November 4, 2005

Acquisition Rocks Capture World

Storage and content management titan EMC pays three times revenue and 30 times earnings for Captiva Software

Despite the rumors, I must admit the call caught me by surprise. It came sometime after 5:30 p.m., a couple Thursdays ago, while I was waiting for a flight in Cleveland. If you are involved in the document imaging industry, you probably know what I'm talking about. It was a call from one of my contacts in the investment community telling me that **EMC** planned to acquire **Captiva.**

Yes, EMC's Documentum business unit has been working with Captiva's *InputAccel* application for something like 10 years, and yes, EMC has a ton of money in the bank [check out its balance sheet sometime], but why would an ECM (enterprise content management) vendor buy a document capture vendor? Aren't some things sacred?

We've grown accustomed to capture players like **Captiva**, **Kofax**, **ReadSoft**, **Datacap**, **AnyDoc**, Cardiff (now **Verity**), and everyone else working with a variety of ECM partners. Will the Captiva deal change all this? Are we now going to see a slew of ECM acquisition activity surrounding the capture market, like we have already seen with the document management, records management, and collaboration spaces over the past couple years?

Captiva President and CEO

Reynolds Bish seems to think so. "We believe the consolidation of the input management and ECM markets is inevitable," Bish told an audience during the company's recent third-quarter financials call. "It was just a matter of time before an ECM vendor woke up and realized it could gain significant competitive advantage and differentiation by extending its capabilities into input management. EMC has become the first mover in that regard."

EMC, for its part, is not content to pigeonhole itself as an ECM vendor. Whitney Tidmarsh, VP of solutions marketing for the EMC software group, said there are two major thrusts behind the planned acquisition. "Related to our Documentum business, the Captiva acquisition [along with the acquisition of ERM/COLD vendor **Acartus**, which was announced last week] fills out our ECM suite. It enables us to offer high-end imaging applications.

"Even though we've had a relationship with Captiva for more than 10 years [dating back to when the capture vendor was known as Cornerstone], we started

Reynolds Bish, president and CEO, Captiva Software.

investing more heavily in the imaging sector about a year-and-a-half ago. During that time, we've seen customers pull us deeply into imaging-related solutions. Two to three years ago, I don't think Documentum was very often associated with imaging. And, despite the fact that we have done large imaging deployments and taken imaging business away from our competitors, we still have some market awareness issues. These two acquisitions should alleviate those."

By our records, Documentum began its heavy push into document imaging in 2002, when it announced an "invigorated" relationship with Captiva, a COLD/ERM offering based on the Acartus technology, and an OEM agreement for a records management application [*see DIR* 9/6/02]. Documentum later acquired a records management software provider [*see DIR* 11/15/02], and was acquired by multi-billion dollar storage vendor EMC [*see DIR* 10/24/03].

EMC acquired Documentum in the middle of its own push towards the market of fixed content management, or archival storage. This push began with the 2002 introduction of EMC's Centera product line [*see DIR*

5/17/02]. By all accounts, Centera has been EMC's fastest growing hardware product line. According to Tidmarsh, the second thrust of the Captiva acquisition (as well the Acartus acquisition) will be helping the company further explore the potential of Centera, as well as EMC's archiving software products.

"The vast majority of our archive files come from three sources: e-mail, document images, and enterprise reports," Tidmarsh told *DIR*. "Our *EmailXtender* product addresses the first source, and now we've addressed the other two. By having all their unstructured documents stored in the same infrastructure, our customers will potentially be able to manage them with one set of archive and retention policies. This should help reduce risk as well as the cost of archival storage and management. We think this provides a pretty compelling offering to take to a CIO."

> **"Despite the fact that we have done large imaging deployments and taken imaging business away from our competitors, we still have some market awareness issues. "**
>
> **– Whitney Tidmarsh, EMC**

Tidmarsh added that it has not been determined yet whether Captiva will fall under the Documentum business line or somewhere else in the company's software group.

What does the future hold?
So, it seems EMC's overwhelming interest in storage makes this acquisition slightly more than an ECM pure play. This clouds the picture considerably when determining whether Documentum's ECM competitors will follow its lead into capture. Indeed, of the major ECM vendors, only **IBM** has similar storage interests to EMC. Historically, IBM has worked closely with both Captiva and Kofax. IBM also has its own capture software product.

It seems obvious that Captiva's relationship with IBM will now be dead, but that is not a sure thing. After all, EMC and IBM maintain some partnerships related to storage—a market where they are the most cutthroat of competitors. Similarly, Captiva licenses to Kofax tools for ISIS scanner drivers.

Both Tidmarsh and Bish indicated that the company would like to maintain all of Captiva's ECM partnerships. Tidmarsh even went so far as to discuss the importance of Documentum's relationship with Kofax, which offers a capture front-end for Documentum's *AX* mid-volume imaging solution—even though Captiva offers its own *IAX* mid-volume capture product.

One thing that is clear is that the price EMC has agreed to pay, more than $300 million in cash ($275 million net when you take out Captiva's cash), validates that the capture space has come a long way in the past few years. Certainly, its seems like eons ago that the **Dicom Group** paid just $70 million, or a little less than two times revenue, to acquire a profitable and growing Kofax in 1999. And, it's certainly been light years since Captiva's market capitalization was hovering somewhere around its cash-in-the-bank total of $6.5 million in the fall of 2002.

"The rise of our valuation has been a combination of the way we have performed, as well as an overall increase in the valuation of capture," Bish told *DIR*. "Capture has become more of a strategic buy on the part of corporations and government organizations. Whereas before, it was typically used to address very specific lines of business, it's now getting more attention throughout the enterprise. At the same time, some capture companies have performed better than others."

Captiva's long journey

Bish acknowledged that the reverse merger of sorts that took place when ActionPoint technically acquired Captiva but Bish took charge of the combined organization [*see DIR 3/22/02*], was a key milestone in his company's history. At that point, rumors were swirling that Bish's Captiva organization was barely solvent and that the $8 million in cash that ActionPoint brought to the deal saved the company. Since then, the combined entity has nearly doubled its revenue in three years and been a profitable, money-making machine.

"After the merger, we not only had to execute our strategy, we also had to communicate our message to the financial community," said Bish. Bish's tireless efforts at communication helped increase the company's market capitalization almost 2,000% in the three years following the close of the merger on July 31, 2002. EMC's offer of $22.25 per share, which was made public on the evening of Oct. 20, represented a 22% premium over the day's closing value of $18.30 per share.

Bish is obviously set financially should he decide to step away from the business following the close of the acquisition by EMC, which is expected to happen sometime in early January. It's our belief, however, that he could be a valuable asset to EMC's management team. "I'm going to stay with Captiva and run it as a business unit within EMC, at least long enough to ensure a smooth transition," said Bish. "If there is an opportunity to run a bigger part of EMC's overall business, that could prove interesting and might keep me around much longer."

If Bish does decide to take his money and focus on something else, we expect that Howard Dratler, Captiva's executive VP of field operations would assume a good portion of Captiva's leadership. Dratler joined Captiva in December 2003, which is about the same time everyone has acknowledged the company's relationship with Documentum really took off. Bish has, in fact, several times referenced Dratler's work driving increased business through Captiva partners such as Documentum. Also, prior to joining Captiva, Dratler spent several years with storage software vendor **Veritas**. This should provide him with considerable insight into EMC's non-ECM-related business.

No matter what happens with Captiva's management, Bish stressed that he sees this merger as an opportunity for Captiva's employees. "EMC is a $9-billion per year company trying to grow 20% per year," said Bish. "They need to hire a significant number of employees to manage that growth."

A look at the new competitive landscape

How does the rest of the capture market view Captiva's assimilation into EMC? Well, there seems to be a certain amount of satisfaction that a company has received the valuation that capture executives feel they have deserved all along. "This signifies that capture is no longer considered the poor stepchild of the ECM market," joked Scott Blau, CEO of Datacap.

"I'm glad to see all of us getting good valuations for our hard work, and expect that capture technologies will become more mainstream as they are supported by the larger software providers," said Chris Thompson, VP, product strategy for **Sungard EXP**. This spring, $3-billion SunGard acquired **RRI**, which Thompson co-founded.

There is also a perception that Captiva could find some tough sledding as it attempts to maintain its partnerships with Documentum's ECM competitors. "Documentum competitors like **FileNET** have a history of being able to freeze out vendors in these types of cases," said Blau.

Anthony Macciola, VP of product management for Kofax, added that while maintaining a number of ECM partnerships might not be necessary for a capture vendor, it does help. "Until now, one of the reasons ECM vendors have been hesitant about buying capture vendors has been the fear of damaging partnerships," Macciola told *DIR*. "There's always been a question of how dependent capture vendors are on the diversity of their partnerships. Once an acquisition is made, some ECM partners

are going to be alienated. The ECM vendor making the acquisition has to decide if their gains are going to offset the revenue that will be lost.

"I don't care what is said at the corporate level. When it comes down to sales people in the field, ECM vendors are going to be hesitant about bringing Captiva in now that it is part of EMC."

From what we understand, approximately 40% of Captiva's business is driven through partner sales—with Documentum and IBM the top two partners, respectively. So, obviously, a considerable chunk of Captiva's revenue has historically come outside the Documentum realm. However, we're not sure how much of that is directly related to ECM partnerships.

We do know one thing—EMC has invested a considerable amount of money in Captiva, but still has a considerable amount of cash and resources to put behind growing the business. We are looking forward to some of the new directions this acquisition is bound to push the capture industry. If EMC proves a visionary, in the long-term, we will probably see some sort of consolidation of not only the ECM and capture markets, but the storage market as well.

In the short term, especially for Captiva's competitors, Blau may have summed it up best. "This is doubly good," he told *DIR*. "Not only does it help give some good valuation to capture vendors, it also creates some additional opportunities with ECM vendors, as there is now one less independent to compete with."

For more information:
http://www.captivasoftware.com; http://www.emc.com; http://www.documentum.com; http://www.datacap.com; http://www.rrinc.com; http://www.kofax.com

Taking A Fresh Look At SMB Imaging

Collaboration applications offer alternative to traditional ECM repositories

Over the past couple years, we've run a number of stories discussing the downstream movement of document imaging systems and their increased traction in the SMB space. A number of factors are driving this transition, including adoption of PDF, scanning from digital copiers, less expensive dedicated document scanners, improved distributed capture software, and increasing attention being paid to records management and archiving.

Our opinion on the potential in this space has

been backed by the financial results of imaging vendors focused on SMBs, studies from **AIIM** (the trade organization), as well as a recent report from **IDC** citing that the workgroup and departmental digital/paper management market is expected to hit $333 million worldwide in 2005. The IDC report goes on to predict a five-year CAGR of 16.8% and revenue of $615 million in 2009.

These are great numbers, especially when you consider that high-end enterprise content management players like **FileNET**, **Open Text**, and **Interwoven** are not growing at nearly this pace—and they represent leaders.

So, who is going to capitalize on the adoption of imaging by the SMB market? Most likely, it won't be the big boys, as they have shown little adeptness nor gumption for moving their products downstream. The motto in our industry has always been that it takes 10 times as much effort to sell 10, 10-seat systems as it does to sell one, 100-seat system. This leaves mid-market-focused players like **Hyland**, **Laserfiche**, **Westbrook**, **DocuWare**, and a number of others to clean up—and from reports we've received over the past couple years, they have been. However, as the market continues to move downstream, we wonder how low these vendors will be willing to go. Some of them have already expressed plans to look upstream, not down, for future growth.

As a result, we see some opportunities emerging for vendors of low-cost document imaging alternatives. But, how do you cost-effectively sell into a market that others have left behind because of low margins? By changing the rules of the game, of course. This summer, we talked with **Traction Software** (http://www.tractionsoftware.com), a corporate blog software vendor that exhibited at **AIIM 2005**. By leveraging WebDAV (Web-based Distributed Authoring and Versioning) protocols, Traction has come up with what it feels is an effective document management-lite system for the SMB space.

However, Traction is small, and corporate blogging is still very much an emerging market. To us, blogs represent the next generation of collaboration software—which is more mature and has been on the market for at least five years now. A couple years ago, there was a big push to envelope collaboration into the ECM space, and it is now most certainly an embedded piece of the ECM infrastructure.

As its name suggests, collaboration software enables the effective sharing of electronic documents. Throw on some back-end versioning,

auditing, and archiving controls, as well as some workflow, and voila, you've got yourself the makings of the document management system. Add some imaging functionality, and you start to see where we are going…

One of the most popular collaboration software products is **Microsoft's** *SharePoint*. Another is **EMC's** Documentum *eRoom* application. Both are considerably less-expensive than a full-fledged ECM system, but by tweaking them correctly, users can often achieve their needed functionality. We recently spoke with a pair of vendors that offer such tweaks.

The first is St. Louis-based **KnowledgeLake**, which has introduced a document imaging suite that leverages the *SharePoint* repository. "We basically take *SharePoint* and put it on steroids," said Chuck Nash, president of KnowledgeLake. "We increase both its scalability and security." The second vendor we talked with was **Visioneer**, which in conjunction with Documentum services partner **Daybreak ICS**, has developed an imaging on-ramp for *eRoom*.

Following is a look at each of these vendor's efforts to bring document imaging functionality to the collaboration space.

Filling In SharePoint's Holes

According to Nash, there are more than 220,000 installations of *SharePoint* deployed today, running on more than 34 million desktops. "*SharePoint* is part of the package that Microsoft enterprise application customers receive," Nash told *DIR*. "Our strategy enables these customers to leverage their Microsoft maintenance costs and *SharePoint* repositories in their ECM solutions."

Nash is very familiar with the ECM market. In 1996, he co-founded Doctex, a document imaging reseller that in 1998 was sold to **SourceCorp** (then known as F.Y.I.) for $6 million. Doctex was a reseller for the likes of **FileNET**, **Documentum**, and **OTG**. After a couple years with **Cap Gemini Ernst & Young**, in 2000, Nash went back into business on his own, helping to found KnowledgeLake.

"We started with FileNET again, but this time around, we also decided we wanted to develop some of our own intellectual property," said Nash. "Margins for resellers of traditional ECM products have gotten really tight. The big ECM vendors have started deeply discounting software to win installations and secure maintenance contracts. If you look at their financial reports, maintenance is where they make their real money these days."

KnowledgeLake was first introduced to *SharePoint* in 2003. The rest, as they say, is history. "When we first saw *SharePoint 1.0*, it was very weak and relied on Microsoft's *Access* database," Nash told *DIR*. "However, as we talked with Microsoft and began to get educated on where they were going, we started to see potential. So, we developed a suite of products around *SharePoint*. This suite hit the market at the beginning of this year. In the third quarter alone, we signed up 42 new customers, and by the end of the year, I expect to have more than 200 new customers and $10 million in revenue—all generated from *SharePoint*-related sales."

> **"Our strategy enables these customers to leverage their Microsoft maintenance costs and SharePoint repositories in their ECM solutions."**
>
> **—Chuck Nash, KnowledgeLake."**

According to Nash, KnowledgeLake is the only imaging/ECM vendor that leverages *SharePoint* as the repository. "This significantly lowers the cost of an ECM installation," said Nash. "We offer conversion services to move documents and images from legacy ECM applications into ours. After that one-time charge, and the cost of our software, which is very competitive, I'd estimate our customers are paying about one quarter the maintenance charges they'd pay for a traditional ECM solution. Conservatively, I'd say we've already replaced 15 FileNET systems, not to mention Optika, Documentum, and Legato."

KnowledgeLake's suite improves the capture, viewing, indexing, and workflow capabilities for both paper and other electronic documents using the *SharePoint* repository. "Yes, with *Office 12* and *Windows Vista*, Microsoft has promised to improve the document management and workflow capabilities of its own products," said Nash. "But we are their exclusive imaging partner. We fill in some of the holes they are not going to address. We know this because we are a member of Microsoft's Technology Advisory Panel for *Office 12*, and Microsoft has even set up an office for us at its Redmond campus." [*For more on Microsoft's ECM strategy, try this white paper:*

http://www.documentimagingreport.com/fileadmin/DIR_Press_Releases/ECM_-_A_Microsoft_Approach.pdf]

Nash added that with KnowledgeLake's product line, a complete Microsoft-based, ECM solution is available today. "If I based my business on *Office 12* and *Windows Vista*, you know how many employees I'd have?" Nash asked facetiously. "Of course, we also offer a clean upgrade path that will integrate

with whatever Microsoft introduces."

According to Nash, the bulk of KnowledgeLake's success has been with mid-market customers with 500-2,500 users. "We have also landed enterprise deals for more than 100,000 seats," he told *DIR*. "Our largest deal, in terms of volume, is with **Scottrade Financial Services**, which has used our software to capture and store 40 million back-file documents, and is adding three million more annually."

To date, KnowledgeLake has primarily sold direct, but recently began efforts to cultivate a channel. "When an end user needs support for its ECM system, it's much easier for them to find a certified Microsoft partner, than a certified FileNET or a **Hyland** partner," said Nash. "We want to leverage Microsoft's large channel and are starting by working with the small percentage that understand ECM. Still, with thousands of partners to pare down from, we see a significant opportunity. We plan to launch a full-scale partner program early next year."

A Paper On-Ramp For 10 Million Users

The Visioneer and Daybreak alliance isn't nearly as mature as KnowledgeLake's work with Microsoft, but it still bears watching. According to Kara Cleaver, president and COO of Daybreak, there are more than 10 million seats of *eRoom* deployed at thousands of customer sites worldwide. *eRoom* is the name of the collaboration vendor and software product that Documentum acquired for $120 million in 2002 [*see DIR 10/18/02*].

Visioneer and Daybreak have partnered to create a scan-to-*eRoom* application leveraging the OneTouch interface on Visioneer's **Xerox**-branded workgroup scanners. Daybreak, which advertises one of its specialties as unlocking the full potential of *eRoom* installations, has helped develop a connection interface, *e4e*, which is being sold in packages of 1,10,25, or 50 seats.

"Up to this point, the majority of documents that have lived in *eRoom* are electronically generated," said Cleaver. "While it's not been impossible to put images into *eRoom*, it can be very labor intensive. We have one customer using a dedicated station to scan to an FTP site and then downloading the images onto the network just to get them into *eRoom*. And those images aren't even searchable."

The OneTouch/*e4e* solution leverages **ScanSoft** technology that is bundled with Visioneer scanners to create searchable PDFs filed in *eRoom* through the *e4e* interface. "With this solution, document images are no longer second-class citizens," said Cleaver.

Cleaver estimated that 30-40% of *eRoom* customers currently use some sort of document imaging technology. "We were getting feedback from our customers that wanted an easier way to get paper into *eRoom*," said Cleaver. "We work with some of the largest *eRoom* customers, who have several thousand seats installed. I'm not saying they will install scanning for every *eRoom* seat, but there is some significant potential just based on a percentage."

In addition to large enterprise installations, Cleaver added that there are a number of smaller *eRoom* deployments not connected with ECM repositories like *Documentum 5*. "We believe many of the smaller installations are being used as document management repositories," she said. "*e4e* is a great vehicle for adding a workgroup scanner as a paper on-ramp in these instances."

Cleaver noted that, to date, Documentum has not done too much to integrate its SMB-targeted *AX* document imaging application (the former OTG stuff) with *eRoom*. "We've been hearing a lot of noise that this is going to happen," she said.

Whitney Tidmarsh, VP of solutions marketing, EMC Software Group, said further integration between *eRoom* and AX is definitely on the way.

The *AX* partner channel, of course, is a natural vehicle through which Visioneer can market its scanners. According to Rusty James, Visioneer's VP of channel sales, since he was brought on board this spring, the company has signed up close to 600 VARs. "We are in the process of comparing our channel with Documentum's and determining what synergies can be leveraged," James told *DIR*. "We also think the *eRoom* integration presents an opportunity for SMB VARs who might not be married to an ECM product line and may want to leverage *eRoom*."

The *e4e* solution, which made its debut at last week's Documentum Momentum event in Las Vegas, will be sold through Visioneer's two-tiered distribution model.

John Capurso, Visioneer's VP of enterprise marketing, indicated the company will leverage its OneTouch functionality in similar applications in the future. "*eRoom* is utilized in the front office, where ease-of-use is a necessity," he told *DIR*. "We have some key core technology for creating searchable PDFs and loading them into a software application with the touch of a button. There are plenty of situations where this can be leveraged, some of which we've thought of, and some I'm sure we haven't."

For more information :
http://www.knowledgelake.com;
http://www.daybreakics.com; http://www.visioneer.com;
http://www.documentum.com/eroom

E-Mail Discovery Killer App For Iron Mountain Digital

Paper storage giant **Iron Mountain** has found a killer digital application. In response to an ever-increasing demand for its litigation support services, the company recently announced a 500% increase in the capacity of its Data Restoration and Electronic Discovery Support service. This service's key line of business is assisting clients with e-mail discovery for litigation purposes.

"We launched the digital business with a generic archive," said Kevin Roden, executive VP and CIO of Iron Mountain. "As I've found with every technology, however, there is a defining business need that drives capabilities to become heavily used. In our digital archive's case, it's been e-mail management. We have three billion assets in our digital archive, including print files and electronic documents, but the great majority are e-mail."

For confidentiality reasons, Iron Mountain could not provide us with any specific customer names related to e-mail management, but John Clancy, Iron Mountain's executive VP, Digital, indicated that financial broker/dealers, whose e-mail retention is regulated by the SEC, have been leading the charge. "That's just the tip of the spear," he told *DIR*. "In any industry where there is litigious behavior, data restoration is important. We are now starting to see more adoption in markets like healthcare, pharmaceuticals, and technical products and services."

Iron Mountain offers two flavors of e-mail management. The first involves ingesting e-mails directly from their clients' e-mail servers, indexing the messages and attachments, and making searchable copies accessible through a Web interface. In the case of many financial services customers, this also involves storing e-mails on WORM tapes that are kept offline.

In addition to these file-centric tapes, Iron Mountain stores backup tapes for its clients, which leads to its second flavor of e-mail management. This is restoration of messages and attachments from backup in cases of litigation. For many businesses, back-up tapes actually serve as their primary medium for e-mail archiving. When a discovery order comes down, the

intricacies of recovering specific e-mails can be overwhelming. According to an Iron Mountain press release, it is estimated that conducting electronic discovery can cost as much as $1,500 per PC.

"In addition to the cost, discovery involves time constraints," said Roden. "We have one customer that needed to process more than 40,000 backup tapes in a specified amount of time. We have the size and scalability to meet those types of needs.

"Anything Iron Mountain does could be duplicated from a technology standpoint by a fairly major company. However, we provide our customers an alternative to investing their internal time and resources. We've already built a number of best practices in the area of data restoration. We've already made the capital investments and developed the intellectual property, so our customers don't have to.

"In addition, in many cases, we are already storing our customers' backup tapes in our secure vaults, so they don't have to worry about shipping their media to someone else for recovery. This simplifies the chain of custody."

COMMENTARY

REUNITED: STORAGE & DOC IMAGING

When we put this **Iron Mountain** piece together, it seemed like a fairly minor piece on the paper records storage king's moving further into the digital world. However, when you are dealing with a $2 billion company, especially in the ECM space, we should have realized that nothing is minor.

From the beginning, we have been impressed with the technical muscle Iron Mountain has put behind its digital initiative [*see DIR* 9/6/02]. Clearly, they aren't just dabbling in the digital realm and view electronic records management as an important extension of their paper storage business. Coincidentally, in this issue, another storage vendor—albeit one with a much richer digital pedigree—**EMC**, is also making a broader push into records management with its recently announced plans to acquire **Captiva** and enterprise report management/COLD vendor **Acartus**.

We couldn't help but hear the echo in the messages that both Iron Mountain and EMC are sending out. Those messages say that the three biggest storage hogs (related to the current market push towards improved records management, compliance, and archiving) are paper, e-mail, and reports. Two of those three areas have been almost the exclusive realm of document imaging vendors, while the third (e-mail management) is a sister application. As a result, we expect the renewed convergence (if you remember **FileNET** was launched in the mid-1980s to leverage then-nascent optical storage technology) of document imaging and storage to gain momentum. EMC has set the bar high with its latest endeavors, and we expect its competitors are now scrambling to counteract.

Digital Services Expanding Rapidly

In 2005, less than 5% of Iron Mountain's more than $2 billion in overall revenue will come from digital services. However, with projected digital revenue of $75-80 million and an annual digital growth rate of more than 50%, Iron Mountain is clearly becoming a digital archiving player.

"Our long-term vision is to manage all records assets for our customers, whether they're paper, electronic documents, e-mails, or back-up tapes," said Roden. "That includes internally stored records, as well as those kept in our repository. Our goal is to help our customers become more compliant by applying the same retention and destruction rules, as well as retrieval capabilities, to all their records."

For more information: http://www.ironmountaindigital.com

eCOPY OFFERS UNIQUE MRC APP

Last month, we ran an article discussing various advanced compression formats for color document images. Shortly after the story came out, we received a call from **eCopy,** pointing out that we had inadvertently omitted mention of its Xpert Compression technology. Xpert Compression employs MRC (mixed raster content) techniques to produce highly compressed color or grayscale images, output in either a proprietary or PDF format.

Xpert Compression is designed specifically to meet the needs of eCopy's core market. "We looked at licensing MRC technology from another vendor, but the digital copier market has some unique requirements for speed and image quality," said Mike Conley, eCopy's VP of engineering. "First off, we want to output highly compressed images in real time, not in a post-scan batch process—like many other applications. To address bandwidth issues related to the size of uncompressed color and grayscale images, we produce the compressed images within our capture application and then deliver them to their final destination. That could be the desktop, an e-mail address, or an ECM system.

"We can't have users standing at the digital copier for several minutes waiting for their images to compress. So, we've designed Xpert Compression to average about 1.5 seconds per image processed, depending on the speed of the CPU.

"We also had to the make the technology flexible enough to work with the output from several different types of copiers. This has become even more important since we opened up our capture platform to more vendors earlier this year [*see DIR 2/18/05*]. Color separation will vary from vendor to vendor, and we had to design Xpert Compression to deliver acceptable results, if not better, from every device we work with."

Xpert Compression first hit the market with the 2003 release of eCopy's product suite. The current version utilizes Group 4 and JPEG compression. A version incorporating JBIG2 is in the works. According to Conley, most eCopy customers don't even realize they are using MRC technology. "It's our default setting for color and grayscale output," he told *DIR*.

Conley added that the company maintains the proprietary .CPY output format because it is optimized to work with the *eCopy Desktop* document image management application.

For information: http://www.ecopy.com