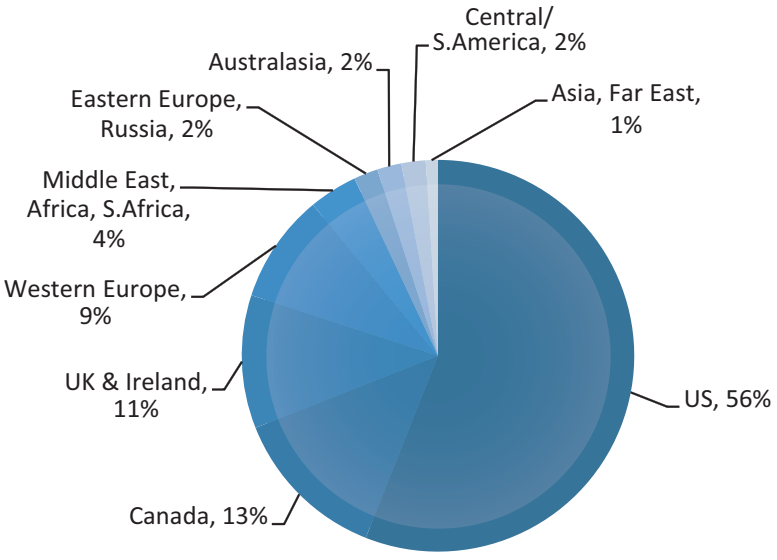
Organizational Size

Survey respondents represent organizations of all sizes. Larger organizations over 5,000 employees represent 23%, with mid-sized organizations of 500 to 5,000 employees at 43%. Small-to-mid sized organizations with 10 to 500 employees constitute 33%. 41 respondents from organizations with less than 10 employees have been eliminated from the results.



Geography

69% of the participants are based in North America, with most of the remainder (22%) from Europe.



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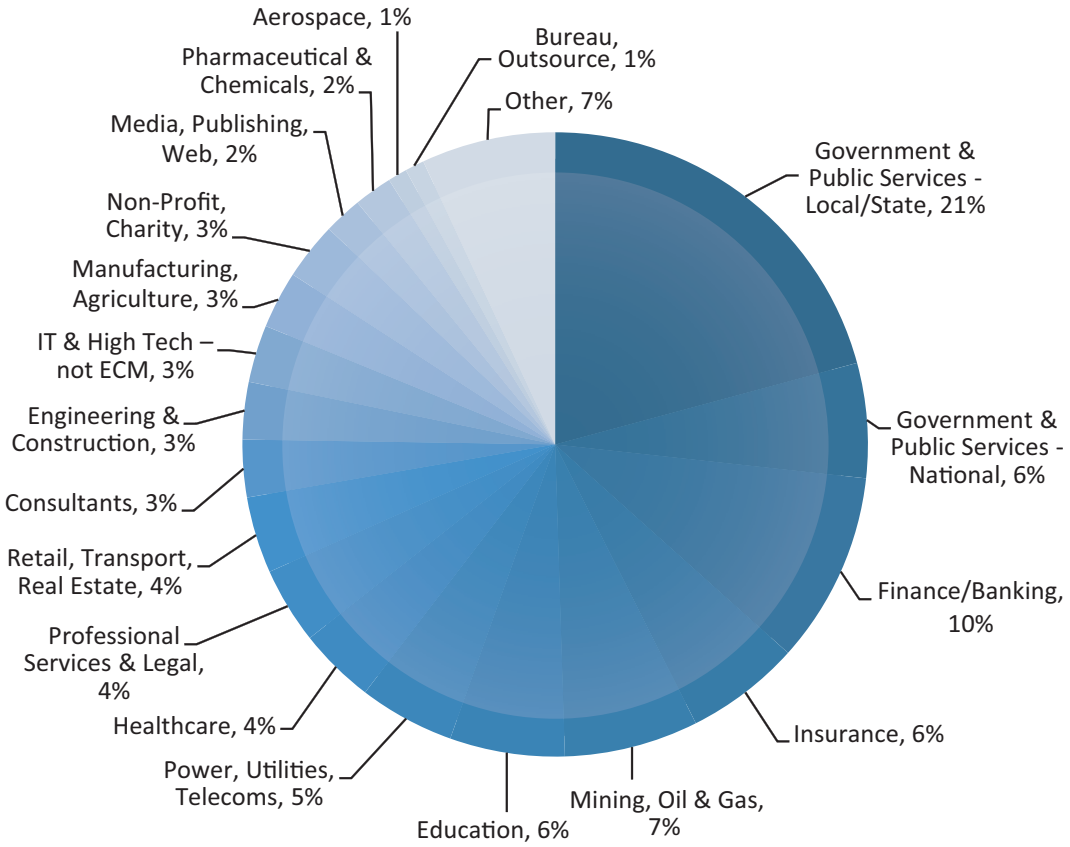
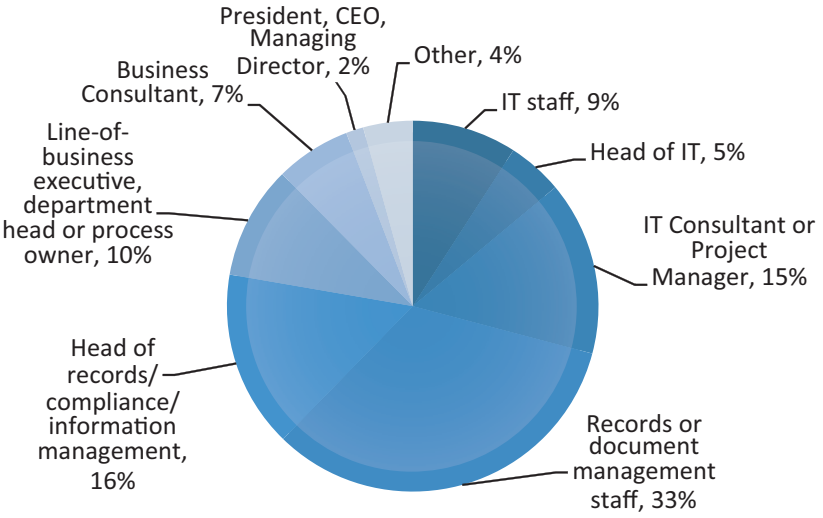
Industry Sector

Local and National Government together make up 27% and Finance, Banking and Insurance represent 16%. The remaining sectors are fairly evenly split. To avoid bias, suppliers of ECM products and services have been eliminated from all of the results.



Job Roles

29% of respondents are from IT, 49% have a records management, information management or compliance role and 19% are line-of-business managers.



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Appendix 2: Overall Comments

Do you have any general comments to make about your scanning and capture experience? (Selective)

- We have been scanning for over 10 years in-house with great success.
- Lots of moving parts in scanning solutions, awkward to troubleshoot problems, but big boosts to process automation when all runs smoothly.
- Management and user buy-in continues to be the main issue with implementing end-to-end processes.
- We are working to outsource back-scanning and will then consider a single digital mailroom across 20 offices within 12-18 months from now.
- Need to integrate more with BPM and electronic signatures to be effective within the organization.
- User education, skills, and changing the confidence level in digital images are our greatest challenges.
- We are more mature than most state agencies; however we have a long way to go especially when it comes to mobile usability.
- Everyone should do it - has made work so much easier and efficient.
- We scan all docs and e-mails into our ECM system. It is a great system, and we can find anything we need.

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As a leader in document recognition, document capture and linguistics technologies, ABBYY now provides the foundation for many of today's popular mobile data capture solutions. ABBYY's product offerings include:

- **FlexiCapture:** A line of data capture and forms processing technologies, 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. With **automatic document classification** and **data capture** features, ABBYY FlexiCapture helps organizations of any kind with any volume of paperwork significantly increase efficiency by automating paper-based business processes.
- **FineReader Engine:** A comprehensive SDK, FineReader Engine readily integrates into any mobile application or platform. Including the full spectrum of ABBYY recognition technologies, it provides functionality for full-page recognition, zonal recognition, PDF conversion and data capture.
- **Mobile OCR Engine:** A specialized development toolkit, Mobile OCR Engine empowers applications for camera-equipped smartphones, PDAs and tablets, with text-recognition and conversion. Such applications enable users to transform text within photographs of articles, business cards, timetables, menus, etc. into data that is easy to store, share and export.

www.abbyy.com

Autonomy Corporation

Autonomy Corporation, an HP Company, is a global leader in software that processes human information, or unstructured data, including social media, email, video, audio, text and web pages, etc. Autonomy's technology manages and extracts meaning in real time from all forms of information, both unstructured and structured, enabling companies to leverage their data assets. Autonomy's product portfolio helps power companies through enterprise search analytics, business process management and OEM operations. Autonomy also offers information governance solutions in areas such as eDiscovery, content management and compliance.

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With IBM Enterprise Content Management (ECM) solutions, organizations can improve efficiency and reduce costs by gaining control of unstructured content. Knowledge workers can then access, collaborate and influence business decisions in new, innovative ways to increase competitiveness and maximize productivity. There are four critical areas of IBM ECM technology and solutions that can help you achieve your business goals:

Essential Content: Managing unstructured content throughout your organization – such as scanned images, electronic documents, web pages, video, email, electronic records, paper files – is an essential ECM capability to drive down costs while improving efficiency. Businesses need to use content, regardless of type or location, in a consistent, reusable manner (standardized and federated) to respond rapidly and accurately to information demands.

Advanced Case Management: IBM unifies information, processes and people to provide a 360-degree view of a case. Advanced case management relies on information, processes, advanced analytics, business rules, collaboration and social computing to help drive more successful, optimized case outcomes.

Content Analytics: Users need to find content when it matters most and turn passive content into active sources of insight. Trusted content analytics and search provide critical tools and capabilities to increase return on investment and business advantage.

Information Lifecycle Governance: A key goal of the integrated enterprise is to support compliance and risk management policies and regulations, improving eDiscovery and the collection, archiving, classification and management of all content from various sources while keeping unnecessary costs down throughout the lifecycle.

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Kofax leverages its rich history and wealth of global resources to create powerful *capture driven business process automation solutions*, supported by market leading products that impact the entire enterprise, one process at a time. Kofax solutions securely capture all types of inbound information at the perimeter of the organization where capture driven business processes are initiated. Kofax solutions enable highly automated and, in many cases, "touchless" processing of information, reducing the manual effort required to understand the information and make decisions about delivering that information to the right person, at the right time, on the right device and in the right format.

Kofax enables companies to see into their critical business processes and unlock their value; to improve the quality and flow of information and produce better business outcomes; and to improve decisions, reduce costs and errors, increase compliance and enhance employee effort across the entire organization. With Kofax, any company can *Capture the Enterprise*.

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Private and Public sector organizsations have chosen to outsource their physical and digital document processing needs to us, utilizing our extensive knowledge of people-based outsourcing and our capability to deliver document processing services on, near or off-shore. Our corporate information management system is a unified delivery platform that provides organizations with the ability to cost-effectively onboard and distribute documents throughout the organization. It provides our clients with the capability to:

- Simultaneously improve productivity and reduce operational costs
- Take an enterprise-wide approach to automating business processes
- Enable improved decision making and customer satisfaction by accelerating business transactions
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