

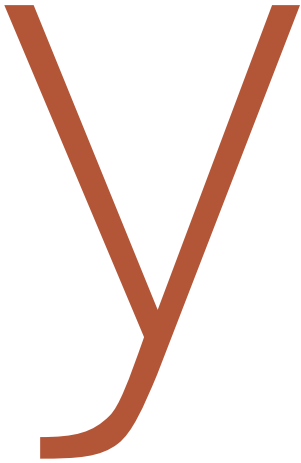
CHAPTER 2:

How to Find the Right Solution



Understanding ECM is the first step. Finding the right solution requires planning.





You know and understand that you need to effectively and efficiently manage your business content to outstrip your competitors. To get there, you have to plan.

Planning your ECM strategy can be a time-consuming process. Take the time to do it right. Don't fall into the old maxim of "being too busy to do it right, but not too busy to do it over." There are many keys to planning and rolling out your ECM implementation. In this chapter, you will learn:

- Contract negotiation tips
- How to choose an outsource partner
- The proper role of consultants and the channel in your project planning

Finally, ECM encompasses multiple types of technology tools. Each tool has different requirements and fits different needs for your organization. Planning also involves finding the right product for your needs.

Kodak



Network Scanning for Distributed Capture

Interview with Don McMahan, Vice President Sales, Regional Business General Manager, US&C, Document Imaging, Graphic Communications Group, Eastman Kodak Company

Q: Why the trend towards distributed capture?

McMahan: Capturing documents at the desktop provides a number of advantages that quickly translate into productivity efficiencies—good news for the bottom line. Document capture provides quicker access to shared information for everyone in the business, equating to easier collaboration throughout the organization, and, more importantly, shortening information retrieval time. Document capture also mitigates potential risks to businesses.

Document capture brings an increased competitive edge in providing better customer service with happier employees. Quickly accessing information when servicing an account increases customer satisfaction, eliminates employee frustration, and, importantly, shortens the time to money. Finally, having your own document capture at the desktop reduces expenses by providing a cost-effective way to manage business-critical information from active files to those archived. It eliminates expenses associated with large back-file conversion projects and shipping documents to a central location for capture and archive. Key enablers have been the availability and low cost of high-speed broadband, better image quality, and a small footprint at the desktop.

Q: Explain networked scanning.

McMahan: Network scanners differ from distributed desktop scanners in that they connect to an existing network infrastructure; providing walkup scanning for everyone in the office without the need for a dedicated computer. Network scanners differ from office MFPs that also offer scanning by having faster scanning speeds, better paper handling of mixed document types, and higher quality images with increased ease of use. From a network scanner, users can simultaneously share scanned document files via email, send files to network

locations, fax, send via FTP, route to document management systems local or remote, save to local USB drives, and/or print them via networked printers.

Q: What hardware is available for enabling a distributed capture strategy?

McMahan: Our network scanner, the Scan Station 100, brings end users innovations that a number of our competitors are finding attractive as well. Our network device features one-touch operation—including image preview of scanned images prior to sharing—from a full-color touch screen and the capability to save files on portable USB devices. The USB capability offers users additional flexibility in working with their email lists and files. Furthermore, once a document is scanned, it can be sent as a variety of file formats, including searchable PDF, and add to all of that, the Scan Station 100 uses Kodak's proprietary Perfect Page image enhancement technology to produce high-quality scanned images. With Notable Solutions Inc. (NSi), we deliver a solution pairing the Scan Station 100 with NSi's AutoStore Software, which connects various types of document input sources such as fax machines, multi-function peripherals, and scanners and interfaces with customers' existing programs, document management processes, and workflow systems.

Q: Where can the technology be effectively deployed?

McMahan: Applications for network scanning include financial services, insurance, healthcare, government, legal and general office.

Q: What's the best way to buy/install distributed capture tools?

McMahan: Through an authorized reseller who not only offers high quality products but takes time to listen to your needs and how the capture device will work within your existing business processes to en-

hance your productivity. As you know, I joined Kodak to grow the distributed capture business. It became clear early on that to do that we needed to substantially increase the number of partners we have in this channel. Kodak has expanded the number of VARs in its distributed capture channel program, the Kodak Desktop Scanner Reseller (KDSR) program, growing from about 200 in April to more than 1,200 today. Endemic to this growth is the training and support KDSRs receive from Kodak. Our resellers are trained in product functionality and proper application, integration issues and proper selection and support for various applications. A number are trained, additionally, in service as part of our Authorized Service Provider (ASP) program.

About Eastman Kodak Company

Kodak is the world's foremost imaging innovator. With sales of \$10.7 billion in 2006, the company is committed to a digitally oriented growth strategy focused on helping people better use meaningful images and information in their life and work. Consumers use Kodak's system of digital and traditional products and services to take, print, and share their pictures anytime, anywhere; Businesses effectively communicate with customers worldwide using KODAK solutions for prepress, conventional and digital printing and document imaging; and Creative Professionals rely on KODAK technology to uniquely tell their story through moving or still images.

More information about Kodak (NYSE: EK) is available at www.kodak.com

More information about KODAK document imaging scanners is available at www.kodak.com/go/docimaging or call 800-944-6171.

From a Plumber to a Partner: Choosing the Right ECM Reseller

By Ralph Gammon

As imaging and document management have evolved into enterprise content management (ECM) and grown from strictly a line-of-business (LOB) application to an infrastructure for unstructured information, I have often heard it described as plumbing. So, I guess it's only appropriate that when I began asking people for their advice on selecting an ECM VAR or systems integrator, that most common response was to compare it to selecting a plumber.

"How do you find a plumber?" asked Michael Bida, a 25-year veteran of Kodak Document Imaging who recently launched a consulting practice. "You start calling around and asking other people who they use. If you need a hot-water heater installed, you ask your neighbor whom they used to do that. It's the same with ECM; you want to find someone who's been down that road before and has experience with the problem you're hoping to solve."

Just like plumbing problems vary in size and scope, so do ECM problems. And, like plumbers, different VARs and systems integrators have different specialties. "It's very important to match up the skill set of a reseller with the requirements of a project," noted AIIM chairman Don McMahan, who is also Kodak Document Imaging's vice president of Sales for the US&C. "It's funny, but people don't seem to spend enough time on that part of the process.

"There are hundreds of different ECM applications out there, and everyone can't be an expert on all of them. Before choosing a VAR or systems integrator, you want to look at what sort of integration capabilities they have, what sort of customized work and training they've done, and what sort of software expertise they have. Do they have experience they can reference in the application areas that you are trying to address?"

THE NEED FOR NEEDS ANALYSIS

Of course, before you can begin selecting someone to meet your needs, you have to know what those needs are. An ECM salesperson once made a very insightful comment to me. He said, "If you have a single document, you don't need an ECM system, you need a thumbtack." This is obviously an exaggeration, but the premise holds true. Before deciding on an ECM application, the most important thing you can do is a serious needs analysis.

"When doing a needs analysis, you typically want to pick out the two departments where you think you have the biggest document problems and do a fairly in-depth study of the benefits that could be gained through ECM," said Bud Porter-Roth, principal at Porter-Roth Associates document and records management consulting practice. "You should also do a cursory review of the other departments, just to make sure there is not something

While this factory-direct approach may be an effective way to buy commodity items like furniture, printers, and PCs, it's often not the best way to purchase an ECM system.

unusual that you won't be able to handle with the type of implementation you are considering."

Porter-Roth recommends finding a champion for an ECM project within either IT or one of the departments immediately affected by the implementation. Variables to consider in an ECM needs analysis include volume of documents, the workflow associated with those documents, employees affected by the documents, time and access requirements, and potential improvements that can be achieved through ECM and the associated business process re-engineering.

Of course, the cost of a potential ECM system must also be weighed. "I've basically stopped doing traditional return-on-investment (ROI) studies," noted Porter-Roth. "They can be very hard to do correctly. For example, if you say ECM can save everyone five minutes per day looking for files, how do you calculate the savings? Do you subtract five percent of your total salary figure? How realistic of an ROI does that produce?"

"I prefer to look specifically at efficiencies being gained. For example, if a user has a file room with three clerks and through an ECM implementation is able to get rid of two of those clerks and the file room, clearly some efficiencies have been gained. Or, if you have a manual workflow that takes seven steps, and with a document-imaging implementation you can reduce that to three steps, and now you can process 100 applications an hour instead of 50, clearly some efficiencies have been gained.

"This basically shows the ROI without having to calculate it. Of course, you also have to detail the costs associated with new hardware, software, training, maintenance, and other items. The bottom line is that 90 percent of the people that hire me to do a needs analysis end up going through with a system. By the time they get to the needs analysis, they have typically done enough work and research that they are past the point of no return."

WHEN TO BRING IN A RESELLER

It may seem that the needs analysis is a precursor to the selection of a VAR or systems integrator, but the fact is, for many smaller businesses, the person that does the needs analysis will turn out to be the same person who installs the ECM system. "If you have not done a needs analysis, you are not ready to buy an ECM system," said Dan Elam, president and founder of ECM consultant eVisory. "However, if you have selected a VAR or vendor to do your needs analysis, you may not realize it at the time, but you've also selected the VAR or vendor for your project."

Not that this is always a bad thing. Porter-Roth and Elam agree that in the best of all worlds, you would have someone who is product independent perform the needs analysis. "However, the cost of our consultant services doesn't scale with the size of the project," said Elam. "It's the same price if you're installing a twenty person or a 20,000-person system. So, if you're talking about a \$50,000 system, it's hard to cost justify a consultant.

"Yes, if you receive a needs analysis from a VAR or a vendor, you might not be getting the most optimal system. But what are the consequences? If it's a smaller system, maybe it will cost you an extra \$1,000 per year in maintenance and/or inefficiencies, but that still doesn't justify hiring a consultant. And, most likely, you will still be getting something that works—which was not always the case in years past."

A SUCCESS STORY

Temporary housing provider Oakwood Worldwide is an example of an end user that relied on a VAR to do its needs analysis. Oakwood recently installed a document imaging application for automatically capturing data from the 75,000-80,000 utility bills it receives per month. Brad Niemiec, Oakwood's manager of National Accounting Processes, is the president of the Phoenix-area chapter of the International Accounts Payable Professionals (IAPP) and learned about the potential of document imaging through local IAPP meetings and the IAPP national conference.

"I pretty much went around to every vendor at the national event and gave them my business card," said Niemiec. "Then, I started getting the follow-up phone calls and began the screening process. We first narrowed it down to vendors that could install software at our location, as we didn't want to outsource anything.

“After several conversations, we narrowed down our vendor choices to Captiva and Kofax, and invited each in to do a presentation. We decided to go with Kofax, because its software had all the bells and whistles we wanted. Kofax then introduced us to three of its resellers.”

In the end, Oakwood chose Tempe-based Western Office Systems. “We interviewed all three VARs and felt that Western would provide us with the best service,” said Niemiec. “They had a broad knowledge base, and really seemed to try and understand our business while we were speaking to them. Being local was also a benefit. It’s nice to know that when you call for service, your VAR can have someone there in a couple of hours.

“Plus, we had someone in our IS department who had worked with Western in the past and recommended them. Also, when we were hammering out the final price, it became apparent that Western really wanted our business. We ended up with a great price and both Kofax and Western Office did a great job when it came to professional services. I think it helped that Kofax really wanted us as a reference site.

“We didn’t realize it at the time, but it turns out that Western is one of Kofax’s preferred resellers and their general manager, Ray Hughes, is on a Kofax advisory committee. I guess if we had known all this in advance, it would have made our decision a bit easier. From that standpoint, I would advise anyone looking for a VAR to talk to as many people and ask as many questions as possible.”

VENDOR RESOURCES

ECM vendors agree that they are often a good source of information when locating resellers. “A good vendor rep is very engaged with all the resellers in their territory,” said Kodak’s McMahan. “They know who is doing what and what is being done right.

“Even though I work for Kodak, I’d also say it’s important to talk to multiple vendors, as well as various other people in the food chain. Your local AIIM chapter is probably a good place to find some more neutral information, as well as find some people with firsthand experience to address your problem.”

John Fox, director of Channel Sales at Hyland Software, adds that various vendor designations and awards are often a telltale sign of a good reseller. “We are very big on our resellers getting trained and

RESELLER SELECTION CHECKLIST

1. **Talk** to as many people as possible to get the names of potential resellers and consultants. This includes vendor representatives, peers, and exhibitors and attendees at conferences and events where ECM solutions are featured.
2. Conduct some **research** on your list of prospective resellers. Check their resumes for items like certifications, vendor accreditations, and awards.
3. Perform a **needs analysis** to determine your document volumes, workflow, and potential effects of an ECM installation
4. **Match up** the experience and skill set of prospective resellers with the specifics of your application. If you have invoice processing needs, find a reseller that has done invoice processing before. If you are a manufacturer, find someone with a history in manufacturing.
5. Make sure your reseller has the bandwidth to provide the **support levels** you require. Ask questions like how many certified support professionals they have on staff.
6. **Call references** and ask specific questions like how well did the reseller support the customer following the installation.
7. Invite your short list of finalists to do product **demonstrations**.

retrained on our products, and the various modules and parts of it,” said Fox. “We give certifications in specific areas. We also give awards that rank our partners in relation to their peers. A platinum or gold partner has earned that status.

“When selecting a reseller, I think you should look at how a partner is perceived by its vendors. This will show up in their technical credentials, as well as the training and certifications they have listed on their resumes.”

CHECKING REFERENCES

Everybody agrees that talking to multiple vendors, VARs, and/or systems integrators is a necessity. “We typically tell end users they need to come up with four to six software vendors to submit a bid on their ECM project,” said Elam. “If you don’t talk to multiple vendors, you lose your leverage for negotiating terms.”

Once you have developed a list of prospective resellers, the task of narrowing it down begins. References can be an important resource. “When you speak with a reference, you want to ask them very specific questions,” said Elam. “This includes stuff like how long their ECM system been in place,

NEEDS ANALYSIS: AN OUTSIDE JOB

In this article, we discussed two methods of determining your ECM needs. The first is to hire an independent consultant who has no allegiance to any vendor. This method will typically lead to a request for proposal (RFP), which enables various vendors and VARs to bid on your project. The downside to this is that it can cost tens of thousands of dollars in consultant fees and may be unrealistic for small to mid-sized projects.

The second method is selecting a systems integrator, VAR, or vendor to do the needs analysis. This is typically less expensive, but may lock you in to a particular vendor's solution.

No matter which way you go, there are distinct advantages to having someone outside your organization perform the needs analysis. "Most end users don't understand the world of documents well enough to do a needs analysis for an ECM system," said Bud Porter-Roth, principal at Porter-Roth Associates. "I compare it to someone coming over from the wilds of Borneo, who has never seen a paved road, being asked to write up the requirements for a car."

According to Dan Elam of eVisory, it's not realistic to expect someone in-house to develop a skill set comparable to that of an ECM consultant. "Even if you're on a second or third-generation installation, there are enough changes in terms of features and architectures that it's helpful to have the experience and expertise of an outside consultant.

"The reason you use a consultant for an ECM project is that you only need a new system every five to ten years, so there is no reason to build up that skill set in house. And, if you do end up building it, it probably just means you're training somebody to launch their own consultancy. If they can earn \$200 an hour as an ECM consultant, I'll guarantee they're not going to want to keep their \$80,000 systems administrator job."

if the integrator followed up with everything they promised, and anything that might be specific to your application, like how the ECM system interacts with a specific software program.

"One trick we'll use is to ask the references who was provided to them as references. All the references you get directly from a reseller or vendor are going to say positive things. But sometimes, if you talk to a customer whose installation is past the honeymoon stage, you'll get a truer picture of what it's like to have a long-term relationship with the integrator."

DEVELOPING AN RFP

At the most formal level, the reseller selection process can be done through a request for proposal (RFP). An RFP lists the specific requirements for an ECM system and solicits responses from vendors to propose their solutions. "An RFP should be functionality based," said Porter-Roth. "It specifies what documents the client has and what the workflow process is for those documents. This can be shown without regard to technology."

"Over the years, I've learned not to put too many mandatory requirements in an RFP," added Elam. "Often, it's good to let the vendors help you solve your business problem. For example, you might think you need annotation capabilities. However, maybe the vendor can show you a more efficient process that involves using comments in metadata fields. If a bidder isn't smart enough to help guide you through a potential solution, they probably aren't smart enough to deserve your business."

Porter-Roth's website links to a presentation he delivered at the AIIM 2004 Conference on developing ECM RFPs (www.erms.com/resource.htm). He added that whoever does your needs analysis is also probably best qualified to write the RFP.

Porter-Roth noted that an RFP could also serve to test how realistic a user's budget is. "I was recently working with a customer that, even after my needs analysis should have told them otherwise, insisted they needed a full-blown electronic document management system. When the bids for that system came in at a much higher price than they were expecting, they scaled back to my original recommendation of a simple document imaging application."

KEEP IT FAIR

When paring down vendor lists, Elam suggests being as fair as possible to those seeking your business. "If you do not see yourself awarding a contract to someone, do not waste their time," he said. "You may have to work with that person in the future. Also, if you tell one bidder something, make sure you tell everybody else the same thing, so as not to create any advantages.

"Finally, try not to make your decision based on a good sales pitch. You have to control the process so it limits the difference a good salesperson can make. In the end, you want the best solution. You achieve this by giving all the bidders an agenda and letting them know what you want to see."

DEMO TIME

Demos are typically the final step in selecting an ECM systems integrator or VAR. “You typically want to narrow down your choices to a short list before scheduling demos,” said Porter-Roth. “This could be two, three, or even four, but you definitely want to look at least your top two choices.

“A demo can be very decisive. For instance, I was recently working with a water district that had narrowed down its choice to two bidders, but something just did not seem right about one of them. I could not put my finger on it, but when they came in for the demo, they could not perform. The other vendor completed it in an exemplary fashion, so the decision was easy.

“For this particular demo, we scheduled four hours for each vendor. We asked them to load their software onto a test machine and gave them two hours to connect to a database. We then asked them to acquire documents already in the database and do simple things like index and submit them to a workflow.”

Elam advises ensuring the reseller shows functionality that is important to your specific application. “Make sure they demo everything you need,” he stressed. “It used to be you always had them run the demo using your documents, but it’s fairly easy for a mortgage customer to see a generic loan document and make the link to their documents.”

A MARRIAGE THAT HAS TO LAST

Yes, choosing an ECM VAR or systems integrator can definitely be compared to choosing a plumber, as in both cases, reputation and experience are very important factors. In addition, word of mouth seems to be the most effective way to get recommendations. However, as you get into issues like application-specific experience and support, you need to dig a little deeper than you would before calling Roto-Rooter.

The bottom line is that selecting an ECM integrator is probably more comparable to choosing a marriage partner than a plumber; as even after the installation is complete, you will have to live with your reseller as your primary means of support. Therefore, it is best to take your time, do your homework, and choose wisely. If you do, and you find a reseller that is truly willing to serve as a part-

WHY USE A RESELLER PARTNER?

Many consumer-oriented firms like to advertise their ability to “cut out the middleman.” They claim this drastically reduces your purchase price. While this factory-direct approach may be an effective way to buy commodity items like furniture, printers, and PCs, it’s often not the best way to purchase an ECM system.

“It’s important for a customer to realize where it fits in the spectrum of purchasing,” noted John Opdycke, VP, marketing, Hyland Software. “An ECM installation is always a big deal to the customer buying it, but it’s not necessarily a big deal to a large vendor. If you are not on the upper-end of a vendor’s customer spectrum, you probably should get someone to act as a go-between and provide support.”

Also, realize that purchasing ECM software directly may not save you money. “It’s a misconception to believe you will get software cheaper by buying directly from the vendor,” Opdycke said. “We just take a lower cut if we go through a reseller. Basically, buying through a reseller enables a customer to have access to more bodies for the same price.”

John Fox, Hyland’s director of Channel Sales, added that resellers could be a great resource, especially for smaller businesses. “At smaller companies, the ECM administrator often has another full-time job,” he said. “The person in charge of invoice processing might also be the head of the accounting department. A partner can be a huge help in providing support both to get these types of systems up and running, and when extra bodies are needed to handle an upgrade or an emergency.

“One thing we’ve seen coming back into vogue recently is the desire to work with locally based resellers. Sure, everyone can do remote software support these days, but there’s nothing like a local partner being able to show up on-site when something goes wrong.”

ner in your relationship, there is a good chance that you will live happily ever after...or at least ‘til your water main breaks.

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Negotiating Contracts

A little haggling, and being fair to the vendor, will get you a contract for your ECM system on the best possible terms.

By Dan Elam

my old track coach used to stress the importance of a good start at the beginning of the sprint race. Similarly, a well-put-together contract is a strong indicator of ECM project success. Get a good start with these tips.

- 1. Tell the vendor what is important.** Start by addressing the basic adage: “Good, fast, and cheap: you can have any two.” If you really need that new departmental implementation done by the end of first quarter, tell your vendor that is the driver and understand it will cost more than a normal implementation. Always negotiate fairly and don’t try to squeeze the vendor too hard: vendors who enter into bad contracts (even if it was their own fault) will immediately look for ways to cut service or increase reimbursable costs in other areas. That never works to your advantage.
- 2. Use schedule to your advantage.** Software vendors, in particular, are focused on meeting their quarterly sales numbers because it affects their bonuses and sales incentives. Get an early handle on how the team gets compensated and you may be able to use that to your advantage. For example, if the team gets sales credit for when the order is signed, you might slow down on signing the contract until the end of the quarter in return for some more discounts. (Again, don’t squeeze too hard or you only hurt yourself.) If the sales
- 3. Fixed-price wherever possible.** Fixed-price contracts have been repeatedly proven to yield the best results at the lowest prices. If a project can’t be performed for a fixed-price, it means that either the requirements have not been determined and you aren’t ready or it means the vendor isn’t sure about how to solve your business problem and lacks the expertise. Either way it is going to cost more. If the vendor comes in with a fixed-price that is over your budget, negotiate with them. You’ll be surprised how quickly the vendor can adjust scope to meet your numbers and let you prioritize your spending. Most vendors truly want to help you more than they want to extract every available dollar. Open negotiations over fixed-price tasks can often do both.
- 4. Understand—and respect—how your vendor makes money.** Software companies make money from software sales and maintenance. Except for the big companies, professional services are a modest revenue stream. But systems integrators make almost all of their money from people billing time to a project. If the vendor expects you to review their draft detailed design in five days before they start

development, they can lose most of their profits if their people sit “on the bench” because you miss your turn-around times or impose delays. Look for key contract clauses that relate to turn-around times and honestly assess whether you are going to be able to meet your contractual requirements. Then be prepared to negotiate realistic terms.

5. **Negotiate as much as you can now.** Once the contract is signed, you become dependent on the vendor and lose most of your negotiating power. Try to negotiate future purchases like additional modules and services now and you won't be paying list prices later.
6. **Prevent bait-and-switch in the contract.** During the sales process, you met the slick sales person and the “proposed” expert who oozed ECM wisdom. Your selection committee agreed that the expert was terrific, awards the contract, and gets a great kick-off presentation from the expert. And then nothing. The expert you expected to see on your project has been moved off to be dangled in front of some other customer. Simple “bait and switch” clauses in the contracts can go a long way to reduce that. For example, a clause that says that the “key personnel”—identified by name in the task order—cannot be removed without your consent. Be careful of contracts that include the common phrase that says consent “will not be reasonably withheld.” Such contracts do little to prevent the bait-and-switch tactic. If you do get to a point where a key team member needs to leave, sit down and talk with your vendor before you approve the replacement. Is the person leaving to go to a new project and the benefit primarily for the vendor or is the person being promoted because they have done a good job on your project and it's nearing the end? Use your judgment to put your interests above the vendor's, but be careful not to limit the career of a valuable team member who has worked with you. And if you replace a key team member, insist on interviewing the team member prior to approval and not at your expense. One common method for a vendor to improve their profits is to replace your senior expert with a junior person and increase their own margin.
7. **Always negotiate a trade.** Procurement personnel are well-versed in the subtle art of negotiation, but ECM systems tend to be driven by technology and business process issues leaving non-procurement experts often negotiating key parts of the contract.

In negotiations even over small points, use the time-tested negotiating method of always asking for something in return for a concession. If the vendor needs \$50,000 for additional subject matter experts to get this task done, you might ask for five additional end-user licenses. In many cases, it doesn't really matter what you get as long as you get something. In some situations, you can get things that are “free” for both. For example, it cost the software vendor nothing except the cost of the CD to “give” you more user licenses or some other software module. Other things like an extra three months of warranty can bring big benefits for you at minimal cost to them. Be creative and your “concessions” can actually be very beneficial to you.

8. **Watch for major upgrades.** Because of the complexities of workflow and integration with other systems, major upgrades can often be an expensive issue for you. If a major release is scheduled within the next year, seriously consider delaying the project. Some vendors don't like to disclose their plans because it results in purchase delays. If you can't get that information, negotiate a clause that includes substantial discounts if a major upgrade is released within a certain time frame (such as a year). This is one area to stand firm: some ECM vendor upgrades can cost as much as installing the original system.
9. **Always have a payment reserve.** Every contract should have some sort of reserve that gets paid once the project is accepted or passes a critical milestone. For services, a ten percent holdback is usually enough to ensure that the integrator keeps things moving at a fast pace. For software companies it is a little harder because the accounting rules don't allow them to “recognize” revenue for software until it is “accepted” (i.e., can't be returned). Software companies will often push for acceptance almost as soon as the software is shipped, but that isn't practical for an ECM project that is going to require more work before it can actually be deployed. Find acceptable reserve approaches that ensure the vendor has an incentive to get things done properly and as quickly as possible.

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Outsourcing Success: Laying an Effective Foundation

Like any successful relationship, that between customer and service provider requires care and tending.

By Kendall Dean and Lee Ann Moore

There is a growing interest in comprehensive document process outsourcing (DPO); generally defined as outsourcing an entire document-intensive business process to an external service provider. These projects are broader in scope than more traditional document outsourcing (such as scanning/indexing/archiving, printing, and printing/scanning/copying facilities management), which is a mature, \$50 billion industry in the U.S. alone. Expanded DPO projects include broader scope and often include improving document creation processes, linking document management best practices to specific business processes, and performing process analysis and improvement work to reduce the overall volume—and costs—of documents in an organization.

The increased complexity of these transactions creates a greater need for effective organizational structure and governance. Few companies realize that the hardest work actually begins once the contract is signed. It takes resources—time, training, change management, and organizational restructuring—to learn how to govern and manage a service provider relationship. Many companies underestimate the cost and are surprised that, on average, they should expect to spend four to seven percent of annual outsourcing expenditures on effective governance.

It is often helpful to segment the work into buckets—the service itself (delivered to the end user or the internal consumer), the outsourced process (managed by the provider), the retained organization (work kept by the com-

pany), and the often newly formed governance organization. If these organizations are not properly established and integrated as part of the new outsourcing deal, the value expected out of the transaction will not materialize.

- **Governance Organizations:** Governance processes are primarily “deal-focused.” Frequently, this organization is built from the ground up, based on contract requirements. The governance executives focus on ensuring contract compliance, performance management, and issue resolution. Governance is the responsibility of the outsourcing company, and, to be effective, should be designed and implemented in collaboration with the service provider.
- **Outsourced Processes – Service Provider:** The outsourced processes are those given over to a service provider, resulting in “efficiency focus.” Frequently, the focus of a DPO deal is to transform processes through standardization and improved automation. This transformation process is typically completed after the work has been transitioned to the service provider and can take significant time to accomplish, depending on the deal scope and company size.
- **Retained Organization:** These processes are the often the more strategic processes that remain the responsibility of the customer and are typically “function-focused” or business process-oriented. The remaining roles often include operational planning, policy development and management, continuous

improvement, change management, etc. The customer is responsible for redesigning internal operating processes based on the outsourcing solution so that “touchpoints” and handoffs between the client and the service provider work smoothly.

COMMON PITFALLS

This whole process does not have to be overly complicated, but without the proper focus on role alignment, companies often make critical errors as they launch outsourcing engagements that impact their satisfaction in the future.

To avoid some common mistakes, these factors need to be considered:

- **Ownership of the processes:** Who should be involved in each process and what is their role? Make sure the implicit becomes explicit.
- **Decision rights related to the processes:** What are the key decisions that are made as part of these processes and who should be involved? Prior managers are now making governance decisions vs. operating decisions.
- **Integration of the processes and process triggers:** How do the processes relate to each other and what initiates them?
- **Process standardization:** Unless processes are standardized, it is difficult to automate them. Many times companies believe that automation alone will transform their processes and ignore the work required to standardize and simplify the processes.

ONGOING GOVERNANCE

Companies often wait until they are ninety-nine percent sure they are going to sign a contract to design, staff, and build their governance team and define the roles of each organization. This is at least two months too late if a company wants to avoid either a drift in objectives between it and the service provider or a bad start to the relationship in the form of unsatisfactory service levels or missed expectations.

Staff in new roles may be not well-suited to governance. Despite good governance procedures in place, without the right type of leadership experience, governance will suffer. The company should evaluate and retain outside specialists and advisors in this instance.

A company should also focus on managing service delivery, to ensure the quality both of provider performance and retained internal services. This involves day-to-day and week-to-week tracking of the provider’s monitoring

and reporting, service delivery issues, and problem escalation and resolution practices across the entire company. Included in overall governance is management of the contract itself, to make sure billing and payment are done correctly, the contract is being adhered to, internal controls are operating properly, and more.

MAINTAINING VALUE

In summary, these seven principles are at the heart of an effective governance team or organization:

1. **Balancing stakeholder needs:** All groups will never be equally happy at the same time, especially in an outsourcing engagement where cost savings is a goal, but over time, the ways each group’s needs have been met should generally be in balance.
2. **Stakeholder involvement:** Formal governance boards and steering committees are essential, but informal stakeholder involvement is important too. This is accomplished through information exchange—finding out what stakeholders think and conveying information to them about the outsourcing arrangement.
3. **Cultural synergy:** Good governance builds on the strengths shared by the provider and the company. For example, shared process development can be an effective way to work together.
4. **Open minds:** Governance group members must reach across organizational boundaries to understand the motivations of all stakeholders. That enables more creative and mutually beneficial solutions.
5. **Experience matters:** Outside specialists and advisors can be a worthwhile addition to the governance team, just as they were during the evaluation and negotiation process.
6. **Alignment (or not):** Alignment between the company’s and service provider’s goals may remain elusive. After all, companies want to cut costs and increase service quality, while service providers want to increase revenue and decrease service delivery costs. Good governance calls for finding areas where both sets of objectives can be met.
7. **SLAs are not enough:** Service level agreements are important, and should be continuously refined and improved over the life of the agreement. But they must be supported by service level objectives.

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The New Hosted Alternatives

Increasingly, customers have less to say about what they can get from installed solutions. Not so with hosted ones. More than ever, they offer cheaper, more flexible alternatives with less downside.

By John Harney

So you're a small-to-medium-size business (SMB) and you need a content management system. Several things are going through your mind. First, how much can you afford to spend? Next, what vendors fall within that price range. Third, what are your requirements? Fourth, can you satisfy them within budget? These are the questions that will get you started researching your short-list.

CONSOLIDATION

You soon find out that the vendors that dominated ECM three years ago now go by different names—larger vendors' names. FileNet is now owned by IBM, Documentum by EMC, Stellent by Oracle, Hummingbird by Open Text...so it goes. Similar trends exist in related technologies. For instance, only one collaboration vendor to date, SiteScape, has avoided acquisition. Many records management vendors are now part of larger suites, as are email management and even capture vendors.

This should not surprise you. According to IDC, more than forty such acquisitions and mergers of document management, workflow, records management, email management, COLD, collaboration, and capture have occurred in the last four years in an effort by larger vendors to offer “information

lifecycle management” solutions that capture, manage, store, and render compliant all forms of data and documents.

That leaves a few pure-play ECM suite and other vendors around—Tower Software, Hyland Software, Xerox, Laserfiche, Westbrook, Global 360, etc.—companies that are largely dedicated to the middle market. But given the M&A activity thus far, how likely is it these players will be independent for long? The chances are about 50/50. Why? Because there aren't that many majors left—HP, Computer Associates, BEA, Microsoft—to make acquisitions. Of them, only Microsoft is what one would call content management-centric. With the right acquisition, though, they all could be.

The agglomeration of functionality by larger vendors is not necessarily bad—the more comprehensive the solution, the better protected the customer is against noncompliance, the fewer vendors the IT department has to deal with, and the less money the customer pays per discrete service because of bundled pricing.

But the downside is this—to get in, the customer has to buy into the platform. For instance, a database vendor offering content management makes it incumbent on the customer to buy its database and portal platform. This “bait” strategy might justify the price of the acquisition in many cases—it's another way

the major grows its core product line. Otherwise, the discrete content management system costs more alone and the customer runs up integration fees with its own legacy platform that otherwise eat into its savings on the database platform.

The more subtle gating factors are these—with smaller, focused vendors, the dog (customer) wags the tail (vendor), because the vendor has to satisfy its installed base with relevant upgrades. With pressure from the open source (OS) world, this is increasingly important. OS products generally get upgraded more frequently and more accurately by a developer community that has access to the source code.

The larger the vendor, the less likely the point ECM solution it acquires will remain focused on a vertical market or the downmarket. It behooves the big vendor to take the offering horizontal so it can function as a teaser to up sales of related infrastructure for G2000 customers, which is where the volume in seats is. It's also likely that some of the functionality of the original ECM product will be discontinued—and end up in a development cul de sac as the parent company decides which features further its overall sales strategy for infrastructure.

These trends are resulting in the classic leaders and laggards phenomenon of market consolidation: a few majors dominating the top eighty percent of the market while the remaining twenty percent of the market is comprised of a number of niche players focused on specific functionality and markets to survive.

So adopters of ECM are going to have to place their bets—go with a big vendor and pay the freight, or with a niche player and risk that vendor getting bought in the future and chance the related disruption that will result. In either case, customers will have to address the consolidation issue.

OR they can bypass the problem by going with a hosted solution. Most ECM vendors or their value-added resellers (VAR) offer hosted alternatives to keep customers who won't bite on the installed offerings. Some vendors offer only hosted solutions. The former don't make as much on these, because it's not their chosen business model, but hosted solutions are a hedge against losing customers to the hosted competition. The latter have decided that a more defined feature set and lower prices for customers requiring eighty percent solutions is definitely their sweet spot.

THE MID-MARKET

Of the choices for SMBs, the smart one is going with a hosted solution. The alternative is opting for a niche vendor of installed solutions that may or may not map to your vertical market and application requirements. The downside of the latter is that they will be bought by a big vendor and end up suffering a functionality cul de sac or other big vendor strategy that leaves you stranded.

With a hosted solution, however, there are a number of advantages. Most are directed at chosen vertical markets and applications so you get more relevant features; all services like training, upgrades, and maintenance come bundled with the monthly leasing fee so you have predictable costs; and the up-front costs are minimal (typically an affordable one-time set-up fee) which is ideal for an SMB. Software-as-a-Service (SaaS) offerings maximize this advantage, because they often upgrade as frequently as on a quarterly basis, whereas installed vendors typically go two years without an upgrade. When an upgrade occurs, it can be lengthy and requires significant training on new features.

By now, too, most ASPs are delivering on their original promise of affordable, focused, eighty percent solutions for SMBs with applications that run the gamut. The dotcom bust and recession delayed their making good on that for several years when potential customers would not go near anything that smelled like a virtual solution.

THE FAILURE ISSUE

A significant issue that is not discussed enough is that a high percentage of installed ECM solutions fail. Most notably because—like so many installed systems from CRM and ERP to Web content management—their customization costs far outweigh the software license fees and are beyond what customers estimated up front, and their user friendliness is underwhelming so users tend to avoid using them to their full advantage.

So the typical tenure of a content management system is about three years when customers replace them with systems from different vendors or pay what amounts to the price of a second system with an upgrade and overhaul of the original system.

Hosted systems don't suffer the same stigma. Quite simply, if customers don't like the results, they can

bail out at the end of their contract and not get stuck with legacy infrastructure, data lock-in, and user shellshock. But there's much less that can go wrong with a hosted system, too, which is why the success rate is better. They are eighty percent solutions geared to deliver core features customers really need in a user-friendly way and keep IT involvement to a minimum. Because the ASP is essentially the same backend for all its customers, it quickly becomes expert at backend issues and can focus on the twenty percent customization and usability of the front end.

OPEN SOURCE – INCREASINGLY IMPORTANT

The combination of open source and SaaS solutions is very promising, but not pervasive enough yet to be on customers' radar. Look for this to be a winning combination that will give installed vendors real competition in another year. The value proposition is just too compelling.

Open source code, of course, is "open source code" so true customization is possible and driven by a user community motivated to make rapid upgrades in response to user requests. This is right in line with SaaS rapid upgrade strategies that require minimal interruption to user platforms and little new training as well.

Granted, the cost of customization sometimes neutralizes the savings on free open source code, but if the vendor is smart, it will consider offshoring customization and cut development fees in half. Some providers that offer technologies like business process management (BPM) have undertaken this strategy with great results. Essentially, they enhance the OS core and charge reduced fees for licenses for the enhancements while providing support for a fee. This gainsays the SaaS model a bit, as the latter usually offers support in the monthly fee, but the cost as a whole comes in well below even straight SaaS offerings.

ADDED FEATURES

While the majors are in acquisition mode to cover the entire information lifecycle, many hosted offerings have pretty much laid claim to the capture/store/route/manage components of it. Once the province of service bureaus, these activities have been transformed into conversion-centric ASP services that give customers the ability to convert analog documents or digital FTP, emails, print streams, and such into

an automatic or full-text indexed digital archive. Customers also have access to some document management capabilities like annotation and versioning. What's missing is the records management component, though most will also provide disaster recovery archives. Solutions like these stress user control of input via distributed scanning which keeps down personnel fees.

CORE SOLUTIONS

Hosted solutions have typically been targeted at non-core applications like human resources, which are horizontal apps with little variety for similar businesses. This does not mean that if content management is involved with mission-critical processes in your organization you must have an installed app. In fact, it can be argued, because installed solutions come with no SLA and hosted ones do, you're better off going with the latter.

What's more, scale is not a limiting factor with hosted solutions, either. Most UNIX-based hosted solutions can handle as many users and as much access behavior and data as the customer can throw at them. So "hosted" and "installed" should be neutral and irrelevant adjectives when applied to content management solutions—the key differentiator should be the SLA the customer negotiates with the provider.

THE INEVITABILITY FACTOR

In three years, fifty to eighty percent of all applications will be hosted. As customers grow accustomed to hosted apps that are bulletproof, robust, scalable, increasingly more rapidly upgraded, and more innovative and cheaper to customize with SaaS (including OS and offshore components thrown in), the adoption rate will increase with every year that passes. So don't approach your next content management solution limited by old categories, and outmoded definitions and ways of thinking. Before you know it, hosted solutions will be able to do anything installed solutions can but better.

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The Tools of Enterprise Content Management

An overview of the technologies and items to consider when purchasing and implementing those tools.

By Alan Pelz-Sharpe

The following pages provide descriptions of the core technologies of enterprise content management (ECM). These tools can be used singly and together to address an array of business needs for managing your enterprise content. With all technology, match the tool to the business problem. After reading the following pages, you'll have a good grounding regarding which tools do what and ideas for fitting them to your situation.

Basic Content Services

Many buyers do not require all the sophisticated functionality that an ECM Suite offers. Instead, they require a simple approach to managing electronic documents, one that they can deploy quickly and with minimal fuss. Enter basic content services (BCS). Simple for many can be defined as a light burden on the user, with a very limited yet highly targeted range of functionality—at a low cost. This minimalist approach to ECM is seen by many buyers as a practical means of deploying to a much larger number of users than has normally been the case when implementing full ECM Suites.

ECM Suites seldom scale to everyone in the enterprise. More commonly, they provide the backbone for mission-critical tasks and processes. BCS tools fill in the gap, by extending basic functionality out to the next tier of users, the majority, those whose

needs are simple, but the sheer volumes related to their output demands some level of control.

At a functional level, BCS products provide basic library services such as check in/out, version control, and the ability to build electronic library/filing systems. In some cases, this functionality extends to the provision of some basic records management abilities and integration with simple capture and search tools. These products do what they do well, have been architected to scale easily, and are priced accordingly. BCS products do not replace ECM suites. They extend the ability to organize and manage electronic documents to a much larger proportion of the enterprise than was previously possible.

BCS products generally deliver this functionality by making full use of the Web, the provision of simple workflow capabilities, and, increasingly, by reliance on emerging standards such as JSR 170 and 168 (two

protocols that promote the interchange and integration of content).

Microsoft SharePoint 2007 may be the most popular BCS product set on the market, but it is not the only one. Buyers should be aware that well-tested alternatives exist in the marketplace—each with relative strengths and weaknesses for you, the buyer, to assess and match against your own requirements. There is a big appetite in the community for BCS, and they represent the right buy for many. There are potential drawbacks to be aware of.

Because these systems can be easily deployed, one would imagine that simple deployment by regular folks without extensive IT skills at low cost would be a good thing. In many ways, it is, but it has also led to instanc-

es of BCS products reproducing almost virally around enterprises. Hundreds—in some cases, thousands—of small BCS systems have been deployed unknown to the IT department, and outside of corporate control, creating a potential compliance nightmare.

While obvious, remember that basic content services are designed to provide “basic” services. Once you need to use them in more complex ways, your costs can rise dramatically as they may need extensive development work, while typically not being suited to such work. A low-cost system can quickly become a very expensive one. BCS is not a cheap way of getting ECM.

If your focus is purely on the consolidation of multiple sources of electronic documents, and to bring some kind

Collaboration

ECM tools have not traditionally been seen as collaboration utilities in the marketplace. Most buyers tend to employ ECM systems initially to automate procedures that have become too sclerotic for the volumes of content enterprises are trying to process, as well as to exploit various options for content reuse. However, some enterprises are discovering that collaboration is an important attribute in enterprise content management, and it is an area of ECM that has come into full vogue, and is the focus of a lot of vendor marketing.

In some organizations, it is clearly an important consideration, but you will want to think about what collaboration means in the context of your ECM environment. For most enterprises, it does not mean WebEx-style collaboration, though firms such as Oracle and IBM can certainly offer this. Rather, it means the ability to collaborate in document-intensive environments. Consequently, the focus of ECM collaboration offerings is on secure, shared document authoring and review, usually within a specified workspace or portal.

Microsoft has set the bar high here with SharePoint’s focus on providing collaborative environments for typical Office situations, but we caution you to clarify whether you are looking for an ECM system to accommodate semi-autonomous knowledge workers. If

you are looking to drive forms and relatively fixed information employing clerks who review or utilize documents in highly transactional processes, then your enterprise may have little need for fancy collaborative functionality.

To be clear: ECM is not evolving from a world of transactional clerks to one of complex knowledge workers—it is simply expanding to meet both needs.

Some ECM vendors have responded by adding richer annotation features to traditional workflows (e.g., digital “stickies”). However, others, like EMC (Documentum), Vignette, Oracle (Stellent), and Open Text have aggressively purchased or developed sophisticated collaboration tools to add onto their ECM offerings. These new capabilities include project-based categorization for workgroups; threaded discussion boards; and real-time, collaborative document editing facilities. In this connection, however, they are bumping up against traditional groupware vendors (MS Exchange, Lotus Notes) who already command major market shares, not to mention MS SharePoint, which presently dominates this space, at least at the workgroup level.

The key distinction for would-be ECM buyers is whether you need full-blown collaboration functionality for workgroups who are working together on specific projects, or whether you want their content

of process and structure to typical administrative functions, BCS may be your way forward. If your organization is “document-centric” and collaborative in nature (typical examples would include government departments, professional service firms, etc.), then you might consider BCS solutions as potentially good fits for your needs.

If your firm is highly distributed (geographically or departmentally), then BCS options may not be such a good fit. Equally, if your organization has complex processes that are highly regulated, then you will want to think very carefully before taking the BCS route. In these cases, the more robust architectures of ECM suites, along with the ability to manage highly complex environments, would make a better fit.

BCS solutions are limited regarding the long-term management of electronic content, initially via records management (RM), and then through retention and archiving. BCS products tend to offer some limited (and good) RM functions, but beyond that, very little.

Fully document your business requirements before considering suppliers. When considering suppliers, you need to look beyond Microsoft (though they will and should be included on many shortlists) and look further out to vendors like Oracle, Xythos, and Xerox. Also, consider SaaS offerings such as Spring CM. There is choice out there, more than many realize, and BCS remains an emerging market with more alternatives on the way.

management processes to be more collaborative. Does the ECM system itself need to be able to account for multiple actors working together on—and communicating about—a single piece of content while it exists in any particular status (e.g., draft, edit, approved)? A full-blown collaboration package may help you manage ad hoc projects run by distributed teams of staffers, but it may not help you improve cooperation in your content approval workflows.

In the meantime, a raft of interactive, “Web 2.0”-style collaboration utilities has hit the market. Not all of these are new, but together they offer the potential for more dynamic information-sharing in the workplace. Such applications include:

- polls
- surveys
- calendars
- forums and chat
- email lists
- blogs
- wikis
- simple (even perishable) data collection forms

The downside to micro-applications within your ECM package is that they may not represent best-of-breed functionality. For example, most blog tools that bundle with ECM packages do not have state-of-the-art

comments-handling subsystems, complete with spam avoidance. That might not matter for intranet scenarios, but could present a rude surprise in a public environment.

Buyers should note, however, that portal software packages usually include these modules as well. In fact, portal products and their ecosystems of third-party suppliers can typically supply a greater variety of these newer collaboration facilities, and they are more likely to be tightly integrated with the portal’s access, security, and search subsystems, which is particularly critical for intranet scenarios. So licensees with portal software already on hand face a strategic choice here.

Content management packages that provide these applications natively can usually boast integrated metadata and workflow frameworks, as well as ease of applying a common look and feel. Perhaps more importantly, they can allow content managers to control other types of information exchange without resorting to separate administrative interfaces—and a separate technical team to make it all happen.

While all of these solutions will work in most organizations, determine how collaboration will fit into your overall business strategy before making the investment in collaboration tools.

Document Management

Like imaging, document management (DM) lies at the root of most major ECM deployments. DM products help companies better manage the creation and flow of documents through the help of databases and workflow engines that encapsulate metadata and business rules. Perhaps more importantly, they represent the original manifestation of effective library services: versioning, version control, repository search, and cataloguing.

As a buyer of DM technology, you need to be particularly clear on what you are looking for, as the market can be very confusing. DM is literally the management of documents (unstructured data); hence, many document-imaging systems call themselves document management products. Some workflow products also call themselves document management systems, since they drive documents to the right locations within an enterprise. It's probably best to think of document management services today as the functions that are analogous to hard-copy document filing systems.

In selecting a DM system then, you need to consider that these products closely mimic traditional filing, with cabinet, folder, and document level structures. Here again, vendors differ widely in the level of sophistication of their document management offerings, so we can define (somewhat crudely, perhaps) document management into the following categories:

- fixed
- lightweight
- regular
- advanced (compound)

As a buyer, you need to recognize which flavor of DM you require. Fixed DM (sometimes called “fixed content management”) refers to systems that have been designed to handle captured images (scanned documents). The documents themselves are fixed, in that they typically will not change. A good example of this would be a scanned bank check. It is what it is, but needs to be stored, referenced,

Electronic Forms Processing

It's the smart buyer that prioritizes electronic forms technology when looking for an ECM solution. Electronic forms, better known as e-forms, are very often the primary means of capture for information management systems, yet even more often they are misunderstood and undervalued.

At their simplest level, e-forms can be simple HTML data capture pages on the Web—indeed e-forms represent the standard method of collecting data on the Web, every site that asks you to input information uses some kind of e-form technology. But if a simple Web enrolment form on a website is your understanding of all there is e-forms, then think again, there is much more you can do with this technology.

Electronic forms are typically used for one of two reasons—as a replacement for an existing paper-based form for internal document management or as an interface on a website to capture user input data. In fact, there is no clear differentiation between these two uses and many

forms address both areas. However, an e-form can be little more than an HTML page with blank fields waiting to be completed by the user, or they can be highly dynamic and interactive server-based applications in their own right, making use of J2EE or .NET technologies. Today, e-forms vendors are moving away from the HTML paradigm and instead embracing XML, interfacing in ever more sophisticated ways with back-end data management software and overall making the user input experience increasingly effective and powerful.

For example, internal business applications, such as time and expense claims processes, can be built in their entirety using e-forms products. In these cases, the forms not only capture information but also process, and use messaging platforms to move the information through workflows. Forms can be self-correcting and undertake field validation in real time, they may even interface with powerful back-end applications that process received information and deliver back results regarding acceptance

and accessed. But once the document is captured and labeled, the contents of that file will never change.

In “lightweight” document management systems, some basic repository services become available, so that document modifications can be tracked, and version control applied to keep people from overwriting each others’ work. This category is frequently termed “collaborative document management.”

Regular document management systems pick up from this lightweight function set by adding a layer of sophistication that includes:

- allowing multiple people to work on a document in a secure manner
- audit and reporting mechanisms to track who has done what and when
- much more advanced attribute (metadata) and security options

Combined, these functions provide for much more sophisticated and secure organization and retrieval processes to be managed.

Advanced document management systems typically contain compound document management functionality and allow the construction and management of highly complex document objects. Others offer highly granular version control and the ability to use customized and highly complex numberings systems, essential in some industries. In fact, few ECM vendors provide advanced document management capabilities. If this is something you require, then you will need to take exceptional care in your ECM selection process.

The lesson for buyers is that you need to first match your needs against these broad groups outlined above, so that you can ensure that the options you consider are at least consistent, and designed to meet your requirements.

or rejection to the end-user transaction request.

Once you have an idea of what you need to achieve, then you will be able to proficiently select between technologies ranging from simple HTML form builders, through to advanced XForm technologies that can run in a Web services environment.

Key then for buying any e-form technology is to first understand your requirements and existing technical environment. You should also remember that e-forms are going to be accessed by your customers and ease of use and satisfaction for them will need to be a priority. Questions you might ask of a proposed supplier would surround the ease of use of building and subsequent management of forms—along with the supply of templates and pre-configured form solutions specific to your industry or needs. Equally important, any information captured will likely be used by internal business applications and will need to be structured in a way that makes ingestion into those systems seam-

less, and integration of the data as easy as possible.

You will also need to consider e-forms from both an input and an output perspective—if you are building forms for simple intranet usage within your organization then your needs are going to differ dramatically from someone who needs to be able to publish and ingest data to a variety of browsers and mobile devices.

Providers of e-forms technologies range from well known names such as Adobe and Microsoft through to specialists in industry verticals such as healthcare and banking right through to a hosted providers. There is much more to e-forms than meets the eye, matching a providers technology with your specific needs is no easy task—on the other hand the right selection and use of e-forms technology can prove to be one of the easiest and most obvious efficiency gains that any ECM system can provide.

ECM Suites

As a buyer, you may well require an ECM suite, and if so, then you have many options from which to choose. There are many excellent vendors [EMC (Documentum), IBM (FileNet), OpenText, etc.] while open source options are now available. ECM suites are not cheap (indeed, they can be very expensive), but in the right circumstances can deliver effective tools for dramatic business improvement.

Vendors make a strong case for multi-functional suites:

- Some of their major customers (who have probably already invested substantially in that vendor's platform and particular API) are clamoring for comprehensive solutions that look at content in a more integrated way.
- Obtaining multiple software modules from one vendor should reduce software ownership and support costs, and potentially smooth out and accelerate what are always thorny and lengthy integration projects.
- By providing a variety of functional services under one platform, a single vendor can theoretically support a document through a longer portion of its life-cycle from creation to destruction.

In practice, many buyers favor the ECM suite approach, as they have more than enough contracts to deal with already, and to bundle all of the ECM elements into one relationship seems logical. This approach is also increasingly favored by IT departments as they (or outsourced developers) are asked to integrate, develop, and expand applications that make use of unstructured content. Logically, the suite approach should dramatically reduce the amount of time it takes to integrate new functionality and to develop applications that draw upon a range of capabilities within the ECM suite. Developers and administrators can get to know the platform's quirks well, and might need just a single technology skill set to administer and maintain the entire suite.

Good negotiators can, of course, also gain substantial license cost reductions by going with a single vendor. In some enterprises, this can represent a significant difference in cost, between paying full list price for best-of-breed modules, and negotiating a much lower cost per seat on an enterprise-wide license agreement with a suite vendor.

In practice, the case for ECM suites can be less attractive than first appears. First of all, enterprises that already own and have customized systems from other function-

point content management software vendors might not wish to replace those existing systems in the name of vendor consolidation. Experienced CIOs recognize that true return on investment comes not just from lower costs, but from added value to the business lines using the tool.

It is critical to remember that the ECM suite vendors typically possess one, two, or perhaps three core competencies, while the packages they acquire have varying provenance. Do you want to replace your working document imaging solution with a new, but substandard, imaging and capture package from one of your other existing vendors simply to reduce your bevy of software suppliers?

Also, the various function-point applications within a typical vendor suite may remain far from integrated. Some suites have individual components that run natively on separate operating systems, support different application servers, and carry divergent repository models. This kind of platform inconsistency should come as little surprise given the brisk pace of mergers and acquisitions, and the relative dearth of pure R&D resources at many vendors' disposals to stitch different tools together. Inevitably, PowerPoint slides with neatly organized layer-cake architectures get created long before the vendors have completed the messy work of getting different products to work together. It is telling that ECM vendors themselves typically use entirely different professional services teams on separate product installations, and are likely to do so for some time. This should signal to you that you may also need different project teams and technical competencies internally even if you standardize on one supplier.

Moreover, it remains unclear just how different function-point solutions should work together. For example, several vendors appear to be working toward developing a single user interface for their product suites, but this may not prove the best solution for an enterprise whose different staff—some scanning images, others editing the images, others publishing the images—may well require highly diverse interfaces.

It is in fact early days for the ECM suite. Until recently, beyond PowerPoint presentations, no vendors have come close to offering truly integrated ECM. The suite is absolutely the right approach for many buyers, because it has many advantages. However, early ECM buyers are likely going to have to teach the vendors how to put their products together.

Imaging

Selecting the right products and vendor partners for imaging can often be the most difficult of choices. The reason for this is simply that there is so much choice available, and that the imaging world is incorrectly viewed as simple—few buyers take the time to understand the complexity of the imaging market, or the value that such technology can truly bring to the organization.

Put simply, document imaging is the conversion of a document into an electronic facsimile, or picture, of that document. Once converted, the electronic image can then be stored and retrieved, distributed via email or network routing, and saved to digital media for portability. Digitizing documents offers many benefits including reduced filing, storage, and distribution costs; better protection and control of information; improved access to information; better customer service; and help in addressing regulatory compliance.

In most cases, once the paper has been converted into its digital format, the physical paper itself can be destroyed and the digital image becomes the legal representation of that document. Documents that cannot be destroyed, such as a promissory note or legal signature documents, can still be scanned and the digital image used for any work-related activities. The physical document would be stored in a secure place and retrieved when and if needed.

So far so good, if you want to simply digitize a static object (a paper document) into another static (albeit digital) format—then your choice of imaging solutions will be relatively straightforward. Your main criteria will be whether the product(s) you are buying are well matched with your required volumes and throughput requirements for capture. Put another way, a product designed to capture 50,000+ images an hour, across a globally dispersed operating environment, will be architected and priced very differently from a system designed to capture a few hundred images a week in a single location.

Regardless of scale, document imaging is a systematic process:

- **Scanning.** Scanning digitizes the document, which turns it into a file that can be stored, viewed, and

routed electronically. While a scanner is most often used, documents can be scanned with a fax machine or a multifunction peripheral. The type of scanner to purchase varies on document size, type, volume, and many other factors.

- **Quality Control.** This step allows an operator to determine if the image is readable and if not, the document can be re-scanned or cleaned up using various technologies.
- **Indexing.** Document indexing refers to how documents are indexed for retrieval once the document is scanned into a document repository. Indexing is critical. A document that cannot be retrieved or retrieved in an acceptable period may as well not exist. Indexing refers to the actual index values needed to retrieve a document from wherever it is stored. Classification refers to how the data is categorized in terms of which storage media it should reside on and for how long.

Key for any buyer of an imaging system is to first fully understand the business process (who captures what, when, where, and why), what happens to the captured image, and what is that image's eventual lifecycle.

Once this is understood, then you can start to investigate some of the very impressive technologies available, such as recognition software that can intelligently read the scanned document, automatically extract metadata, and thus automatically index the document. Along with consideration of complementary technologies, such as BPM systems, viewing tools along with archiving requirements must be taken into account.

Imaging is a great area of ECM to ask for demonstrations specific to your organization's needs. Giving vendors samples of your original documentation and undertaking tests to see how well the system captures, reads, and indexes your information can provide an immediate and relevant indication of whether this particular product is well suited to you, or whether your search needs to continue.

Records Management

Of the product sets that fall under the banner of ECM, records management (RM) appears to be one of the most familiar. Almost everyone thinks they know what RM is, yet few in fact do.

For the buyer of RM technology, we cannot stress just how important it is to ensure you have the advice and involvement of your RM professionals, or to bring in expert outside advice if you do not have this expertise in-house.

Let's just take a quick look at what RM is, here is a formal definition I like:

A professional discipline that is primarily concerned with the management of document-based information systems. The application of systematic and scientific controls to recorded information required in the operation of an organization's business. The systematic control of all organizational records during the various stages of their life cycle: from their creation or receipt, through their processing, distribution, maintenance and use, to their ultimate disposition. The purpose of records management is to promote economies and efficiencies in record keeping, to assure that useless records are systematically destroyed while valuable information

is protected and maintained in a manner that facilitates its access and use.

As you can see, then, RM is not about keeping everything (though in some highly regulated industries, it may seem so). RM is about ensuring that what needs to be kept as a record is retained AND prescribing how long it should be kept, where it should be stored, who has access to it, and when it should be destroyed (if ever).

Definitions vary, but a good working definition is that records are recorded information, regardless of physical form, that are generated or received and used while conducting business, and preserved because of their informational value or as evidence of an organization's, functions, policies, decisions, procedures, operations, mission, programs, projects, and activities.

The remit of RM is extremely wide, and it clearly has not only deep implications for compliancy, but beyond this into efficiency, operations, and corporate memory. In short, RM is not just about identifying and flagging business records.

Records management products, provide you with the tools to:

- Organize records

Web Content Management

Of all the function-point technologies in this buyers guide, Web content management (WCM) may be the most distinct from traditional ECM technologies. There is good reason for this. At its core, WCM revolves more around *publishing* content, whereas most ECM tools serve to *process* content. The content producer and consumer personas tend to be radically different (and in the case of public websites, the consumer is actually someone from outside your enterprise). Many ECM vendors make the mistake that WCM is simply about exposing a document store over the Web. Sometimes that functionality is needed, but really WCM represents much more. In addition to managing content on the Web, enterpris-

es must manage the delivery of that content. In other words, at some level, they are managing websites and a consumption experience, as opposed to simply moving files through a repository.

This also means that architecturally, WCM tools must account for two applications—the content production and management environment; and the content delivery environment, which is essentially a Web application. Choreographing the movement of code, files, and text between those two environments represents some complex technical challenges that you tend not to see, for example, in a DM system (more about this below).

To be sure, webmasters sometimes forget that at a

- Define retention schedules
- Define file plans
- Declare records
- Maintain record security
- Manage records access
- Provide circulation management
- Help preserve records
- (Optionally) provide email management

There is no single approach to defining a records retention program for every document that is out there—every company has to look at its own business operations and examine what should be considered a record and then decide what retention rules to apply against them. Again, the government and other industry regulators may help in that decision by defining exactly what they expect to see if they have to do an audit or investigation, but audits and investigations aren't the only reasons to have a records management program.

This cannot be stressed too much: RM software products support the implementation of your records management program. Understanding your records needs—what needs to be kept, for how long, and

what needs to be destroyed (a file plan, also called a record plan)—is absolutely necessary before embarking on a search for software.

Confusion still abounds when it comes to understanding exactly how records management and archiving is differentiated from document management and other ECM strategies and technologies. Although many enterprises rightly try to link these strategies together, it is still important to understand the differences between them so that key functions and procedures are not overlooked.

Even the word “archive” is used in various ways that can confuse buyers and sellers alike. To some people archive means saving just about everything—to a records manager, archive means saving the right things for a specific length of time—usually forever. Retention and disposition practices define saving other things for a specific length of time.

Records management can be complex, and the technologies to support this activity no less so. Too many buyers seem to believe that the RM functionality in an ECM suite will provide them with RM, and underestimate the effort and expertise required to take full advantage of these technologies.

base level WCM tools share the same core services as any content management platform, including library services, transformation services, and workflow services. But in addition to core ECM functions, specialist WCM packages bring special capabilities to the mix, potentially including:

Specialized authoring and transformation tools: To enable business users to input content into the system and have it normalized to HTML or XML

Aggregation and component management: To combine and publish discrete chunks of content that may originate from a variety of sources

Templating: To ensure consistent, predictable renderings for the Web environment

Deployment path: To publish to standard Internet platforms (development, stage/ testing, production)

Page assembly and delivery: For dynamic production

and submission of content to end users (content consumers)

Personalization: To deliver targeted sets of content to individual consumers

Caching and replication: To ensure high performance in public environments characterized by spikes in demand

Micro-applications: To provide basic interactivity to a website; includes tools such as wikis, blogging, and user-driven tagging (folksonomies)

Syndication: To add value to content through advanced Internet-based distribution, most notably RSS feeds

Producing wireless and other formats: To push content through multiple electronic channels

...continued on page 48.

We should clarify that not all WCM tools cover both sides of the production/delivery spectrum. In other words, not all WCM products manage your actual website, just the content going into it. So-called “decoupled” WCM tools remain behind your firewall and publish content out to a Web server, application server environment, or portal platform. “Coupled” WCM products must be installed in the delivery tier as well and also serve as your Web application development environment. You tend to see more coupled solutions at the lower end of the market, although this is changing amid a recent trend toward greater website management from within the standard content management interface.

SPECIAL ISSUES OF MANAGING WEB CONTENT AT AN ENTERPRISE LEVEL

Managing Web content on an enterprise scale brings a varied set of challenges above and beyond the issues that confront those implementing a WCM for a single department or website. We see at least three major challenges to address:

Sheer size. Enterprise implementations can be very large, with contributors numbering in the hundreds, even thousands. Enterprise WCM packages can be made to scale, but synchronizing the deployment of large bodies of content can become a persistent headache, and, in general, the complexity is not always linear. User management and support also typically

Workflow and BPM

Workflow in an ECM context constitutes how content gets processed through a set of interdependent tasks that usually occur in a specified sequence. Done right, workflow systems can improve process efficiencies within enterprises of all sizes. Executed poorly, a workflow system can gum up an otherwise perfectly good system.

ECM without workflow leaves you a static repository. Workflow is the technology that automatically moves content out from the repository, and around (and sometimes beyond) an enterprise.

In most ECM deployments, there is seldom really an option as to whether or not to use a workflow system, as the whole point of the ECM system is to automate and bring order to huge volumes of unstructured data, and in that context, moving files around in a manual fashion simply doesn't make much sense.

However the degree to which you automate this, and the degree to which you will want to manage the automation process on an ongoing basis, will vary hugely. In some situations, little more than an “a to b to c” routing process will be required. In other cases, (particularly Web publishing environments), you may only want to engender ad hoc collaboration with simple content promotion to different states of readiness. In yet other instances, you will need to apply a deep understanding of complex processes, cross-application integration, queuing, and workload balancing. Knowing where you sit on this con-

tinuum of needs, and matching your needs to a specific product or approach is an essential, before starting the look for a technology supplier.

CONTRASTING TECHNOLOGIES

The range of possibilities here matches the breadth of technology offerings in the market, and navigating these requires that you have some understanding of the fundamental camps that products fall into:

- routing
- workflow
- BPM (business process management)
- rules engines

These categories are not particularly definitive. There is overlap among them, and vendors will label themselves in whatever way they think is currently most effective. Still, this is a good starting point for understanding the range of workflow options that are available to you.

Every ECM tool ships with basic routing as standard functionality in its core document management offering. This is essential: You need something to move content from one place (or person) to another. In some cases, this functionality is little more than simplistic routing, with email flags sent to alert people that a document needs attention. This kind of functionality will suffice for many basic needs, particularly

require a dedicated team of WCM specialists at the enterprise level.

Enterprise content integration. Enterprise-level content management systems may require integration with line-of-business systems (such as CRM packages) and other ECM packages, like a document management or workflow system.

Multiple systems and websites. Different parts of the enterprise may require separate content repositories or even separate content management systems entirely, and those CMS implementations may target multiple delivery environments, including portals, application servers, and diverse Web servers

Buyers of WCM technologies, need to consider both

the publishing and production/management stages of the system. And also very clearly articulate what you want to use the system for. There is world of difference between a product designed to support large globally distributed interactive sites, and those focused more on a prosaic Web presence delivering intranets and relatively static corporate websites. For some, the ECM-centric approach of exposing the document store on the Web will be more than sufficient, for others use of such an approach could be your undoing. Do your homework carefully!

in simple publishing scenarios (i.e., author, review, authorize, publish), but can quickly become stretched. Therefore, most ECM vendors embed far more than simple routing in their offerings and provide instead full-blown workflow capabilities as standard.

Workflow technologies are more sophisticated than simple routing tools with more powerful modeling abilities, and are able to capture and design processes that are more complex. For example, workflow systems typically manage parallel processes, whereby an event triggers a series of parallel and usually different actions that may or may not connect again at some future process-point. They can typically also deliver a document directly to an employee's application, not simply "ping" them an alert that there is a job to do. As workflow tools manage processes that are more complex, they also require some management and analysis functionality to ensure that the workflows can be modified as required, and that processes that are in action can be monitored for potential bottlenecks or other problems.

BPM tools take this to the next level. They do everything a workflow tool does, but also extend this functionality to a data integration tier. And, just as importantly, they do not work on documents within a single repository or application, but instead attempt to choreograph business activity across multiple tools and applications. In short, BPM tools are not just focused on accessing and moving documents around an enterprise

(indeed, this may not be their main focus), but are also tasked with moving data and communicating between business applications, databases, and network systems.

Therefore, BPM tools in many respects represent back-end integration software toolkits designed to knit different systems together to drive particular processes. In contrast to workflow systems that route information to people to undertake tasks, sophisticated BPM systems combine the power of workflow and enterprise application integration (EAI) technologies—to not only initiate a task, but potentially complete the task as well, based on a set of rules.

Rules engines perform a similar job to workflow engines, but are driven by defined rules more so than processes. They are often used in conjunction with BPM systems, providing certain intelligence to a process-driven approach. A typical example of a rules engine in action would be a credit card application. The application is scanned and read, its data extracted and fed through a rules engine; the engine considers the data, and triggers business application functions or workflows dependent on a decision it makes based on the data order, relevance, and type.

TIPS FOR THE BUYER

Virtually all ECM systems come complete with some form of workflow system, while some of the larger vendors tout BPM capabilities as well. However, with the exception of a handful of firms such as IBM or Oracle,

few ECM suites can really meet the needs of full-scale BPM requirements. Of course, a more lightweight approach might work better for you, in any case.

Note that many ECM vendors sell workflow or BPM products, but then also embed workflow/BPM capabilities separately within their different product offerings. These are almost never the same technology. In fact, we know of no ECM suite where workflow works the same across all products (recall that most ECM suites were assembled via acquisition). So as a practical matter, if you unify around a particular vendor's set of offerings, you will be dealing with multiple workflow subsystems. Over time, vendors will figure out how to separate out workflow as a distinct service that can be easily replaced, but that remains years away. In all cases, test carefully, and

remember to look for flexibility as well as rules-enablement, including support for ad hoc workflow and rerouting mechanisms.

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Question and Answer

A series of talks with users of ECM technology.

Q: WHAT WAS THE PROCESS PRIOR TO THE IMPLEMENTATION?

A: Rimex has a wide variety of data acquisition and delivery tasks, including a multi-site sales report each morning for the sales department and a complete inventory valuation several times a year for its accounting department. Although the old ERP system included a wide variety of standard reports, (some of which were highly detailed), there were as many as three different data fields appearing in the same report column, which was very difficult to read. Other reports were less detailed, and did not have all of the data we needed. We needed a way to capture and transform relevant information such as ERP reports to a usable format to drive our manufacturing capabilities.

Q: WHAT WAS THE CONTENT, DOCUMENT, AND/OR PROCESS MANAGEMENT TECHNOLOGY USED TO SOLVE THE BUSINESS PROBLEM?

A: Rimex implemented the Monarch Data Pump Server to automatically transform our ERP reports into data that helps drive our manufacturing activity. It mines data from company reports and produces the specific data we need. After the Monarch Data Pump Server

Darren Kennedy, IT Administrator - Canadian/International
Regional Director, Rimex Supply Ltd.

automatically “mines” the data from each report, it performs a “lookup” of data within one report with the next report, using the item number as the “common key” of data. We later added the Monarch Data Pump Server for automated Monarch data processing and data delivery.

Q: WHAT WERE THE BENEFITS FROM IMPLEMENTING THE SOLUTION?

A: We now derive more business value from our ERP reports. For example, we combined three different manufacturing reports into one combined dataset, which helped efficiently drive manufacturing floor production for the day. The solution also allowed for a wide variety of data acquisition and delivery tasks, including a multi-site sales report each morning for the sales department, and a complete inventory valuation several times a year, for the accounting department.

Janelle Julien is AIIM E-DOC Magazine's former associate editor.

Question and Answer

A series of talks with users of ECM technology.

Ray Green, Focus Group, Managing Director,

Focus Data Services

Q: WHAT WAS THE PROCESS PRIOR TO THE IMPLEMENTATION?

A: The Focus organization comprises specialists in intelligence analysis and investigation, providing a holistic approach to identifying, detecting, and dealing with criminal activity. Focus is actively involved in ongoing investigations, providing an analysis and examination service to a range of agencies. As the only European commercial holder of a license to train Anacapa Sciences intelligence analysis, and the authorized external trainer of i2 Limited's software, Focus is responsible for delivery of this and other training in the UK and throughout the world.

Telecommunications companies face unique challenges as they navigate between meeting growing data retention laws and important business objectives. Often, the cost of storing massive amounts of data required for compliance limits the ability to focus on data with high business value. This is largely because affordable, traditional approaches to data storage tend to be "off-line," and result in difficult and slow data retrieval. In the case of police inquiries, a few minutes' delay can have severe consequences. European telecommunications carriers must retain large amounts of CDR data to remain compliant with EU Data Retention Directive requirements. As such, they require data management systems that can adequately store and provide real-time access to massive volumes of data.

Q: WHAT WAS THE CONTENT, DOCUMENT, AND/OR PROCESS MANAGEMENT TECHNOLOGY USED TO SOLVE THE BUSINESS PROBLEM?

A: Focus Group implemented the Satori Server.

Q: WHAT WERE THE BENEFITS FROM IMPLEMENTING THE SOLUTION?

A: The 112 software system stores and queries large volumes of data to more efficiently fulfill the Data Retention Directive Requirements of the Operator. This Data Retention Store in the 112 system provides a local, on-demand, record-based subset of all the required disclosure data, thus making compliance and data retention requirements a much easier and affordable operation. To remain compliant with EU Data Retention laws, we built a solution that delivers the data retention capacity that organizations need for twenty percent of the cost at approximately £130,000. The system ensures fast, accurate responses through its advanced middleware, high-performing Communications Services Provider database, and a storage solution that provides immediate access to data, which has facilitated an efficient and automatic method of securing urgent information to move forward with investigations. This has allowed Focus Group to eliminate disparate data sources, gain access to greater volumes of data, and improve the performance of inquiry times, making it easier and more affordable to process queries.

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