Document Imaging Report

Business Trends on Converting Paper Processes to Electronic Format

4003 Wood Street ● Erie, PA 16509 ● PH (814) 866-2247 ● FX (412) 291-1352 ● www.documentimagingreport.com

March 21, 2003

THIS JUST IN!

DIR BEEFS UP WEB SITE

If you haven't had a chance yet, check out our redesigned Web site:

www.documentimagingreport.com. Our goal is to make the site an extension of the newsletter. We want it to serve as your portal for all the news that counts in the imaging industry.

The first thing we've done is to begin posting press releases as we receive them. Our "Latest News" section will give you a preview of some of the material we will be analyzing in upcoming editions of *DIR*. We've also opened a discussion forum for industry topics. It's new and hasn't been used much so far, but one of our goals over the next few months is to start generating some meaningful dialog on the site. Feel free to post your comments at any time!

We have a subscriber-only section, which includes on-line access to back issues of *DIR*. Other features include an industry directory and links to industry resources. We've set up the infrastructure and are hoping you can help us make the site grow. Tell us what works, what doesn't, and what you'd like to see. We have marketing opportunities available.

Also, we know we've discussed this with a few of you already, but our editorial staff is now available for free lance work. If you like the writing style and analysis you see in the *Document Imaging Report*, you now have the opportunity to leverage our talents in your case studies, marketing materials, or any other type of editorial needs you may have. Please contact *DIR* editor Ralph Gammon if you are interested.

Finally, **AIIM 2003** is just a couple weeks away, April 7-9, at New York City's **Jacob Javits Center**. *DIR* is currently scheduling appointments.

Pitney Bowes Fine Tuning Imaging Strategy

The way things are shaping up, **Pitney Bowes** could become a big player in the document imaging industry over the next few years. Best known for its postage meter technology, Pitney Bowes recently launched a major marketing effort focused on the flow of business communication. It seems that flow includes document imaging.

Pitney Bowes Management Services Division (PBMS), the billion-dollar services arm of Pitney Bowes, recently finalized a deal to act as a reseller of **Kodak** scanners. In addition to Kodak, PBMS has standardized on components from **Plasmon**, **Hyland**, **Dell**, and **Kofax** for the systems it will sell. Kodak Service & Support will provide consulting and integration, as well as service, for the systems.

According to Fran Morgan, training and employee communications manager for Kodak Service & Support, PBMS has several legacy imaging applications employing a variety of technologies. "Because of the number of vendors and technologies PBMS has worked with in the past, its customers were working with a wide range of service organizations," Morgan told *DIR*. "PBMS wanted to arrange it so there is only one phone number for its imaging customers to call for support. Kodak will manage it from there."

Kodak will also help PBMS design and implement the applications, including testing them either on-site or at a Kodak "hot staging" lab in Chicago. The specific types of applications Pitney Bowes will be implementing is still a bit of a mystery. According to a Kodak press release, "Pitney Bowes provides imaging systems that digitize mail and then electronically send it to customers."

d-mail Strategy Still In Development

To us, this sounded a lot like the d-mail initiative that Pitney Bowes company **MailCode** announced with Kodak competitor **IBML** last summer. MailCode is a manufacturer of mail sorting machines. d-mail is focused on reducing operations costs by scanning all of a

corporation's incoming mail and digitally distributing it from there [see <u>DIR</u> 7/5/02].

Pitney Bowes is currently in the middle of market validation studies for d-mail and was reluctant to discuss too many details. A spokesperson did say the company is currently piloting a d-mail system at its Stamford, CT headquarters, and that the pilot utilizes an IBML scanner along with Hyland document imaging software. (The d-mail system that was demoed at last summer's **MAILCOM** show used software from high-end imaging specialist **IAC**.)

"We'd obviously like to partner with anyone that understands the concept of digital mail and has the ability to sell it. Captiva is a vendor that understands there is life beyond current document imaging applications."

Robert Sbrissa, IBML

"We are currently using the IBML scanner for our d-mail prototype," Chris Tessier of Pitney Bowes told *DIR*. "Kodak is our preferred vendor for traditional imaging solutions. We have a contract with Kodak for installation and help desk support for any PBMS installation that uses Kodak scanners. In the future, we expect to integrate Kodak scanners into the d-mail process."

John O'Connell, the co-founder of MailCode who is currently employed by PBMS as an executive resource for the d-mail application, told *DIR* that the configuration of d-mail needs to remain flexible. "The front-end scanning technology, as well as the back-end, can vary depending on customer requirements," said O'Connell. "PBMS has been working on its relationship with Kodak and Hyland for at least a year-and-a-half. In addition, we've been cultivating a relationship with IBML based on d-mail. We hope to have some standard d-mail configurations, but we also know we need more than one choice to meet our customers' needs."

When d-mail was announced at **MAILCOM**, O'Connell was acting as point man for sales. At the time, Pitney Bowes owned 53% of MailCode. In November of last year, Pitney Bowes bought out the rest of the company. As a result, PBMS is now managing sales of d-mail, with O'Connell acting as a consultant.

Robert Sbrissa, VP of sales for IBML, acknowledges that his company's expensive, high-end scanners probably do not fit into all of PBMS' imaging applications. "d-mail represents a specific area where we wanted to work with PBMS," Sbrissa told *DIR*. "We talked a lot about it last year, and the initiative is progressing. We believe there is some good long-term potential in our partnerships with PBMS."

Document Imaging Report

Business Trends On Converting Paper Processes 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. 13, No. 6

Editor: Ralph Gammon 4003 Wood Street Erie, PA 16509 PH (814) 866-2247 FX (412) 291-1352 dir.ralphg@verizon.net



Managing Editor

Rick Morgan PH (814) 866-1146 morganpub@adelphia.net

Publisher and Circulation Manager

Larry Roberts RMG Enterprises, Inc. 5237 Karrington Drive Gibsonia, PA 15044 PH (724) 449-7577 FX (412) 291-1352 larry@rmgenterprises.com

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

RMG Enterprises, Inc.

5237 Karrington Drive Gibsonia, PA 15044 **PH** (724) 449-7577

Web: www.documentimagingreport.com

Copyright © 2003 by RMG Enterprises, 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 multiplecopy subscriptions available at a substantially reduced price.

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

However, IBML, which was one of the first vendors to discuss the potential of digital mail with DIR, remains open to additional relationships. "The relationship with PBMS is non-exclusive," said Sbrissa. "We are pursuing the concept of digital mail delivery with a number of other partners as well."

Sbrissa indicated that one of those could be forms processing and image capture software developer **Captiva**, which has promised a preview of its digital mailroom strategy at **AIIM 2003**. Captiva recently cemented its partnership with IBML by acting as the reseller for **SourceCorp's** purchase of 14 IBML scanners [see story on page 4]. "We'd obviously like to partner with anyone that understands the concept of digital mail and has the ability to sell it," said Sbrissa. "Captiva is a vendor that understands there is life beyond current document imaging applications."

According to Sbrissa, IBML began to develop the concept of the digital mailroom approximately three years ago. "It fits with our vision of moving image and data capture further upstream to reduce customers' paper handling costs," Sbrissa told DIR. "We believe d-mail represents the second generation of document imaging. The third might be digitizing mail at the point of distribution, such as USPS offices."

Sbrissa said the concept of digitizing mail received some important publicity following the anthrax scares of late 2001 and early 2002. "We haven't made any sales of digital mail systems yet, but we have a lot of current customers that are ready to try something," he told DIR. "They've already made their capital investments in IBML scanners and are ready to layer a digital mail delivery system on top. By the end of the year, we will be in position to have a number of pilots installed."

IBML is currently installing a pilot at its own Birmingham, AL headquarters. "Technically, assembling the solution is not difficult," Sbrissa told DIR. "All the pieces are available. How we address the adoption issues is what is going to make or break the system."

Some of these issues include how to deal with items like parcels and junk mail, and how to retrieve a piece of paper mail when it is requested. "Once we get our system running internally, we will be able to get reaction from our users," said Sbrissa. "It's important that we don't attack the market prematurely and fall on our faces. That could not only kill our efforts but set back the whole digital mail market."

Sbrissa said that even after demoing d-mail at

MAILCOM last summer, he felt the market needed another 18 months to mature. "Market understanding has progressed beyond the concept stage," he told DIR. "Now, potential customers are asking practical questions, like how does digital mail integrate with existing records processes, such as email management."

Sbrissa concluded, "Over the past couple years, it's been exciting for IBML to be recognized as a pioneer in the emerging market of digital mail distribution. It's been kind of fun to have giants like Xerox, IBM, and Kodak call us up and ask what we're doing in this area."

For more information: Kodak Document **Imaging**. Rochester, NY. (800) 944-6171. Pitney Bowes, Stamford, CT, PH (800) 672-6937, **IBML**, Birmingham, AL, PH (205) 439-7100. ■

VRS—Latest Kofax Success Story

VRS has come a long way in three years. First introduced as an option on Fujitsu's 3097 scanner model [see DIR 2/19/99], the latest version of **Kofax's** image enhancement platform supports over 50 models of scanners. Originally, a hardware/software combination aimed at mid- to high-volume production applications, the fastest adoption of VRS is now coming in the software-only versions more prevalent in the low-volume and workgroup segments of the imaging market.

"In the last six months, we've sold 30% more software-only VRS licenses than we did in the previous six months," Tony Venice, Kofax's senior product manager for VRS, told DIR. "Over the past 12 months, our software-only license growth has been 50%. The growth in hardware/software combination licenses has been slightly less than double digits during the same period."

According to Venice, the reason for the spike in software-only license sales has a lot to do with increased adoption of distributed scanning by end uses. "In a centralized environment, a user may be setting up two or three production scanners," he said. "In a distributed environment, that number could be 200 to 300."

VRS functionality is especially valuable in distributed applications because, typically, the operators doing the scanning are not imaging specialists. "The installation we did with FedEx last year was a good example of this," Venice said. "Pegasus TransTech, which offers scanning

services at truck stops for shipping companies, is also a large VRS customer. VRS enables truckers to make clean scans out of shipping documents that are often printed with dot-matrix technology and in less-than-perfect condition by the time they are completed."

Kofax released VRS 3.0 late last month. Most of the new scanners it supports are in the lower-volume, software-only VRS categories. Most of the hardware/software combination support is still done by legacy versions of VRS. "One of the goals of the VRS line going forward is to eliminate the distinctions between VRS hardware and software," said Venice. "We want to offer the same features and functionality with all VRS configurations. In order to do that, we are working more closely with a wider range of scanner vendors than we have in the past."

New to VRS 3.0 is a **Pixel**-certified driver for ISIS-compliant document imaging applications. "In the past, we had supported ISIS-compliant applications with our own driver," said Venice.

"However, there are hundreds of ISIS-compliant imaging applications, and each one is slightly different. With the help of Pixel, which does some pretty intensive testing, we have been able to increase the bandwidth of the ISIS-compliant applications we support. In addition, we continue to support TWAIN and Image Controls-driven applications."

Another new feature of VRS 3.0 is a hardware JPEG compression option in certain scanner models. "The main focus of VRS going forward is providing more color functionality and features," Venice told *DIR*. "This could include support for processes like auto-color detection, which would enable scanners to automatically create different file types for color and bitonal documents scanned in the same batch. We are also experimenting with different color compression methods."

Venice would not elaborate on the compression formats Kofax was studying except to say, "We want to do something groundbreaking."

As far as VRS support for digital copiers, a topic Kofax has touched on in the past, Venice indicated that interest may be waning. "One of the biggest challenges we've run into working with digital copiers is that they are typically networked devices utilized by 25 to 30 workstations," he said. "VRS typically

runs on one workstation that is dedicated to a scanner. Yes, we are always looking to new markets for growth, but we are also looking for areas where we can leverage our existing technology."

Venice added that the images created by digital copiers also differ slightly from those created by dedicated scanners. "Document imaging scanners are typically designed with a scan-to-display mindset," he said. "In contrast, the scanning in digital copiers is designed with a scan-to-print mindset. This creates challenges, especially when applying OCR, because of different dithering patterns."

One of the strengths of VRS is its ability to improve OCR read rates. Kofax advertises that **Doculabs** studies show VRS improves OCR accuracy by approximately 35%. However, according to J.D. Moons, Kofax's director of marketing, the main reason for adoption of VRS is its ability to create quality images on the first pass, thus eliminating the

CAPTIVA RECORDS \$3.3 MILLION SCANNER SALE

Apparently **Captiva** CEO Reynolds Bish wasn't kidding last month when he said scanner sales were becoming a more integral part of Captiva's business model [see <u>DIR</u> 2/21/03]. Captiva, a developer of image capture and forms processing software, recently announced a \$3.3 million deal to sell **SourceCorp** 14 **IBML** ImageTrac II scanners. The deal includes payment for integration services involving an existing Captiva *FormWare* installation, but no new software licenses.

SourceCorp, a service bureau with more than \$400 million in revenue in 2002, will deploy the ImageTracs in two of its large scanning centers. According to SourceCorp spokesperson Lon Baugh, the scanners will replace legacy machines on an application-by-application basis. "These scanners were purchased with some specific high-volume accounts in mind," Baugh told *DIR*. "Gradually, we will move each of those accounts onto the ImageTracs."

The scanners were purchased to work in conjunction with an enterprise-wide *FormWare* application SourceCorp purchased last fall. "We are looking forward to leveraging the high-volume capabilities of the ImageTracs, in conjunction with the automatic recognition technology in *FormWare*," said Baugh. "Over the next few years, we expect to be able to increase our image processing volume at a much faster rate than our labor costs. We expect these scanners to make a significant contribution to our bottom line by 2004."

The \$3.3 million represents \$1 million more hardware revenue than Captiva recognized in all of 2002. And, more than half of Captiva's 2002 hardware revenue came in the fourth quarter. "We started selling scanners in the second quarter of 2001, and it took a while to develop a pipeline," Bish told *DIR*.

For more information: **Captiva**, San Diego, CA, PH (858) 320-1000; **SourceCorp**, Dallas, TX, PH (214) 740-6500.

need for painful and costly rescanning.

Based on this strength, Kofax expects to sell some 8,000 seats of VRS in 2003. This represents some significant adoption for a product that was based on the fairly revolutionary concept of grayscale thresholding three years ago when it was introduced. Yes, VRS represents a rare breed in today's technology market—a successful new product.

Coupled with the success of the Ascent Capture line (introduced a few years prior to VRS), Kofax has managed to stay on top in the document capture space by evolving its technology to fill unmet market needs. In fact, the company's original product line, its controller boards to enable scanning from the PC platform, was also a fairly revolutionary concept in its time. Kofax continues to prove that successful products are conceived not in the lab, but on the streets. Over the years, at least partially through the help of its strong reseller channel, Kofax has done a great job in keeping its ear to the street.

For more information: **Kofax**, Irvine, CA, PH (949) 727-1733, www.kofax.com.

InfoTrends: Distributed Scanning Has Arrived

The fastest growth is in the slower models. This is the case in the production document scanner market, according to **InfoTrends Research Group**. InfoTrends is currently preparing its latest *Document Imaging Scanner Forecast and Analysis* based on sales numbers from 2002. "The production scanning market gets healthier as you move downstream," explained Susan Moyse, lead analyst for document scanners at InfoTrends. "There is a definite trend toward distributed scanning, which is driving sales of lower-speed models."

Moyse pointed to a much publicized **Federal Express** installation a year-and-a-half ago as a prime example of where the market is headed. "Before moving to a distributed environment, FedEx utilized a handful of high-volume scanners in a centralized location," Moyse said. "Now FedEx has low- to midvolume scanners installed at some 1,200 locations. These types of sales are driving the market."

Moyse expects her new report will be available by the **AIIM** show in early April. She shared with us some of her preliminary numbers. "The high-end of the market, which we define as scanners rated at 60 ppm and up, and priced at more than \$30,000, is not growing at all," said Moyse. "In fact, we expect it

to start declining soon."

InfoTrends is predicting the high-volume segment will decline 3% in terms of units sold and 10% in terms of revenue on a compounded annual basis from 2002 through 2007. "I would not be surprised if the actual decline is more aggressive," Moyse told *DIR*. "Mid-range scanners are now being introduced that are priced under \$30,000 and include a lot of the functionality formerly restricted to high-end models. This includes speeds of close to 90 ppm."

Moyse added that buying several lower-volume scanners gives users flexibility and redundancy that is missing with the purchase of a single high-volume machine. "With multiple scanners, it's possible to have one set up just for color scans, for example, while the rest handle black-and-white images that might be the majority of scans," she said.

Moyse predicts the mid-volume production market, which is defined as scanners priced from \$12,000-\$39,000, with rated at speeds of approximately 42 to 85 ppm, will also be relatively flat in the next few years. "Through 2007 we have predicted a CAGR of 2% in terms of units sold and a compound annual decrease in revenue of 2%," she said. "Of course, this market has been skewed since **Kodak** introduced the 3500 in 1998 and almost doubled the segment's size overnight. The fact that it has been able to avoid backsliding since that spike is pretty remarkable," said Moyse.

The real growth in the document scanning market starts in the low-volume production segment. InfoTrends defines this as scanners priced between \$6,000 and \$12,000 and rated between 36 and 50 ppm. **Fujitsu** has traditionally ruled this space, but last year Kodak introduced a new model here [see <u>DIR</u> 6/21/02]. "From 2002-2007, we've predicted an 18% CAGR in terms of units sold and a 9% CAGR in revenue for this segment," said Moyse. "That is based on the current economic situation. If IT budgets get healthier, we expect that growth to be even higher."

InfoTrends also is predicting some healthy growth for the departmental and workgroup scanning segments. Departmental scanners are rated between 20 and 36 ppm and priced at \$2,000-\$6,000. Workgroup scanners are rated between 10 and 20 ppm and priced at \$500-\$2,000. In terms of units sold, InfoTrends has predicted CAGRs of 27% and 37% for the departmental and workgroup segments, respectively, through 2007.

According to Moyse, the movement toward distributed scanning has definitely begun. "The Internet, network backbones, and capture

applications are all in place to make distributed scanning happen," she explained. "There is a significant cost savings that can be realized by businesses not having to ship or fax all their documents to a centralized location for scanning."

For more information: **InfoTrends Research Group**, smoyse@infotrends-rgi.com.

Capture Specialist Acquires Electronic Discovery Vendor

DocuLex's recent acquisition of **Advocate Solutions** is an attempt to corner the market on document capture in the legal space. The acquisition combines Doculex's legacy line of image capture software with Advocate's *Discovery Cracker* line for capturing electronic legal documents. "We've created the first one-stop shop for capturing legal documents," explained Carl Strang III, president and CEO of DocuLex. "Any documentation that has to be captured by a law firm or a service bureau can now be managed with our software."

Doculex boasts some 600 customers in the legal space. "The legal paper capture market continues to grow," Strang told *DIR*. "However, the capture of electronic documents is growing at a much faster pace. Documents that used to be printed out and captured are now being captured before they are printed. This includes e-mails, and think of how many e-mails you generate compared to paper documents."

According to Rick Weber, president and CEO of Advocate, his company's software was used to capture some 50 million documents in 2002. "Our software was used in all the big cases involving companies like **Enron**, **Microsoft**, and **Arthur Andersen**," he told *DIR*. "If a document is printed on paper, there is a good chance there are 10 to 20 electronic versions of it floating around. Our software is used to capture and create meta data for all relevant case information kept on hard drives, back-up servers, laptops, etc."

Advocate, which was founded three years ago, had approximately a dozen joint installations with Doculex prior to the acquisition. Advocate's sixperson, Chicago-based staff will be retained by DocuLex. DocuLex is a six-year-old company with approximately 30 employees.

According to Strang, growth in the legal capture space is currently being driven by two things: the

downstream movement of electronic discovery processes and an increased interest in archiving. "It used to be, only the largest, high-dollar cases leveraged electronic document images, but we are now seeing smaller cases being automated as well," Strang told *DIR*. "Also, many corporations are starting to archive their legal documents as a safety net—in anticipation that there could be legal action in the future."

Doculex offers both TIFF and PDF output. "TIFFs are typically used in the discovery process, while PDFs are more popular for archiving," David Bailey, VP of sales and technical development for DocuLex, told *DIR*. "Our software can export images to leading content and document management programs to make search and retrieval easy for the end user."

For more information: **DocuLex**, Winter Haven, FL, PH (863) 297-3691.

Scan-Optics Launches Service Bureau

If you can't beat 'um, join 'um. This seems to be the logic behind scanner manufacturer **Scan-Optics'** recent launch of a service bureau initiative. "As we went to our customer base trying to sell scanner upgrades, we found the single biggest reason they had for not buying new scanners was that they were outsourcing," Joe Crouch, Scan-Optics' VP of manufacturing and business process outsourcing services, told *DIR*. "As I considered the situation, I realized we have the facility, the equipment, and the expertise to be a service bureau ourselves. It was logical for us to make the leap into this business."

It was also logical in terms of Scan-Optics' evolution as a company. Since acquiring software vendor **Southern Computer Systems** and the hardware services division of **Access Services** in 1998, Scan-Optics has been busy diversifying its sources of income. But that doesn't mean it has completely forgotten its manufacturing roots. One of the selling points of its service bureau is that it will be governed by the company's ISO 9001 processes.

"I look at a service bureau as a manufacturing environment with the scanned image being the finished product," Crouch told *DIR*. "A document moves through a process just like a product being manufactured would. ISO 9001 provides a framework for auditing our level and quality of output."

To get things started, Scan-Optics set up four of its scanners (two 8000s and two 9000s) in its Manchester, CT manufacturing facility. "It didn't take much upfront investment," said Crouch. "We have plenty of room. Also, we take-in 8000s on trades when we do upgrades, and for the 9000s, it was just a matter of capitalizing them. Initially, the service bureau will be staffed with our existing employees."

When we spoke with Crouch last month, Scan-Optics was soliciting customers. "We've done a couple of small back-file conversions, but have not signed up any recurring revenue producers yet," he told DIR. "However, we are fairly close on four or five deals."

Crouch added that he did not see much conflict with Scan-Optics' scanner customer base. "Service bureaus are not a big market for us, and the ones we have seem to be fairly specialized," he said. "For example, we have a legal service bureau customer and another that specializes in processing marketing materials like all-star ballots. We plan to offer much more generalized services."

For more information: **Scan-Optics**, Manchester, CT, PH (860) 645-7878. ■

Color Compression Still A Developing Market

For the past couple years, color capabilities have been the dominant topic regarding document imaging scanners. Almost every vendor now offers a color document scanner, even if end users are not lining up to demand them. In a recent conversation with a Kofax executive, he estimated that between 15% and 20% of all scans today are being done in color. Even this figure seemed a bit high to us.

Of course, the fact that most OCR programs only work on black-and-white images has not been a big boost to color adoption. The consensus has always been that when useful color imaging applications start appearing, color scanning will be adopted en masse. Apparently, the aesthetic benefit of viewing color is not considered a killer app—at least in its current manifestation. A lot of this has to do with the fact that the document imaging industry hasn't come up with an effective and widely accepted format for storing and retrieving color images.

TIFF is the de facto black-and-white standard, but color TIFFs are often too large to work with efficiently. So far, JPEG has proven the de facto color image file format. However, JPEGs do not handle text particularly well, which can be a huge

issue when dealing with business documents. There are a handful of vendors who have introduced file formats that address these compression and clarity issues. However, end users are skittish about adopting proprietary file formats that could become obsolete if a developer decides to drop support for them.

German Developer Embraces JPEG 2000,

Algo Vision LuraTech is the developer of one of these proprietary formats—the LuraDocument. LuraDocument uses mixed raster content (MRC) techniques to separate text from graphics in an image. It then compresses each element separately, applying lossless compression to the text to ensure integrity and wavelet compression to the graphics to minimize file sizes.

"In some cases, the advantages of using LuraDocument over JPEG or TIFF are so great, the customer ends up not caring that it is a proprietary format," Carsten Heiermann, managing director of Algo Vision LuraTech, told DIR. "However, everyone at least brings up the proprietary issue."

Fortunately, Algo Vision LuraTech has experience in dealing with that issue. The company has another compression line called LuraWave, which is based on wavelet technology. Wavelet is the type of compression used in the JPEG 2000 standard. "A couple years ago we introduced a version of LuraWave that produces JPEG 2000 files," Heiermann said. "That way, if customers want to use LuraWave to create a standard file format, they have that option. We've found that many customers, who have closed user groups, have stuck with the proprietary LuraWave format. Because it is not a standard, it operates with a reduced overhead."

In a deja vu [excuse the pun] of this effort, this summer Algo Vision LuraTech plans to release a version of LuraDocument that can be used to produce JPEG 2000, Part 6 files. JPEG 2000, Part 6 is the document imaging-centric version of JPEG 2000 that, like LuraDocument, also employs MRCtype technology [see DIR 10/4/01]. "JPEG 2000, Part 6 is in its final draft," Heiermann told DIR. "From a technology standpoint, it is set. By early June, we expect to start working with existing customers on converting files to the JPM format that is embraced by JPEG 2000, Part 6. By July, we should have a JPM compression product for general availability."

Momentum Growing After A Slow Start

Currently, LuraDocument's main competition comes from LizardTech's DjVu format, which also employs MRC-like compression technology. "There have been several vendors, including **Xerox**, talking about advanced color document image compression formats," Heiermann told *DIR*. "However, until now, the only competition we have seen on the market has been DjVu."

Neither Algo Vision LuraTech nor LizardTech appear to be in that great of shape financially, which may lead to some of the concerns over their proprietary technology. Over the past couple years, LizardTech has gone through a series of layoffs. Algo Vision LuraTech is a subsidiary of the \$50-million **Algo Vision Group**, which has seen its stock drop precariously during the dotcom crash. After reaching a high of more than \$30 per share in 1999, as of last week, it was trading at less than \$.15 per share on the European market.

However, according to Heiermann, LuraDocument's time may finally be arriving. "When LuraDocument was introduced a few years back, only a handful of specialized scanners could generate color images," he said. "As more color scanning technology is introduced, momentum for color archiving is increasing. In 2002, sales of LuraDocument doubled, and I expect them to double again this year."

LuraDocument's largest user is a German utility company, which according to Heiermann, has archived some 30 million LuraDocument files. LuraDocument also has users in the financial services, insurance, and historical archiving markets. "Often times, our technology is integrated with an existing black-and-white archiving system,"

Heiermann told *DIR*. "We've found most of our success comes from partnering with scanner, workflow, and imaging system vendors who are good at integrating our technology into existing applications."

Some of Algo Vision LuraTech's LuraDocument partners include **Canon**, **IXOS** and **Easy Software**. The company has a North American office in Redwood City, CA, that is focused on forming partnerships.

Algo Vision LuraTech also recently introduced a couple of inexpensive end-user targeted packages that were displayed at the recent **CeBIT** show in Germany. "These packages are designed to be run in conjunction with *Outlook* or *Exchange Server*," explained Heiermann. "We recently had a Japanese customer buy one as a replacement for faxing among its distributed offices. The customer installed small scanners, and its employees now attach LuraDocument files to e-mails."

Heiermann also views digital mailroom applications as holding some significant potential for LuraDocument. "I recently discussed the concept with **Captiva** at one of their partner conferences," Heiermann told *DIR*. "Color is an important aspect on many pieces of paper mail. Our technology offers a way to create manageable and high-quality color images that could be key to the success of applications for digitizing incoming mail."

For more information: **Algo Vision LuraTech**, Berlin, Germany, PH 49-30-394050-0; U.S. Office, Redwood City, CA, PH (650) 326-8829.

Subscription Order Form for RMG Enterprises, Inc.	
5237 Karrington Drive • Gibsonia, PA 15044 • Phone (724) 449-7577 • Fax (412) 291-1352 • http://www.documentimagingreport.com	
Document Imaging Report Business Trends on Converting Paper Processes to Electronic Format	☐ 1 year (24 issues) @ \$597 ☐ 2 years (48 issues) @ \$1097 OUR GUARANTEE TO YOU
Mass Storage News Opportunities and Trends in Data Storage and Retri	ieval 1 year (24 issues) @ \$597 2 years (48 issues) @ \$1097 If you are not completely satisfied, we will refund your subscription cost for all remaining unserved issues.
SCAN: The DATA CAPTURE Report Premier Management & Marketing Newsletter of Automatic Data Capture 1 1 year (24 issues) @ \$597 2 years (48 issues) @ \$1097	
NameTitle Company	Please □ enter / □ renew the following subscription. (Add \$33 on all orders outside of Canada and the United States.)
Street	☐ Payment Enclosed (Remit to: RMG Enterprises, Inc., 5237 Karrington Drive, Gibsonia, PA 15044)
City State Zip Phone () Fax ()	☐ Charge My Credit Card (Charge will appear as RMG Enterprises.)AmExVisaMCDiscover
E-Mail	card number expire date ☐ Bill My Organization (Purchase order # optional.)