Document Imaging Report

Business Trends on Converting Paper Processes to Electronic Format

October 24, 2003

ARMA A HOTBED FOR IMAGING

A recent wave of regulations concerning records management has made it a hot topic. Because most records come in the form of documents, there has been a natural convergence with the document management market over the past couple years. That should be apparent at this week's **ARMA Conference & Expo** being held Oct. 19-22 in Boston.

FileNET will be there showcasing its much-awaited records management suite, which was announced last week. After a couple false starts, FileNET has finally decided to develop its own technology in this area. Next issue we'll detail some of the advantages FileNET feels it is gaining. The suite is due to be released in the second quarter of next year.

Low-cost document management software developer **Xythos** will also be at ARMA. Xythos will be introducing a Web-scanning module for its WebDAV-based system. Xythos promotes its software as complementary to enterprise content management systems.

"Often times, before information becomes part of a formal document management or Web publishing process, members of a department or workgroup will collaborate on it," explained Jim Till, VP of product marketing for Xythos. "The **CHUBB Group,** for example, has a couple hundred seats of FileNET. However, its more than 6,000 commercial underwriters use our software to manage their exchange of files."

Xythos' *WebFile Scan Manager* is based on tools from **Lead Technologies**. It is due to begin shipping in December. For more information on Xythos, check out www.xythos.com. ▨

Storage Giant Makes ECM Play

EMC acquires Documentum for approximately $1.5 billion in stock.

Documentum, or should we say **EMC**, has just upped the ante in the enterprise content management (ECM) market. Six-billion-dollar EMC's recently announced acquisition of $250-million software vendor Documentum threatens to change the ECM landscape as we know it. Not surprisingly, on the morning the deal was announced, the stocks of Documentum competitors **Open Text**, **FileNET**, and **Interwoven**, all shot up sharply. One analyst suggested this reflected the fact that maybe these companies would be acquired next at similar premiums to the 29% Documentum shareholders received from EMC.

Whitney Tidmarsh, VP and GM of document and Web content management, Documentum.

"Content management is a hot market and one of the top priorities for IT spending," proclaimed Whitney Tidmarsh, Documentum's VP and GM of document and Web content management. "Big players like **IBM** and **Microsoft** have already woken up to this fact and realize there is an opportunity in ECM. No doubt, they are going to continue to invest in their content management strategies. I expect other big platform players like **Oracle** to head in that direction as well. Although we were enjoying a 20% year-over-year growth in revenue, that still wasn't ever going to enable us to compete on a level playing field with the big boys coming into our space."

Added Dave Milam, chief marketing officer for Documentum, "Documentum has been very aggressive pursuing growth organically and through acquisitions. We followed this strategy, so we would have the scale and resources to support global enterprise applications. Through that strategy, we feel we have become the gorilla of the little six currently competing for ECM market share."

Milam listed the rest of the little six as FileNET, Open Text, Interwoven, **iManage**, **Vignette**, and **Stellent**. "The sheer resources of a $6 billion company will enable us to further accelerate our R&D and acquisition activity," he added. "Removing the constraints of a $300 million per year footprint, we can now grow by leaps and bounds.

"The game is over for the little six," he continued. "This is a brand new game that is going to start. I bet there are a lot of board room discussions going on right now by our competitors as well as some of the platform players who are looking at this high growth, high margin space."

In addition to sheer size, the Documentum executives stressed there are technical synergies between the two companies. Documentum and EMC began working together last year when EMC introduced its Centera platform for magnetic archival storage [*see DIR* 5/17/02]. Documentum's software fits into what EMC calls its Information Lifecycle Management (ILM) strategy, which the company announced earlier this year.

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>
> **Dave Milam, Documentum**

"ILM is about giving users the flexibility to use more than one storage option for an application like managing unstructured content," Tidmarsh told *DIR*. "ILM is about the ability to migrate information across different types of storage as the value of information changes from production, to declining, to archival, through destruction."

Tidmarsh acknowledged that historically Documentum has been storage agnostic. "ILM is really a new concept," she said. "As we move from line-of-business to enterprise applications, however, it is becoming more relevant."

We first heard EMC posturing about the concepts behind ILM when it announced the acquisition of **Legato** earlier this year. Actually it was Legato that first introduced us to the concept of combining storage with ECM after the backup software specialist acquired **OTG**, a document management and optical storage software developer, last year [*see DIR* 11/15/02].

When you add in EMC's acquisition of **Data General**, a low-end magnetic storage specialist, a few years back, and EMC's traditional high-performance storage products, the company has now assembled an impressive range of ILM-related products. "Our software provides a level of intelligence to EMC's storage offerings," said Tidmarsh. "EMC is offering end users the means to create very cost-effective

information management systems."

EMC's Transition From Hardware To Solutions

EMC's transition from storage vendor to a marketer of ILM solutions has been relatively swift. It has also been necessary for a company that has watched its revenue drop from close to $9 billion in 2002 to $5.4 billion last year. Driving this decline is an increasingly cutthroat storage hardware market that took a big hit with the demise of the dot-coms.

To offset this weakness in its traditional space, EMC has been increasingly moving to software. The company has stated that by 2005, it hopes to be generating at least 30% of its business through software sales. According to Bill Teuber, EMC's CFO, the Legato acquisition, which was expected to close this week, should bring software revenue close to 26%. The Documentum acquisition, which is expected to close early next year, will increase that figure to 28%. When you add in revenue from software-related services, based on the run rates of Legato and Documentum, EMC should be generating approximately 34% of its revenue from software after the Documentum deal closes.

"With the Documentum acquisition, EMC will become a $2.2 billion software company," added Documentum's Milam. "That makes it one of the largest software companies in the world. EMC is a sleeping giant, and I think Documentum will help get the word out that EMC is in the software business in a major way."

Keeping The Horse Before The Cart

As long as Documentum is leading EMC's charge into software applications, things should be fine. We think it's important that EMC remembers why they made this acquisition: to get into Documentum's high-growth, dynamic market. Too many times, we've seen large companies destroy the dynamics of smaller businesses they acquire by trying too hard to assimilate them into their existing business models. **eiStream** has made a career out of rescuing mismanaged software acquisitions [see *DIR* 10/10/03].

Of course, there are some good signs here. EMC has said that Documentum will remain intact, even down to its name, which will be Documentum, a Division of EMC. There is also the usual spiel about the companies' corporate cultures and visions being

DOCUMENTUM COMPETITORS QUESTION DEAL

The enterprise content management market (ECM) is clearly in transition. On a conference call discussing his company's recent acquisition of **Documentum**, **EMC** President and CEO Joe Tucci indicated Documentum "needed to make some strategic decisions, because size matters."

iManage President and CEO Mahmood Panjwani came to a similar realization, which is one reason his company recently merged with **Interwoven** [see *DIR* 8/22/03]. Panjwani admits he was nervous when he heard that Documentum had been acquired by a larger company. "But when I heard who it was, I immediately knew it was going to be a good thing for Interwoven," Panjwani told *DIR*.

According to Panjwani, Documentum's decision to throw-in with EMC takes it out of the running for potentially more threatening partnerships with, or acquisitions by, the likes of **HP**, **BEA**, **Oracle**, and

IBM. "Now that Documentum has been removed from the equation, these companies will be looking at businesses like Interwoven, **Open Text**, **Vignette**, and **FileNET**. This acquisition also makes us more attractive to EMC's storage competitors like **Veritas** and **Network Appliance**."

Matt Suffoletto, president and CEO of **IXOS, Inc.**, the North American arm of German-based ECM software developer IXOS AG, agreed that storage vendors will now be taking a closer look at the ECM space. "Storage vendors are looking for solutions that prevent commoditization of their products," he said. "The Documentum acquisition was some great PR for the ECM space."

IXOS already has partnerships with several storage vendors, including EMC. "We've talked to several people at EMC, and they have indicated that our relationship will not change," he said. "Documentum, however, may

be at a disadvantage going forward because they will be umbilically linked to EMC. It will be harder for them to be storage agnostic as they have in the past. On the other hand, there are some price advantages that can be gained by working closely [in Documentum's case being owned by] a preferred vendor."

Suffoletto concluded that the size Documentum adds through the acquisition does not scare him. "I don't think it dramatically changes the playing field," he said. "We have been competing successfully against IBM for years. In the software market, the behemoths have always had to deal with smaller companies. The real challenge will be for EMC, which has traditionally been a hardware company, to show they can successfully manage a software developer."

For more information: **iManage**, Foster City, CA, PH (650) 577-6500; **IXOS, Inc.,** Newtown Square, PA, PH (610) 355-7467.

in line with each other. One of the most interesting facts related to the deal is that EMC President and CEO Joe Tucci is the former CEO of **Wang**. At Wang, he orchestrated the $260 million sale of the company's software business, primarily a document imaging business, to **Kodak** in 1997. [*That business became **Eastman Software** and was eventually acquired by eiStream. See* <u>DIR</u> *9/15/00.*] So, there is some irony in the fact that Tucci is now on the acquiring end of a content management deal.

Adding to that irony is the fact that EMC is a storage vendor. Document imaging pioneer FileNET was actually founded as a way to sell optical storage technology. However, over the years, content management applications have generally tried to separate themselves from storage and hardware in general. Now, it seems EMC and Documentum are making an effort to bring the two back together.

Perhaps this ILM strategy will work due to the sheer increase in the volume of information expected to be put into ECM systems over the next few years. The recent increased interest in compliance and regulations seems to be driving a revolution in the ECM market, similar to the one driven by the introduction of scanning several years back. In both cases, existing storage systems were blown out of the water by an explosion of new data being put online. In extreme cases like these, the tight integration of storage and information management may make sense.

IBM is the only other company we see on the competitive landscape that has stressed integration between storage and content management. As IBM is EMC's main competition in the storage space, this acquisition may prove to be a great defensive play for EMC in that area. As the Documentum executives suggested, it will be interesting to see how the rest of the ECM field reacts to this deal.

EMC has some $2 billion on its balance sheet, which should scare the aforementioned "little five" somewhat. As far as the big platform players go, do any of them feel threatened by this acquisition? How about the big storage players? I think it's safe to say that the ECM consolidation is not complete. Whereas the Interwoven/iManage merger

OTG PRODUCT LINE COULD GET NEW LEASE ON LIFE

We must admit that earlier this year, following the announcement of **EMC's** intention to acquire **Legato**, we were a bit skeptical about EMC's intentions for the *Application Xtender* document imaging product line. *Application Xtender* was originally developed by **OTG**, which had been acquired by Legato in 2002. Based on EMC's track record with the document imaging line it had acquired with **Data General**, we thought the future of *Application Xtender* could be in jeopardy. Legato's core business is storage software, and it was our guess that EMC was focusing on that.

With the acquisition of Documentum, however, EMC intends to make a $1.5 billion investment in the ECM space, and the future for *Application Xtender* appears a little brighter. Whitney Tidmarsh, Documentum's VP and GM of document and Web content management, suggested that the *Application Xtender* line could be complementary to Documentum's current ECM offerings.

"*Application Xtender* has historically been focused on the lower-end of the market and departmental applications," Tidmarsh told *DIR*. "Documentum has focused on enterprise-wide installations. I think there is some opportunity for us to leverage *Application Xtender* as an entry-level solution and for the two products to meet somewhere in the mid-market to give us more strength there."

How a departmental sales model plays out in the hands of two companies, like EMC and Documentum, that have been traditionally focused on enterprise sales, remains to be seen. However, the fact that EMC realizes it has to expand into new markets—Centera being an example of this—and Documentum recently touted its eRoom product line as a similar gateway into smaller applications are two positive signs. Maybe we haven't heard the last of *Application Xtender* after all.

announced a couple months back raised the ECM stakes one level, this knocks them up another notch. Now that the money is flowing fast and furious, the game is really getting interesting. Stay tuned for more.

For more information: **Documentum**, Pleasanton, CA, PH (925) 600-6800; **EMC**, Hopkinton, MA, PH (508) 435-1000. ▭

ABBYY Focuses On Improved Accuracy, Market Demands

ABBYY Software House continues to push its way into the document imaging market by developing tools to meet the demands of its customers. The latest release of ABBYY's recognition engine, *FineReader Engine 7.0*, includes new functionality addressing both niche applications and the mainstream demands of the image capture and forms processing markets. For the first time, ABBYY is offering its tools through a modular licensing

model, meaning customers can license only the technology they require.

FineReader 7.0 advertises more accurate character recognition and improved image analysis. ABBYY has also introduced support for Chinese and Japanese characters, as well as some older script-type characters. In addition, *FineReader* 7.0 promises improved PDF-to-text conversion capabilities, improved XML-output, OMR and PDF417 bar code recognition, and a special invoice processing module.

FineReader Engine 7.0 will be available before the end of the year. It follows up *ABBYY FineReader* 7.0, the retail version of the product, which was released this summer. "Licensing our technology engine is our main business," explained Dean Tang, president and CEO of ABBYY USA. (ABBYY's corporate headquarters and development are in Moscow.) "We have retail software that we license through OEM agreements and sell directly. The main purpose of our retail business is to seed the market and create demand for more advanced applications."

According to Tang, ABBYY also leverages its retail and OEM installations to hone its tools before releasing them to developers. In the retail market, ABBYY has bundling agreements with the likes of **HP**, **Epson**, and **Lexmark**. Imaging application vendors who license ABBYY's tools include **Cardiff**, **Kofax**, **Optika**, **OTG/Legato/EMC**, **IXOS**, and **Zylabs**.

The invoice processing module is aimed squarely at the needs of imaging vendors. "Our module is designed to pre-process invoices before they reach a forms processing application," explained Tang. "It captures all the text on the invoice, even if it's part of a stamp or a graphic. Invoice processing applications can be used to determine the meaning of that text."

In an effort to service another emerging area of document imaging, the *FineReader 7.0 Engine* employs color as its default scanning mode. "We've been in communication with scanner vendors," said Tang. "It makes sense that if their customers buy color, they expect to do color scanning. Working with color enables our software to perform better in areas like thresholding, background removal, and separation into layers."

According to Tang, ABBYY also continues to improve its basic recognition accuracy by employing a principal known as IPA. He broke down the elements of IPA for us.

"The 'I' stands for integrity, which is what almost all recognition technology to date has been based on," explained Tang. "That means that to recognize characters, software must have existing knowledge of the features of a character and the relationships of these features. It knows that an '8', for example, has two loops that sit on top of each other."

Tang acknowledged that voting techniques introduced in recent years have improved the results of integrity-based engines. "However, to build an OCR system with recognition as good as a human's, requires purposeful reasoning," he said. "That is what the 'P' stands for."

Dean Tang, president & CEO, ABBYY USA.

According to Tang, integrity breaks down when characters are deformed or distorted. In some forms processing applications data tables can be used to improve recognition rates on these types of characters. However, in many potential recognition applications, there are no relevant tables to utilize.

That is where purposeful reasoning comes in. "When people see a distorted letter, they can use reasoning based on a structural analysis of related characters and lines of text," said Tang. "We've added that type of reasoning to *FineReader Engine* 7.0. And we are not going to stop at analyzing structure, we plan to add lexical reasoning in the future."

Finally, the "A" stands for adaptive. "This means that the system is capable of learning and can go through shortcuts in the reasoning process when a situation arises that is similar to one it has already experienced," said Tang. "ABBYY is applying the IPA principal in all the artificial intelligence programs it has in development today."

In addition to meeting the demands of its ISV customers, ABBYY works closely with some end-users. ABBYY's work with ancient scripts was initiated to fulfill some library archiving applications the company has recently become involved with. "We have one customer that is using our OCR to fight spam," said Tang. "Spammers have started using images to get around spam filters that analyze the text of e-mails. Our software gives the filters another weapon."

ABBYY is also doing work testing the accuracy of cell phone text-messaging systems, working with **Google's** on-line catalogue directory, and working with the **Rochester Institute of Technology** on a robot. According to Tang, ABBYY USA is on target

for 30% growth in 2003. "A lot of my friends ask me why I have stayed in the OCR market for so long," said Tang, who co-founded a business card-reader company back in 1989. "Most of them don't see the possibilities for recognition technology that I do."

For more information: **ABBYY USA**, Fremont, CA, PH (510) 226-6717, www.abbyyusa.com.☐

ScanSoft Hopes To Ride Office 2003 Momentum

No, **Microsoft** *Office 2003* will not include all the document imaging features originally promised. However, that won't stop long-time Microsoft imaging partner **ScanSoft** from being a part of the *Office 2003* parade, which was scheduled to start with a series of launch events this week.

Office 2003 will not include ScanSoft's TIFF-FX color imaging technology as had once been planned. However, ScanSoft recently announced two products tied in directly with the launch. The first is *PDF Converter for Microsoft Word*, which converts PDF files into editable word processing documents. The second is a new version of ScanSoft's *OmniForm Developer Edition*, which enables the conversion of paper and e-forms into Microsoft's new *InfoPath* e-forms format.

PDF Converter is currently available for a list price of $49.99. It represents a new twist on a process originally released in ScanSoft's *OmniPage* retail OCR product line. "In *OmniPage*, we applied OCR to convert the text from PDFs," explained Chris Strammiello, director of product marketing, ScanSoft. "In *PDF Converter*, we capture the electronic text directly. Our recognition algorithms are leveraged only to recreate the layout."

As a result, *PDF Converter* is designed to work on PDF Normal files that include textual elements. If users want to convert PDF Image files to text, they have to purchase *OmniPage*. "Selling upgrades to *OmniPage* is by no means the goal of *PDF Converter*," said Strammiello. "This product can stand on its own. It has horizontal appeal and in the first three weeks it has been available, it has blown away our aggressive sales projections."

ScanSoft worked closely with Microsoft both in the development and beta testing of *PDF Converter*. "We introduced PDF conversion technology in *OmniPage* because we were hearing demand from customers that wanted to work with PDFs the same way they work with *Word* documents," said Strammiello. "Microsoft was hearing the same thing. Their

customers wanted access to the information in PDFs. We worked together to refine the specifications of *PDF Converter*. Microsoft is also helping promote the product. They have been critical to our early success."

One of the specifications of *PDF Converter* is that the average conversion rate per page is less than five seconds, considerably faster than *OmniPage's* conversion rate for PDFs. Microsoft also gave ScanSoft 20,000 user names for beta testing. "So far, the greatest adoption of *PDF Converter* has been by sales, marketing, and technical writing professionals," said Strammiello. "But, it really appeals to all knowledge workers. The **U.S. Army** has put in several hundred seats across a variety of information worker desktops."

PDF Converter is available from ScanSoft's usual channels and features volume discounts. Strammiello did not rule out the possibility of Microsoft bundling *PDF Converter* with *Office* in the future.

An On-Ramp For InfoPath
OmniForm Developer Edition 5.1 could have an equally broad appeal as *PDF Converter*, although it follows a different installation model. *OmniForm Developer Edition* is a server-based product designed to help businesses convert their existing forms to the new XML-based *InfoPath* platform that Microsoft is introducing with *Office 2003*.

"Some people have asked if *InfoPath* is competitive with *OmniForm*," said Lisa Panero, ScanSoft's *OmniForm* product marketing manager. "The answer is that they are complementary. *OmniForm's* strength is the creation and conversion of forms. *InfoPath's* is connecting forms with XML."

Actually, *OmniForm* is advertised as a complete e-forms solution. It has historically leveraged ScanSoft's recognition technology to convert paper and legacy electronic forms into the proprietary *OmniForm* format. It can be used on paper, PDF, *Word*, and other proprietary e-forms. The *Developer Edition* also includes an ActiveX component for creating Web-forms.

Panero acknowledged that if a business standardizes on *InfoPath*, it should have little use for either the ActiveX tools or the proprietary *OmniForm* capabilities. However, the *InfoPath* conversion capabilities are not available separately. "We have initially decided to include the *InfoPath* capability only in the *Developer Edition*," said Panero. "This partly has to do with our product cycle. I can't say if we'll introduce it into the other *OmniForm* products in the future."

The *OmniForm Developer Edition* retails for $1,495, compared to a $700 list price for *OmniForm Premium* and a $100 list price for the most basic version of the product. *OmniForm Developer Edition 5.1* will be released to manufacturing on Oct. 21 and begin shipping early next month. "We are working with the *InfoPath* marketing team to get maximum exposure from Microsoft," concluded Panero.

For more information: **ScanSoft**, Peabody, MA, PH (978) 977-2000, www.scansoft.com. ▣

d-mail To Be Available From Pitney Bowes By Year's End

Mailroom processing has become one of the hottest topics in document imaging. It's being treated as the next big thing by many capture vendors—the natural culmination of the collision of the forms processing and image capture markets. Mailroom processing relies on the application of advanced recognition and classification technology, which has been in development for the past several years and is finally reaching maturity.

Kofax and **Captiva**, two of the leaders in the capture space, have both been assembling technology and solutions designed to move their applications from the backroom, or specific lines of business, into the mailroom, or more general document scanning. The likes of **Datacap**, **ReadSoft**, and **Top Image Systems** are not far behind with potentially competitive technology. However, to date, no one has really been able to crack the mailroom processing nut.

A lot of this may have to do with a lack of understanding of the mailroom. As we mentioned, document imaging has historically been a line-of-business application. The types of documents entering a corporate mailroom are a lot more diverse than the documents entering an accounts payable department. Sure, it would be nice to get AP's invoices scanned in the mailroom and then digitally passed downstream… but what about the other documents? Do image capture vendors really have a clue about how to deal with variety?

Pitney Bowes, on the other hand, understands the variety the mailroom presents. Known primarily for its postage meter business, Pitney Bowes also offers a full-range of mail processing equipment and services. Pitney Bowes Management Services (PBMS) does outsourcing for more than 1,400 businesses. This includes managing traditional mailroom processes.

PBMS is currently working on the roll-out of the d-mail digital mail system that was introduced back at the **MAILCOM** show in 2002. The original system featured an **IBML** scanner and a Pitney Bowes Olympus letter sorter, along with capture software developed by Warrenton, VA-based **IAC**. d-mail was introduced in the aftermath of the string of anthrax attacks perpetuated by mail. The attacks resulted in a heightened interest in the digitization of mail for safety purposes. Both Pitney Bowes and IBML had already been exploring the process as a cost-savings benefit for end users [*see DIR* 7/5/02].

To date, Pitney Bowes has yet to sell a d-mail system. However, the company currently is running a pilot application in its Stamford, CT headquarters. That system features document imaging software from **Hyland Software**, as well as IBML and Pitney Bowes hardware. "We have about 50 different types of users on the pilot, ranging from the corporate executives, to the corporate legal group, to some of the operations personnel," said Judy Eckert, director of mail solutions for PBMS. "Our current volume is approximately 200-300 pieces of mail per day. We scan the mail and attach it to e-mail messages."

According to Eckert, d-mail is still a few months away from being available to Pitney Bowes customers. "We are hoping to get an entry-level solution, similar to the one we are running as a pilot, out the door this year," she said. "Next year, we hope to offer a more full-blown solution that includes the option of posting imaged mail to intranet sites for retrieval. We are also working on improving the communication between the sorter and the scanner."

Pitney Bowes considers d-mail both an interesting option for its existing mailroom customers and a way to get into new mailrooms. "As a mailroom manager, we are working with our customers to determine what is the best way to distribute their mail," Eckert told *DIR*. "In some cases, document imaging could be the answer. We are trying to determine the most efficient document workflows."

Not surprisingly, Pitney Bowes is finding significant early interest in d-mail in the financial services market. "A lot of regulations are emerging around correspondence in that market," she said. "Imaging those documents as soon as they enter the mailroom ensures they will be safely filed in an electronic records management system."

"High-touch" documents are another area of focus for Pitney Bowes. "Typically, documents in areas like AP and AR, that have business rules built around them, qualify as high-touch," said Eckert. "We count the number of touches both before a document

reaches the initial recipient, and after. We are also looking at automating data entry through forms processing technology. We want to automate as much as possible for our customers."

It seems Pitney Bowes is hitting on some of the same areas that document imaging vendors have been dealing with for years. That's why we think the marriage of mailroom specialists like Pitney Bowes to experienced imaging vendors is a natural. It could be the union that takes the potential of mailroom processing and makes it a reality. Because, for now at least, mailroom processing still seems to be at the point it was when we first talked to Pitney Bowes about d-mail a year and a half ago.

"We are talking to customers about d-mail," said Eckert. "There is a lot of interest and chatter in the market about digitizing mail. However, there aren't a lot of customers ready to take the plunge yet. We are currently working on finding the niche high-touch applications that show the largest ROI."

Indeed, these are the applications the imaging industry has been focused on for years. If you add that experience to Pitney Bowes' mailroom experience, we think it should prove a winner.

For more information: **Pitney Bowes**, Stamford, CT, PH (800) 672-6937, judy.eckert@pb.com. ▣

THE BANK OF NEW YORK IMPLEMENTS IMAGE-BASED FRAUD TECHNOLOGY

New technologies, new federal legislation such as Check 21, and rapidly developing check image exchange and image presentment are currently hot topics for banks. **The Bank of New York** is no exception. "Image technology has enabled us to provide our customers with innovative solutions that take advantage of new technologies available today," said Tony Gandolfo, VP and a group product manager with The Bank of New York.

In addition to leveraging imaging for the exchange and processing of checks, The Bank of New York is also utilizing its check imaging capabilities to prevent fraud. "With the increased availability of high quality scanners and printers on the market, check fraud is becoming more pervasive," Gandolfo told *DIR*. "Today, many people can make very accurate representations of checks on their home computers and printers. This makes it easier not only to create your own checks, but easier to alter existing checks as well."

To better combat fraud, The Bank of New York recently installed a payee name recognition module for its positive pay system. This module is designed to be complementary to traditional positive pay as an anti-fraud technology.

"Traditional positive pay uses MICR line information to compare dollar amounts and check numbers to data provided by our customers about the checks they've issued," said Gandolfo. "However, it does not take into consideration the verification of the payee line. If the payee information has been altered, standard positive pay systems have no way to detect it. The payee name recognition module uses image and OCR/ICR technologies to review the payee line on the check and compare it to the payee information provided by our customers. By verifying an additional information component on checks, this technology increases the level of fraud protection we're able to offer our clients."

For more information: **The Bank of New York**, www.bankofny.com.

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