

# Document Imaging Report

Business Trends on Converting Paper Documents to Electronic Format

2840 West 21st Street ● Erie, PA 16506 ● PH (814) 838-0025 ● FX (814) 836-9605 ● [www.documentimagingreport.com](http://www.documentimagingreport.com)

February 15, 2002

## THIS JUST IN!

### IS OPEN TEXT THROUGH WITH ACCELIO?

Tom Jenkins, president and CEO of **Open Text**, doesn't seem to be losing any sleep over the fact that **Adobe** trumped his bid for electronic forms software vendor **Accelio**. "I'm happy that I made millions of dollars—don't forget that Open Text is one of Accelio's largest shareholders," Jenkins told Reuters in a recent interview. "Right now...we are quite happy to tender to a superior bid like that, but it remains to be seen...maybe somebody else will come forward."

Could Mr. Jenkins be hinting at a second bid from Open Text? If you remember, in 1999, Open Text made a second effort to acquire PC Docs after its original bid was topped by **Hummingbird**. Hummingbird then had to up its bid to complete the deal [see *DIR* 6/4/99].

Dennis Clerke, president and CEO of Cardiff Software, an Open Text partner and Accelio competitor, called Jenkins "a master of acquisitions." "Because Open Text and Accelio are both Canadian companies [as was PC Docs], Open Text is not subject to the same regulations on unsolicited bids that it would be in the United States," said Clerke.

Speaking of potential acquisitions, Clerke said the recent announcement about Cardiff leveraging Kofax' VRS technology in an installation with the City of Calgary, Alberta, was "a design win, no more and no less." A Kofax representative indicated that more announcements involving forms processing applications that leverage VRS for image clean-up will be forthcoming.

For more information: **Open Text**, Waterloo, ON, PH (519) 888-7111; **Cardiff Software**, Vista, CA, PH (760) 936-4500, **Kofax**, Irvine, CA, PH (949) 727-1733. **DIR**

## A Fish Out Of Water?

**Adobe ups its stake in the e-forms market with \$72 million bid for Accelio. But can the desktop vendor make a successful transition to enterprise apps?**

It's funny, accelerate almost sounds like **Accelio**. Accelerate in fact was the term that **Adobe** used to explain how its intended acquisition of Accelio will drive its penetration into what it views as the burgeoning e-forms market. Cardiff President and CEO Dennis Clerke, however, may be more tempted to use the phrase, "crash and burn."

Clerke, of course, has good reason to be upset. If you remember, last summer, when his forms processing company first entered the e-forms space, it was with the support of long-time partner and equity investor Adobe [see *DIR* 4/6/01]. Adobe even agreed to distribute a trial version of Cardiff's e-forms designer module with *Acrobat 5.0*. The Cardiff/Adobe alliance was positioned to take on established market leader JetForm (which has since changed its name to Accelio).

All that changed, of course, late last month when Adobe announced it intended to acquire Accelio for \$72 million in stock. The deal is expected to close in March, making Cardiff a David in a battle against the combined efforts of Goliath Adobe/Accelio. Clerke, however, knows full well how the Biblical story ends up, and he is not backing down.

"The fact that Adobe was willing to spend \$72 million validates what I've been saying all along about the potential of the e-forms market," Clerke told *DIR* at a cocktail party the day after the acquisition was announced. "I still think we have better technology than Accelio, and I question Adobe's ability to compete effectively in a server-based market like e-forms. Adobe's success has been on the desktop."



Dennis Clerke,  
president and CEO,  
Cardiff Software.

Clerke makes a good point. Adobe's flagship products, *Illustrator*, *Photoshop*, and *PageMaker*, are all typically single-user, or at best workgroup, products. Like the rest of the company, Adobe's \$300 million ePaper Solutions group, which is responsible for *Acrobat* as well as the company's e-forms initiative, has little experience with enterprise applications.

"Yes, the primary drivers for *Acrobat* sales have been desktop applications," admitted Joe Eschbach, VP of ePaper Solutions. "However, we think the big opportunity for *Acrobat* lies in the server market, especially when it comes to e-forms.

"Let's face it, the real value in an e-forms solution is in the routing capabilities, so you can get approvals. In addition, you need back end integration with your customers' management software—whether that be SAP or PeopleSoft applications, or whatever. Adobe didn't really have any workflow or integration technology, and we are adding it through Accelio."

---

**"We've added a talented team of professionals in areas like corporate account maintenance, sales force engineering, and consulting services—all areas we needed to ramp up in."**

**Joe Eschbach, Adobe ePaper Solutions**

---

Eschbach estimated the e-forms market is currently worth between \$200 million and \$300 million annually, with the potential to grow to \$1 billion by 2004. He said this accelerated growth in a market that has been relatively flat in recent years will be driven primarily by two factors:

■ "Recently, governments around the world have been passing paperwork elimination acts. They want to eliminate file cabinets as well as convert both their internal and external [or constituent-facing] processes to electronic formats. Because of the way the deadlines are set up, 2003 will be a big year in the United States for government e-forms installations, 2004 in Japan, and 2005 in Europe.

■ "Secondly, as enterprises move from client/server based networks to Internet backbones, e-forms initiatives become more feasible for them."

Eschbach said that as far back as last October, he told financial analysts that one of Adobe's goals was to establish the company's leadership in the emerging e-forms market. "The e-forms market has been on our radar screen for years," he told *DIR*. "Historically we've offered rudimentary capabilities in *Acrobat*. However, last year, in our minds at least, the e-forms market opportunity increased from a

## Document Imaging Report

Business Trends On Converting Paper Documents To Electronic Format

*DIR* is the leading executive report on managing documents for e-business.

Areas we cover include:

1. Scanning
2. Forms Processing/OCR/ICR
3. Integrated Document Management
4. Content Management/XML
5. Document Output
6. Storage
7. E-Commerce

*DIR* brings you the inside story behind the deals and decisions that affect your business.

---

**Vol. 12, No. 4**

**Editor:** Ralph Gammon  
PH (814) 838-0025, Ext. 209  
FX (814) 836-9605  
ralphg@corrypub.com



### Associate Publisher and Circulation:

Martin Zapolski  
PH (814) 838-0025, Ext. 266  
FX (814) 835-0441  
DIR@corrypub.com

---

*DIR* is published 24x per year, on the 1st & 3rd Fridays of the month, by:

### **Corry Publishing, Inc.**

2840 West 21st Street  
Erie, PA 16506

**PH** (814) 838-0025

**Web:** [www.documentimagingreport.com](http://www.documentimagingreport.com)

**Copyright** © 2002 by Corry Publishing, Inc. Federal copyright law prohibits unauthorized reproduction by any means including photocopying or facsimile distribution of this copyrighted newsletter. Such copyright infringement is subject to fines of up to \$25,000.

Because subscriptions are our main source of income, newsletter publishers take copyright violations seriously. Some publishers have prosecuted and won enormous settlements for infringement. To encourage you to adhere to this law, we make multiple-copy subscriptions available at a substantially reduced price.

**Subscriptions:** \$597 per year (outside North America add \$33 postage)

medium to a high boil, and we decided we wanted to make an acquisition that would accelerate our penetration."

There had even been some speculation that Cardiff might be the object of Adobe's desire. According to Clerke, however, the Accelio opportunity was probably too good for Adobe to pass up. "Adobe really bought Accelio's customer base of 7,000 businesses and organizations," he told *DIR*. "When you consider that Accelio has over \$15 million in cash listed on its balance sheet, Adobe is paying less than \$60 million."

The announcement of Adobe's intention to acquire Accelio came shortly before the expiration of an unsolicited acquisition bid by Canadian document management software vendor **Open Text**. Although Accelio's board was dead set against accepting the Open Text offer (they've embraced the Adobe bid), Open Text had announced that five of the company's leading shareholders had agreed to it.

"The Open Text bid let everybody know that Accelio was available and approximately for how much," said Clerke. "Adobe then came in with a higher offer, but still one that it probably viewed as a bargain."

In addition to Accelio's technology and install base, Adobe is also excited about adding a sales and support team with experience in enterprise sales. "This acquisition will accelerate our go-to-market strategy for enterprise applications," acknowledged Eschbach. "We've added a talented team of professionals in areas like corporate account maintenance, sales force engineering, and consulting services—all areas we needed to ramp up in."

Clerke, however, questions whether Accelio really has the sort of team Adobe wants. "If you look at Adobe's traditional revenue per employee, it's close to \$400,000. In 2001, Accelio's was around \$100,000. You wonder how long Adobe is going to be willing to put up with that type of return."

Clerke concluded by saying that Adobe's historic acquisition record has been spotty. "Adobe has done a lot of acquisitions, and I can't think of too many that have been successful," he said. "Most of their success has come from internally developed software. I'll be as interested as anyone to see how the Accelio acquisition turns out. However, it's my belief that Cardiff will eventually end up acquiring Accelio—one customer at a time."

For more information: **Adobe Systems**, San Jose, CA, PH (408) 536-6000, FX (408) 537-6000; **Cardiff Software**, Vista, CA, PH (760) 936-4500. **DIR**

## Optika Promises Profitable Year

Like many companies whose stocks rode the dot-com roller coaster, **Optika's** strategy may have been ahead of its time. However, unlike many who staked their future on the Web, Optika had a proven market to fall back on. Relying mainly on its legacy document imaging and workflow technology, the one-time e-commerce visionary recently announced its first profitable quarter in two years. And according to Chairman, President, and CEO Mark Ruport, "We've told investors that we will grow top line revenue and be profitable for the entire year [2002]."

So what's led to the turnaround? Reduced expenses are the most obvious answer. In the fourth quarter of 2001, Optika increased its revenue by almost \$900,000, while reducing expenses by close to \$3 million. This included reducing its sales and marketing expenses from \$3.6 million to \$1.6 million.



**Mark Ruport,**  
chairman, president,  
and CEO, Optika.

"I know it's ironic that we increased sales when we reduced our marketing expenses," acknowledged Ruport. "What happened was that in 2000 we were trying to make a push with our collaborative technology, which I always saw as an extension of our legacy, but which the market saw as taking us in a completely different direction. So, we built up a big direct sales force to sell collaborative software, and we were ahead of our time."

According to Ruport, Optika's much publicized collaborative technology has actually generated very little revenue for the company. "There is a progression our customers need to make before they can fully leverage it," he told *DIR*. "First they have to get all their content in a place where it can be accessed. Then they have to get all their internal processes organized, and finally they have to set up their firewalls to control interaction with their vendors and customers. Not until they do all that are they ready to use collaboration. We have customers whom we sold collaborative systems to two or three years ago that are just now getting ready to use them."

Ruport added, however, that the potential for collaboration proves to be a differentiator for Optika when it is selling imaging and workflow. "Our biggest markets are retail/supply chain,

manufacturing, financial services, and education," he said. "Most of our customers have some sort of accounts payable process where our collaboration software, which focuses on solving disputes, can be leveraged."

Optika's collaborative technology was an outgrowth of its *eMedia* initiative, which was launched in 1998. At that time, Ruport told *DIR* he viewed imaging as a stepping stone to the adoption of purely electronic transaction management—which, with the proliferation of the Internet, was bound to happen. When the Internet boom hit a year later, Optika's stock also boomed, soaring from its value of around \$5 per share for most of 1999, to a high near \$45 per share in February 2000. When the company failed to sustain growth or profitability, however, its stock value returned to earth with a thud, bottoming out at around \$.60 per share this past August.

"Sure, [during the Internet boom] we all hoped our stocks would stay up there, but now everybody looks back and realizes how things were way overvalued," said Ruport. "I think we are going to look back on 2001 and say things were ridiculously undervalued. This year things should return to an equilibrium. We might not be worth \$44 per share, but we're worth more than \$.60 per share."

Ruport added that Optika's success in the fourth quarter of 2001 was driven by strong pushes in three areas:

- Sales to existing customers, which accounted for 50% of the company's revenue for the quarter. This includes upgrades, sales of additional seats, service, and maintenance revenue.

- License sales by reseller partners, which increased 40% in the fourth quarter of 2001 over the fourth quarter of 2000.

- Optika's integration of its software with software from ERP vendors **PeopleSoft**, **Oracle**, and **J.D. Edwards**. According to Ruport, Optika has invested heavily in this initiative, and it is finally paying off.

"These are the three areas we will continue to focus on going forward," Ruport concluded. "And although we will continue to invest 20% of our revenue in R&D, that level has been reduced from as much as 35%. A lot of our development work is done. Now we need to focus on marketing and selling what we have."

For more information: **Optika**, Colorado Springs, CO, PH (719) 548-9800. [\*\*DIR\*\*](#)

## Raising The Standard For Image Compression

### *Revolutionary segmenting technology increases image compression potential.*

There is a lot of speculation in our industry about color scanners eventually making bitonal scanners obsolete. One argument against this, however, is that most of the information on business documents is black-and-white. So, why would users need color scanners?

There is a camp that believes because color scanners work with a broader spectrum of information, they can be used to distill higher quality bi-tonal documents. This train of thought runs parallel to the concept behind **Kofax'** successful VRS technology, which distills bi-tonal images from grayscale scans. The word is that Kofax is currently working on color VRS technology, but details are not yet available.

*DIR* did receive an interesting e-mail a couple weeks ago, however, from a vendor that claims it can not only create higher-quality bi-tonal images from color scans, it can also leverage these higher-quality scans to significantly improve compression ratios. "With our technology, we think we can achieve 20 times the compression that is currently achieved for bi-tonal images," said Joe Doll, CEO of **Accelerated I/O (AI/O)**.

Doll is an electrical engineer who has done work with machine vision and radar imaging. You might call him a compression specialist. "AI/O's technology is focused on making information available to computers," he told *DIR*. "The same work we are doing with images and graphics can also be applied to sound and video. We are starting with graphics, because, if you'll excuse the pun, the results are easier to see."

The centerpiece of Doll's work involves cleaning up files in preparation for applying cutting-edge compression methods. "Some compression methods, like geometrical compression, have historically been unrealistic to apply to images because the images have not been clean enough," he told *DIR*.

AI/O's Web site defines geometrical compression as "a compression algorithm that reduces geometrical shapes into more efficient representations (usually tags)." Doll compared it to the techniques used to compress computer-generated word processing files. "Typically, with a statistical compressor, a scanned document can be compressed about three times," he said. "However,

the same file created on the computer could be compressed about 100 times. Furthermore, the computer-generated document would be much cleaner and clearer."

AI/O's technology attempts to make scanned documents as clean and clear as computer-generated documents by applying a technique AI/O labels as advanced segmentation. "In a word processing file you are dealing with two colors—black and white,"

said Doll. "In a color scan, you can be dealing with hundreds of different shades caused by input distortions from the scanner. Our technology segments the images into as many different colors as you want, compares the outline of the shapes (such as letters) against information stored in a database, then restores the shapes to their original crisp, clean, two-color format."

So, why not just scan the documents in a bi-tonal format in the first place? "When you do a bi-tonal scan, you get a certain amount of orphaned pixels and noise that our process eliminates," said Doll.

It's Doll's contention that AI/O's segmentation and restoration process mirrors the natural process people use to decipher objects. "While segmentation might seem to add an artificiality, recognition requires segmentation. In other words, if a person wants a picture to mean anything, they will have to segment it in their head," he said. "The process of finding a shape [or any feature] of an object is called extraction. The extracted shape is then compared to memory."

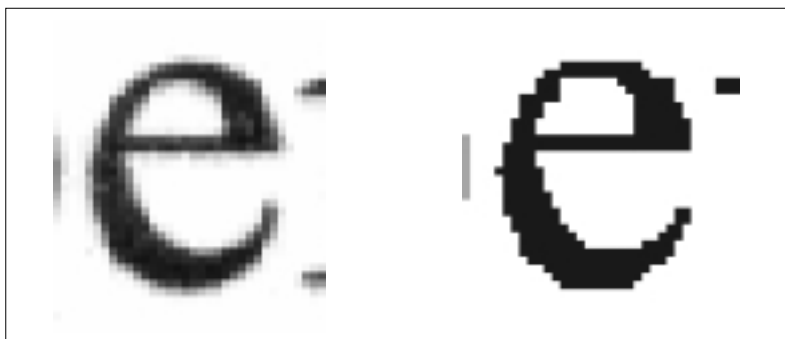
And from this memory, the shape is restored in the mind's eye. In the case of a scanned image, computers would substitute a database for memory. According to the AI/O Web site, this database "isn't necessarily limited to template matching." This sounds like an opportunity to apply neural networking technology developed by vendors like **SER** and **Mitek**, among others.

Doll said it is the restoration process that differentiates AI/O's technology from other segmenting technology on the market. "Other technology separates colors, but it doesn't try to

bring an image back together."

Once documents are effectively segmented and restored, they can be compressed with a variety of

techniques. "The best compression rates can probably be achieved using geometric techniques," he said. "However, our technology can also be leveraged to create smaller TIFF Group 4s, JPEGs, PNGs, GIFs, or whatever." [Go to the following Web-site for the



*On the left is a close-up of a character scanned at 250 dpi before Accelerated I/O's technology was applied. On the right is the same character after it has been segmented and restored using AI/O technology. In addition to improving compression ratios, the technology would appear to have potential for OCR applications as well.*

results of compression tests as well as other information about AI/O's technology: [www.ifr everywhere.com/aio/doc\\_hndl.htm](http://www.ifr everywhere.com/aio/doc_hndl.htm)]

Doll admits that effectively managing AI/O's technology can be very CPU-intensive, as well as more complex than the technology typically used in imaging. "I don't know how fast our technology will be adopted," Doll told *DIR*. "In the high-end scanning market, we would have to have hardware (we will have it some day) to keep up with high-speed scanners, or we could keep up pretty well with multiple processors. We estimate this to cost an additional \$30,000 or so. Furthermore there is more messing around (if you know what I mean). My gut feel tells me that some of the market will opt for a highly compressed (probably about 20 times more than TIFF Group 4), better looking document even though the additional processing is a hassle."

Doll said that AI/O is currently in discussions about implementing its technology with a document imaging solutions provider and a business that is scanning checks. "The check scanning business is using grayscale scanning and is having trouble picking up information on the backs of the checks," he said.

AI/O's technology is the latest in a long list of color compression techniques we have covered in *DIR*. It's just another example of the potential that color scanning is bringing to our market. The bottom line is color increases options—and with more options should come more applications—and eventually more sales!

For more information: **Accelerated I/O**, Broomfield, CO, PH (303) 465-0830. **DIR**

# Westbrook Seizing Healthcare Opportunities

Financial services, government, insurance—when it comes to document imaging markets, these have always been the big three. However, at least one imaging vendor, **Westbrook Technologies**, has had considerable success focusing on a fourth market—healthcare. “We’ve sold a lot of systems to healthcare providers,” Sean Donegan, president and CEO of Westbrook, recently told *DIR*. “This includes everyone from small groups of general practitioners to a very large cardiotherapy group.”

According to Donegan, the bulk of paper scanned in healthcare applications is patient records. “Studies have shown the average visit to the doctor generates something like 41 pieces of paper,” he said. “However, although patient records act as the catalyst for most healthcare installations, healthcare providers have the same paper concerns as any other business. There is other paperwork like staffing and human resources documents, accreditations, and training records that can be managed more effectively with imaging.”



**Sean Donegan,**  
president and CEO,  
**Westbrook**  
**Technologies.**

Westbrook's primary sales model is through resellers. It has some OEM partners who embed its imaging technology into their own practice management software.

Westbrook recently participated with one of its partners in the **Healthcare Information and Management Systems Society's (HIMSS)** annual conference and exhibition, which was held in Atlanta. At HIMSS 2002, Westbrook co-exhibited with server vendor **Stratus Technology**. “Stratus has extremely fault-tolerant server technology that is an especially good fit for the healthcare industry, where constant availability of records is vital,” said Donegan. “It's also a good fit for any of our partners that act as ASPs and might be hosting documents for a dozen businesses. In those types of situations, you really want a high mean time between failures.”

Donegan added that Westbrook is \$300-million Stratus' first partner in the document imaging space. “For years, optical storage dominated the document imaging market, because it had a significantly lower cost per gigabyte than magnetic storage,” he said. “However, in the past few years, the majority of new installations I've seen have used some type of

server-based, or RAID-based, magnetic storage. I expect that trend will continue as the cost of magnetic storage continues to fall.”

In addition to its partnership with Stratus, Westbrook was also promoting its software as a springboard to HIPAA (Health Information Portability and Accountability Act) compliance. “The standards have yet to be finalized,” noted Donegan. “However, from early indications, we believe the pieces we have in place are not a million miles away. With the HIPAA standards in mind, we have added the ability to track who did what to a document and when. By adding the concept of an audit trail, we've gone a long way down the road toward being HIPAA-compliant when the standards are released in March.”

Donegan said that because healthcare is such a large market for Westbrook, the company has kept a close watch on HIPAA. “I guarantee that within five years, anyone scanning documents for hospitals will have to have some sort of HIPAA-compliance certification,” he said. “The importance of audit trails, however, is not restricted to healthcare. When you think about what recently happened at **Enron**, can't you see the same type of regulations spreading to other markets?”

For more information: **Westbrook Technologies**, Branford, CT, PH (203) 483-6666. **DIR**

## Venetica Completes Installation With FleetBoston

**Venetica**, a software vendor that specializes in connecting diverse document imaging and management repositories, recently completed a deal with **FleetBoston Financial**. According to Jeff Dodson, Venetica's director of product marketing, FleetBoston is using Venetica's *VeniceBridge* software to link documents from three separate repositories.

The installation is with FleetBoston's Wholesale Banking Group, which manages very large loans and lines of credit. “Applying for a loan through the Wholesale Banking Group is not like applying for a personal mortgage,” he explained. “While a mortgage may go to one person for approval, a large commercial loan might pass through several departments. You might have the marketing department that generates the lead. That lead might then be passed to a relationship manager who then needs feedback from some analysts. Each department might have its own repository where it stores its documentation.”

According to Dodson, Venetica's installation with

FleetBoston was part of a process reengineering project. In addition to *VeniceBridge*, the project included a portal framework from a leading CRM vendor that tracks the progress of the loans and acts as an interface for the system's users. The project was managed by **PricewaterhouseCoopers (PWC)**. "This is a medium to large installation for us," said Dodson. "The first phase rolls out to 400 users. It could grow to as many as 4,000 users, if the system becomes pervasive across the consumer banking organization."

Dodson said that Venetica is looking to market its software to other banks with collaborative lending requirements. "Large banks are always in an acquisition mode," said Dodson. "We've found that this creates the need to connect a lot of different document repositories. Not only can we provide that back-end connection, we've also architected our product in such a way that it connects easily to whatever front-end portal system a bank might be using. In the FleetBoston installation, for example, the original design called for a Radnet portal. However, when Radnet imploded, PWC began working with the CRM portal software."

Dodson said that return for banks investing in systems to streamline their loan processes comes through the reduction of cycle time per loan. "FleetBoston estimated that the collaborative loan system it installed reduced its cycle time by 25%," he said. "From what we've heard, cycle time is typically the number one barrier to growth in commercial loans."

For more information: **Venetica**, Charlotte, NC, PH (704) 926-3000, FX (704) 333-0899. **DIR**

## IBM On Data Management: Digitize, Integrate, & Scale

Over the past year, **IBM** has really been pushing its ECM (enterprise content management) platform. As we outlined in a series of articles last year, ECM is a key part of Big Blue's strategy to expand its DB2 database platform into the potentially lucrative market of managing unstructured data [see *DIR* 10/19/01, 11/2/01, and 11/16/01]. To illustrate the validity of this strategy, IBM has announced a series of prestigious wins involving its *Content Manager* platform leveraging DB2. This includes installations with **CNN** and **Coca-Cola** [see *DIR* 1/18/02]. The latest is a large document imaging installation with **LeasePlan**, a business that manages the leasing of more than 1.2 million vehicles.

Part of the key to IBM's success in the ECM space

is its breadth of technologies, which all come under the flag of IBM's Data Management Solutions group. This group not only includes IBM's document and media asset management technology, which are incorporated in the *Content Manager* suite, it also includes DB2 and related data mining and business intelligence technology. IBM's message is that to fully leverage their information, businesses need to combine all their types of data in one system.

Janet Perna, general manager of Data Management Solutions, recently submitted an article offering businesses advice on integrating data. Sure, it just so happens that IBM's vision is directly aligned with the advice Perna is giving end users. However, partly because of the success IBM has enjoyed in the ECM market, we thought there might be some industry-wide truths in Perna's message that could be valuable to anyone in the ECM space.



**Janet Perna, GM,  
Data Management  
Solutions group,  
IBM.**

Here's a look at Perna's "three proven strategies that can help companies capitalize on their data:"

■ "First, integrate all systems, and be certain critical information is digitized, so employees can access every form of content, and share it, wherever it is stored. The Coca-Cola Company, for example, is integrating graphic images,

video, and text documents to create a comprehensive archive of all its advertising and marketing programs.

■ "Second, use open computing standards so systems can operate on any vendors' server platforms, database systems, or content repositories. 'Open' means being able to use off-the-shelf applications, or legacy systems, providing maximum flexibility to add to systems as business needs evolve, without being locked into using any one product or vendor.

■ "Third, be certain systems are robust enough to manage all current content, as well as accommodate future volume, while maintaining fast response times."

Perna's advice on successful ECM can be summed up in three words: digitization, integration, and scalability. These concepts are a good starting point for anyone wishing to build a true enterprise content management system.

For more information:  
[www.ibm.com/software/data/cm](http://www.ibm.com/software/data/cm). **DIR**

# DIR MARKET WATCH

## For February 6, 2002

Public Company Names	Phone	Exchange	Symbol	Close Price	52-Week High	52-Week Low	P/E Ratio	EPS
1IMAGE Software, Inc.	(303) 694-9180	NASDAQ	ISOL.OB	0.61	1.00	0.5313	6.10	0.10
Accelio Corp.	(613) 230-3676	NASDAQ	ACLO	2.73	3.6875	0.98	N/A	-1.19
ACS, Inc.	(214) 841-6111	NYSE	ACS	90.34	109.55	55.15	31.62	2.92
ActionPoint, Inc.	(408) 325-3800	NASDAQ	ACTP	2.77	6.375	1.11	N/A	-0.45
Altris Software	(619) 625-3000	OTC BB	ALTS.OB	0.23	1.4688	0.18	N/A	-0.04
Autonomy Corp., plc	44-1223-421-220	NASDAQ	AUTN	4.65	33.00	2.50	68.57	0.07
BroadVision, Inc.	(650) 261-5100	NASDAQ	BVSN	1.97	15.3125	0.68	N/A	-3.01
CE Computer Equipment	49-521-93-18-01	NASDAQ	CCEQ	4.10	13.50	2.85	5.64	0.78
Convera Corp.	(703) 761-3700	NASDAQ	CNVR	3.71	19.50	2.05	N/A	-19.91
DICOM Group, plc (in British pence)	49-761-45269-36	London	DCM.L	426.20	620	205	18.48	23.10
Documentum, Inc.	(510) 463-6800	NASDAQ	DCTM	18.66	45.875	5.875	N/A	-1.01
F.Y.I. Inc.	(214) 953-7555	NASDAQ	FYII	27.50	44.50	25.80	N/A	-0.73
FileNET Corporation	(714) 966-3400	NASDAQ	FILE	20.40	29.125	8.875	N/A	-0.47
Gauss Interprise Ag (in euros)	(949) 784-8000	XETRA	GSOG.DE	0.91	5.80	0.24	N/A	N/A
Global Imaging Systems, Inc.	(813) 960-5508	NASDAQ	GISX	17.85	21.30	4.30	14.74	1.30
Hummingbird Communications	(416) 496-2200	NASDAQ	HUMC	20.88	36.0625	14.15	N/A	-0.22
IKON Office Solutions, Inc.	(610) 296-8000	NYSE	IKN	13.30	14.25	3.96	64.29	0.21
ImageMax, Inc.	(610) 832-2111	OTC BB	IMAG.OB	0.35	0.8438	0.11	N/A	-0.16
iManage, Inc.	(650) 356-1166	NASDAQ	IMAN	7.35	8.45	1.50	N/A	-0.85
INSCI	(508) 870-4000	OTC BB	INSS.OB	0.045	1.00	0.035	N/A	-1.00
Interwoven, Inc.	(408) 774-2000	NASDAQ	IWOV	6.40	38.625	3.11	N/A	-1.29
Itesoft (in euros)	N/A	Paris	ITFT.LN	1.18	8.75	1.15	3.87	0.30
IXOS Software AG	(650) 294-5800	NASDAQ	XOSY	5.40	13.625	2.92	20.00	0.29
Lason, Inc.	(248) 597-5800	Pink Sheets	LSOONQ	.012	0.68	0.025	N/A	N/A
Mitek Systems, Inc.	(858) 635-5900	NASDAQ	MITK	1.6504	2.75	0.70	95.26	0.02
Mobius Management Systems, Inc.	(914) 921-7200	NASDAQ	MOBI	2.50	5.25	1.78	N/A	-0.20
On-Site Sourcing, Inc.	(703) 276-1123	NASDAQ	ONSS	2.90	3.65	1.05	23.50	0.12
Open Text Corp.	(519) 888-7111	NASDAQ	OTEX	23.75	36.5625	15.75	46.94	0.51
Optika	(719) 548-9800	NASDAQ	OPTK	2.01	2.93	0.60	N/A	-0.46
OTG Software	(301) 897-1400	NASDAQ	OTGS	10.0496	13.25	4.34	N/A	-0.24
PaperClip Software, Inc.	(201) 329-6300	OTC BB	PCLP.OB	.045	0.17	.02	N/A	N/A
Peerless Systems Corp.	(310) 536-0908	NASDAQ	PRLS	1.20	2.27	.50	N/A	-1.05
Plasmon, plc (in British pence)	(952) 946-4100	London	PLM.L	52.20	158.625	45	5.51	9.62
ReadSoft (in Swedish Krona)	(858) 546-4438	Stockholm	RSOFB.ST	13.50	60	7.40	79.44	0.18
Scan-Optics, Inc.	(860) 645-7878	OTC BB	SOCR.OB	0.40	0.20	1.00	N/A	-1.97
ScanSoft, Inc.	(510) 608-0300	NASDAQ	SSFT	3.9391	5.75	0.50	N/A	-0.41
SER Systeme AG (in euros)	49-268-3984-0	Frankfurt	SESG.F	1.14	25	1.19	N/A	N/A
Staffware PLC	44-1628-786800	London	STW.L	410	1625	126	37.84	11.10
Stellent	(952) 903-2000	NASDAQ	STEL	18.94	50.875	13.24	N/A	-0.16
Top Image Systems, Ltd	(760) 918-1660	NASDAQ	TISA	3.50	4.90	0.99	N/A	-1.13
TMSSequoia	(405) 377-0880	OTC BB	TMSS.OB	0.21	0.35	0.13	N/A	N/A
Vignette Corporation	(512) 306-4300	NASDAQ	VIGN	3.45	11.35	3.08	N/A	-6.32
Xenos Group (in Canadian dollars)	(905) 709-1020	Toronto	XNS.TO	1.50	4.50	0.90	N/A	-1.06
Xerox Corporation	(203) 968-3000	NYSE	XRX	10.74	11.45	4.73	N/A	-0.49

2840 West 21st Street • Erie, PA 16506 • Phone (814) 838-0025 • Fax (814) 836-9605 • <http://www.corrypub.com>

### Document Imaging Report

Business Trends on Converting Paper Documents to Electronic Format

- ☐ 1 year (24 issues) @ \$597  
☐ 2 years (48 issues) @ \$1097

### Mass Storage News

Opportunities and Trends in Data Storage and Retrieval

- ☐ 1 year (24 issues) @ \$597  
☐ 2 years (48 issues) @ \$1097

### SCAN: The DATA CAPTURE Report

Premier Management & Marketing Newsletter of Automatic Data Capture

- ☐ 1 year (24 issues) @ \$597  
☐ 2 years (48 issues) @ \$1097

**OUR GUARANTEE TO YOU**  
 If you are not completely satisfied, we will refund your subscription cost for all remaining unserved issues.

Name \_\_\_\_\_ Title \_\_\_\_\_

Company \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone (\_\_\_\_) \_\_\_\_\_ Fax (\_\_\_\_) \_\_\_\_\_

E-Mail \_\_\_\_\_

Please ☐ enter / ☐ renew the following subscription.  
 (Add \$33 on all orders outside of Canada and the United States.)

☐ **Payment Enclosed** (Remit to: Corry Publishing, P.O. Box 270, North East, PA 16428-0270.)

☐ **Charge My Credit Card** (Charge will appear as Corry Publishing.)

\_\_\_\_ AmEx \_\_\_\_ Visa \_\_\_\_ MC \_\_\_\_ Discover \_\_\_\_\_ card number \_\_\_\_\_ expire date

☐ **Bill My Organization** (Purchase order # optional.) \_\_\_\_\_