

Paperless Processes Deliver Clear ROI and Workflow Efficiencies

An exclusive survey of document imaging users shows where to find the benefits, as well as the gaps, in today's solutions.

By Alan Joch

An Exclusive InformationWeek Survey

UBM TechWeb research conducted an online study of 320 business technology professionals who run at least one document imaging solution in their organizations. Key findings indicate that document imaging solutions get uniformly high marks for delivering anticipated ROIs while helping organizations reduce costs and increase efficiency, compared to traditional processes that rely heavily on paper documents. However, the survey also found that gaps exist in the implementations of document imaging systems that lead some executives to see opportunities for additional business benefits.

Document imaging systems can be counted on to deliver on their ROI promises, and successful implementations can increase efficiency, decrease costs and eliminate many of the headaches associated with paper documents. These are two key conclusions of the 2011 State of Imaging Survey, an exclusive UBM TechWeb research project that explored how document imaging systems are being used at 320 enterprises representing a cross-section of industry sectors.

The survey respondents offered insights into what's working and where gaps remain in the document imaging systems they rely on to support core business processes. Comprehensive document management solutions are designed to convert paper documents into digital files, create and automate document workflows and use the information extracted from the documents to drive business processes.

The technology professionals discussed everything from key document imaging business drivers to wish lists for future capabilities. The result is a fascinating portrait of how document imaging is becoming a competitive advantage for modern enterprises.

Although the responses showed diversity in how the systems are being used, the IT executives found widespread agreement on one key point: the ROI is real. As a result, document imaging is becoming a core business application in software portfolios of many enterprises. "From an efficiency viewpoint, this is how we route documents to the right departments, ensure the timeliness of processing activities, expedite processing for high-priority clients and track any documents that need follow-up action," says Steven Marenakos, senior vice president for annuities, operations and systems at Prudential Financial. The company has relied on document imaging for the past 15 years to process annuity paperwork, including applications and contract updates.

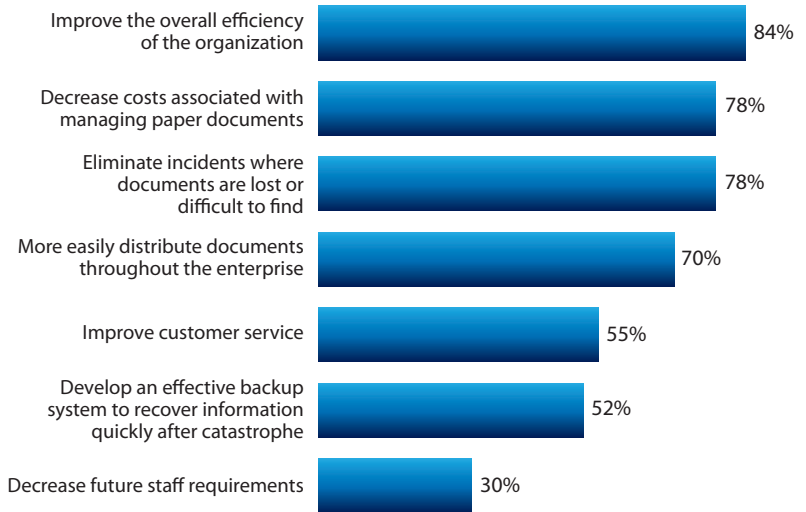
Prudential is not alone. Document imaging is driving the adoption of electronic documents into a wide range of traditionally paper-driven organizations in health care, insurance, banking and the government.

But while technological innovations have improved document imaging solutions in recent years, the survey found that shortfalls remain. Some organizations identified breakdowns in key areas, such as automation, efficiency improvements and forms processing.

Business Drivers

An overwhelming majority of survey respondents see document imaging as an important tool for working smarter and reducing expenses. For example, when asked what business goals their document imaging systems address, 84 percent ranked improving overall efficiency at the top. Decreasing paper-management costs came in a close second at 78 percent of the responses, and tied with eliminating incidents where documents are lost or difficult to find.

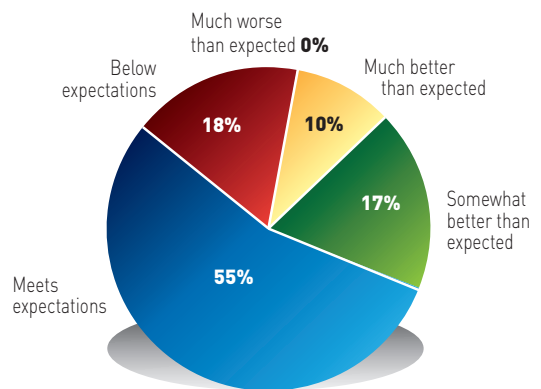
Figure 1. What are the main business goals you'd like to achieve with a document imaging solution?



Note: Multiple responses allowed
 Data: UBM TechWeb survey of 320 business technology professionals who run at least one document imaging solution, March 2011

Related responses offered additional insights into the efficiency and cost-reduction goals of today's enterprises. Another sizable percentage of document imaging users want to eliminate the wasted resources associated with lost or hard-to-locate documents. Seventy percent of the executives are seeking alternatives to unreliable processes used to distribute documents throughout their organizations.

Figure 2. How would you characterize the return on investment (ROI) from your current document imaging solution?



Data: UBM TechWeb survey of 320 business technology professionals who run at least one document imaging solution, March 2011

Low Risk, High Gains

The survey found that the pairing of clearly defined business goals and today's document imaging technologies is a potent combination. When asked to characterize the ROI of their solutions, 82 percent of the survey participants said the applications met or exceeded expectations.

Forty percent of organizations see ROI from their capture solution in less than a year, according to the Association for Information and Image Management.

These results confirm the findings of research by a variety of technology analysts and industry groups that consistently rate document imaging as one of today's most reliable investments. For example, a 2011 Capture Software Product Study found that 40 percent of the organizations see an ROI from their capture solution in less than a year, according to the Association for Information and Image Management (AIIM), an independent industry association that focuses

on managing documents, content, records and business processes.

The cost-cutting benefits of document imaging can be impressive. For example, Huhtamaki, Inc., a manufacturing company, used its system to eliminate the need for external storage to archive important documents. The company estimates it is saving about \$50,000 a year now that it stores all of its records electronically, says Mark Pettigrew, IT project manager.

The company has also seen efficiency improvements. "In the past, if a clerk in accounts payable had a question about an invoice, we might go through several weeks of sending copies of that invoice back and forth between central AP and the plants to resolve the question," Pettigrew explains. "Now, we typically can get resolution of those questions in hours instead of weeks — that's been a huge improvement."

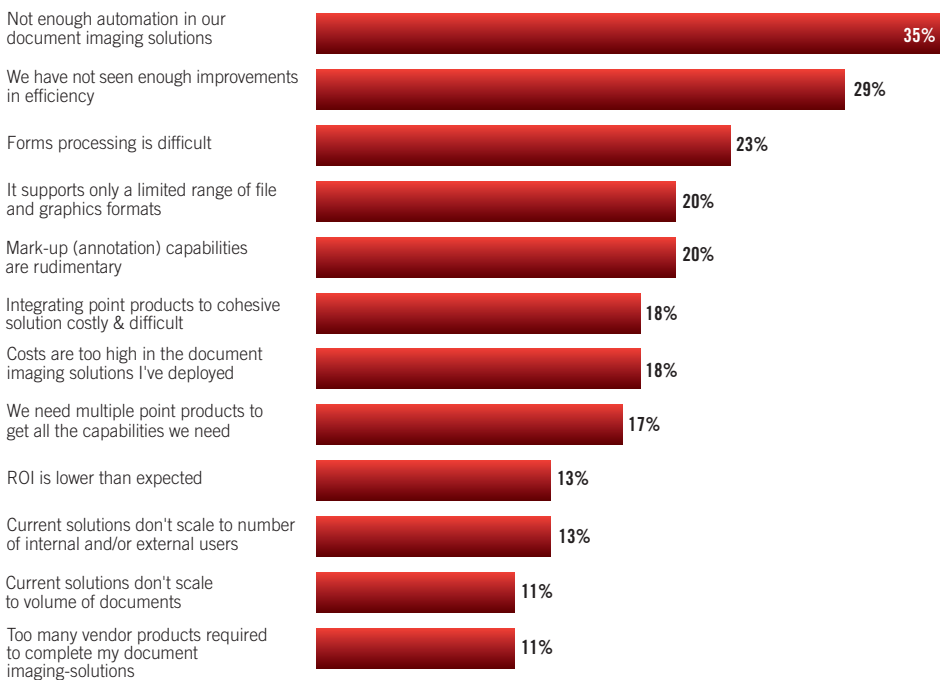
Document Imaging Pain Points

While document imaging systems can be critical components in efficient business processes, the survey found that some solutions are falling short of perfection. Participants identified a range of problems that dilute the benefits of their solutions. The

most common complaint, shared by 35 percent of the respondents, specified that there was insufficient automation to eliminate human involvement in managing documents.

In some cases, this gap is forcing companies to devise workarounds. "We are starting to add more intelligence to the system for more automation," says Larry Kallembach, executive vice president and CIO for MB Financial Bank, a large Chicago-based institution with 92 branches. It moved predominantly to electronic documents about five years ago with the twin goals of less manual intervention and fewer document-processing errors.

Figure 3. What are the greatest pain points you face with your current document imaging solution?



Note: Multiple responses allowed
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Automation is important throughout document imaging, from initially creating electronic documents to providing tools to help business users efficiently extract information from individual document fields.

Some survey respondents also reported disappointing efficiency gains, with 29 percent citing this as one of their greatest pain points. The reason: Electronic documents alone may not eliminate old problems associated with paper. They include drains on staff resources and misfiled or lost information. “Replacing paper with digital files in itself doesn’t create a more efficient organization,” says Philip Page, offering manager for IBM Imaging Solutions. “What you really need to do is direct those digital images to the right people as quickly and efficiently as possible so your workflow is genuinely improved.”

The best document imaging systems promote automation using sophisticated rules-based, decision-making capabilities and by embedding business process management (BPM) tools to optimize enterprise-wide processes. For example, the document imaging system at a financial institution might automatically route loan applications to the lending department. But valuable time will be lost if department managers must then manually distribute the documents within the department to balance workloads or tap specialists for a particular type of loan. That’s time that could be saved if the document imaging solution used

included BPM capabilities and used business rules to automatically route documents to the individuals who need them to perform their work.

In addition, the document systems should offer the latest techniques for document identification, which can include keyword searches, pattern matching and advanced image matching — for recognizing a document’s layout. Kallembach says it’s essential to have the ability to properly identify files once they’re entered into a document imaging system. “If you think it’s hard to find a piece of paper when it’s misfiled, just try to find an electronic document that’s been misfiled,” he says.

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Gaps Remain in Forms Processing

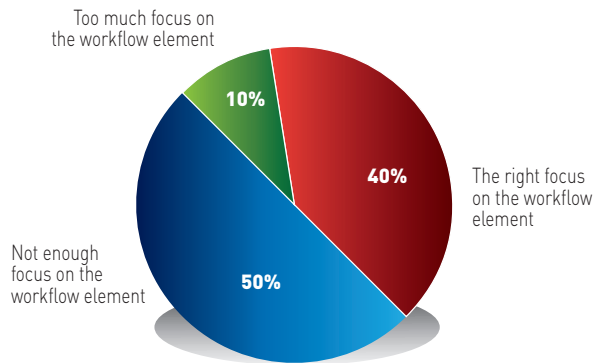
Breakdowns in forms processing constituted another highly ranked pain point among survey participants. Russell Beard, senior application architect at First Data Corp., a merchant processing-services company, says this area is especially vital for a company like his, which runs 500 million documents through its document imaging system

:: Expert Advice from IBM: What to Look for in Document Imaging and Capture Solutions

To achieve the full potential of document imaging systems, organizations need to consider pre-integrated, end-to-end solutions with the following characteristics:

- Advanced document capture software that’s able to identify and extract data from a variety of document types, such as claim forms, letters and résumés. The capture system must also be able to handle fax images, previously scanned images and email messages and attachments.
- A core content management server that can manage multiple content sources in their original format and across various locations. If necessary, the server should scale to support billions of objects. Support for the Content Management Interoperability Services (CMIS) standard aids integration with Microsoft SharePoint, SAP and other third-party applications.
- Imaging-centric process management tools that automatically route documents based on established and user-customized workflows or the characteristics of each document’s content.
- Software for image viewing, annotation and redaction that allow users to add notes to document images, or “burn out” (redact) areas of images for security purposes. For example, a hiring manager could mark a résumé for delivery to a colleague at a different location, or a mortgage broker could burn out personal details from an application before sending it outside the company.

Figure 4. Do you think there is ...



Data: UBM TechWeb survey of 320 business technology professionals who run at least one document imaging solution, March 2011

each year. “The faster and more accurately we can perform the processing, the more we reduce our costs and the better service we can provide for our clients,” he says.

To satisfy high-volume environments like these, document imaging systems should offer advanced forms-processing capabilities that allow businesses the flexibility to define rules for unique and complex forms and then use BPM to speed their processing times.

A significant number of respondents also knocked document imaging systems for their rudimentary mark-up and annotation capabilities. Underperforming annotation functions can cause organizations to miss out on important efficiency opportunities. For example, a human resources (HR) professional may use a capture system to process job applications and résumés. Some of the candidates may not be a fit for the particular job opening but offer talents valued by another part of the organization. With mature mark-up capabilities, the HR person could

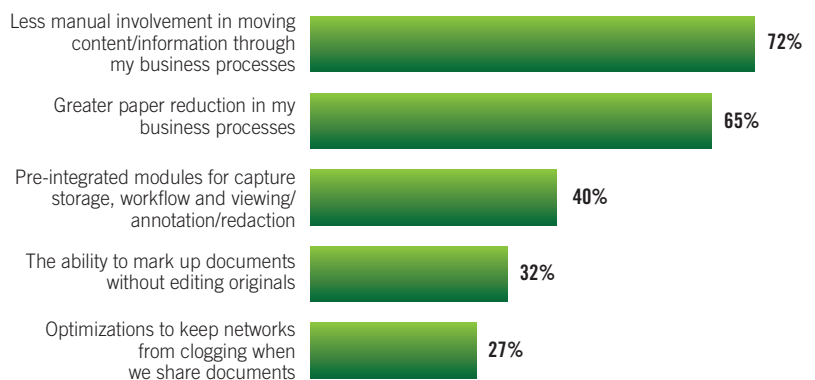
highlight these talents so the document management solution can route résumés to additional HR managers.

Integration Concerns

Because an end-to-end document imaging solution comprises so many individual components, integration cost and complexity are big concerns. A significant number of companies (18%) voiced concerns about the integration hassles they face when stitching individual point products together into a cohesive solution. “Integration is a problem for the simple reason that vendor A’s product may talk completely differently from vendor B’s; so then how do you tie all those inputs and outputs together?” says Beard. “It’s getting better, but there’s still a way to go.”

There are two sides to the integration challenge. In addition to the internal connections that bind the individual modules together, document imaging systems also connect with third-party document repositories. “Maybe I want transactions to go into my SAP or Oracle financial systems; or perhaps I want to check invoices with my JD Edwards ERP [enterprise resource planning] system,” Page explains. The best document management systems offer out-of-the-

Figure 5. What benefits are you still seeking with your document imaging initiatives?



Note: Multiple responses allowed
Data: UBM TechWeb survey of 320 business technology professionals who run at least one document imaging solution, March 2011

Methodology:

In March 2011, UBM TechWeb research conducted an online study of business technology professionals on behalf of IBM on the State of Document Imaging. Email invitations were sent to a random sample of UBM TechWeb’s database of qualified business technology decision makers who had agreed to be contacted for research purposes. The 320 respondents who qualified to take the survey by confirming that they run at least one document imaging solution comprise the final data set.

box capabilities that address all of these needs.

Rounding out the pain points that crop up most around document imaging systems are shortfalls when the solutions need to scale to meet the demands of additional users. “We started out with 10 users, but we probably have 300 knowledge workers using it now,” Pettigrew reports. “It grew a lot faster than we anticipated, but in retrospect we should have anticipated this growth.”

He explains that one department adopted the system and began storing all its documents into the system. “In the old days, someone would make a copy of a document and stick it in interoffice mail when another department needed it. Now they say, ‘Just go look in the system,’” Pettigrew says. “All of a sudden, the other departments are asking how they get an account so they can access the information.”

Customer references from organizations with high-volume imaging needs can be a good indicator of scalability success when evaluating potential solutions.

Workflow Is Key

Strong workflow capabilities are another important factor

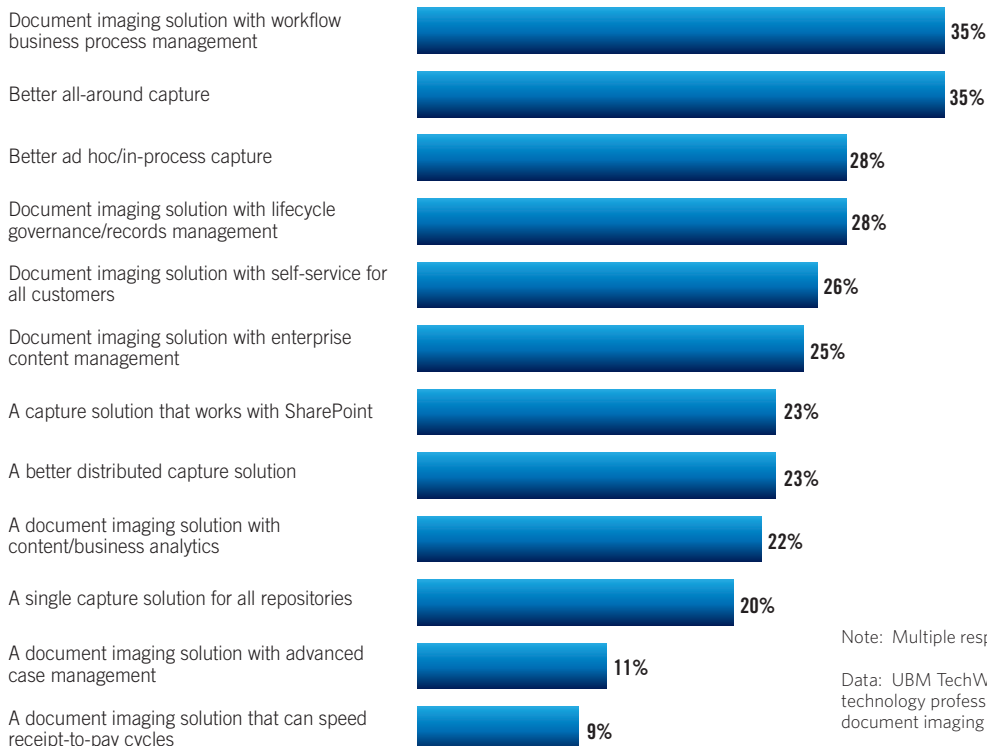
for ensuring that document imaging solutions successfully help organizations evolve beyond their paper-based processes. This need surfaced when survey participants were asked whether their document imaging solution focused adequately on workflow. Half said the workflow emphasis wasn’t great enough.

Some respondents highlighted the inability of their systems to accommodate changes in the established workflow process. For example, if someone releases a proposal to spend capital funds and someone in the approval chain requests more information, the process may come to a halt.

Document Imaging Wish Lists

In addition to inquiring about pain points, the survey also asked participants to identify any additional capabilities they’d like to see in their document imaging solutions. Topping the list was the desire for less manual involvement when moving content and information through existing business processes, something almost three quarters of the executives highlighted. In addition to other innovations on

Figure 6. What additional capabilities would you like to see in a document imaging solution?



Note: Multiple responses allowed

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the wish list, respondents asked for optimizations to keep networks from clogging when organizations share documents among the staff.

The right workflow engine can remove existing bottlenecks and even offer analytics to help managers spot future problems before they become significant.

And when it comes to new capabilities available in the document imaging products, 35 percent of those surveyed said they wanted a solution that provides workflow and BPM. The same percentage of respondents is anxious for better all-around capture solutions, while 28 percent highlighted better ad hoc/in-process capture tools.

Respondents also recognized that document imaging applications solutions don't run as silo solutions. Instead, they're part of a larger ecosystem that may include other enterprise document repositories, ranging from folders on file servers to applications with built-in document sharing capabilities, such as SAP or Microsoft SharePoint. This helps explain why 23 percent of the executives said they are seeking a capture solution that works with Microsoft SharePoint and enterprise content management (ECM) solutions. Twenty percent want a single capture solution for

all repositories, regardless of vendor.

Because replacing repositories is rarely a practical solution, organizations should consider a federation strategy that allows for managing multiple sources of content across all locations and formats. It's also important for solutions to support the Content Management Interoperability Services (CMIS) standard, which eases the task of integrating Microsoft SharePoint, SAP and other applications with the document imaging system.

Finally, respondents said want to see their document imaging solutions improve specific areas of their overall operations, including disciplines such as case management and receipt-to-pay processes. These needs can be addressed with document imaging solutions that offer analytic capabilities for insights into current operations and suggest how to fine-tune systems for future needs.

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