Document Imaging Report

Business Trends on Converting Paper Processes to Electronic Format

4003 Wood Street ● Erie, PA 16509 ● PH (814) 866-2247 ● http://www.documentimagingreport.com

July 16, 2010

THIS JUST IN!

A DIVERSIFIED EMR OFFERING

Scranton, PA-based document management service bureau **Diversified Information Technologies** has launched a suite of electronic medical records (EMR) services. eChart-Rx combines backfile conversion, paper records storage, and on-demand scanning to help healthcare organizations transition from paper to EMR. Diversified is a certified scanning partner of **Allscripts** and is currently focused on forming partnerships with health information exchange (HIE) networks.

"Last October, the company I was with, Active Data Services [based in Raleigh-Durham, NC] was acquired by Diversified," said Peter Ransome, VP, healthcare, marketing, and channels, at Diversified. "The only piece Active Data Services had was backfile conversion. Once we put the two companies together and added physical records management, we've seen some tremendous acceptance by major healthcare organizations."

Hospital groups that are current Diversified customers include **Piedmont Hospital** in Atlanta, **North Shore Long Island Jewish**, and Florida-based **Holy Cross**. "At five to seven cents per page, our calculations show that scanning a year's worth of records for a single physician costs approximately $9,000," said Ransome. "If you're dealing with a seven-year retention period, you're talking $63,000 to digitize everything. By contrast, storing a paper record in our facility is something like three cents for 30 years. It's easy to see why it's more cost-effective to convert one year's worth of backfiles and keep the other six in paper storage, scanning them on an as-needed basis."

CONTINUED ON PAGE 6

The Latest and Greatest in Archiving Technology

ProStor's InfiniVault an attractive option for imaging users.

It's been a long time since I wrote anything about storage. Back in 2002-2004, with everyone trying to solve compliance problems in the wake of scandals like the one at Enron and several fines levied on large broker/dealers [*see DIR 12/20/02*], there was a run on WORM (write once read many) technology. This was big news for *DIR* because WORM had formerly been used almost exclusively in document imaging applications. As a result, document imaging users suddenly had a host of new storage options— in addition to the optical media systems that had historically been so popular in our industry.

Of course, this increased attention on WORM didn't really help optical storage. By that time, optical, which had originally become popular because its cost per gigabyte was so much less than anything else, had been surpassed by magnetic technology in price. And relying on WORM as a differentiator was no longer going to cut it. In late 2008-2009, the assets of **Plasmon**, which was pretty much the sole developer of the next generation of optical, were sold to storage distributor and service provider **Alliance Technologies** [*see DIR 1/23/09*].

While Alliance continues to sell and service optical installations for document imaging resellers and users (many of whom have standardized on the technology), the roadmap for future generations of optical is unclear at best. In other words, optical is a dying storage technology—being kept on life support by our industry.

That all said, optical has some fairly unique features that people in our industry like. First, it's affordable. It's possible to get into a UDO (ultra-density optical) jukebox system for around $10,000. Second, the discs are removable, meaning they can be put on a shelf for near-line storage and or/file back-up, which has some cost benefits over keeping everything on-line. Finally, old habits are hard to break, and a lot of people in the

document imaging market have paid their dues and know how to make optical work for them.

However, it seems that a technology has come along that will finally put optical in its grave. That is **ProStor Systems'** InfiniVault. You may have read about it in our last issue when we ran a brief stating that Fulton, MD-based service bureau and systems integrator **Quality Associates, Inc**., had signed on as a reseller of the InfiniVault. Based on ProStor's patented RDX magnetic disk technology, the InfiniVault basically offers all the benefits of an optical jukebox, while taking advantage of the faster development cycles associated with magnetic and even solid-state storage.

"We are replacing a lot of optical systems as they come up for maintenance renewals," Buzz Walker, VP of marketing at ProStor, told *DIR*. "Document imaging has been our main market for the InfiniVault, along with healthcare, which includes both EMR [electronic medical records] and diagnostic imaging applications."

What is RDX?

As we mentioned, the InfiniVault is built on ProStor's patented RDX technology. ProStor, which is based in Boulder, CO, was founded in 2004. After two years focusing on R&D, it introduced RDX in 2006.

RDX is basically disk technology encased in a special drive that makes it both durable and removable from the InfiniVault. On its own, RDX is primarily marketed as a standalone device used for back-up and in smaller archiving applications by businesses that want removable storage. "This includes people like wedding photographers, tax accountants, and others that want a high quality, removable hard drive," said Walker. "Basically, at its core, RDX uses a standard mobile hard drive. But, we don't use just any magnetic disk; we use the best disk platters the manufacturers make.

"We enclose the hard drive in a steel shock-proof case that we subject to extensive drop testing from one meter on any axis. The casing is also designed to protect against electrostatic discharge. We have firmware that enables the drive to authenticate itself to any system, so you basically have an intelligent media with a 30-year shelf life."

Walker said this shelf life is based on the roadmap for the Serial ATA technology that RDX uses to connect to computers. "We've also tested our drives at 98% relative humidity and 78-degree temperatures and determined they will last in those conditions for at least 30 years. This is a big advantage over RAID systems, for example, which may last 5-6 years."

Walker said that as magnetic disk capacity increases, so does that capacity of each RDX drive. When RDX was introduced four years ago, it offered 400 GB of storage per disk. "We're currently using 1 terabyte disks, and that should reach 2 TB by the end of the year," he said. "Part of the

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. Document Capture
2. Image Processing
3. Forms Processing/OCR/ICR
4. Enterprise Content Management
5. Records Management
6. Document Output
7. Storage

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

Vol. 20, No. 14

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

Managing Editor:
Rick Morgan
PH (814) 866-1146
rickm@scandcr.com

DIR is published 24x per year, on the 1st & 3rd Fridays of the month, by:
RMG Enterprises, Inc.
4003 Wood Street
Erie, PA 16509
PH (814) 218-6017
http://www.documentimagingreport.com

beauty of RDX is that it doesn't matter what's on the inside of the drive, they all look the same to the computers they're connected to.

"In the future we will probably utilize solid state drives (SSDs). Right now, they're too expensive and only stable for up to seven years. But, in three to five years, we expect that to have changed. Then, the price will be low enough, and the life expectancy long enough, that they'll be a good fit.

"The ability to evolve at the speed of the mainstream storage industry gives us a huge advantage over optical disk. UDO discs have been stuck at 60 GB [since 2006]. Even if that doubles in the next generation, they will only be 120 GB. Basically, UDO is obsolete technology."

Walker added that one weakness of tape storage vs. RDX is that when users upgrade the capacity of their tape cartridges, they typically need to upgrade their drives. "That's one of the hidden costs of tape," he said. "And, unless users want to keep running two sets of technologies, they end up having to migrate all their legacy data to the newer cartridges."

According to Walker, there are currently more than 125 petabytes (125,000 terabytes) of data being stored on RDX. However, most people have never heard of ProStor because RDX drives are sold through OEM agreements with vendors like **Dell**, **HP**, **IBM**, **Fujitsu**, and others. The manufacturing of RDX is outsourced to **Tandberg Data** and **Imation** who distribute the drives to the OEMs. Depending on their storage capacity, list prices for RDX drives run from approximately $150 to $600.

"We design, qualify, and test the RDX drives for compatibility, but there are no ProStor branded individual drives," Walker said. "ProStor was originally venture funded, but we've now started to generate some significant revenue from the RDX drive business. We also received a $5 million investment from Imation at the beginning of the year. They wanted to ensure RDX technology would be available for at least the next 20 years."

A near-line archiving solution

ProStor has taken some of the revenue from its RDX business and invested it in the InfiniVault. The InfiniVault can be configured with between three and 100 RDX drives and includes traditional magnetic storage/hard drive space, as well as software. MSRP for the smallest model, a unit with slots for three RDX drives and three-quarters of a terabyte of on-line disk capacity, is $10,000.

"There are three components to the InfiniVault," said Walker. "Basically, to the network, the InfiniVault looks like any drive letter. When a user logs in, he sees the list of vaults that he has permission to. He then chooses which vault to store the file in and the software takes over from there.

"Depending on the rules that have been set up, the InfiniVault can make multiple copies of files to separate RDX drives. These drives can even be in different locations for protection against disaster. Files can also be kept in the online cache for a specified amount of time—to ensure faster access during periods when files are most often accessed. The file information, or meta data, is kept on-line permanently.

"This way, when a user recalls a file, the InfiniVault immediately knows which drive to access for retrieval, or it will know if the drive is currently offline. If that's the case, an e-mail can be automatically sent to an administrator asking for that drive to be loaded."

NEW OPPORTUNITIES FOR QAI

The addition of the InfiniVault gives **Quality Associates, Inc**. (QAI) an additional line of business. "This is our first entree into back-end storage systems," said Greg Chalmers, business development executive for QAI. "Historically, we have not sold in this area because most of our customers already have their networks set up—they are using optical or another type of storage. Also, we have not really had the skill set to address storage.

"But, we do sell a lot of document imaging software and all the stuff our customers are capturing ends up on a back-end system somewhere. There is clearly some opportunity that we were not taking advantage of. The InfiniVault opens up a new market for us, and it doesn't take a doctorate in network engineering to install."

Initially, QAI will begin using the InfiniVault in-house as an alternative to DVD. "We have customers who we capture medical records for, for example, that have patients that might have a couple years between appointments. So, when their paperwork comes in, the DVD with their records might be offline, and we'll have to search for it before we can upload the file.

"With the InfiniVault, all meta data is kept online, so when the software recognizes the indexing information for a new file matches that of an older record, it will automatically add it to the older record, or at least tell us which RDX disk needs to be loaded."

For more information:
http://www.qualityassociatesinc.com/ISD_Services.shtml

There are four versions of ProStor Systems' InfiniVault available, ranging from three to 100 RDX slots and with up to 13 terabytes of on-line storage. At the high-end, the device can support up to 1 billion files.

The InfiniVault also has features like optional hardware-enforced WORM—similar to what you'd get with an optical system—encryption and compression options, and file-level duplication detection. "The software is designed to allow our customers to manage their data in a 'set it and forget it' fashion," said Walker. "They plug the InfiniVault into their network, and it looks like any NAS storage device."

A lot of the selling points that Walker made for the InfiniVault were similar to those Plasmon was making for optical technology seven years ago. He said the primary target for the device is archiving applications and explained the advantages of dedicated archive storage vs. trying to use back-up tapes for archiving. He also discussed the lower power requirements and greater durability of near-line disks like RDX vs. online RAID systems—even ones designed for archiving. "You have to look at all the economics of keeping your data for a long time," he said. "This includes the cost of replacing media, upgrading the system, the data migration, and the power consumption to keep a RAID system spinning all the time."

Unlike the standalone RDX drives, the InfiniVault carries the ProStor name. "That was a deliberate strategic decision on our part," said Walker. "We currently don't have any intentions to OEM the device."

The InfiniVault was launched in 2007 and, for the second half of 2009, ProStor announced a 250% growth in sales of the device. There are four basic models, with the most popular one being the InfiniVault 30, which comes with 4 terabytes of online storage and 10 RDX drive slots—which can be increased in increments of 10 up to 100. The base price is $30,000.

"We are initially targeting the SMB market and departments within large businesses," said Walker. "Part of that has to do with the size of our company. IBM and EMC can have Wal-Mart. That said, we are in the departments of some very large organizations."

To address the SMB market, ProStor has established a reseller channel that currently has more than 175 members. "We've been working closely with value-added distributors like **Cranel** and **NewWave** and marketing to their partners. So far, most of our sales of the InfiniVault have been in the U.S.

"For service, we enable VARs to set up their own agreements. **ServRight** is an authorized service provider, and Cranel also has a suite of services it offers."

Walker concluded that although the InfiniVault has many features of the optical storage jukeboxes so popular in imaging applications, it improves on them by offering the advantages of magnetic storage. "Quite simply, magnetic disk fits the way most customers work with data," he said.

For more information:
http://www.prostorsystems.com/data-storage/prostor-infinivault/

CMS Not Giving Imaging Its Due

Recently finalized requirements for meaningful use bypass conversion process

The race for U.S. federal government stimulus money related electronic healthcare record (EHR) implementations is officially on. In the past couple weeks, we saw close to a half-dozen imaging-related announcements about new EHR products and services. Then, this week, the federal government's **Centers for Medicare & Medicaid Services** (CMS) announced its final list of criteria for meeting the "meaningful use" requirement that makes healthcare providers eligible for federal stimulus money.

In case you've been totally ignoring the healthcare market, in 2009, as part of the federal stimulus package, it was announced that more than $27 billion would be available over a 10-year period to doctors' offices and hospitals who successfully implement EHR. What's more, because these implementations are designed to improve healthcare service, after 2015, it was announced that penalties would be levied against institutions that do not have compliant EHR systems.

As you can imagine, this has set off a bunch of talk about opportunities for document imaging. Most of the figures we've seen estimate that less than 10% of doctors' offices and hospitals currently have EHR systems that would meet the meaningful use standards. The opportunity for our industry is in

helping the other 90% of healthcare providers make the transition to EHR—which, as most patient charts and records are currently paper, could involve quite a bit of document imaging.

There's one problem, however, according to Ken Rubin, a senior VP at **Iron Mountain** and GM of its Digital Healthcare Solutions. CMS' "meaningful use" criteria don't necessarily reward healthcare providers for imaging their records. "It's our point of view that the meaningful use criteria, as they are written, focus on too narrow of a topic area," Rubin told *DIR*. "We think that the steps needed to transition to a successful EHR implementation should be part of the criteria."

"Healthcare organizations can't just snap their fingers and make all their paper records electronic."

—Ken Rubin, Iron Mountain

Imaging vital to EHR success

A total of 25 interim requirements for meeting the meaningful use standard were published in January by CMS. A comment period followed and over 2,000 comments were received. CMS adjusted its final list of requirements based on the comments.

The final set of requirements for meaningful use, published this week, features 14 "objectives" for eligible providers and 15 for hospitals. There are 10 additional objectives, any five of which must be met during Stage 1 (2011-2012) of the EHR implementation period. The other five can be deferred until Stage 2 (2013).

Reading over these objectives, we'll have to concur with Rubin. While many require functionality that can only be achieved through converting paper records to electronic ones, the requirements skip over the steps involved in actually performing the conversion. For example, one of the mandatory requirements is to "On request, provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication list, medication allergies, and for hospitals, discharge summary and procedures)." Meeting this objective is measured by "more than 50 percent of requesting patients receive electronic copy within three business days." Quite obviously this will require some document imaging.

Two other requirements that likely involve imaging technology include, "Implement capability to electronically exchange key clinical information among providers and patient-authorized entities," and "Implement technical systems to protect privacy and security of patient data in the EHR."

And many of the other objectives, which seem to call for the extraction of data from paper records, could certainly be assisted by imaging-based data entry and OCR.

It's Rubin's contention that by not first giving healthcare providers incentive to convert their paper records to electronic ones—before asking them to do all sorts of stuff with electronic records—CMS is putting the horse before the cart. "The danger is that if the providers don't address conversion of paper records correctly, their EHR systems won't be fully functional, which will result in bad implementations," said Rubin. "Quite frankly, one of the reasons I think the initial adoption of EHR has been so much slower than expected, is that many organizations are intimated by the deadlines.

"They are concerned that they won't be able to implement the technology properly. Part of the problem with the meaningful use requirements as they're set up is that organizations are afraid that there isn't enough time to move through all the preliminary steps that would ensure a successful EHR implementation—before the deadlines start to hit. A lot of these preliminary steps involve converting paper records to electronic ones, and we think they should be included in the objectives for achieving meaningful use. But they're not, so they may end up getting skipped."

EHR: a three-step process

Iron Mountain is certainly no neophyte when working with patient records. "Our customer base includes 2,000 hospitals and 45,000 doctors' offices," said Rubin. "We see from the trenches what our customers are seeing regarding EHR."

It's Rubin's view that a successful EHR implementation is really a three-step process. "The first step is to get physical records inventories under control," he said. "Organizations need to get their master patient indexing (MPI) information rationalized before they can begin implementing EHR. A typical hospital might have 10 records management centers, 10 health information management systems, and 10 different coding offices. This is a poor platform to begin an EHR conversion from.

"First, all physical records should be consolidated

in one place. Then, an MPI can be built. Often, this process will reduce coding costs by 20-30%, which is capital that can be invested back in the EHR project.

"Only after all that should an organization begin step two, which is the intelligent conversion of records and the implementation of an EHR system. Intelligent scanning means deciding which records are core and need to be scanned in advance, and which can be scanned going forward on an as-needed basis. It's important to have a go-forward scanning program, because, although EHR can reduce paper, it certainly won't eliminate it.

"All this requires a considerable bit of planning, but CMS isn't accounting for any of it. Healthcare organizations can't just snap their fingers and make all their paper records electronic."

The final stage of an EHR implementation, which, according to Rubin CMS doesn't account for either, is the secure management of information after it has been converted. "It's very important that the proper security and privacy controls are placed on electronic patient record archives, to account for both disaster recovery and protection against unauthorized access," he said.

Rubin concluded by saying that because scanning and archiving is not accounted for in CMS' criteria for meaningful use, it's up to imaging and records management providers like Iron Mountain to deliver the message. "We need to let the large IDNs [integrated delivery networks] know that, while it's important to move to EHR, it's also important to do it as part of an integrated records management plan," he said. "It's first vital to restructure the way in which paper is managed; when that's done they should be able to simply layer an EHR system on top of it. To install EHR without first addressing paper is wasteful."

For more information:
http://www.ironmountain.com/solutions/industry/healthcare/;
http://www.nixonpeabody.com/publications_detail3.asp?ID=3404 (article summarizing publishing of final meaningful requirements); http://tinyurl.com/CMSpress

DIVERSIFIED EMR-FROM PAGE 1

Diversified offers two flavors of go-forward scanning. "We can scan on-demand when a request is made, or we offer on-schedule scanning," said Ransome. "This means our employees see a list of scheduled patients and convert their files prior to their visits."

Diversified also offers to scan on-site for its customers or train them to do their own scanning. "Right now, everybody is talking about all the paper being gone," said Ransome. "The reality is that we are years away from even getting all the existing paper under control."

That said, Ransome expects paper use in healthcare to drop drastically. "Our services help customers bridge the gap to electronic records," he said. "After the initial wave of conversions, I expect paper volumes to drop 70-80%. That is going to happen in the next three years, not the next 10. Organizations focused solely on scanning paper records are going to be in trouble. Only outsourcing organizations that can evolve to address some of the complex BPO issues related to electronic transfer of data in healthcare will survive."

For more information: www.Diversified-EMR.com

Safer Offers Innovative Batch Compression Technology

It's been quite a few years since document scanners with high-speed color capabilities have become the norm in the marketplace. Despite this color functionality, the majority of document scanning is still done in black-and-white. Part of this has to do with the bi-tonal nature of business documents. However, with the growth in adoption of color printing and the continuing spread of document imaging into new markets, an uptick in high-speed color document scanning is inevitable. **Safer, Inc.**, is prepared to address this emerging trend.

Based in Baltimore, Safer is an ISV that specializes in intelligent compression of color document images. "In the document imaging user community, there is a lot of inertia created by the attitude, 'if it ain't broke don't fix it,'" said Mike Cohn, an imaging industry marketing veteran who is developing a channel for Safer. "As a result, there are still a lot of people scanning in bi-tonal and creating TIFFs. Based on the technology that is available, this is ludicrous. Our mantra is 'scan everything in color,' and most of the time, we can make it as small as a bi-tonal file."

Safer is certainly not the first document image compression specialist we've covered in *DIR*. Like most of the other vendors, it relies on a combination of mixed raster content (MRC), JPEG 2000, and JBIG2 technologies (along with Group 4 and JPEG) to achieve optimally compressed PDF files. According to CTO Michael Kennedy, it's the technology built around the compression that makes Safer stand out.

"We don't innovate compression methods," he told *DIR*. "We utilize standardized compression that is in

compliance with worldwide standards. We do innovate what is done prior to files being compressed, and how these files are rendered when they're viewed."

One innovation has been to introduce production/batch capabilities. "I've worked with a number of companies in the industry, as a software developer, architect and technology advisor," said Kennedy. "I worked early on with DjVu, when it was owned by AT&T Labs. I watched its evolution and looked around at some of the other compression products on the market and thought, 'there are better ways to do this.'

"One shortcoming is that most compression products were developed as desktop solutions that aren't geared toward production-grade workflow. I had experience in batch capture with Kofax's tools and decided to incorporate some of that functionality into a compression product. Our Safer suite is designed for production specialists. Everything is carefully logged and it's designed to run as fast as possible.

"It's made to handle millions of images, and users can set it up to run unattended all night. It can perform tasks like recreating folder structures and uploading meta data from databases."

In addition to batch processing controls, Safer offers some innovative image processing options. "Most capture applications give you two options when outputting images—you can store them as a baseline JPEG in a PDF wrapper or a TIFF with Group 4 compression," said Kennedy. "Those are typically considered compliant document image formats. But, in both formats, compression is being done through downsampling information and you're not really sure what is being lost.

"Our software offers a way to upsample and interpolate. This ensures that the representation of images will be very precise. We preserve the quantities of the color values before we do our final compression. In some cases, we can even represent the color better, so you'll see an image with improved contrast and resolution.

"Lossless images are also an option. We have a lot of customers that want to create archival derivatives, and we can do that by applying JPEG 2000. Of course, JPEG 2000 at 70%, which is perceptually lossless, is an interesting alternative. Most humans can't detect any difference, and file sizes can average one-eighth the size of a full JPEG 2000 format."

Safer develops its own segmenting technology used for MRC. "We can control which layers are displayed first—whether it's the foreground, the background, or the text," said Kennedy. "And, if a customer wants to change the display order, it can be done without having to recreate the image."

Targeting vertical markets

Safer currently offers its technology under the Safer Create brand. Create is sold as an application that can be fed through multiple avenues, including watched folders. It can also output to multiple back-end systems. Pricing is based on monthly volumes.

Safer is currently trying to establish itself in some targeted vertical markets. "We've designed the product to be functional in multiple verticals," said Fredrik Salvesen, the CEO of Safer. "We will focus on the speed and production aspects of our software and align ourselves with reseller partners to introduce us into the markets where they have expertise."

Service bureaus have been one target for Safer. "That's kind of a default market, because they have major clients in several areas," said Kennedy. "We are trying to get into the medical market because there is a lot of color content typically included in patient records. Physicians are interested in being able to read every piece of information in a folder, and oftentimes each person in a practice might use a different color pen. We are working on a pilot in which we are trying to make color patient record files as close as possible to bi-tonal files in size, so the images can be remotely served. We are also trying to come up with a universal configuration that can be applied across all patient folders.

"In the life sciences market, we are working on capturing FDA trial notebooks, which also contain pen and pencil writings that need to be viewable. And online submission requirements encourage smaller file sizes. The legal market is a target because of all the documents that need to be captured for litigation support.

"Finally, we're looking at the book scanning market, and targeting organizations like the American Library Association and the Society of American Archivists."

Safer has found a niche selling its technology into applications for capturing images from microfilm. "A lot of this involves historic documents that need to be preserved forever, but over the years, the quality of the film has deteriorated," said Kennedy. "Sometimes, the user might just want a fresh film copy. Since film is typically grayscale, there's enough information for us to improve the images significantly before they are put back on film."

In addition to software, Safer offers consulting around its technology. "We will help our customers configure our software in the best way for their files," said Kennedy.

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

NewSoft Growing With Desktop Imaging Market

The market for desktop document imaging and management software is maturing. This is the viewpoint of Johnson Yang, the general manager of **NewSoft America**, developer of the Presto PageManager application. "We've always had a lot of features in our products, but until recently most customers were likely only using it for scanning," Yang told *DIR*. "They would maybe e-mail scanned images or store them, but that was about it.

"However, since about the timeframe of AIIM 2009, about a year and a half ago, it seems like people are trying to go towards more paperless processes leveraging PageManager. We're getting an increasing number of calls to our support center asking about things like creating PDFs that can be searched in the future, or secure storage, or running PageManager in a Citrix environment. Desktop users are getting a lot more advanced."

Along with Nuance's PaperPort, PageManager is a leader in the desktop document imaging market. Like Nuance, NewSoft develops its own OCR technology, which it acquired in the mid-1990s. Around the same time, NewSoft spun-off from scanner manufacturer UMAX and is now publicly traded on the Taiwanese market.

The majority of NewSoft's revenue comes through bundling and OEM agreements with the likes of **Canon**, **HP**, **Ricoh**, **Lexmark**, **Brother**, **Epson**, **Toshiba**, **Visioneer**, **Kodak**, **Hitachi**, and **Adobe**. The PageManager standard edition (SE) is the bundled version, with a professional edition available through an upgrade. "Both versions pretty much have the same set of features, but the functionality is narrower in the standard edition," said Yang.

NewSoft also has a business card application it bundles with hardware products, as well as some unique technology it will OEM. "Our software is very modular," said Yang. "For example, we have auto-cropping technology that enables users to separate multiple business cards scanned at one time on a flatbed. A partner could take that and integrate it directly into their scanning application.

"Our history as a spin-off from UMAX means we have a good understanding of integrating with hardware devices. Our modules are designed so they can integrate directly with the control panels of hardware devices. This enables our partners to launch our technology directly from their devices.

"We are very flexible and will do custom integrations. We have OEM versions of PageManager, for example, that are slightly different for each vendor. We want to provide a tight and unique integration for our partners."

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