Document Imaging Report

Business Trends on Converting Paper Processes to Electronic Format

April 4, 2003

DOCUMENTUM LAUNCHES RECORDS APPLICATION

Documentum has announced the first version of its Enterprise Records Management application. It is designed to work in conjunction with an enterprise content management (ECM) environment and automate the enforcement of archive retention policies. The application was built with technology Documentum acquired from records management software specialist **TrueArc** late last year [*see DIR 11/15/02*].

"TrueArc had a narrow market focus and sold its technology mainly to the government," Lubor Ptacek, Documentum's director of product marketing, told *DIR*. "In the wake of new regulations like Sarbanes-Oxley and HIPAA, we think this technology can be applied in almost any market."

Early interest has come from public companies affected by Sarbanes-Oxley, as well as financial services organizations concerned with the **SEC's** rule 17a-4 for e-mail archiving. In conjunction with the application, Documentum has introduced e-mail archiving that leverages intelligent categorization .

* * * *

Board Targets Software Vendors

Fresh off the momentum of **Microsystems Technologies'** announcement it had joined the board of the **TWAIN Working Group**, Chair Pam Doyle is hoping to recruit other software vendors at next week's **AIIM** show. "We are looking to create a balance on the board between hardware and software vendors," Doyle told *DIR*. "If there are things software vendors want us to add to the spec, we want to know about them."

For more information: Pam Doyle, **Fujitsu Imaging Products Group**, PH (727) 772-6709, www.twain.org. DIR

Captiva Showcasing Digital Mailroom Prototype At AIIM

Captiva Software will be showing a prototype of its digital mailroom solution at **AIIM 2003**, set to run next week, April 7-9, at the **Jacob K. Javits Convention Center** in New York City. The system will feature a rules-based infrastructure built on top of Captiva's *InputAccel* document capture architecture. It is designed to sort any type of document that comes through a mailroom, as well as incoming e-mail.

"The biggest benefit to our digital mailroom system is that it will reduce manual sorting," H Trimble, product manager for the digital mailroom solution, told *DIR*. "Typically, six people might have to touch a piece of paper mail before it is delivered to the correct person within an enterprise. Our digital mailroom system can reduce that to two people. This will cut down on both the time it takes for a document to get to its final destination and the number of delivery errors that are made. Also, if an error is made, because the document has been digitized, it's much easier to correct."

Captiva expects to begin shipping its digital mailroom software by the end of August. "We expect to have some installations by that time as well," said Trimble. "We have been talking with key prospects since the end of last year."

Most of those prospects already use either *InputAccel* or Captiva's *FormWare* forms processing solution. "About 10% of our high-volume customers have expressed serious interest in our digital mailroom product," Trimble told *DIR*. "These customers have already purchased $250,000 systems from us. Our initial version of the application will be targeted at businesses processing between 10,000 and 100,000 pieces of mail per day. We can go even higher by implementing multiple systems."

Although its price has not been finalized, Trimble estimated the digital mailroom application will start at $150,000. "That doesn't include any hardware," he said. "Right now, you could build your own digital mailroom system using *InputAccel*. However, with our application, a

lot of the work will be done for you. This includes GUI interfaces that can be used to define document types and set up rules for routing documents to the appropriate destinations once they've been identified."

In addition to employing Captiva's own structured and semi-structured forms recognition technology to classify forms, the company has also licensed intelligent text classification software from **Mohomine, Inc**. "Completely unstructured documents and e-mails will be run through the Mohomine software," said Trimble. "It is a learning-based program that, compared to other text-base classification products, requires a very small sample set before producing reasonable results. It is also language-independent and works well on OCR text that is often not 100% accurate."

> **"Typically, six people might have to touch a piece of paper mail before it is delivered to the correct person within an enterprise. Our digital mailroom system can reduce that to two people."**
>
> **H Trimble, Captiva Software**

To support its legacy software lines, Captiva has already written output connections to several leading ECM, workflow, and forms processing systems. "For our digital mailroom application, we are looking to increase the number of systems we output to," said Trimble. "We are looking at ERP, CRM, and other types of e-business applications. We also offer generic exporters that can be customized to link to almost any application."

As far as image formats go, Captiva is offering a flexible dual-stream output with its digital mailroom application. This means users can opt to send a black-and-white image to an OCR system for processing and a color image of that same document to a customer service application for viewing. "For our color output, we are considering several forms of JPEG, including lossless versions that can ensure data accuracy," Trimble said. "PDF output is also an option."

According to Trimble, installing a digital mailroom application could increase by five times the number of documents being scanned by a corporation that currently uses imaging as a line of business application. "That doesn't even include e-mails," he said. "However, the biggest cost savings will come from the paper mail part of the system, as e-mails are already digital and thus easier to manage."

Trimble said that one customer Captiva is working with has 700 different types of documents that it is manually sorting in its mailroom. "There is a certain amount of sorting that can be done on the envelope level," he told *DIR*. "We are counting on our partners to provide that. Our digital

mailroom application takes over after the documents have been extracted from the envelopes."

At the upcoming AIIM show, Captiva will be demonstrating its digital mailroom application using an **OPEX** envelope sorter and an **IBML** scanner. Captiva will also be giving away a Segway Human Transporter. "One of the applications being considered for the Segway is mail delivery," explained Trimble. "So that's the tie in."

All the fun will we be taking place at booth 1635.

For more information: **Captiva Software Corporation**, San Diego, CA, PH (858) 320-1000. ▣

Some Swear By Centralized Scanning

The distributed scanning market may be on the rise, but centralized applications are far from dead. This was the consensus we gathered from talking with end users at the recent **Scan-Optics** User Group Conference held at the **Mohegan Sun Resort** in Connecticut. *DIR* editor Ralph Gammon keynoted the event.

Scan-Optics, which manufactures high-speed scanners and develops image capture and document management software to go with them, offered three different user tracks: government, insurance, and general business. *DIR* caught up with representatives from each one.

Control—Key Benefit Of Centralized App

"We considered moving to a distributed scanning environment," said Jignesh Patel, imaging manager at **Frito-Lay**. "However, we decided training a distributed staff would be both expensive and difficult. We like the control we get in a centralized application."

Frito-Lay relies on a Scan-Optics 9000 and three 8000s to process some 230,000 documents per day. The bulk of those documents are what the company refers to as charge sales invoices, which are shipped to the company's Plano, TX headquarters from some 50 regional distribution centers. "Charge sales invoices are copies of invoices left by our delivery drivers at the sites of large customers, like supermarket chains that stock our products," explained Patel. "These companies have accounts with Frito-Lay and the invoices help us manage them."

The charge sales invoices have been designed to be scan friendly. They feature one line that contains all the data that needs to be captured. Because of this design, the Scan-Optics 9000 is able to perform in-line OCR on the documents as they are being scanned. "We've tried doing off-line OCR on a server, but we found our accuracy rates suffered considerably," Patel told *DIR*.

Frito-Lay has been a Scan-Optics customer since 1989 when Patel spearheaded a movement to transition the storage and retrieval of charge sales invoices from a paper-based to a microfilm-based system. "Our initial ROI was achieved in 20 days," he boasted.

Patel eventually expanded the system to include the charge sales invoices from **PepsiCo**, Frito-Lay's parent company. Recently, he has been adding documents from departments like accounts payable and human resources into the imaging mix. Patel estimates the volume of documents being scanned by Frito-Lay is increasing 30% annually.

Although Patel has dismissed going to a distributed environment, he continues to improve his system in other ways. Frito-Lay recently purchased a new 9000M, the most recent generation of Scan-Optics' 9000 series. Frito-Lay also recently upgraded its image storage from an optical jukebox system to a magnetic hard drive solution. "Aside from improving our retrieval time, the magnetic solution is much less expensive to support," said Patel. "Optical jukebox management software is very much a niche technology, and we found we were paying a premium for specialized software. The NAS management tools, which we use in our magnetic environment, are much more reasonable."

Core Focus Of Employees A Concern

The imaging systems manager at a big name property and casualty insurance company shares Patel's opinion of distributed scanning operations. [*The individual asked not to be named because of company policy.*] The manager runs an application to process Workers' Compensation claims.

"Processing Workers' Comp claims is complicated," he told *DIR*. "Workers' Comp is a state run program, and each state has different rules on how to administer its claims. We have regional offices in each state to service our Workers' Comp program. The claims are sent to those offices and then forwarded to our corporate headquarters where they are scanned. The images are often used in the adjudication process to determine how much we should pay out."

According to this executive, one of the primary

selling points of the imaging system was getting the claims documents out of the hands of the employees at the regional offices. "This frees them up to do things like visit work sites to determine the validity of a claim," he told *DIR*. "We don't want these people tied up in the office scanning documents. On the same day those claims documents reach the regional office, they are boxed up and forwarded to the central office for scanning."

The insurance company uses two Scan-Optics 8000s to scan approximately 80,000 pieces of paper per day, which represents approximately 15,000 claims.

> **"We decided training a distributed staff would be both expensive and difficult. We like the control we get in a centralized environment."**
>
> **Jignesh Patel, Frito-Lay**

E-Returns Not Reducing Volumes For Tax Shops

From the government track, we talked with organizations involved in a pair of tax processing applications: the **Louisiana Department of Revenue** (**LADOR**) and **Northrop Grumman**, which runs the SCRIPS program for the **IRS**. In the tax processing arena, the threat to centralized scanning does not come so much from distributed applications, but from electronic filing.

However, while the number of electronic filings is definitely on the rise, it seems they are more than being offset by the increasing breadth of tax documents being scanned. LADOR, for instance, is responsible for the collection of 44 different taxes. The bulk of its paper forms are generated by just three of those taxes: individual income tax, sales tax, and withheld income tax filings. LADOR already has processes in place that automate the processing of those forms. However, the organization continues to expand its imaging efforts to include a wider variety of forms every year. This increased automation is in part being driven by steady staff cutbacks that have affected the Louisiana state government over the past couple years.

LADOR also continues to look for ways to improve the processing of the forms it already images. This includes continuing education of tax preparers on how to create scan-friendly forms and the institution of a program that uses special "scan-lines" to improve the automated read rates of individual tax forms done by preparers. LADOR also recently instituted a 2-D bar code pilot program targeted at tax preparers.

LADOR's fairly advanced imaging system includes

three Scan-Optics 9000s, three 8000s and an **IBML** ImageTrac. LADOR utilizes **IBM's** *ImagePlus* storage and retrieval software.

The SCRIPS application is fairly indicative of the IRS' acknowledgement that paper tax forms will not be going away any time soon. Originally launched as a temporary initiative in 1993, last fall the IRS signed the contract for SCRIPS III with Northrop Grumman. The SCRIPS system processes more than 100 million forms annually, mostly 1099 and Federal tax deposit forms sent in by small businesses. It has also been used to process 1040-EZ forms in the past.

The IRS recently signed a deal to purchase 12 new 9000Ms from Scan-Optics, two of which have been delivered so far. The rest are scheduled for delivery before the end of the year. A source involved with SCRIPS speculated that the increased functionality of the 9000M, including its ability to do double-sided scanning, could indicate the IRS is looking to increase the breadth of tax documents handled by SCRIPS.

Digital Mailroom Could Drive High-Volume Rebound

Centralized, high-volume scanning applications are certainly not dead. The numbers by **InfoTrends Research Group** that were published in our last issue actually validate this. While InfoTrends did not forecast growth for the high-volume scanning segment, it certainly didn't predict a huge drop off. Granted, the Scan-Optics user group may be a bit biased, but their reasons for choosing centralized over distributed capture seem valid and well thought out. Document imaging is still a niche application, and it takes a fairly unique skill set to manage it effectively. Sometimes those skills are most effectively focused in a centralized environment.

In addition, the increasing breadth of documents being handled in these centralized applications is indicative of another trend that could provide a boost to the high-end scanner market. That is the digital mail room strategy, which we discussed in our last issue and explore further in this issue [*see story on page 1*]. If and when the concept of the digital mail room starts to deliver on some of its potential, look for a renaissance of sorts in the high-volume scanner market.

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

Visioneer Releases Strobe Toolkit

Since its launch five years ago, **Visioneer's** Strobe scanner line has played on the peripheries of the traditional document imaging market. A 6 ppm sheet-fed model with a footprint that covers just a small piece of a desktop, the Strobe is an inexpensive and convenient way to capture documents at an individual workstation. Traditionally, it has been packaged with **ScanSoft's** *PaperPort* software and marketed as a self-contained system.

However, as the vendors of production document imaging software attempt to expand their market to include ad hoc input, Visioneer is meeting them halfway. With the latest Strobe release, the XP 200, Visioneer has made a toolkit available. The toolkit, which is available directly from Visioneer, enables both imaging software vendors and end users to write drivers directly from their applications to the Strobe. It lists for $3,499, which includes two XP 200 scanners.

"The XP 200 can be connected to document management applications in three ways," said Murray Dennis, president and CEO of Visioneer. "It includes a TWAIN/WIA driver. There have also been links written that can move images from *PaperPort* into other document management systems. Developing a direct connection with our toolkit, of course, is going to be the fastest and most efficient way to connect. However, working with the toolkit requires a certain level of technical expertise and monetary investment. Some combination of speed and how many documents a user is scanning per day will probably determine the connection they want to employ."

Creating a capture toolkit for the XP 200 required a complete rewrite of the Strobe drivers. "A few years ago, we had a bank that wanted us to connect the Strobe with its imaging application," Dennis told *DIR*. "The bank had a need for its tellers to scan invoices. For strategic purposes, we thought we'd give it a shot. It turns out, we had to completely rewrite the whole scanning code just to integrate with the bank's application."

As opportunities for integration with other applications arose, Visioneer realized it needed a long-term strategy. "We spent a year and a half developing the XP 200," said Dennis. "That included re-designing our architecture to uncouple our scanning drivers from the *PaperPort* application."

The XP 200 began shipping last month. It also includes an upgraded USB connection from the legacy line it is replacing. "The XP 200 is a replacement for our self-powered model aimed at the corporate user," Dennis said. "Last fall, we introduced the XP 100, which we view as complementary to the XP 200. It also has a USB connection, but it is USB powered as well. So it's a little smaller, more mobile, and also scans a little slower. It's targeted at what I call the mobile sales professional." (The XP 100 lists for $199 and the XP 200 for $299.)

According to Dennis, the number of corporate-user Strobes being shipped annually topped out at 60,000 units. "When we launched the XP 100, we couldn't keep it on the shelf. It opened up a new market for us. Combined, we expect the XP 100 and XP 200 to ship around 100,000 units in a year. And that doesn't include potential gains that our toolkit will bring us."

Dennis estimated that the addition of the toolkit could double the number of Strobes shipped to the corporate market. "We are trying to advance document imaging out of the stage of what I call a utility application," Dennis told *DIR*. "We want it to become part of the enterprise, like an e-mail application. To do that, imaging has to be unobtrusive, easy-to-use, and cheap enough to sit on every desktop."

Dennis told *DIR* he hopes by next week's **AIIM** show to have announcements from two high-profile imaging software vendors embracing the Strobe toolkit. "Software vendors are facing the same issues as many higher volume scanner vendors," said Dennis. "The traditional production scanner segments are not growing. To grow their businesses, software vendors have to extend their applications beyond traditional production scanning environments. They are very excited about leveraging our scanners to reach the desktop."

For more information: **Visioneer**, Pleasanton, CA, PH (925) 251-6350. ▣

Former PARC Researcher Introduces Revolutionary Book Scanner

The Windows user interface, the Ethernet, laser printing… **Xerox PARC** is famous for the number of cutting-edge inventions conceived by its researchers. Unfortunately for Xerox, many of those were allowed to walk out the door. It took other companies to successfully market them as products.

Lofti Belkhir, the CEO of **Kirtas Technologies**,

thinks he has the latest PARC innovation destined for success in the hands of another company. Belkhir, a former PARC researcher, co-founded Kirtas in 2001. At **AIIM 2003**, he will show a revolutionary book scanner that leverages automatic page turning technology—technology he helped develop while at PARC. Kirtas is advertising the scanner as capable of producing 1200 color images per hour with minimal manual intervention.

"A product like ours could blow the market for bound book scanning wide open," Belkhir told *DIR*. "Today most book scanning is done in black-and-white, and it's very labor intensive because someone has to manually turn the pages. We have eliminated any performance issues associated with color. As far as manual labor goes, basically all a user needs to do is load the book and press start."
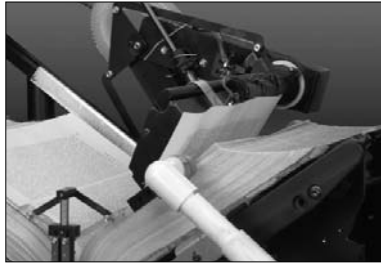

A look at the revolutionary page-turning apparatus on Kirtas Technologies' APT 1200.

Kirtas will be showing a prototype of its must-see BookScan APT 1200 in booth 2072. "The machine shown at AIIM will be slightly larger than the units we will begin shipping in July," Belkhir told *DIR*. "The APT 1200 is basically a tabletop scanner. We are currently accepting orders and offering 0% financing on the first 10 machines ordered."

With a list of $125,000, the APT 1200 is considerably more expensive than competitive book scanners. However, according to Belkhir, productivity gains will more than offset the extra cost. "Our main market for these scanners is service bureaus," Belkhir told *DIR*. "Currently, the lowest rate that we've seen for scanning books and bound volumes is between $.15 and $.25 per page, for black-and-white images. Based on that rate, we think our scanner will pay for itself in four months through reduced labor costs and increased throughput. That doesn't even take into account the fact that our customers can offer color scans without incurring any additional production costs. And, the going rate for color scans is as high as $3 per page."

According to Belkhir, the market for scanning bound volumes has been limited so far by the cost and labor associated with it. "Think of all the important documents stored in bound volumes," he said. "Obviously, libraries have a ton of them. There are also municipalities that have bound volumes of birth certificates, marriage licenses, and property information. In addition, law firms, insurance companies, healthcare businesses, and biotech firms all have their own volumes. We think our product will drive the cost of scanning books so low, that

people will be able to scan a lot of material they only wish they could today."

The first version of the APT 1200 is advertised to work on books .5- to 4-in. thick. The scanner can output TIF or JPEG images with resolution between 300 and 600 dpi, depending on the page size. It can scan pages as small as 5 x 7 and as large as 10 x 13.

When he left PARC, Belkhir negotiated an exclusive, royalty-based license for some of the technology used in the APT 1200. According to Belkhir, Xerox cancelled its internal development of advanced book scanning during a cost-cutting purge of non-core products in 2001. Ironically, Xerox is now among the companies considering licensing the APT from Kirtas. But that's okay. I'm sure Xerox uses Windows and the Ethernet as well.

For more information: **Kirtas Technologies**, Rochester, NY, PH (585) 924-2420. ▣

A Pair Of Micrographics Solutions To Look For At AIIM

In all the buzz about ECM, let's not forget that **AIIM** was once called the **National Micrographics Association**. Although the use of microfilm has tapered off in the wake of digital imaging applications, there are still shelves full of microfilmed documents that have not been digitized, as well as new documents being microfilmed everyday for archival purposes. Technology that addresses both these areas will be on display at AIIM 2003.

TMSSequoia, an image processing software developer, will be showing its *Prizm Gray* image enhancement application. *Prizm Gray* is targeted at high-volume, film-to-digital conversion operations. It is designed to create high-quality, bi-tonal digital images by performing thresholding on grayscale renditions of microfilm images.

"While microfilmed images are generally bi-tonal, converting them to grayscale for thresholding before digitizing them helps ensure legibility," explained Elspeth Bloodgood, product manager at TMSSequoia.

"The quality of microfilm images can be inconsistent because of variables in the filming

process," added Don Jones, TMS' VP of sales. "Some film is low quality. Some early film machines had problems with variable light sources. There are issues involved with the chemical mix used to develop film. And how long and in what manner film has been stored can affect its quality. These variables lend themselves to inconsistent and poor images. Working with a grayscale rendering can help improve those images for digitizing."

Prizm Gray is designed to work on a server after an image has been scanned. The application has already been installed in **Mekel** and **Zeutschel** scanning environments, and TMS is currently in conversations with **SunRise**. "We've found that most high-speed scanners do some image enhancements, but not nearly the level our algorithms can produce," said Jones. "Also, because we process images downstream, our application doesn't slow down the scanners."

Bloodgood added that one of the unique features of *Prizm Gray* is its ability to handle the cropping challenges presented by scanning filmed images. "There is almost always background to be removed from filmed images," she said. "Users like the flexibility we offer for dealing with this, including some preprogrammed choices for common cropping scenarios."

Prizm Gray lists for $7,500 a seat, which includes both a job manager and an exception handling module. "With *Prizm Gray*, the user has the ability to analyze images, develop a test set, and then set the mark as to what will be considered exception images," Jones told *DIR*.

When we spoke with TMS last month, *Prizm Gray* was being run at a couple of large federal government imaging shops, while in the process of being evaluated by several service bureaus.

Silas Integrates With Archive Writer
Our news in the archiving space also involves an application that is very attractive to service bureaus. That is **Silas Technologies'** *Reveille* application, which tracks the diagnostics associated with scanning applications. Silas recently announced integration of its software with **Kodak's** Archive Writer platform. The Archive Writer films digital images to preserve them for long-term storage.

"Our technology is especially attractive to service bureaus because it automatically tracks the statistics associated with multiple jobs," said Brian DeWyer, director, document processing at Silas. "It gives them immediate feedback on scan volumes, which reduces administrative costs and enables them to get their bills out quickly."

According to DeWyer, Silas validated the need for integration with Kodak's Archive Writer through conversations with service bureaus at Kodak's recent Breakaway partner conference. "The service bureaus we talked with are consistently running at least two Archive Writers," he told *DIR*. "So, from a volume standpoint, I think the demand is there."

According to Eric Bruening, worldwide marketing manager for Kodak's Imagelink products, 20-35% of the Archive Writer install base is in service bureaus. *Reveille* supports both the 4800, which was introduced in 1997, and the i9600, which began shipping last fall. An Archive Writer platform running *Reveille* will be in operation in Kodak's booth (1722) at AIIM.

For more information: **TMSSequoia**, Stillwater, OK, PH (405) 377-0880; **Silas Technologies**, Winston-Salem, NC, PH (336) 748-5605; **Kodak Imagelink**, Rochester, NY, PH (585) 726-0134, e-mail: eric.bruening@kodak.com. DIR

Former Bluebird Execs Tout Virtual Repository

IBM first began talking about it way back at **AIIM 1999** in Atlanta. At the time we scratched our heads trying to figure out just what they were trying to do—merging their DB2 database technology with document imaging. Well it turns out IBM was a pioneer in the soon-to-emerge market of enterprise content management (ECM). ECM just didn't have a name then.

When the term finally came into being the following year, like many things during the prevailing dotcom boom, it was Web-ified. *DIR*, in fact, defined ECM as the combination of Web content and document management. And, while these may be two important components, this definition leaves out a whole class of enterprise content that IBM had the foresight to embrace early on—structured content.

"Let's not forget that 90% of all useful data in a business resides in databases," Maurice Correa, CEO of **WindFire Technology**, recently told *DIR*. "When an invoice or another important document comes into an organization, what's the first thing that is done with it? All its important information is keyed into a database."

Correa doesn't discount the importance of unstructured data. In fact, WindFire has developed a complete document image management system as part of its ECM offering. However, Correa feels that many vendors who claim to play in the ECM market

have ignored the importance of structured data.

"Most end users have three separate clients to access their document repository, their ERP system, and their CRM system," he said. "The EAI market has done a great job of integrating various applications. However, integrating the information in each application is not that simple. It's very difficult to run a single search that queries all of a user's applications and returns one list of results."

According to Correa, WindFire has achieved this unified search capability with its recently announced virtual repository management (VRM) technology. "VRM is the next generation of ECM," Correa told *DIR*. "Unlike a portal, which typically queries applications separately, we can go to an SQL database, an **Oracle** database, a mainframe application, and a **FileNET** system all at the same time. We act as a layer between the client and the applications. When a change is made on the client, that change passes through our technology. This ensures all appropriate back-end information is updated."

Correa told *DIR* that only IBM and Swiss-based **Day Software** even claim to do anything similar to VRM. [*Janet Perna, IBM's General Manager, Data Management Solutions, will be delivering Tuesday morning's keynote address at next week's* **AIIM Expo.**]

It's been *DIR's* experience that most ECM vendors currently are focused on creating virtual repositories of unstructured information and haven't begun to address the structured content issue yet. "From what I know, both **Open Text** and **FileNET** want to do VRM," said Correa. "However, I think they are at least a year-and-a-half away. We are able to do it now."

Correa is not so naïve to think that the market is ready to sustain a vendor of such a fresh concept as VRM. So, WindFire has hedged its bets by developing a high-volume document image repository, which has been deployed at seven of Korea's largest banks. "We have to invent the market for VRM," said Correa. "For now, our bread-and-butter remains document imaging applications."

Correa and his partners have plenty of experience in the imaging industry. WindFire's top three executives come from **Bluebird Technologies**, a high-end document imaging software specialist that was acquired by **Open Text** two years ago [*see DIR 3/2/01*]. "When we were at Bluebird, I always thought we were attacking information management problems from the wrong angle," Correa said. "Ninety-nine percent of companies are database driven. Only a small percent care about managing their unstructured files."

WindFire introduced its image management suite in 2001. "We built it from the ground up," said Correa. "And we built it so it could be easily extended to manage structured data. Obviously, we see an opportunity for upgrading our current customer base to our entire VRM suite."

WindFire is also introducing its product line in North America and is looking for partners.

For more information: **WindFire Technology,** San Diego, CA, PH (858) 558-1970. ▣