Document Imaging Report

Business Trends on Converting Paper Processes to Electronic Format

September 1, 2017

AIIM OFFERING PRIVACY CERTIFICATION COURSES

Through a partnership with the **International Association of Privacy Professionals** (IAPP), **AIIM** is now offering courses around privacy and data protection. IAPP is an international organization that has certified thousands of people worldwide. AIIM is now an official training organization for three of IAPP's ANSI-accredited programs: Certified Information Privacy Professional/U.S. (CIPP/US), Certified Information Privacy Technologist, and Certified Information Privacy Manager. The focuses of the programs are, respectively, laws and regulations, operations, and technology.

"Privacy has been a concern of our members for a long time," said Jesse Wilkins, director of professional development for AIIM. "We have members who work with ECM technology in areas like financial management and HR—and obviously there are privacy concerns related to that. Our courses have historically included security and a little bit of privacy, primarily as it relates to records management and document disposition, but we've mainly danced around it.

"So, with the way the IT market is going, and GDPR (the EU's General Data Protection Regulation) seemingly becoming the buzzword of 2017, people had started asking us why we didn't offer more privacy focused courses. Well, IAPP already does that. We didn't think we could out-privacy a privacy organization, so we decided to partner with them."

Wilkins noted that the programs' ANSI

TIS Banking on Cloud for Growth

Top Image Systems (TIS) CEO Brendan Reidy has done successful turnarounds before. At his previous employer, XRS Corporation, in 18 months he helped improve the company's valuation 11 times from what is was trading at when he joined to what it eventually sold for. And, while the timetable at TIS may be extended a bit, he has implemented a similar turnaround strategy—one which involves transitioning more of the capture vendor's business to the cloud.

"If you look at my last turnaround, at XRS, in 18 months we took the stock from trading at $0.47 per share to where we sold it at $5.60 in a successful exit," he told *DIR*. "One thing we did was continue to support a legacy product with a large install base and introduce a new product targeted at the SMB—with an emphasis on the 'M.' When we did that, we had to successfully transition from primarily on premises sales to cloud-based SaaS sales."

Brendan Reidy, CEO, Top Image Systems

XRS was a fleet management software specialist that was sold to one of its competitors for $178 million in 2014. In August 2016, Reidy joined TIS and since then has implemented a three-pronged approach to driving the business and increasing shareholder valuation:
- improving operations;
- maintaining and protecting the company's on-premises document capture software business and hosted payment processing service
- investing in a cloud-based invoice processing platform targeting the SMB

It's this third area where Reidy expects to drive growth for TIS in the future. "What I've found is that the inflection point where cloud sales overtake on premises sales is probably three years out," said Reidy. "In 2017, I expect TIS to have a minimum

amount of revenue from eFLOW cloud sales. In 2018, we will start to ramp up. By 2020, I expect we will have hit the inflection point where cloud sales of eFLOW are surpassing on premises sales."

The Cloud Strategy

Like Reidy, TIS is not a newcomer to cloud services. eGistics, a Plano, Texas-based ISV that TIS acquired in 2014 [see *DIR* 7/18/14])(and of which Reidy was a founding board member), has been providing cloud-based payment processing services since it was founded in 1994. It counts four of the largest five banks in the U.S. as customers.

"Through our eRemit service, we process about 500 million images per month and 100s of billions of dollars worth of financial transactions every year," said Reidy. "Everything is hosted in a Tier 4 data center, of which there are only 11 in the U.S. They are the most secure data centers available, and we have chosen them in concert with our largest customers to address the security requirements you have with remittance processing."

Reidy estimated that the cost to operate these data centers is four to 10 times that of what you'd pay to host an application on leading cloud servers like those run by **Microsoft** and **Amazon**. "For our A/P SaaS product, we are currently utilizing Azure," he told *DIR*. "In addition to being less expensive, this helps us meet requirements in some countries that call for data storage to remain local. Of course, if one of our customers wants to utilize Tier 4 data centers for invoice processing, we will be able to address that. Administration for all our hosted services will be handled from a single location."

Initially, TIS will have two sets of target customers for its cloud-based invoice processing: its eRemit banking customers who wish to offer A/P services to complement their A/R services and mid-market SAP users. "We are defining the mid-market as companies with at least $100 million in revenue up to $1-2 billion, with our concentration toward the higher end of that," said Reidy. "Our focus will also lean toward companies in markets with intense A/P operations, like manufacturing, where there are typically a high number of A/P transactions."

Last year, TIS launched eFLOW AP, which includes tight integration with SAP's ERP software. It was developed under the direction of Carsten Nelk who joined the company as CTO in 2015 [see DIR 5/29/15]. Previously, Nelk had worked for SAP before founding Ebydos, which was contracted by ReadSoft to develop A/P workflow. Ebydos was eventually acquired by ReadSoft, which then became a leading vendor of SAP invoice processing solutions.

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"TIS has more than 100 customers running some flavor of accounts payable application," said Reidy. "But, if you go back a few years, I'd say they were primarily just leveraging our core capture capabilities. Now, we have what I consider more of an A/P platform that includes workflow and deep integration into an ERP platform."

eFLOW AP has initially been brought to market as an on premises application. TIS is currently running its internal invoices through a cloud version and plans to officially launch the beta version of eFLOW AP in the cloud at the upcoming **Biz.ONE Conference** being held Oct. 23-25 in Orange County, CA. "We have a very powerful integration with SAP and initially that will be the only ERP platform we focus on," said Reidy. "As we work through 2018, we will look at interfacing with other ERP systems from vendors like **Microsoft**, **Oracle**, and **NetSuite**."

Reidy sees a lot of market opportunity with users of Business One, which is SAP's SMB solution. "SAP has a two-tiered strategy," Reidy told *DIR*. "They sell their enterprise product, ECC, through a direct salesforce and Business One primarily through a channel. We don't see the **Open Text** Vendor Invoice Management application nearly as much in the Business One channel as it shows up in ECC accounts. Business One resellers tend to be decent sized consulting organizations that are often looking for additional capabilities. So far, they have been very receptive to eFLOW AP."

The state of the business
As TIS prepares to bring eFLOW AP in the cloud to market, Reidy is faced with the task of keeping the company afloat. In December, TIS raised $5 million through a sale of convertible notes. The money was earmarked for use as working capital as well as to drive expansion, including the launch of eFLOW in the cloud [see DIR 1/20/17].

Through the first six months of 2017, TIS has seen its revenue decline by 13%. To offset that, the company reduced its YOY expenses by 10% but still saw its operating loss increase by $1 million. As of June 30, its cash and cash equivalents were listed at $4.4 million.

Reidy noted that one area of recent weakness has been in digital mailroom sales in Europe. "The decline in revenue in eFLOW sales in Europe is a function of how that market has matured," he said. "Today, most major customers that need digital mailroom solutions already have something. Any new sales typically involve replacing a competitive product. But, those types of solutions are really sticky and it's a big decision to replace one."

TIS' payment processing business is healthy but not a high growth area. "Paper-based payments are declining but not as rapidly as many analysts projected," said Reidy. "Our systems offer integrated processing of multiple inputs—we don't care if its paper, a PDF e-mail attachment, or an electronic payment. Our customers can look at all their transactions through a single view, which is a powerful capability.

"We are also seeing a lot of consolidation in the payment processing industry, which is moving the dial in favor of larger scale operations. The businesses we work with are growing through acquisition, which increases their volumes and helps drive down their costs per transaction. So, when they compete with smaller operations, they can win on cost."

Transitioning to cloud sales
While Reidy has worked to trim TIS' operating costs, he realizes the company needs to ramp up sales and support as eFLOW AP in the cloud is brought to market. "Right now, we have a very lean sales team," he said. "Fewer than a quarter of the salespeople that were here two years ago are still in place. I can say that we have retained the salespeople we wanted to. We have key guys who continue to sell on premises software and have a good probability of being able to make the transition to selling cloud-based solutions."

Reidy noted that making that transition can be a challenge for a lot of salespeople with experience selling enterprise software. "The cloud is a higher velocity sale that has to be enabled by marketing automation," he said. "At XRS, when selling cloud solutions, we had a price point below which we would not put a person on a plane to chase the sale. There is a lot more Web enabled, inside sales work, and the sales cycle is typically more compact than with on premises sales. In addition, there is minimal input from the buyer's IT and the cost is typically something that comes out of a departmental budget vs. something that has to be considered in deference to a budget cycle.

"As a result, the whole decision-making process is drastically different than when doing an on premises sale. Another factor to consider is that cloud sales typically aren't as sticky.

Because their up front investment isn't as high, the customer can be more brutal. If the solution isn't working, they can just turn it off and replace it. So, it's very important to have excellent customer care, and we still have to hire up to that."

TIS will take a conservative approach to ramping up its cloud sales and support. "I'm not expecting to have 200 customers in the first year," said Reidy. "I'm hoping to have maybe 12 in the beta mode and we'll ramp up from there. As I said, I don't expect to hit the inflection point where cloud sales overtake on premises for three years. In the meantime, I don't expect our legacy business to grow significantly."

That said, Reidy expects the company will be able to make it through until cloud sales take off by generating revenue at its current pace of $30-$35 million annually.

For more information: http://bit.ly/TISQ2results

CVISION Spin-Off to Focus on Automation through AI

SoftWorks AI may be a new company, but it is not new to the world of artificial intelligence (AI). Headed by Ari Gross, who holds a Ph.D. in computer vision, SoftWorks AI is an ISV that was recently spun off from **CVISION Technologies** when that company was sold to **Foxit Software** [see DIR 8/11/17]. Leveraging a successful practice in intelligent document capture as its starting point, SoftWorks AI plans to use its expertise in artificial intelligence to help further automate its customers' business processes.

"We've been doing AI for over 20 years now — before it was a buzzword in the technology market," Gross told *DIR*. "I personally have written more than 40 papers on AI and related topics. We didn't discover the technology yesterday, but it seems the market is finally catching up with us. We felt it was the right time to launch a company focused on AI."

CVISION was founded in 2002 and became a document compression specialist by leveraging its expertise with JBIG2, which was incorporated in the PDF specification with version 1.4 (published in 2001). "We didn't start out with the aim of becoming a compression company," said Gross. "We were working on automation by trying to get machines to see

documents and images more like humans do. One of the questions we ran into was that when two letters look the same to a person, why does a machine recognize them as different? For example, if the letter 'b' is printed twice on the same page, why is a machine treating them as different characters?"

Basically, JBIG2 involves substituting a single representation for all similar characters, which greatly increases the potential for compressing a document image. "To accomplish this, we invented the CIF standard, which eventually morphed into JBIG2," said Gross.

We first me Gross in 2004, when CVISION's PdfCompressor application was just starting to take off [see DIR 3/5/04]. At the same time, the company continued to look for other ways to improve business processes and in 2008 launched

Ari Gross, founder, SoftWorks AI

Trapeze, an intelligent document capture platform [see DIR 10/24/08]. The Trapeze business will serve as the foundation for SoftWorks AI.

To date, Trapeze has been deployed in a number of accounts, typically in applications that require some sort of complex document processing and customization. It is being utilized on a variety of form types including tax documents, mortgages, college transcripts, invoices, and more. Working with partner **Open Text** Captiva, at one major financial institution, CVISION was able to deploy Trapeze to reduce its loan processing times from more than two hours to under 20 minutes.

"Our focus is on business process automation," said Gross. "So far, our technology has been primarily applied in document-centric applications in financial services. We are not going to walk away from our focus on documents, because that's where most of our initial customers are, but we are open to addressing other issues. For example, we think we can apply our technology to help create automated responses to e-mail inquiries."

Ultimately, Gross views SoftWorks AI as a potential competitor to cognitive computing programs like **IBM's** Watson. "Watson is terrific at what it's specifically engineered to do, like play chess or Jeopardy, but in most cases involving documents and images, machine

learning technology has been overhyped and oversold," Gross told *DIR*. "It's very hard to build essentially an expert system to automate a knowledge-based vertical process by using a general approach like Watson does. You can't start to optimize human workers unless you can achieve a certain accuracy threshold for document classification and extraction.

"Let's say you devise a bot to assist in insurance underwriting and it helps, but it also misprices two out of every hundred quotes. When one of those policies blows up, who pays for it? To effectively automate an application like that you really have to understand the information on documents and images at a very deep level and know how to calculate the confidence and risks. It's not something that can be done without expertise.

"We are seeing that we can provide high value to our customers related to processing their documents in these areas, but our technology also enables higher level tasks. These include being able to automatically pay invoices or underwrite mortgages and insurance policies without requiring a human to analyze all the information. SoftWorks AI is more than a document company. We are a knowledge process automation company."

SoftWorks AI will continue to work directly with end users as well as with partners like Open Text and large accounting firms. Their software is currently used by at least one global accounting firm to automate the processing of tax forms—a service which the firm sells to its customer base. "We license our software through a subscription model," explained Gross. "We've found that it typically takes a long time to really automate a company's business and a subscription model with an initial multi-year contract helps minimize the cost of up front professional services. I compare it to the real estate market, where you might do a build-out or renovation for a tenant that you don't charge them for up front, but you incorporate the cost in the leasing agreement."

SoftWorks AI will remain based in Queens, which is where CVISION was headquartered and retains the majority of the organization's employees. "We had a lot of potential buyers interested in the PdfCompressor business and signed multiple NDAs," said Gross. "We decided to sell to Foxit because we felt the market was right and that we had found the right buyer. There are some very nice upside opportunities for Foxit related to PdfCompressor.

"The sale also provided some liquidity for our investors. We started the company 15 years ago and this was a nice exit for all our investors. We feel we sold the business to a strong company that is growing and serious about competing in the PDF market. It also gives our new company a clean AI story. We are no longer locked into documents and can focus on the wider spectrum of business process automation."

For more information: https://www.softworksai.com/

Acquisition Increases M-Files' AI Capabilities

M-Files differentiates itself in a crowded ECM space through its focus on managing meta data. With the upcoming release of M-Files 2017, the Dallas-based ISV has revealed plans to add more intelligence to its meta data capture and management process [see DIR 6/30/17]. Its recent acquisition of Canadian ISV **Apprento** fortifies this strategic direction.

Based in Fredericton, New Brunswick (East of Maine), Apprento specializes in natural language processing and artificial intelligence. "Apprento has a Context Engine the helps users more effectively leverage their unstructured document files," said Greg Milliken, SVP of marketing at M-Files. "This plays beautifully with our meta data-driven story."

In addition to NLP, Apprento focuses on a discipline called natural language understanding (NLU). "Let's say that you have a document related to a certain project, but a customer's name is not mentioned in it," said Milliken. "Apprento's Context Engine should be able to infer which customer the document is connected with, so we could include its name in the meta data."

When we last spoke with Milliken, it was in the wake of a partnership M-Files had announced with **ABBYY** to license auto-classification technology, which is being incorporated in M-Files 2017. "The Apprento technology will not be included in the initial release of M-Files 2017," explained Milliken. "It will likely start showing up in point releases a few months down the road."

M-Files VP of Product Management Mika Javanainen explained that there is little overlap between what Apprento does and ABBYY's Smart Classifier. "The ABBYY technology does

document categorization which it learns through a training process," he said. "Basically, you suggest that a particular document is a contract, another is a memo, another is an agreement, and so on. It then applies NLP to learn these categories and matches future documents with them.

"Apprento's Context Engine uses similar algorithms but is more focused on NLU. It's about more than just entity extraction. For example, a particular e-mail might include mention of two parties and Apprento would be able to suggest which one is the buyer and which is the seller. M-Files now has the ability to combine multiple different algorithms to figure out what documents are about, what type they are, who is involved with them, and what the parties are doing."

Greg Milliken, SVP, Marketing, M-Files

When we originally talked with Milliken about M-Files 2017, he told us it was utilizing a combination of in-house and third-party technology to extract meta data. Apprento's technology will be deployed in addition to that. "We are comfortable either building or buying technology," said Milliken. "Our approach is pretty open minded. We always believe that having our own technology is a valuable asset, and with Apprento we are bringing on board some strong capabilities. But, we are also totally open to licensing third-party technology."

Milliken explained how a more open architecture in M-Files 2017 is designed to better enable third-party integration. "We did this so we don't have to depend on our own IP," he said. "It's part of our plan for creating an intelligent meta data level. There are really two parts to it. On the back-end we are open for connecting with other repositories. On the front end is an intelligent services layer which can be used to connect to something like Microsoft's Computer Vision API. We haven't done this yet, but somebody could conceivably build a plug-in that would enable them to leverage the Microsoft technology for analyzing images to tag them with meta data."

Apprento has developed some applications for its context engine around e-mail and document management, but Milliken stressed that it's a technology acquisition not a customer-base buy. M-Files picks up

approximately 10 additional employees, all of which are engineers. "If you think about our meta-data driven approach, we believe there are a number of practical ways that AI can be applied," said Milliken. "This includes figuring out ways to drive the meta data once it has been acquired."

M-Files did not disclose how much it paid for Apprento. The acquisition was presumably funded out of a $36 million round of Series B funding the company secured last year [see DIR 4/22/16].

New HR template released

In addition to the acquisition of Apprento, M-Files recently announced a new HR-focused configuration of its ECM platform. It's the third in a series of templates the ISV is currently developing. M-Files HR is available either through an on-premises or cloud deployment.

"We launched a Quality Management System configuration in 2011 that has been very successful, and earlier this year we released a contract management template," said Javanainen. "We are currently working on a GDPR template and plan to release three or four others by the end of the year."

Mika Javanainen, VP, Product Management, M-Files.

These configurations or templates are designed to reduce professional services costs for M-Files customers. "They buy a regular M-Files license and pay something extra for the template," said Javanainen. "But the templates come with a lot of preconfigured documents and workflows that are designed to reduce the number of services needed to complete a configuration to address a specific area."

The HR template has been built leveraging knowledge from M-Files' current customer base. "We have more than 7,500 customers and through them we've built up our experience around deploying and configuring solutions," said Milliken. "When we find an application we can repeat across an industry or vertical market, we look at putting together a template to address it. In the U.S. especially, we have seen our technology used a lot for management of employee records."

Milliken noted that these pre-configured solutions are often an entrée into broader

deployments. "We find that once people see that they can quickly address their core use case, it potentially opens things up dramatically for deployment of M-Files in other areas," he said. "Once they successfully address HR, then contracts can be a natural next step. It doesn't have to be, but when users start realizing the opportunity they have to increase their ROI through additional applications, that's typically where it leads."

For more information:
https://www.m-files.com/en/m-files-news

Y Soft Goes After Chinese Print Management Space

Print management and document capture software specialist **Y Soft** recently opened a subsidiary in China to help it expand its business in one of the world's largest markets. Y Soft, which is based in the Czech Republic, had been addressing China through an office in Hong Kong. It has now opened a subsidiary on the mainland in the Shanghai District Technology Development Center. Milan Fujita, who oversees Y Soft's entire Asia-Pac operations, has also been appointed CEO of Y Soft China. In addition, Y Soft has signed a partnership with **Aurora Office Automation**, a Taiwan-based **Konica Minolta** reseller with a strong Chinese presence.

"For several years I have been working closely with our partners to develop Y Soft's business in the Asia-Pac region," Fujita told *DIR*. "We have established subsidiaries in Japan and Singapore and recently acquired a company in Australia. We also had a branch office in Hong Kong, but our growth in China has been fairly slow because we did not have local people.

"We have now increased our priority for developing our business in China and plan to move more aggressively after the market. Hong Kong was a good starting point, and it helped us understand what is going on and to gain some of the right contacts. But, Chinese people prefer to work with other Chinese people on a daily basis."

Y Soft China currently has four employees who will focus on providing technical support for Aurora, which will handle the sales and marketing of Y Soft's SafeQ product line. "Although it is based in Taiwan, Aurora has a strong presence in China," said Fujita. "They are

a Konica Minolta partner and are acting as our exclusive reseller partner in China. They have an excellent presence in the market with many business customers throughout China.

"What they are missing is expertise in how to implement print management and capture solutions. We bring deep knowledge on how to implement complex applications across multiple sites. We are focused on the technology side. We already have our first project in place with Aurora and plan to hire additional employees to support them by the end of the year."

Fujita added that having a local partner is also important for logistical purposes. "It's important to have things like the proper certifications in place," he said. "Also, if you only have a subsidiary, without the infrastructure of a local partner it's tough to ensure that products will be delivered on time."

Milan Fujita, CEO, Y Soft Asia Pacific; CEO Y Soft China

On an international scale, Y Soft goes to market through a combination of office equipment dealers, like Aurora, and vendor hardware partners. "We're not looking for additional dealer partners in China," said Fujita. "When we work with vendors, it's more on a global, strategic level, so that could potentially incorporate China."

According to Fujita, the biggest competition for Y Soft in print management software in China is from local ISVs. "There are two global companies in the Chinese market but they have a very low presence," he told *DIR*. "I've come up with a list of eight local Chinese companies that develop print management and capture, but they are mostly small and only focus on regional markets. There is one in Shanghai and one in Beijing, for instance, that focus on those regions.

"They really don't have the scalability to deploy national projects. In addition, their interfaces are only in Chinese, so they can't scale internationally. We are looking to sell to larger enterprises—companies that are looking for more scalable solutions that can be deployed at multiple sites but maintained from a centralized location."

For more information: http://bit.ly/Y_SoftChina

Neat Expands Third-Party Scanner Certification Efforts

A month after announcing that it had completed its exit from the hardware business, the **Neat Company** announced an expanded hardware certification program. The Philadelphia-based ISV that originally made a name for itself with a bundled scanner and receipt capture software solution, is moving forward with a cloud-based strategy. It has also widened the scope of documents it addresses.

"The company started as a software developer, and we were first-to-market with a hardware and software solution for capturing receipts," said Mike Crincoli, president of Neat. "But since then the market has evolved quite a bit. On the hardware side, the personal scanner space has become a lot more competitive. And everyone's phone can be used as a scanner. Also, there are a lot more documents coming in electronically, not on paper.

"So, we decided to untether ourselves from the scanner and make our software compatible with third-party hardware, as well as utilize mobile technology and e-mail to deliver content into our software."

Neat currently has a bundling agreement with **Panasonic** [see <u>DIR</u> 4/24/15] and lists **HP**, **Fujitsu**, **Canon**, and **Brother** as certified hardware partners. "We announced that we are TWAIN compatible, but we also go through individual certification programs," said Crincoli. "What that consists of varies by vendor. We are also working strategically with some vendors and discussing deeper partnerships."

Neat also has a mobile capture app that is able to crop and rotate images and then send them to the Neat cloud for further processing. "Our software can be used completely untethered from a scanner," said Crincoli. "Files can also come in through e-mail and be fed directly into our software."

According to Crincoli, Neat has an install base of 90,000 subscribers, a lot of whom are sole proprietors looking for some sort of document management system. The cloud software is integrated with several applications used by these types of individuals including QuickBooks, Sage, TurboTax, and ConstantContact.

"Our software is designed to take the friction out of getting capture up and running and creating efficiencies for users as quick as possible," he said. "As we transition away from one-time hardware sales to SaaS, we need to cultivate relationships with our customers and continue to improve our support."

For more information: http://bit.ly/NeatCertification

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certifications underscore their quality and integrity. "There are a lot of check boxes to fill in to earn those certifications, and ANSI goes through and makes sure everything they require is in place," said Wilkins.

AIIM's initial privacy training course is being held Oct. 3-4 at AIIM's headquarters in Silver Spring, MD. AIIM will be offering CIPP/US training taught by Wilkins, who was working on earning his own certification when spoke in August. Cost is $1,795 for AIIM members and $1,995 for non-members. This includes the registration fee to take the certification exam once and the first-year annual maintenance fee. Exams must be schedule at a separate time and location.

In the long term, Wilkins hopes the relationship with IAPP will prove to be a two-way street. "For IAPP, this represents a way to make our community aware of its resources related to privacy," he said. "We are also looking at ways that our services could benefit the IAPP community. For example, they focus mainly on what you have to do to safeguard privacy, but not as much on how you implement it. AIIM understands how you can use repositories, capture, and digital workflows to make that happen."

Wilkins added that he would like to have someone from IAPP potentially speak at AIIM's annual national conference.

Wilkins added that AIIM is currently working on similar partnerships with other organizations as well. "This is something we want to do more of going forward," he said. "We are looking at partnering with anybody offering good, high-quality information-management related content. We want to make sure our community is aware that these types of programs are out there, and we want to do more than just have our name on a Web page. We want to make sure our community has access to these programs."

For more information: http://bit.ly/AIIM-IAPP