# **Document Imaging Report**

Business Trends on Converting Paper Processes to Electronic Format

4003 Wood Street • Erie, PA 16509 • PH (814) 866-2247 • FX (800) 507-8981 • http://www.documentimagingreport.com

January 21, 2005

#### THIS JUST IN!

#### KOFAX, ADOBE INK PARTNERSHIP

**Kofax** recently signed an agreement to integrate **Adobe's** *LiveCycle Barcoded Forms* application with *Ascent Capture*. Adobe introduced *Barcoded Forms* at **AIIM 2004**. It captures data from electronic PDF forms and encapsulates it in a 2-D bar code. The 2-D bar code appears on the form when it is printed [see <u>DIR 4/9/04</u>].

The application is especially relevant when forms require handwritten signatures, users are uncomfortable submitting information online, and/or additional information must be collected off-site. The 2-D bar code improves the accuracy and speed of data capture from paper forms by eliminating the need to apply OCR or other data entry techniques. Relatively inexpensive 2-D bar code reading technology can be utilized.

Kofax expects to make a *Barcoded Forms* module for *Ascent* available to its reseller channel in the second half of this year.

"These types of forms are great in applications where portability and signatures are required," said analyst Harvey Spencer of **Harvey Spencer Associates** (<u>http://www.hsassocs.com</u>). "Tax departments, DMVs, and transportation applications are just a few of the markets where this is relevant."

For more information:

http://www.adobe.com/products/server/barcodedpaperforms/main.html

#### **TiS Introduces Its Mailroom Solution**

Content-based classification is the buzzword at Israeli forms processing specialist **Top Image Systems** (**TiS**). This is the technology at the core of the software developer's recently announced *Smart!* mail sorting and routing application. TiS will showcase *Smart!* at next month's conference

#### CONTINUED ON PAGE 8

# Kodak Brings Its Technology Further Downstream

# New departmental offering puts pressure on segment leaders.

**Kodak** is continuing its efforts to move downstream in the document scanning market. This week, the long-time high- and mid-volume market leader introduced an impressive departmental model based on its proven i-series technology. The i100 series represents Kodak's lowest priced, own-manufactured scanner to date. The simplex, i150 lists for \$3,495, while the duplex i160 lists for \$3,995. The i100 series is rated at 40 ppm/80 ipm in a landscape mode at 200 dpi in bi-tonal, color, or grayscale. In a portrait mode, it is rated 32/64.

"The i100 has basically the same look and feel as our i200 (low-volume production) series with a few differences," said Nancy Sherman, marketing manager, U.S. and Canada, for Kodak Document Imaging. "The most significant differences are obviously the lower price and speed. We've also chosen not to include a flatbed option. Basically, we felt the i100 filled a hole in our product line between the i80, which is priced at \$2,800, and the i200 series, which starts at \$4,600."

#### How does the competition stack up?

**Fujitsu** is the long-time leader in the departmental segment, and the i100 series is positioned directly against the fi-4530C, a duplex, sheet-fed-only model introduced at **AIIM 2003**. Both the Kodak and Fujitsu models feature ultra-sonic double-feed detection, which differentiates them somewhat from the rest of the market.

Like the i160, the fi-4530C lists for \$3,995. At 47 ppm landscape and 35 ppm in portrait, the fi-4530C is faster than the i100 series in a simplex mode. However, the fi-4530C features only one camera and therefore is rated at 47 ipm landscape and 35 ipm portrait in duplex. For users who do the majority of their scanning in duplex, the choice is obvious.



Kodak's new i100 series represents the vendor's lowest-priced, ownmanufactured document scanner to date. It comes in a simplex and duplex model and is priced below \$4,000. It was scheduled to begin shipping this week.

Kodak's i150 also offers a less expensive, simplex-only alternative. (Kodak reports that 15% of its i200 series sales are of the simplex i250 model.)

Kodak is also pointing to its PerfectPage image processing technology, which is included with the i100 series, as an advantage over Fujitsu. Kodak compares PerfectPage to Kofax's VRS grayscale thresholding application, which is available for the fi-4530C for a list price of \$535. Of course, the i100 series is also compatible with VRS, which can be purchased for a similar price. In Fujitsu's favor, it bundles Adobe Acrobat with the 4530, while Kodak has chosen not to include a PDF application with the i100.

Other leaders in the departmental segment have been Canon, with its DR-3060 and DR-3080C models, and HP with its Digital Sender. The Canon models are missing some of the features of their Kodak and Fujitsu counterparts and are not as strong in color. However, they are competitively priced and should remain a good option in bi-tonal-only, or

#### **NEW PRODUCTS SHOULD SPUR SEGMENT GROWTH**

The Kodak i100 series represents the first real new blood that's been introduced into the departmental scanning segment since 2003, when Fujitsu released the fi-4530C. Since then, we've seen both Panasonic and **Canon** add some new features to their existing departmental models. Böwe Bell & Howell has taken a similar route by OEMing the same scanner Matsushita was already licensing to Panasonic and putting some new dressing on it. As a result of this dearth of truly new products, unit sales in the departmental segment have not grown as fast as originally predicted by InfoTrends/CAP Ventures.

"The departmental segment was pretty slow in 2004," observed Susan Moyse, industry consultant for InfoTrends/CAP Ventures. "When we finish our numbers, we expect them to show less than 10% growth over 2003. In a nutshell, there were not many strong offerings introduced last year and price points remain relatively high. This category seems to have been overlooked in favor of products in the workgroup and low-volume segments, where many new products were introduced last year. 2005 should be better, and the Kodak offerings should help the departmental segment get out of its rut."

For more information: www.infotrends-rgi.com.

#### **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. 15, No. 2

Editor: Ralph Gammon 4003 Wood Street Erie, PA 16509 PH (814) 866-2247 FX (800) 507-8981



ralphg@documentimagingreport.com

#### Managing Editor:

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

#### Publisher and Circulation Manager

Larry Roberts RMG Enterprises, Inc. 5905 Beacon Hill Lane Erie, PA 16509 PH (412) 480-5116 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. 5905 Beacon Hill Lane Frie. PA 16509 PH (412) 480-5116

http://www.documentimagingreport.com

Copyright © 2005 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 (electronic) or \$670 (paper) per year.

January 21, 2005

primarily bi-tonal, scanning environments—which are still the norm. The Digital Sender is kind of an oddball in that it is designed as a networkable fax replacement and isn't typically attached to a PC. HP recently released an updated version, the 9200C, which is rated at 47 ipm in black-and-white and 30 ipm in color and lists for \$3,199.

#### Panasonic and Böwe Bell & Howell also

compete in the departmental space with similar models manufactured by **Matsushita**. Their scanners feature a rated bi-tonal speed of 43/76, but like the DR-3080C, they drop off considerably in color. The Panasonic models are aggressively priced, while the Böwe Bell & Howell Sidekick 1400, which was introduced at AIIM 2004, comes bundled with VRS and lists for \$4,095.

#### How low can they go?

To Kodak's credit, the high-speed, duplex color capabilities of the i100 series do a pretty good job differentiating the new product from the competitive landscape. Was it really less than five years ago that Canon first introduced very basic (and slow) color to the departmental segment, and we all went, "Wow!" The i100 is clearly a sign of things to come as vendors continue to move once high-end technology downstream to take advantage of the recent growth in lower-volume unit sales.

How low will Kodak take its own-manufactured technology? "We have not ruled out going further downstream," said Michael Bida, director, worldwide product marketing for Kodak Document Imaging. "We are looking at all opportunities to leverage our technology across our portfolio. How we leverage it might be different from one product to the next."

For more information:

http://www.kodak.com/global/en/business/docimaging/globalPages/home.jhtml

# Pegasus Renews TMS' Product Focus

Jack Berlin hopes to get **TMSSequoia's** business back on track. Berlin is president of imaging tools specialist **Pegasus**, which recently completed the acquisition of TMSSequoia—a long-time document imaging tools developer. Now that the two companies have been combined, Berlin hopes to refocus TMS' business on the products that have earned TMS a stellar reputation within our space.

"Sarbanes-Oxley has made it impossible to operate as a public company if your revenue is under \$50 million," Berlin told *DIR*. "TMS is a good deal smaller than that [2004 revenue of \$2.9 million] and always has been. In addition, in the high-tech market, if you have to worry about making quarterly numbers, you sometimes have to sell your soul. In TMS' case, to generate cash flow, it took on some custom coding and engineering projects that took its developers' focus off its core products. TMS has products that compete in 18-month lifecycle markets, and some have already gone 24 months without an update."



"Pegasus made the decision a long time ago that, for a tools vendor, product price should never be a barrier to entry"

- Jack Berlin, Pegasus

According to Berlin, the acquisition will basically add three products to Pegasus' portfolio—tools for processing images, tools for processing scanned forms, and an image viewer. "Historically, TMS had marketed its *ScanFix*, *FormFix*, and *Prizm IP* (image processing) lines separately," said Berlin. "We plan to take the elements of *Prizm IP* and incorporate them in updated versions of *ScanFix* and *FormFix*. This includes color and grayscale capabilities. We have already incorporated our PDF viewing technology in TMS' *Prizm Viewer* and will continue to market it as an application—which will be a first for us. Historically, we have mainly used applications to demo our tools.

"Finally, we are combining the best elements of TMS' ViewDirector toolkit with our ImagXpress viewing tools. For those products, and anywhere else there is overlap, we are running bakeoffs. Bakeoffs are kind of fun, but you have to put all egos aside. You can't say just because we bought TMS, our technology is better. We've run bakeoffs before with other companies and products we have acquired. You have to start with the view that both companies have great products."

Pegasus would also like to combine the companies' engineering staffs. "The sales, marketing, and accounting are all slowly moving from Oklahoma [where TMS had offices in Tulsa and Stillwater] to Tampa," said Berlin. "We will maintain an office in Stillwater for at least a year, and we haven't determined what we'll do after that. We have offered several TMS developers moving packages, and some have accepted."

Berlin said he was impressed with the engineering

staff he found at TMS. "Because of SEC regulations, we couldn't get inside TMS and talk to their staff until we announced out intent to acquire," said Berlin. "When you are buying a software company whose value is in intellectual property, you want to know what type of personnel you're getting. We found a very experienced staff and some people that have worked together a long time. This was pleasantly surprising based on the pressure TMS has been under recently. The biggest problem the engineering staff has had was that the management and the direction of the company kept changing over the past few years."

#### **Reducing Barriers To Entry**

Although Pegasus and TMS had similar target markets—imaging ISVs, service bureaus, and a smattering of end users—Berlin said there is little overlap in the customer bases. "TMS built its business by offering premium technology at a premium price," he told *DIR*. "We like to think Pegasus sells premium technology at more of a middle-of-the-road price. As a result, TMS had a significantly larger average sales price than we have had.

"Although TMS' customer list was shrinking, it was still a fairly impressive list of less than 200 businesses. TMS was very good at servicing its 30-40 largest customers. While I hate to become too dependent on a small number of customers, we will try to maintain those relationships, while at the same time making TMS' technology more accessible by dropping the prices."

Berlin said TMS' barrier-to-entry was too high. "Their licensing model was fine, but some of their product pricing was geared more toward end users," he said. "Pegasus made the decision a long time ago that, for a tools vendor, product price should never be a barrier to entry. We are dropping some of TMS' product prices by more than 50%. For example, TMS was selling its high-end *Prizm IP* tools for a starting price of \$24,000. We have dropped that to \$9,900."

According to Berlin, the combined company will be about three times the size of TMS, or approximately \$9 million annual revenue. "There were only a couple of bidders for TMS, which is not a great valuation statement for our industry," said Berlin. "Although the volume of imaging tools sales may be increasing, the price pressures we have felt since 2000 have more than cancelled that. Pegasus has been fortunate to be on the right side of some recent market consolidation. Now, we have reached a critical mass where we hope some more people will take notice."

For more information: <u>http://www.pegasusimaging.com</u>

### Dralasoft Expands Verity's OEM Portfolio

**Verity's** acquisition of **Dralasoft** represents the latest move in the search specialist's efforts to become a one-stop shop for specialty technology used in ECM applications. Dralasoft's BPM technology joins **Cardiff's** capture and e-forms applications, as well as Verity's legacy search technology, as OEM products Verity is offering to ECM software vendors. *DIR* caught up with former Cardiff CTO Mark Seamans, currently Verity's senior VP of R&D. He told us about Verity's plans to market the Dralasoft applications to the company's current base of 260 OEM partners.

"Yes, a lot of our larger ECM partners like **FileNET**, **Documentum**, and **Stellent** have their own workflow and BPM technology," Seamans told *DIR*. "However, many of our smaller partners, or those with applications in more vertically specialized areas like e-commerce or litigation support, don't have any BPM. Because of the size of our OEM base, no matter what direction we try to expand, we are going to overlap with somebody. However, because the Dralasoft application is designed to run across multiple platforms, we think we have something of value even for our partners who already have workflow applications."

According to Seamans, Verity's attitude toward information has always been to "play it as it lies." "Most ECM vendors take the view that, if you put information in their repositories, the world will be an easier place to work," he told *DIR*. "One of the things we've seen is that customers who begin working with Verity's search product as a component of their ECM application, often come to us for a wider-reaching, more enterprise-oriented search application. Similarly, we think customers utilizing workflow as an embedded element of their ECM are going to want to expand BPM across several applications. The Dralasoft technology has capabilities to do that."

Verity paid \$8 million for Westminster, CO-based Dralasoft and has offered continued employment to all its personnel. In addition to a workflow engine, Dralasoft comes with a drag-and-drop workflow design application, a workflow manager for closely tracking activity related to processes, and tools based on the BPEL4WS Web-services-based standard for integration across applications. Dralasoft's current OEM customers include **Hummingbird**, **Xerox**, and Verity—which offers Dralasoft technology as the advanced workflow component of *LiquidOffice*.

#### 4 Document Imaging Report

In addition to marketing Dralasoft's technology on its own, Verity plans to further integrate it with its current product lines. Although Seamans did not provide any specifics, he did tell us about two integrations between Verity's search technology and the product lines that Verity acquired with Cardiff last year. "In a *LiquidOffice* application, we've found it might be helpful for users to have visibility into multiple in-process e-forms at once," said Seamans. "Say, for example, a user wants details on all the POs currently being processed through *LiquidOffice* in order to come up with an aggregate total. Our Verity *Extractor* technology can be used to collect that information.

"In relation to *TeleForm, Extractor* can be used to collect specific nuggets of information from unstructured documents after they are scanned. These nuggets might include names, places, store locations, or part numbers. This data could be automatically tagged and you'd have something better than a full-text index because you'd know that '310' was an area code, for instance, instead of a quantity number or a price." [*For more details on Extractor, see DIR* 10-8-04.]

Seamans did not rule out Verity potentially offering a capture-to-workflow application based on the Cardiff and Dralasoft technology. He did, however, say Verity has no intention of expanding into the content repository business. "We'd make quite a few enemies if we did that," he said. "Also, as we see larger companies like **Microsoft**, **EMC**, and **Oracle** getting into the repository space, ECM is increasingly becoming an infrastructure decision. That is not a battle we want to fight. We would rather leverage our relationships with repository vendors. One of our strengths is our ability to tap into their systems and embrace them."

For more information:

http://www.verity.com/company/press/acquisition/dralasoft

# SO Series Positioned For The Long Run

**Scan-Optics** laid it all on the line with last year's release of its new SO Series scanner. The SO Series represents the company's latest, and hopefully final, attempt to make the difficult transition from proprietary, hardware-based systems to a more open, software-driven platform. A recent provisional patent application filed by the Manchester, CT-based manufacturer sheds some light on the mechanics of this transition.

"We have taken a revolutionary approach to developing a high-speed scanning device," Joel

Howser, VP of software development for Scan-Optics, told *DIR*. "We believe we have some patentable elements in our techniques that enable our scanners to leverage commercial off-the-shelf [COTS] products instead of proprietary hardware."

According to Howser, these techniques involve an analog-to-digital conversion of sensory information, the execution of commands in software, and the translation of those commands to perform analog processes. Howser provided us with the example of controlling an ADF. "Historically, we used a hardware controller to manage our feeders," he told DIR. "In the SO Series, we use a hardware sensor to determine information like, 'there is a stack of paper in the ADF.' The information is relayed to a software program that tells the feeder to move at a certain speed. Currently, we are running the application software with a processor similar to what you'd find in a PDA. We have also incorporated a desktop-style PC that enables users to connect to the SO Series scanners through a standard SCSI configuration."

We're not sure how revolutionary this analog-todigital-to-analog process is, and Scan-Optics may find itself challenged if it follows through with filing for a formal patent. (From what we understand, the provisional application gives Scan-Optics one year to file a formal application.) Regardless of the design's patentability, Howser noted that it has already helped Scan-Optics reduce its manufacturing costs. A glance at Scan-Optics' third-quarter financial report shows that hardware and software costs were down 38% from the previous year.

This is important because revenue from hardware and software was down 46%, while overall revenue was down16%. Howser attributed the revenue slippage to the transition to a new product line that carries a significantly lower price tag than the company's legacy 9000 Series. Also, until the end of November, Scan-Optics was only shipping the lessexpensive, image-only version of the SO Series, which has a starting list price of \$85,000—compared to more than \$200,000 for the 9000. The online OCR version of the SO Series, which actually compares more closely to the 9000 and carries a starting list price of \$185,000-200,000, only recently began shipping.

"Sales have been good," Howser told *DIR*. "We implemented a try-and-buy program, and the majority have turned into buys. Also, because our initial sales were image-only machines, they mostly represented sales to new customers. We have just started marketing the online OCR version to our legacy customers as upgrades to their 9000 systems. Finally, we are still ramping up an indirect channel for the image-only models. We have been in discussions with major distributors and expect to announce significant relationships in the near future."

Howser added that the open design of the SO Series makes it field-upgradeable from an imageonly device to an online OCR machine used for sorting. (Up to 32 optional sort pockets are available in sets of twos.) "With a single scanner, we can compete with both **Kodak** for image-only business and **IBML** for online OCR applications," said Howser. "To upgrade the scanner, we replace the standard processor with an off-the-shelf dual processor and add software to control the recognition. We can complete the process in a couple of hours."

Howser concluded by saying that as COTS processors continue to become less expensive and more powerful, the SO Series should improve in quality while dropping in price. "We are looking at adding capabilities in the areas of image processing and increased resolution, as well as potentially attaching additional peripheral devices."

For more information: http://www.scan-optics.com

# **EFI Enters Capture Space**

There is no question that the use of digital copies for document imaging is a growing trend. In the past year, we've reported on the successes in this market by vendors like **eCopy**, **IKON**, and **NSi**. It seems both the number and complexity of imaging applications that utilize digital copiers is growing.

One interesting trend is that the lion's share of success in this niche seems to be driven by third-party software vendors rather than the digital copier vendors themselves—most, if not all, of whom offer some sort of internally developed document imaging technology. Canon, for example, has a comparatively sophisticated own-branded line of digital imaging applications. However, two years ago it made a \$16 million equity investment in eCopy cementing its relationship with a third-party imaging software vendor [*see <u>DIR</u> 12/20/02*].

Because of its success, the Canon/eCopy relationship is now looked at as the model to follow when deploying scanning on digital copiers. eCopy's technology is sold directly through Canon dealers with eCopy providing support and product development. When its exclusivity deal with **HP** expired at the beginning of this year, NSi began trying to forge similar relationships with Canon's competitors. So far, NSi has succeeded in inking an OEM agreement with **Kyocera Mita**, who like HP, will resell document capture applications jointly developed with NSi [see DIR 12/3/04].

That still leaves several leading digital copier vendors like **Ricoh**, **Xerox**, **Konica Minolta**, and **Sharp** without sound third-party relationships. While NSi is continuing to pursue tighter relationships with these vendors, and eCopy continues to make noise about potentially partnering with other vendors, a new player is also entering the digital copier capture market. That is printing controller specialist **EFI** (Electronics For Imaging).

#### Exclusive IKON Relationship Expires

*DIR* recently caught up with Richard Piper, product marketing director in EFI's Enterprise Solutions Group. Piper, a former IKON executive, is responsible for the marketing of EFI's SendMe capture application, which was originally developed for IKON. IKON has marketed SendMe under the brand name DocSend since May 2003.

According to Piper, SendMe was originally developed to provide IKON with a capture solution that could run on Ricoh as well as Canon machines. "Scanning applications are important to digital copier vendors and dealers; they enable them to increase the revenue associated with each copier sale," said Piper. "When I was with IKON, from 2000 to 2001, we increased eCopy sales by five times. However, as IKON began to increase the number of Ricoh machines it was selling, it needed a scanning application that was vendor agnostic."

EFI and IKON jointly developed SendMe, and until recently, IKON had an exclusive agreement to resell the application. According to Piper, IKON is approaching 4,000 installations of DocSend, which it markets as its tier-one capture solution for digital copiers.

#### Ease-Of-Use Key To Success

SendMe is actually designed very similar to eCopy's ShareScan. Both run on a PC attached to each digital copier they are deployed on. The user interfaces are accessed through color touch screens mounted on the copiers. IKON has been selling DocSend for a list price of \$6,995, which is the same list price as the highest-speed version of ShareScan. Piper pointed to a couple of functional differences between the two product lines, such as SendMe's ability to apply OCR at the scanning station and SendMe's simplified command for e-mailing to users' desktops.

"eCopy was the first vendor to come to market with a very slick and elegant way to distribute paper documents over an e-mail infrastructure leveraging a digital copier," said Piper. "They provided a nice big touch screen and a very simple and easy

Notice: No part of this publication may be reproduced or transmitted by any means, electronic or mechanical, without written permission of RMG Enterprises, Inc., Erie, PA, USA.

process. eCopy also recognized that to work as a fax replacement, ShareScan had to provide users with some sort of receipt, or proof that their documents had been scanned." Both eCopy and SendMe do this by displaying scanned images on their touch screens.

While a lot of eCopy's recent technical development has focused on the networked and embedded version of its application, ShareScan OP, as well as creating connections to other applications, Piper believes there is still plenty of business to be had selling simple e-mail-based distribution systems. "The potential document distribution market is equal to the current amount of money being spent on faxing, overnight delivery, and traditional mail," said Piper. "Not only is scanning to e-mail less expensive than all those methods, the user can access document images from anywhere they have access to e-mail."

That's not to say EFI has ignored potential networked deployments of SendMe and connections to other applications. "We will definitely consider Canon's MEAP and other embedded architectures," Piper said. "And, we have built some connectors, both to popular applications like **Interwoven's** *WorkSite* and for custom systems. We also make our APIs available for third-party integration.

"Finally, we are working on features like integration with biometric and card identification systems for secure environments like hospitals, as well as integration with some of our own advanced print management technology. We have also included in our product the ability for copier dealers to track scans if they want to incorporate our applications in leasing programs based on per-copy contracts."

Piper acknowledges that eCopy has very successfully established itself as the leader in the digital copier capture space. "Look what they have done working with only one copier vendor," he said. "We have created SendMe to have a standardized look and feel for any vendor's product. Currently, it works most smoothly with Canon and Ricoh machines because of their GUI-less TWAIN drivers and their ability to initiate scans remotely. However, EFI already has established relationships with most digital copier manufactures, and we have done testing on their products. We have also had discussions with additional large digital copier dealers and distributors. Finally, we are working on tightening our integration with NSI's middleware application."

Piper concluded, "Even when you look at all the capture products for digital copiers available today, I really think we have just scratched the surface of the

market potential."

For more information: http://www.efi.com/products/sendme.html

# Dual-Camera Configuration A Differentiator For Sharp

Of course, the capture application isn't the only component of a quality digital copier scanning solution. The digital copier itself must be able to scan images quickly and cleanly. While image quality hasn't necessarily been a problem in recent years, speed sometimes is, especially when dealing with dual-sided documents. Most digital copiers contain only one camera, and thus need to flip a document and scan it twice to capture both sides. This typically results in duplex scanning times that are half those of simplex speeds. For example, a digital copier rated at 40 ppm in simplex mode, will typically only capture 20 ipm in duplex.

One copier vendor has managed to improve on this process. A few years ago, **Sharp** introduced what it called single pass, dual-sided scanning (SPDSS) on its Digital Imager Series of copiers. The feature is now incorporated in the company's Scan<sup>2</sup> (Scan-Squared) package, which also offers scan toe-mail, desktop, and file capabilities.

According to Mike Marusic, VP of marketing for Sharp Document Solutions Company of America (SDSCA), Sharp's proprietary controller technology has enabled it to implement more advanced duplex scanning technology than its competitors. "The most obvious way to improve duplex scanning is to add a second camera and then just double your internal controls," Marusic told *DIR*. "However, that strategy would price you right out of the market. "

Sharp's Scan<sup>2</sup>-enabled digital copiers do feature two CIS cameras. However, Sharp, which unlike many of its competitors, develops its own controller boards, has introduced one capable of managing dual-sided images. "Our controllers are capable of absorbing the doubled amount of content associated with duplex scanning," said Marusic. "They are also able to process that content and understand the layouts of the pages being captured. The manufacturers that make the controllers for the other digital copier vendors haven't developed this sort of technology yet, so for now, we have a competitive edge."

According to Marusic, this differentiation is at least partially responsible for Sharp's continuing to increase its market share in an essentially flat blackand-white digital copier market, according to IDC figures. "When we marketed the technology as SPDSS, it went over a lot of people's heads," he said. "However, in the past year and a half, since we've introduced the Scan<sup>2</sup> package, we've received a lot of requests."

Sharp's dual-sided capture does not quite double the simplex ppm speeds. "If you have a 35 ppm simplex scanner, for example, it probably captures 55-60 images per minute in duplex," said Marusic. "We are approximately 115% faster than competitive duplex speeds. The single pass technology also reduces paper jams."

Marusic gave us an example of the type of savings this functionality can return. "Our studies show that on a 55 ppm machine, a user is probably doing 30,000 images per month. About 15,000 of those are single-sided copies and the rest are a combination of duplex copies, and simplex and duplex scans. We've found that our duplex capabilities on average save customers at this level about 10 hours of time per month.

"The biggest savings, of course, are realized when a document is being scanned for e-mail or filing, or when a user is only making one dual-sided copy. The savings start to decrease if a user is making multiple copies of a dual-sided document because then the bulk of time is spent on output."

Up until now, the dual-sided scanning capabilities have been limited to Sharp's black-and-white models, but Marusic said that will change this summer. "The initial generation of our color products does not offer Scan<sup>2</sup>, but the next generation will," said Marusic. "As users continue to increase the amount of scanning they do from digital copiers, we think the demand for better duplex scanning will continue to increase."

For more information: http://www.sharpusa.com/products/scan2/benefits/

#### TIS, FROM PAGE 1

for customers and partners being held Feb. 16-18 in Barcelona, Spain.

Smart! features a combination of internally developed technology and technology licensed from German partner **Xtramind** (<u>http://www.xtramind.com</u>). "Content classification has an advantage over searching for keywords, because you are considering a much larger set of words than a single phrase, which may or may not appear," said Ofir Shalev, VP of R&D for TiS. "Currently, we are working with natural language processing algorithms that use content to determine the type of classification a document belongs in."

The Smart! technology is currently being tested by several TiS customers including **BKK**, a large German healthcare claims processor [*see DIR* 10/22/04]. Smart!'s classification capabilities are activated by feeding the system a series of examples. "The speed of set-up, of course, is determined by the number of classes you want to identify, plus the inherent similarities and differences in the documents," Shalev told *DIR*. "In testing, we have set up as many as 25 classes in 10 seconds."

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

Subscription Order Form for RMG Enterprises, Inc.	
5905 Beacon Hill Lane • Erie, PA 16509 • Phone (412) 480-5116 • Fax (412) 291-1352 • http://www.documentimagingreport.com	
<b>Document Imaging Report</b> Business Trends on Converting Paper Processes to Electronic Format	1 year (24 issues) □ electronic copy @\$597 □ paper copy @\$670 UR GUARANTEE TO YOU If you are not
<i>Mass Storage News</i> Opportunities and Trends in Data Storage and Retrieva	electronic copy @\$597 completely satisfied, we will refund your
SCAN: The DATA CAPTURE Report Premier Management & Marketing Newsletter of Automatic Data Capture	
NameTitle	Please <b>□ enter / □ renew</b> the following subscription. (Add \$33 on all orders outside of Canada and the United States.)
Street	□ Payment Enclosed (Remit to: RMG Enterprises, Inc., 5905 Beacon Hill Lane, Erie, PA 16509)
City State Zip	Charge My Credit Card (Charge will appear as RMG Enterprises.)
Phone () Fax ()	AmExVisaMCDiscover card number expire date
E-Mail	Bill My Organization (Purchase order # optional.)

#### 8 Document Imaging Report

#### January 21, 2005

Notice: No part of this publication may be reproduced or transmitted by any means, electronic or mechanical, without written permission of RMG Enterprises, Inc., Erie, PA, USA.