Is File Shows The Shows Th

Is File Sharing Killing Enterprise Governance?

The difference between CMS and ECM

Are esignatures the real deal?





7 reasons why your Enterprise Social Media project might fail









# Records enable your staff!

- anyone
- anywhere
- anytime















Contact EzeScan for more information:

Call: 1300 EZESCAN (1300 393 722)

# iManage in management buyout from HP

The iManage leadership team has completed a buyout from Hewlett-Packard (HP) for the purchase of the complete iManage business, including its brand, products and services. iManage co-founder and current General Manager Neil Araujo is the CEO of the management-owned company, now one of the largest independent software companies focused on work product management solutions for professional services firms and their clients. Rafig Mohammadi, also a co-founder and former CTO of iManage, is returning to the company as Chief Scientist.

"With this buyout now complete, the iManage team has rededicated itself to our customer and partner community around the world," said Araujo. "They have trusted us with their most important assets, and we are proud to begin a new era of innovation and ultimate market leadership in partnership with them."

iManage is used by nearly 3,000 professional organizations worldwide including legal, accounting and financial services firms and the corporate departments they serve.

The company says 80 percent of the largest law firms in the US, a majority of the largest firms in Europe and more than 400 corporate legal departments rely on iManage. In addition to WorkSite (document and email management), the HP products in this transaction include LinkSite (secure file sharing), Universal Search (enterprise search and analytics) and WorkSite Records Manager (records and information governance.)

iManage will continue utilising HP cloud services for its private and hybrid cloud offerings. The company will also resell relevant HP products, including TeleForm and HP Process Automation, and will have ongoing access to other relevant technology, including HP IDOL. In addition, iManage will maintain its partnership with HP Managed Print Services for document process automation solutions based on integrating HP multifunction devices with WorkSite.

"For us, iManage is much more than a product; it's a community that spans our people, partners, customer organizations and nearly one million users, many of whom have been with us for a decade or more," said Araujo. "This buyout allows us to serve the community we care about with a culture based on listening and working with customers, developing innovative products and providing best-in-class services and support."

iManage will be headquartered in Chicago, with offices in Silicon Valley, London and Bangalore.

# Publisher/Editor

**Bill Dawes** 

Published by: Transmit Media Pty Ltd ABN 631 354 31659 PO Box 392, Paddington NSW 2021, Australia

Telephone: +61 (2) 9043 2943 Fax: +61 (2) 8212 8985 email: idm@idm.net.au

**IMAGE & DATA MANAGER** 



**Audited Circulation:** average net distribution 5.633 for period ended March 31, 2014

All material in Image & Data Manager is protected under the Commonwealth Copyright Act 1968. No material may be reproduced in part or whole in any manner whatsoever without the prior written consent of the Publisher and/or copyright holder. Editorial contributions are welcome. All resonable efforts have been made to trace copyright holders

The Publisher/Editor bears no responsibility for lost or damaged material. The views expressed in Image & Data Manager are not those of the Editor. While every care has been taken in the compilation of editorial, no responsibility will be accepted by the Editor for omissions or mistakes within. The Publisher bears no responsibility for claims made, or for information provided by the advertiser.

# Drought of data scientists is hurting

Australian organisations may be missing out on opportunities to improve their business decision-making by not considering to hire a data scientist. The recent Teradata Data Analysis Index revealed that 88 per cent of companies use analytics to make decisions based on data but nearly the same percentage (86 per cent) have no plans to hire a data scientist.

Alec Gardner, general manager, ANZ, Teradata, said, "The results suggest these organisations either already have a data scientist, which is unlikely, or they don't understand the benefits a data scientist could bring to the business.

"Data scientists can play a vital role in the success of an organisation because of their ability to identify business problems, identify the right data to help solve a problem and communicate the solution back to the executive team."

The Teradata Index found that 97 per cent of organisations gather data from internal systems, 80 per cent gather online data and 74 per cent gather third-party data.

Alec Gardner said, "It's clear that most organisations have access to a broad range of information. The survey results show that companies are mostly analysing this data to improve the overall customer experience. More than three-quarters (76 per cent) of respondents are looking to reduce customer service issue and complaints, and 53 per cent aim to improve customer loyalty and optimise the mix of marketing initiatives."

Alec Gardner said, "Organisations that consider appointing a data scientist or a team of data analysts may find that they can derive much deeper and more varied insights from their data. This will let them recommend improvements in areas of the business such as supply chain and logistics, product or service development, or customer acquisition.

"Employing a data scientist could help organisations achieve a higher return on their investment in data collection."

# Lexmark launches Kofax View+

Lexmark has announced the availability of Kofax View, claimed to be the first document viewing, editing and PDF creation application for Outlook and available for free in the Microsoft Office Store. Kofax View+ works directly with Outlook and Outlook for Office 365 user interfaces, allowing users to complete collaborative tasks - including image viewing and editing, document merging, and PDF creation – without leaving the Outlook application interface. Kofax View+ makes it easier to generate

> PDF documents, increasing productivity and fostering better collaboration throughout email workflows.

It builds on the familiar Outlook interface reducing the need for formal user training.

The company says remote deployment and centralised management of Kofax View+ reduces administrative costs when compared to locally-installed desktop applications with similar capabilities.

Kofax View+ is a free showcase application that can be leveraged by enterprises of all sizes that rely on Outlook for document collaboration. Kofax View+ is available now in the Microsoft Office Store at www. store.office.com.

"Microsoft Office delivers exceptional workforce productivity and Microsoft Outlook is central to increased productivity through collaboration. Kofax View+ gives Outlook users—including Outlook for Office 365 users in the cloud—the ability to more easily create, manage and share familiar document types for improved communication that significantly streamlines the workflow process," said David Caldeira, product marketing executive, Lexmark Enterprise Software.

# **National Library to store online media**

New legislation means that from January 2016 the National Library of Australia will be able to capture everything from ebooks to blogs, websites to social media—and everything else published on the Internet.

Director-General of the National Library of Australia, Ms Anne-Marie Schwirtlich, said for more than 100 years, the Library had been collecting all print material about Australia and Australians through legal deposit.

'This new legislation allows us to take the lead in the way Australia documents the ever-changing online world by collecting the very latest digital media, that is, the full digital landscape.'

Ms Schwirtlich said this had been made possible through the introduction of The Civil Law and Justice Legislation Amendment Bill 2014, which updates the Copyright Act 1968.

This will allow the Library to collect billions of Australian web pages, tens of thousands of Australian ebooks, journals and magazines and any new forms of publication that appear in the

'We look forward to working with the publishing industry so, together, we can preserve all Australian stories, regardless of whether they're in print or online,' she said.

'These new digital collections will be as important for researchers tomorrow as our most prized treasures like Cook's Endeavour Journal or Edward Koiki Mabo's papers are today.

'Collecting this digital material will let us create a picture of what it's like living in Australia today: how we think, how we feel, what we care about. This will provide invaluable social history to scholars of the future.

# Bechtel signs on to the Aconex cloud

Bechtel, one of the world's largest engineering, project management and construction (EPC) firms, is moving to replace its internal document and record management systems to instead collaborate via the Aconex cloud.

Aconex Limited, a listed public Australian company, provides a cloud collaboration platform for the global construction industry. Its three-year agreement with Bechtel will standardise the use of Aconex across all business units globally in a phased implementation.

All new projects will be implemented on the Aconex platform. The terms of the agreement are user-based, providing flexibility for Bechtel to add an unlimited number of platform users to its projects over time. Bechtel has some 40 offices and 58,000 employees in 40 countries.

"This enterprise agreement reflects our growing relationship with Bechtel across a range of global projects," said Aconex CEO Leigh Jasper.

"The world's leading EPCs and contractors are increasingly trusting the Aconex platform to manage their largest and most complex developments. The network effects of Bechtel's project partnerships and industry influence are helping us drive new business in multiple regions. The conversion of individual project engagements to enterprise agreements with Bechtel and other EPCs solidifies our relationships while expanding our market penetration and global user network. We look forward to serving increasing numbers of Bechtel projects worldwide under the new agreement."

Under the enterprise agreement, Bechtel will use Aconex to automate key work processes; content, document and record management; and overall information management across its project teams. Aconex supports the entire project lifecycle, from feasibility and design through construction, inspections, handover, and asset operation. For building information modeling (BIM) projects, Aconex enables full collaboration between design and construction teams.

# Automation is the way of the future

Just under half (49%) of businesses in Australia are planning to automate business practices over the next 12 months, according to data from the Grant Thornton International Business Report, this number is only slightly behind the global average (56%).

Automating business practices facilitates productivity and efficiency, empowering people to focus on the tasks that add real value to their clients' growth, stated Matthew Green, Digital Advisory Partner, Grant Thornton Australia.

"The findings suggest that opportunities will arise for workers to assume new roles and responsibilities created through an increasing use of technology. More than half (65%) of automating firms expect to redeploy workers in other areas, with 22% saying that workers will be trained to operate new machinery."

The Grant Thornton International Business Report (IBR) is drawn from interviews with more than 2,571 chief executive officers, managing directors, chairmen or other senior executives from all industry sectors conducted in February 2015.

"The vast majority of these companies are looking to automation to lower long term costs, but just under half want to free up key staff for higher-value-add tasks, while only a third expect this automation to lead to job losses," said Green.

"Automation in the first industrial revolution made us stronger, automation in the second made us faster, and in the third we will have tremendously greater insights. For firms which adopt progressive digital strategies the possibilities are enormous," said Mr Green.

# Law firm automates with Intapp Flow

Henry Davis York, a leading Australian law firm with over 200 lawyers, has implemented Intapp Flow to connect key business applications and automate workflows. The firm is also using Intapp Time for time recording.

Henry Davis York recently deployed Intapp Flow to automate and improve the efficiency of several business processes, including initial workflows for IT security requests, invoice reversal requests for Finance, and external seminar and training approval processes for People and Development.

The firm has used Intapp Integration Builder since 2012, and worked with Intapp and Askew Network Solutions to train the IT and Finance teams on the addition of Intapp Flow earlier this

"Intapp Flow is a really exciting product. It delivers an intuitive interface for automating business processes and workflows. For Integration Builder users, it's the front end we've always wanted," said Ivan Costello, Finance Systems Manager, Henry Davis York.

"It's surprisingly simple to use. You don't need a large team of internal or external developers to make it work, or have a deep technical background as you do with other products on the market. Intapp Flow is very visual so you can see what's going on and how you are progressing as you create and update workflows.

"The end-user feedback on the workflows we've rolled out so far has been very positive."

# Kaspersky Lab secures PM & Cabinet

Kaspersky Lab has announced it is delivering its security offerings to the Department of the Prime Minister & Cabinet across Australia.

"Kaspersky Lab is proud to be protecting the Department of the Prime Minister & Cabinet, including its almost 2,500 employees across Australia," Kaspersky Lab's Australia & NZ managing director, Andrew Mamonitis, said.

"It is testament to the strong confidence key players on a national level have in our robust portfolio of security offerings."



# GET YOUR HEAD IN THE CLOUD

Brother Document Scanners are the ultimate content and document management tool. Instead of trawling through papers across your desk or hand picking documents out of filing cabinets, scanners enable a digitised library in one place, with the ability for multiple people to access the same document at the one time.

Brother's Scan to Cloud feature can help eliminate manual filing and retrieval of paper documents, as well as minimising on-site storage costs and safeguarding you against any compliance issues.



# eHealth delays hit Royal Adelaide Hospital

Promised as a flagbearer for the brave new world of eHealth when it opens in April 2016, the \$1.85 billion new Royal Adelaide Hospital (nRAH) will instead have to cope with a "hybrid" environment including paper records and workflow due to delays in a decade long program to implement a state-wide electronic health record. Promoted as Australia's most advanced hospital, the nRAH is also facing supply chain issues due to SA Health's a failure to complete a long running rollout of Oracle, initially commenced in 2010.

A report from the South Australian Auditor General says a 10 year, S214 million program commenced in 2007 to deliver a state-wide Enterprise Patient Administration System (EPAS) had "ambitious timeframes and an under estimation and lack of detailed understanding of the effort required. In particular, the underestimation of effort required to implement EPAS at a major hospital site.

"Although Audit has noted a number of improvements to the EPAS Program, challenges still remain, including ensuring system readiness for the nRAH by 17 January 2016 for SOC testing and commercial acceptance on 17 April 2016."

All ICT for the nRAH systems must have testing completed prior to 17 January 2016, ready for State Operational Commissioning (SOC) involving testing of all new hospital operations ready for commercial acceptance.

In 2007, the state's Department of Health (now Department for Health and Ageing) awarded a contract to Allscripts Healthcare Solutions Inc. (Allscripts) for the EPAS solution. Intended to be deployed state-wide by 2014, it has reportedly been successfully installed at just three hospitals.

While it was initially scheduled to be rolled out to the existing RAH in mid-2014, a decision has been made to not go ahead with this. SA Heath has instead decided to deploy the new EPAS system directly in the new RAH, although this has raised concerns from the Auditor General.

"There remain considerable risks around the lack of readiness, capacity and capability to manage the level of required business change. This is compounded when the system is being implemented at South Australia's new major hospital site, the nRAH," it

"Despite remediation of certain functional issues during the stabilisation phase, ongoing delays in the EPAS Program still present a heightened risk that the required minimum EPAS functionality will not be fully ready for rollout to the nRAH."

"In addition, the nRAH has a requirement for a reduced hardcopy paper workflow and storage.

The nRAH was not in the original scope of the EPAS business case and as such the nRAH's reduced hardcopy paper requirements were not clearly articulated in the original EPAS business

"Recent feedback provided to Audit has indicated that a Hybrid Record Team is investigating the option of implementing a hybrid medical record on initial operation at the nRAH. This

approach is a combination of paper based as well as electronic records of information. A concern remains around the implementation of a hybrid record due to its associated impact on workflows.

"A successful implementation of the EPAS solution into the nRAH is also reliant on a number of dependencies to facilitate efficiencies by reducing the requirement for paper work and manual handling, notably:

• implementation of and interface with EPLIS for information flow of patient pathology transition of ESMI and interface for



A visualisation of the new Royal Adelaide Hospital, due for completion in 2016.

online electronic ordering of imaging services implementation and interface with iPharmacy for information flow of medication management including drug ordering

• transition of Oracle and interface for recording patient billing for financial management purposes.

"The contingency approach adopted, should EPAS not be ready for implementation at the nRAH, involves a number of alternate legacy systems. In particular. Acute Patient Management System (APMS) for PAS and Open Architecture Clinical Information Systems (OACIS) for renal and pathology functionality.

"As part of this process these legacy systems may require certain functional upgrades and/or workarounds to achieve required business process flows. There is also the risk that SA Health will need to factor in alternate paper storage options and daily transport arrangements.

"Given the tight implementation deadlines for the nRAH there is a risk that insufficient time will be available for adequate EPAS testing. The tight deadlines also heighten the risk that the alternative legacy systems may not be suitably upgraded to provide all required functionality."

# **Supply Chain blues**

"Since July 2010. SA Health has been implementing components of its new financial management system, Oracle Corporate System (OCS) to replace SA Health and health unit legacy general ledger and financial systems.

"The system aims to provide a whole-of-health integrated financial management system, which includes procurement and supply chain management functionality.

"Throughout the implementation of OCS. Audit has noted project delays, increased costs and reduced benefits due to implementation problems.

"Without appropriate contingency plans in place the nRAH may not have all required medical and office supplies delivered in a timely manner for the first six to nine months following commercial acceptance.

"OCS Phase 1 (financials) was implemented in July 2010 at all locations identified in the OCS Program plan. This primarily involved some accounts payable and accounts receivable functions, general ledger maintenance and reporting, budgeting and forecasting.

"Phase 2 (procurement, supply chain and some financials) consisted of inventory management, product information management. iProcurement, purchasing, order management, warehouse management, accounts payable and cash management .... deployment was originally expected in the second quarter of the 2014-15 financial year. This deadline was not achieved ..."



Fuji Xerox are experts at getting everyone and everything working happily together. We get things sorted by sorting them out for you. Quickly, affordably and without too much fuss. Whether it's integrating web based eforms, easier hard copy digitisation or simpler cloud based networking we focus on making your everyday smarter and more efficient. See how we do it for free with our 30 day free trial offer of Docushare, it'll put a smile on your face.



# eSignLive expands with IBM Cloud

Australia is leading the international rollout of e-SignLive by Silanis, e-signature software available on IBM Cloud's SoftLayer infrastructure. The rollout will continue through Japan, Germany, the United Kingdom, Singapore and Brazil by the end of 2015.

The announcement follows joint successes of e-SignLive on IBM Cloud, including a leading Australian bank, which is using a private instance, and Canadian financial services organizations Tangerine Bank and FundSERV, which are using the public cloud.

The company says e-SignLive on IBM Cloud will allow organizations to scale operations quickly, both locally and globally, enabling users to electronically sign from anywhere, anytime, on any device.

"As the leader for e-signatures in regulated markets, including banking, insurance and government, our customers have identified in-country data residency as an important factor in taking their businesses digital," said e-SignLive CEO, Tommy Petrogiannis.

"IBM Cloud offers a level of transparency and granular control that is key for customers who find it important to know exactly where their data resides in detail, right down to the city, data center and even the serial number of the server."

www.silanis.com

# Human error biggest data security threat

Human error was the number one cause of data security incidents according to a new report released by the Privacy and Data Protection Team at US law firm BakerHostetler. In the incidents that the firm worked on last year, employee negligence was responsible 36% of the time. That was followed by theft by outsiders (22%), theft by insiders (16%), malware (16%) and phishing attacks (14%).

The BakerHostetler Data Security Incident Response Report provides insights generated from the review of more than 200 incidents that the law firm advised on in 2014. It looks at the nature of the threats faced by companies, as well as detection and response trends, and the consequences that follow. The firm has more than 900 lawyers located in 14 offices across the US.

The BakerHostetler Report shows that incidents were self-detected 64% of the time. Of the incidents reported by a third party, 27% were due to theft. Among the other notable statistics in the report are:

Not all security lapses involved the theft or hacking of electronic records. Of the incidents included in the report, 21 percent involved paper records

58% of the incidents required notification of affected individuals - based on state breach notification laws in the US

Credit monitoring was offered in 67% of the incidents

In 75 incidents where notification letters were mailed, only five of the companies faced litigation by potentially affected individuals

Attorneys General were notified in 59 cases, resulting in inquiries 31% of the time. Multi-state inquiries were initiated less than 5% of the time. For incidents involving stolen payment card data, PCI Data Security Standards fines for non-compliance ranged from \$US5,000 to \$US50,000 per matter. Initial demands for operating expense and fraud assessments ranged from \$US3 to \$US25 per card involved

"While sophisticated software and monitoring/detection systems have become more widely adopted, our data suggests that many security breaches still result from low-tech missteps.

"Chief information security officers should combine general security awareness training with state-of-the-art data security architecture, to minimise vulnerabilities," said Gerald Ferguson, co-leader of BakerHostetler's Privacy and Data Protection Team.

# **Esker adds Supplier Self-Service portal**

Esker has launched a new supplier self-service portal to complement its Accounts Payable automation solution. The new tool improves the way organisations interact and collaborate with their suppliers. Esker's portal provides suppliers with real-time status information on their invoices, strengthens supplier relations and increases the buyer's productivity.

Esker's portal provides both suppliers and buyers with a single view of data which enables the two parties to improve their ability to share information, enhance supply chain performance and facilitate dispute resolution. The use of electronic exchanges also leads to lower transaction costs.

The portal reduces supplier inquiries by providing them with the status information on all their invoices, (e.g., received, approved, paid, etc.), without ever having to pick up the phone. Suppliers have visibility into when they will be paid and can therefore better manage their working capital treasury.

In addition to looking up the status of any of their invoices, suppliers can also submit invoices directly and electronically on the portal. This allows buyers to reduce unnecessary paper handling, improve the timeliness of payments and lower their Days Payable Outstanding. By accelerating the payment cycle, buyers can benefit from early payments discounts. Suppliers get paid faster and are able to reduce their Days Sales Outstanding.

Based on Esker research, AP staff performing their tasks using manual methods can spend as much as 30% of their time responding to supplier calls, impacting both costs and productivity. On average, it takes an AP clerk five minutes to manage one invoice status inquiry. This equals approximately \$2.5 per call, which can add up quickly and cause unnecessary expenses that would otherwise be used more productively. With fewer supplier calls to manage, an AP department is able to focus on more value-added tasks, increase its efficiency and reduce costs.

Designed to optimise the buyer-supplier interaction, both parties can conveniently exchange information and chat directly via the portal, removing communication barriers. All conversations are kept together and always available for reference when needed. With improved relations, suppliers feel more informed and confident on what is happening with their invoices and when they will get paid, and buyers can negotiate payment discounts.

# **Brainspace text analytics gets Predictive**

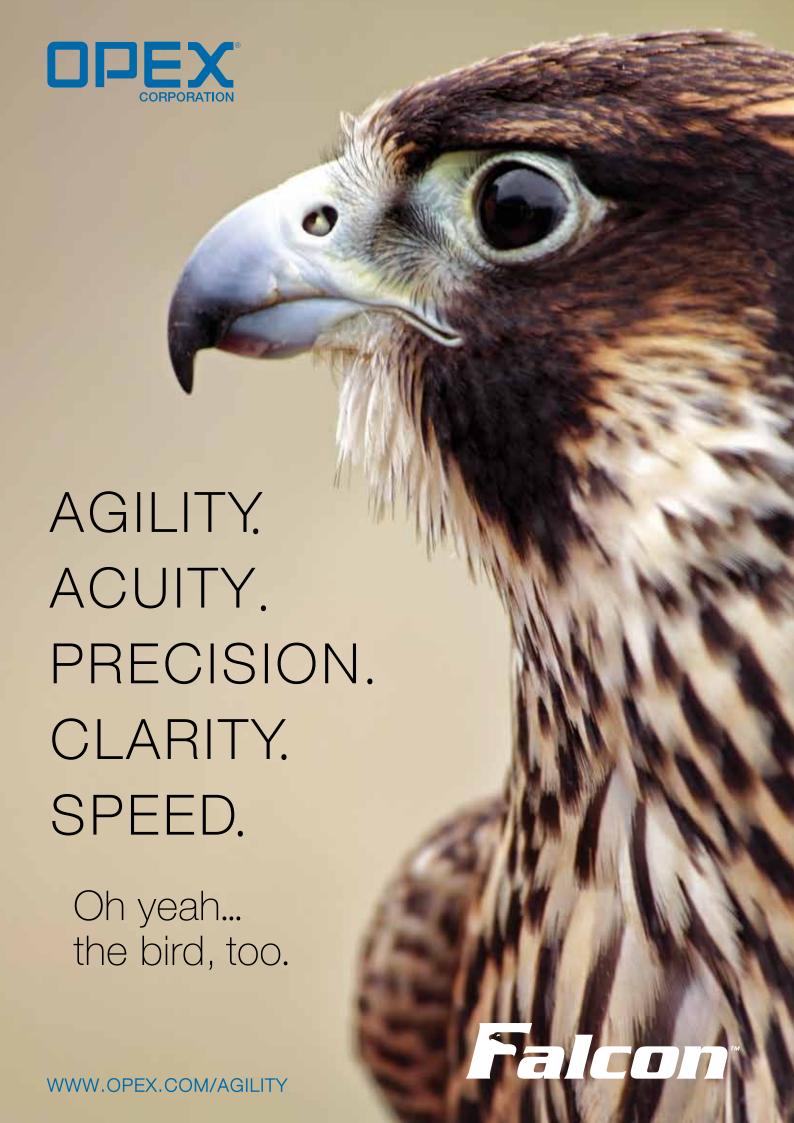
Brainspace has announced an addition to its text analytics platform with the launch of Brainspace Discovery 5.2, adding adding supervised machine learning for document classification. Brainspace leverages patented concept search and document clustering methodologies to create multiple methods of active learning, incorporating both diversity and density of documents. This approach aims to enable fast, best-in-class results for use in e-discovery, digital forensics, investigations and large-scale text analytics applications.

David Copps, Brainspace CEO states, "With this new release of Discovery 5, we have developed a unique approach to document classification. We've incorporated active learning to accelerate system training, added depth for recall for planning and cost analysis, and are delivering best-in-class matching results. This is an important, differentiating release for Discovery 5 that has been highly anticipated by our customers."

"The need for text analytics is exploding right now," said Copps. "Companies now realise that the answers to many of their most challenging and critical questions may already exist inside their own textual data. Engaging machine learning and visual analytics to surface and connect with this information is no longer just a good idea, it's a business imperative."

Brainspace Discovery v5.2 is available for purchase and as an upgrade for existing users.

http://www.brainspace.com/discovery





By Rickard Hansson

In this digital age, instant messaging has essentially become a way of life. From the good ole days of AOL Messenger to modern means of texting, Slack, What's App, Yammer, Jive and Skype, the options and opportunities for instant messaging are endless.

A Harvard Business School professor told The Wall Street Journal back in 2007 that instant messaging is "changing the way people collaborate" and companies "increasingly react to situations and problems on the fly, not solely by hierarchy" – an approach supported by the rise in instant messaging in the enterprise.

Messaging has brought countless benefits to the workplace. Aside from easily getting quick updates on current projects, it's by far the easiest way to share funny Buzzfeed articles with co-workers and discuss where to eat lunch. Messaging also makes it possible for a co-worker across the country to feel like they're in the next office over, effectively closing the gap between remote and dispersed teams.

If you're currently using a messaging platform in your workplace ... great! Instant messaging and being social is good for business. A study by Symantec Corporation even found that:

55% of employees who use instant messaging at work say it reduces email traffic

50% of employees find instant messaging more efficient than

Even with these great benefits, messaging just isn't enough. As efficient (and sometimes entertaining) as IMing can be, there are some things that it just can't do that are essential to a collaborative, productive work environment.

Here are a few reasons why you should look into a more complete solution with a full feature set that includes wikis, blogs, document collaboration and file sharing, among others to help your teams get more stuff done. As the saying goes, enterprise collaboration cannot subsist on messaging alone.

You need a sufficient forum for knowledge sharing.

While messaging is great for one off-questions that need immediate answers and casual brainstorming, it's not ideal for capturing background and knowledge that needs to be shared with an entire team. And for information that needs to live on, consistently be referred back to or dispersed across different departments, messaging falls woefully short. Instead, find a platform that offers wiki and blog apps that allow you to write entire posts and articles, share them and have them always accessible through intelligent search.

Document collaboration is too important.

Let's just get this out of the way. Yes, you can share documents via most instant messaging apps. But what happens when that document gets buried under a pile of new messages or an entire team needs to collaborate on it and make live edits? Chaos ensues.

Instant messaging isn't an efficient way to edit and collaborate on documents. A good enterprise social collaboration platform will not only have messaging, it will also enable to upload documents or native content so an entire team can access it, make edits in real time and keep feedback and comments in a consolidated and searchable location. Document collaboration is an essential feature for any team looking to embrace true collaboration and work as efficiently as possible.

Sometimes there's nothing like face-to-face video chat.

There are some things that just get lost in translation or inadequately communicated via text message - in fact, 93% of communication is non-verbal. Instant messaging can't replace good old-fashioned face-to-face conversations.

Video chat capabilities integrated into your messaging platform allow you to easily conference call with team members or clients no matter where they're located, eliminating the chances of miscommunication or lack of clarity over information and next steps. Plus, it gives you the chance to show off a good hair day.

File sharing needs to be organized and searchable.

We don't need to tell you how many documents and files can be exchanged among team members in just a single day. Without a centralised place to store and share them, team workflows become inefficient and finding the one piece of information you need becomes as easy as finding a needle in a haystack.

Searching multiple platforms cannot only take up nearly 16% of your day, it makes intellectual property retention a challenge. Enterprise social networks that combine messaging and file sharing enable your team to rest secure knowing all of its files and information are being stored in one location, and that they're all easily discoverable with an intelligent search function.

Implementing a simple messaging platform in your workplace is a large step in the right direction toward building a collaborative workplace, but we challenge you to think bigger. Consider your holistic needs as an organization, team or department what other functionality can your social business tools bring to the table to help your company "Get Stuff Done, Together?"

Rickard Hansson (@rickardhansson) is CEO & Founder of Incentive, which offers an enterprise social collaboration platform. www.incentive-inc.com

# The difference between CMS and **Enterprise Content Management**

By Adriaan Bloem

There's a lot of alphabet soup in online and digital. One distinction that keeps confusing us is between CMS and ECM. What's Enterprise Content Management (ECM)? How is it different from Content Management and a CMS? And does it have something to do with Star Trek?

The short version:

- ECM is document management.
- A CMS is a web content management system.

Both are technically incorrect, but this is how they're commonly used. It's a bit like calling a tomato a vegetable. It's a fun bit of trivia to point out this is wrong, a tomato is really a fruit; but does this really matter in the kitchen, as long as you know in which dishes to use it? Let me explain.

In ECM, "Enterprise" is the marketing bit. A decade ago, a lot of vendors started rebranding their software like this. It sounds vaguely impressive, while not actually meaning anything. Document management vendors started marketing as ECM (which would be just great to create websites as well), and Web CMS vendors started adding "Enterprise" (suggesting they could also deal with documents, and sounding more impressive).

Because of this, I think formal definitions of "ECM" make little sense (they're just codifying the hype, and it's a pretty stale hype by now). If anything, managing enterprise content is a practice (and not a "system" that automagically does it for you).

That said, and without necessarily agreeing with these definitions, an ECM system is generally regarded to be either one of these two things:

A system that manages documents or records. This is the "bread and butter" of enterprise content. It's tempting to extend this to "any kind of content within the enterprise", and software vendor marketeers love doing this (adding in anything from email, to social, to digital assets) but if you take a hard look at most ECM systems, they're document management solutions. The names of a lot of well-known systems reflect this ("Filenet", "Documentum", and even "SharePoint", meaning: share your Microsoft Office documents).

A "suite" of tools for managing enterprise content, usually a lot more loosely coupled than vendors would like you to believe. Vendors like Open Text have spent years on cobbling together software acquisitions, rebranding them, and then selling them

as "integrated" ECM systems. (They usually require a lot of custom integration work, the components don't play all that nice together, and the suite will usually still pivot around documents and records.)

As for a "CMS", technically, this is any system that "manages" "content" (both terms are pretty hard to define). This means that anything from a document management system, to a media asset management system, to a portal, to a blog system could be considered a Content Management System.

However, the reality is that nowadays, when people discuss a CMS, they usually mean a web content management solution (technically speaking, that's a WCMS).

Are they the same?

In theory, if you look at the definitions: CMS is a superset of ECMS (since any enterprise content management tool manages content, and is therefore a CMS; but not every CMS handles enterprise content well).

In reality, the common usage of these terms in the digital space tends to be as simple as I put it at the beginning of my answer. ECM does documents, and a CMS does web.

In the end, does it really matter? Well, you should be aware of the huge differences in what it takes to effectively manage different types of content for different purposes -- the scenarios are wildly disparate and there are no tools or suites that are great in dealing with all of them.

So don't buy "enterprise content management" to also do your web presence; and don't think a Web CMS with a document management add-on module will be as good at this as a document management tool. (Even if they call it ECM, or as I've spotted in the past few years, "Enterprise Web Content Management", which is a ludicrously vapid description.)

It's essential to know the difference between scenarios, and to find the right tool for the job. It's probably a good thing to know what the common understanding of the terminology is.

And keep in mind that usually, "enterprise" is just a marketing term that doesn't mean a lot more than "we'd like to sell this to large companies." And it has nothing to do with Star Trek.

Adriaan Bloem is Senior Manager Online Platforms at the Middle East Broadcasting Center, the largest media and broadcasting group in the Middle-East. He is responsible for innovation and coherence of online and digital (marketing) platforms, ranging from web content management, mobile, social, email, to video delivery (OTT and CDNs) and big data.

# **Professional Services**

for HP Records Manager





Install - Upgrade - Migrate - Integrate - Train - Support

Contact us today and find out how we make your life easy with HP Records Manager professional services.

ph +61 8 6103 8428 info@infoproficiency.com.au

# PDF/A-3: interesting new features for the Information Manager

# By Roberto Nagel

The new versions 2 and 3 of the PDF/A standard provide interesting features for document and information specialists to solve issues around Enterprise Information Management.

Right after the initial publication of the standard, document specialists, IT architects and suppliers started creating awareness for PDF/A as a reliable data format for long-term archiving. Not surprising, when you consider that the driving force behind this standard were the record managers of US government archives who ran into preservation issues with earlier PDF versions..

When PDF/A was introduced in 2005, it was made clear that further versions of the standard would be coming up. Until recently, we have been mainly dealing with implementations of PDF/A-1 which is based on the technical capabilities of PDF version 1.4. In the meanwhile, two new versions of PDF/A were published in relatively quick succession. They are based on later PDF versions and the most important innovations are:

- Support for the JPEG 2000 image format allowing smaller file sizes.
- Page size up to 381 km  $\times$  381 km (PDF/A-1: 5.08 m  $\times$  5.08 m).
- Embedding files as attachments.

Especially the last item is very interesting for Information Managers, as it helps solving a number of problems in Content and Information Management. The embedding feature allows for a PDF/A file to act as a container for one or several attachments. Similar to a zip file, but without the compression feature.

### **Embedding**

To begin with, there is a small difference between PDF/A-2 and 3 relating to embedding files. In version 2, only PDF/A files may be included – this is in line with the original objective of PDF/A - to be the data format for long-term archiving of documents.

In a PDF/A-3 file however, anything may be added as an attachment. Now you can archive a PDF document for example with the source information in its original data format. This creates interesting solutions for uses cases where you want to manage files which belong together as a single object. Some examples:

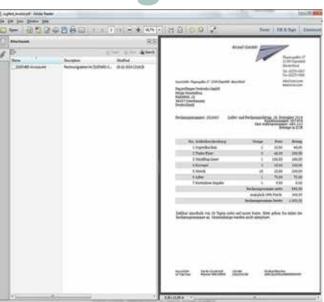
Email archiving – You can use a PDF version of an e-mail as a container for the attachment(s) and the original e-mail file. This maintains the valuable routing information and it makes it possible to use reply or forward functions for archived e-mails.

Archiving incoming signed PDFs – One of the best practices for digital mailroom operations is to add digital timestamps to incoming messages (emails, PDFs, etc.) in order to prepare archived documents for future document integrity validations. This does not work for signed objects because the added digital timestamp is a 'change' which renders the signature invalid. Now you can archive the timestamped version together with the signed PDF as a single PDF/A-3 object.

Document generation – You can save the generated document along with the original raw data file.

Web forms – Store a "printed" version of the web form, as it is completed by the customer along with the filled-in data and other information from the web server, for instance uploaded images or videos of damages etc.

Digital invoice – Send a human readable version of an invoice as a PDF (unstructured information) together with the raw invoice data in a structured data format, such as XML, CSV etc. This is the starting point for the German standard ZUGFeRD applied by more and more organizations.



Screenshot of a ZUGFeRD sample invoice, note the attached XML data file.

### Long-term preservation

Embedding source files offers interesting opportunities for Content - and Information Management. But you should be aware that it also creates a new responsibility for the Information Manager: to ensure that the enclosed data files remain readable and usable for the retention period. In many cases, tools can help for conversion or transformation in order to keep the data formats up to date. But this becomes more difficult with specific proprietary formats, such as MS Office etc.

The two new PDF/A versions do not have the intention to replace the existing version PDF/A-1. It depends very much on the use case and the reason for archiving. You should rather see the new versions as new possibilities to solve certain issues around Information Management.

# Consequences for the user

The new PDF/A versions make use of features that are available in 'normal' PDFs for quite some time. This means that users of the Adobe Reader should be able to access the new PDF/A features with their current reader versions. The paperclip tab (see screenshot) gives access to a list of the embedded files. A right-mouse click on the invoice.xml file in the screenshot would open the file in the associated application on your computer. This happens outside of the PDF viewer and you need to have the necessary software installed on your computer. Another option is to extract and save the file.

However, your archiving or ECM installation may use a specific viewer supporting multiple file formats (TIFF, PDF, GIF, JPG, WORD, etc.). This is usually done in order to provide users with a unified user interface allowing annotations and other specific features as opposed to burden users with different user interfaces of various viewers.

In these cases you may want to check if there is support for embedded files because this was not allowed in PDF/A, and it was therefore not necessary for these multi-format viewers to support this feature. This issue should be on your deployment checklist if you want to introduce PDF/A-3.

Roberto Nagel is a consultant for communication-intensive organisations with European solutions provider Document Dialog.



# The easiest to use and most powerful Content Management tool set

Please allow us to demonstrate how RecFind 6 can add real value to your organisation.

# The only ECM able to run multiple applications concurrently, saving you money and time, for example:

- ✓ Business Process Automation/Workflow
- ✓ Integration with SharePoint + any other application or data source
- ✓ Content Management (ECM)
- ✓ Email Management
- ✓ Paper Records Management (RMS)
- ✓ Electronic Document Management (EDRMS)
- Contract Management
- ✓ Mortgage Application Processing
- ✓ HR Management
- ✓ Asset Management

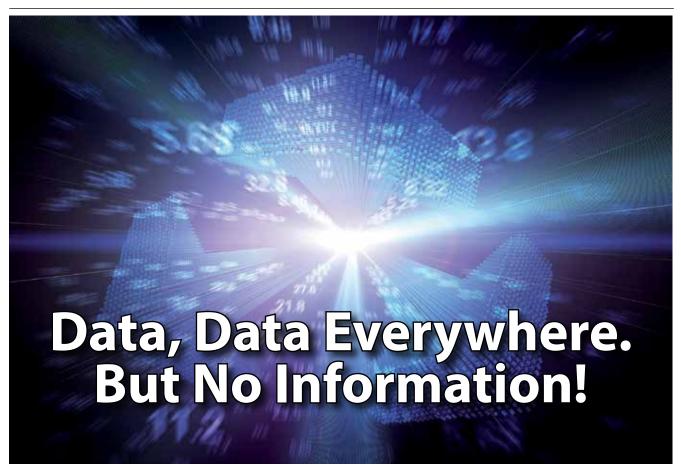
Contact us for a free day of consulting by one of our product evangelists to evaluate your needs.

We will follow up with a report & recommendations. You have nothing to lose & everything to gain.



sales@knowledgeonecorp.com 02-8913-9300/1-800-221-061 www.knowledgeonecorp.com

Over 30 years in business 1984-2015



# By Prashanth Southekal

Poor quality of data impact organisation's performance and bottom line. According to Gartner, poor quality data is costing organsations on average \$US14.2 million annually and 40% of business initiatives fail to achieve targeted benefits because of poor data quality. According to Experian, 77% of companies believe their bottom line is affected by inaccurate and incomplete data.

The impact of poor data quality on enterprise performance has made organisations realise that data is one of their core assets and efforts to improve the data quality will have positive impacts on the company's performance. Garter estimates that data quality initiatives improve labour productively by as much as 20%. Bardess Group found that when a data quality initiative is implemented it can lead to 20% to 40% increase in revenue for a business.

While data quality initiatives (further fueled by Big Data, IoT, Analytics, etc...) have been the talk in the recent years, companies have struggled to successfully implement a data quality program. The data quality problem get camouflaged in different forms like symptoms, business processes, system proliferations, solutions, etc.

Defining a data quality problem and opportunity statement is extremely challenging. Albert Einstein once said, "If I had an hour to solve a problem I'd spend 55 minutes thinking about the problem and 5 minutes thinking about solutions." In this backdrop, this article looks at some key aspects organisations should consider in their data quality journey if the goal is to derive good information.

Organisational silos result in data silos. Business data is of three

• Reference data (set of permissible/standard values such as Country codes based on ISO standards, currency, INCO terms, etc.);

- Master data (business entities such as products, suppliers,
- Transactional data (business events such as purchase orders, invoices, etc.)

While Reference data and Master data are typically enterprise-wide (and shared), transactional data is specific to the line of business (LOB). However if the Reference data and Master data are managed by multiple LOB systems, the cause is invariably due to organisational silos where the LOBs do not believe in sharing of data (or do not see the need to share data) with the rest of the organisation.

Data is a shared asset and you will not know completely how the data is consumed and interpreted. The intended use of data might be very different from the actual use because data is contextual and is always tied to the business process and role of the data consumer. For example the phone number field in the customer master data can be a shared data object in the entire sales process. The shipper can use this for contacting the customer while the tax analyst can use it for validating the jurisdiction code (along with the tax codes) while calculating the taxes.

The value of data is correlated with the frequency of use and the number of users. At the same time, the more the data is shared; the more consumers for that data object who will have varied and implicit needs.

For example, the sales order status in the sales process might provide the sales director the sales pipeline. The accounting analyst however might not be able to improve the prediction of the future Daily Sales Outstanding (DSO) from the sales order data unless the delivery dates and the payment terms/schedule details are also maintained in the sales order. Hence satisfying diverse requirements (or multiple data consumers) invariably results in the data becoming more vulnerable to data quality

Data usage is tied to the business process. As a segway to the previous point, ask why the delivery dates and payment terms/ schedule cannot be maintained when creating the sales order

or for that matter why can't all the data fields be just populated? Just populating DB tables/fields doesn't necessarily guarantee data quality; in fact data origination and maintenance is an expensive activity. Usage of the data fields within the DB table is tied to the business process. For instance if the procurement department decides to update the terms of payment terms/schedule field in the customer database to 45 days, it is important to ensure that the account payable (AP) team is aligned to clearing the supplier invoices within 45 days.

Ability to search for data is the acid test for data quality. Sometimes non-availability of data is perceived as poor data quality. For example, if the user is trying to look for a product code for SKF ROLLER BEARINGS (when creating a work order in the plant maintenance process) by entering the search parameter as "BEARING" and if the product is maintained as "BRG RLR SKF 6312", he/she will not get any product codes for SKF ROLLER BEARINGS in the search results. Most of the cases where the "data is not available" despite the data being present can be attributed to lack of formatting, lack of standards, missing characteristics of the data object, poor data governance, database constraints, poor training, etc.

System proliferation (and integration) is correlated with poor data quality issues. Even if some of the data fields are maintained in the source "System of Record" system, the values might change when these data objects are interfaced to target applications as those downstream applications might act as the System of References for specific business processes.

For example, the master data team in an oil/gas company might describe the flange as Fixed 23/4" CF Flange with Unit of Measure as Each (EA) according to PIDX (Petroleum Industry Data Exchange) standards. But the sales department might change the UoM in the CRM system to packets (PK) as the flanges are sold in packets and the warehouse technician might change the UoM in the warehouse application to boxes (BX) as the flanges are stocked in boxes.

While each of the UoM values is correct, the business processes and system proliferation are enabling the respective departments to contextualize the data and meet their specific needs. This might not be a data quality issue per-se as long as the primary key value, i.e. the product code number, is not compromised in the three systems. Fundamentally the ACID (Atomicity, Consistency, Isolation, and Durability) model and metadata definitions are more vulnerable to compromises during data/ system Integration.

Consumers of data typically have more issues with data quality than the originators of data. In the previous example, the problem with the value of EA on the UoM of the flange is seen by the sales and the warehouse functions as a problem as they want to use/consume the product code with a different UoM (PK and BX) and not take the UoM value (EA) originated by the master data team. In addition, data quality problems become visible and

even get amplified when viewed End-2-End (E2E) in the entire value chain when data gets propagated to different business functions, users, and systems at every stage.

Though business rules/events govern data rules, sometimes the data rules impact business. Business rules define entities, attributes, relationships, assumptions and constraints. Data rules are define the database attributes such as field length, type, format, etc.

For example, if the field length for product description is restricted to 25 characters, complete details of the product cannot be maintained. This example shows that data rules impact business performance making the relationship amongst the entities (in the ER Diagram) more complex.

Even though most business processes are asynchronous (and nonlinear), the timing of data availability (and concurrency) might cause data quality issues. For example, let us say the Purchase order (PO) is created with INCO (International Commercial) term CIF (Cost, Insurance & Freight). Between the times the PO is issued and the goods delivery is done, if supplier negotiations result in INCO term to CFR (Cost & Freight), the goods receiving and accounting teams will have challenges in reconciling the INCO term codes.

Results of data quality improvements are transient. Even if the data is 100% accurate during capture (or after cleansing), factors such as entity relationship, metadata definitions, data structures, systems etc... change over time. Data quality degrades if not controlled or governed regularly. The degradation or corrosion is typically gradual, if checks to measure and control the data consistency, integrity, correctness and completeness are not maintained in the entire data lifecycle from data acquisition to archival/purging.

Today we have capabilities to generate, capture, and process huge amounts of data. According to Eric Schmidt, Chairman of Google, every two days we create as much data as we did from the dawn of civilisation up until 2003. According to IBM, every day, we create 2.5 quintillion bytes of data (1 quintillion = 1 followed by 18 zeros).

This situation will result in more challenges in getting quality data and ultimately deriving meaningful information. However data quality initiatives should not be pursued in isolation. It should be viewed together with the business process, data objects, stakeholders (data consumers and originators), and the organizational response mechanism to implement the information successfully.

Dr. Prashanth Southekal is a Principal Consultant at Catyeus, an IT strategy company based in Calgary, Canada. He specialises in Information Management, Enterprise Architecture, Cloud Computing, and Enterprise Mobility, and he has published papers in leading IEEE and industry conferences on these areas. He can be reached at prashanth.southekal@catyeus.com

# **Invoice Processing and AP Automation**

Capture documents from email, paper, fax & mobile

**Extract** data automatically and validate with business rules

Automate the accounts payable process

Integrate with your ECM and ERP

Kofax's invoice processing and AP automation solutions streamline the process of capturing invoices to increase processing speed and reduce data entry costs. Our tools enable you to leverage best practice workflows to expedite invoice review, coding and the approval processes for fast return on investment. Find out how our customers achieve best-in-class AP automation metrics and improve service levels.

Contact us today for a demonstration ph +61 8 6230 2213 sales@sigmadata.com.au

www.sigmadata.com.au





# **SAP and Concur - The \$8 Billion Question**

In one of the bigger software deals of 2014, SAP agreed to buy Concur Technologies for \$US8.3 billion. The purchase provided the German ERP software giant with an entry into AP Automation and travel-related software for hotels and tourism services. On a recent visit to Australia, IDM asked AG Lambert, Concur's VP, Product Management and Strategy, how the merger was progressing.

## IDM: Why do you think SAP was prepared to make Concur its biggest ever acquisition?

AG: I would put it down to Concur's success in the cloud business. Concur started as an on premise business and transitioned to be 100% cloud. So that experience is in our management team of how to do cloud well, I think it was very important to SAP. Concur's focus initially was on how do we make this whole process of creating expense reports easier? And it was probably 10+ years into the evolution when we said okay, this process of taking a bunch of paper that needs to be scanned, turned into digital information and then put through a workflow for approval, is very similar across employee expense reports and the AP automation side. The technology used to capture invoices (OCR) is now used for something we call Expenselt, which allows you to just snap a picture of a receipt, and then it will automatically appear, ready to be dragged into your expense report after it's put through OCR. So we built AP automation off the back of expense automation, and now we're feeding some of the technology of AP automation back into the expense report process as well. We also approached the business problem of how to make the distribution of business travel more efficient and more effective for companies and for employees. We opened up the platform for direct connections through the travel agency, as well as through a global distributions system, giving companies a variety of ways to connect to their suppliers. SAP believes that the concepts of expenses, travel and invoices can extend beyond just travel. And Steve Singh, our CEO, is now the head of the SAP Business Network Group, including Ariba and Fieldglass. So we have a variety of business networks that help companies work more effectively, whether it's Concur Travel, the Ariba network or direct connections to suppliers. I think that experience of looking at new ways of distribution and commerce also drove the deal with SAP.

# IDM: Will SAP continue to offer Invoice Management by OpenText?

**AG: Y**es. Concur will stay independent and there are no plans to take OpenText off the SAP price list. We think we're serving a different niche, in terms of what we're doing. OpenText is very good for very high volume, shared service on-premise environments. Concur on the other hand is much more focused on the employee. Concur is good for distributed AP environments where you've got invoices that are being managed by different units around the business without a lot of centralisation, or smaller organisations where the amount of setup and installation for OpenText would be too much. The other big difference, I think, is that Concur is 100% cloud-based. And one of the reasons SAP bought Concur overall was to help accelerate their move to the cloud. We're providing an option where we can work with the customers on-premise system and then provide a cloud-based frontend for invoice capture and the workflow.

### IDM: So will Concur be definitely targeting non-SAP accounts as well.

AG: We are. We're developing specific integration for SAP ECC to make sure that we have seamless integration with the SAP customer. However, Concur's business, although there was a fair bit of SAP in it, it was always multi-ERP. We have some VARs but by and large we're selling direct.

IDM: It's interesting to see SAP acquire a traditional AP automation provider, after its earlier purchase of Ariba, one of the big names in EDI. Is this just a case of catering for all possibilities, or is there a concerted push towards one way or the other?



If you go back 23 years from when Concur was founded, it started as package software to create an expense report. It evolved to be client-server, and then to the web. Now we are one of the leaders in cloud-based Software as a Service." - AG Lambert, Concur Technologies

AG: With the purchase of Concur, SAP's created what we're calling the Business Network Group, which is a combination of Concur, Ariba and a company called Fieldglass that manages contingent labour and service contracts. We're looking at opportunities for Concur on the expense and travel side to work with Fieldglass to deal with non-employee travellers and non-employee expenses, and Ariba to manage network and non-network AP solutions. We're looking at how we can bring all these together in a series of networks that are connecting businesses. Some networks are direct like Ariba, where you can eliminate the need for invoice reconciliation altogether, because it's totally electronic. Some are more indirect, where we're facilitating the processes on both sides of the transaction to try and make it more effective.

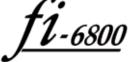
### IDM: Is the SAP AP automation market itself saturated or are there opportunities there?

**AG:** For smaller companies, AP automation is often completely un-automated. In many cases, big companies have some form of solution already but it's not where they want to be, and they're looking to how they evolve that forward. So, for small companies, this is a new field. For large organisations, AP automation is virtually a replacement market, and looking at how you can take advantage of new technologies and approaches.

One of the key differences to our approach to AP automation is to be more employee-centric. And to not view this as simply an AP problem, but how do you help manage spending across the organisation. One of the strengths we have is that we're a leader in travel expense solutions as well. I think that helps us in two ways. One is that many companies consider us for an expense management solution in managing your travel expenses, and then we proved to them that we're effective, we're low-cost, that their employees will adopt it, and then we have a conversation about AP automation. It also helps us in terms of our design approach. The nature of employee expense reports and travel it has to be very intuitive design. And so that's different than a lot of, some of the traditional AP automation vendors which are more back office-centric. We end up being viewed as much easier to use than a lot of the competition.

There are also opportunities as we look forward around the split between the pre-approved spending that has a three way match, and employee-initiated spending. Particularly with smaller companies, you'll have the situation where they'll tell the marketing manager, just put it on your credit card and expense it. And that provides a loss of visibility to spending. So for these smaller organisations, we're really trying to pull together the expense report side, and the AP automation side. So you've got a full view of all your spending. I think, that's something that makes Concur a little different.





- Fast, 130 ppm (simplex) / 260 ipm (duplex) scanning in monochrome or colour (letter, landscape @ 300 dpi)
- Triple Ultrasonic Double Feed Detection with Intelligent MultiFeed Function and retain image feature
- 500-page automatic document feeder with adjustable height hopper

# Big time Performer

Fujitsu's office equipment for document capture puts you in safe hands. With decades of experience and leading technology that drives the market, Fujitsu scanners are state-of-the-art. We have the scanners that exactly suit your office needs.

If you would like more information, please contact Proscan 1300 132 001 **au.fujitsu.com/scanners** 



# Veritas maps out independent future



The Veritas Information Map, a new tool to enable businesses to delve deep into their data stores to recognise and prioritise information across their organisations, is one of a number of releases being delivered over coming months as Veritas completes full operational separation from Symantec, due by October 2015.

Earlier this year Symantec announced the split into two publicly traded companies, one focused on security and the other on being an information management firm.

Currently available in Beta release, Information Map will initially glean metadata from Veritas NetBackup, store it in the cloud and present this data in a user-friendly, visual navigation tool that helps identify areas of risk, areas of value and areas of waste across an organisation's primary content repositories. Later this year the Information Map will be enhanced to guery other sources such as Enterprise Vault.

The latest version of NetBackup 7.7 now supports hybrid-cloud deployments leveraging Amazon Web Services.

Another upcoming launch, Veritas Data Insight 5.0, will extend unstructured data analytics to support governance across on-premises storage platforms and Box cloud storage. It promises enhanced access control tracking and entitlements orchestration, to help ensure file share security. Veritas believes version 5.0 will continue to expand the application of data analytics to facilitate retention management, achieve access compliance, and gain a better understanding of how user risk relates to data sensitivity.

"For us is all about providing customers with insights into their data," said Paul Simos, Managing Director Pacific for Veritas.

"So where is the data? Who is the true owner of it? What is the usage profile of it? And then what action should you be taking to help you have a better view of your unstructured data, okay?

"Our customers have traditionally done that with us as it related to e-mail, and to a certain extent file and SharePoint archiving.

"The biggest challenge now is when a user leaves an organisation, a certain file will get tagged and re-allocated to the admin of the file share, or their manager.

"Customers as we talk to them today are trying to look at how do they

deal with the move to hybrid cloud, how do they manage this information explosion, and how do they know what are their core assets. The information intelligence piece is a critical part of our strategy moving forward." - Paul Simos, Veritas, Managing Director Pacific.



"And until an organisation can find the actual owner of the information, it's hard to take action.

"What Data Insight allows is for a customer to scan that network, monitor the usage, and build up an actual profile of what's in use, who uses it, and then obviously the heaviest user implies the owner of the document. And then they can set policies and customers can make decisions on what they can actually see happening to that information on the network."

"Data Insight will be a tool to help customers get intelligence and insight into their data, to then make decisions whether to archive it off, or classify and make it a record.

"It is a tool that once established around the parameters of what the business is looking for can then be relatively seamlessly implemented to purely have a review point before an action

Other new launches from Veritas target the management and failsafe operation of complex, multi-tiered applications in physical and virtual environments.



# DISCOVER MORE ...

Learn how Councils are achieving significant savings while delivering innovative services to their citizens. objective.com/local-government

Phone: 02 9955 2288



# 7 reasons why your Enterprise Social Media project might fai

# **By Antony Cousins**

Enterprise Social Media is the way forward! It's the dawn of a new era in collaboration. It will kill email and make us all happier and more productive employees in flatter more agile organisations. Well, at least that was what we were all saying a few years back. Even as long ago as 2006, when 'Enterprise 2.0' was first coined to take advantage of the power of user generated content inside organisations, we've all eyed the potential of turning those exciting products we use in our personal lives, into the next big thing in business.

But almost 10 years have passed since then, and we're already four years on since Microsoft made that purchase, yet we haven't killed email, we haven't fundamentally changed the way we work and we haven't seen the proven results we'd expected. Stories of failed implementations of social tools are rife and backed up by Gartner's often quoted "80% will fail in 2015" report, but not many agree on why.

Since leaving the Government after playing with a number of social platforms and joining a company doing it differently, I thought I'd share what I've discovered so far on the likely causes of failure of Enterprise Social projects:

Not defining success. I was at a "social media gurus" event a little while back and was surprised to find some people still defining success in terms of adoption, or number of shares or even worse, 'likes'. If you can't define success by making the link between the use of the social platform and your organisation's top-level objectives, how can you ever be 'successful'? Increased sales, retention, reduced spend on consultants, whatever it is you're trying to achieve, be clear and benchmark before and routinely thereafter.

Cats (and other things non-work related). Your boss probably uses social in their spare time and they probably see that social content is seemingly 90% cat-related. So when you say to your boss "hey, we'd like to use a social platform to engage our staff and allow them to [collaborate/connect/ insert value proposition here]" I suspect all they hear is "cats, cats, cats, cats". Even if they believe in it, they have to answer to the board/shareholders/public or someone else who cares a lot more about work getting done than the ability of your staff to tell their colleagues what they had for lunch. I'm not suggesting they do that but convincing the board they can't/don't is the key challenge with a 'social' platform.

**3 Senior support.** Possibly due to points 1 & 2 senior staff and leadership support for the use of a social platform in the business might be difficult to achieve. But in addition it's sometimes a generational thing. People who haven't grown up using social can sometimes still be daunted by who's going to see what they write and what if they make a mistake, etc. Valid concerns backed up by the horror stories we've seen when it goes wrong. Senior leaders are especially sensitive to this and ask all the time for the ability to share information, but only with the right people. But social, by its nature, is often open to all meaning everyone (to a degree) then has to self-sensor their content to ensure it's not going to be misunderstood or mis-interpreted by others.

**Training.** Social platforms may be simple. It may be quite easy to work out what button does what when you click it. But knowing when to click it and why still requires training. When I'm running sessions the majority of the time I focus on the value for the individual and the case for collaboration for the organisation (the why) because if you give them a good enough why, they'll work out the how for themselves. But knowing the why comes back to the initial business case and being clear on what value are you trying to achieve through what improved processes? It's OK to add to the list of value propositions as you go, but the 'organic' approach to just throwing it out there and seeing where it lands is a recipe for lengthy sub-par results.

Noise. Unfortunately, most social platforms just add to the Information overload already experienced by many employees because their fundamental mechanics are the same as the social platforms we use in our personal lives. Join the right groups and follow the right people and if you're there at the right time you'll see useful information. But which groups? And which colleagues? And when? You might follow a colleague because they're relevant to you today, but that doesn't mean they will be relevant to you tomorrow. But tomorrow, and every day after that, you're still going to get their status updates in you feed and potentially miss the relevant ones. Social platforms aren't designed to really help you with the key challenge which is who should you be connecting with now in the context of the challenge you're facing now?

> Re-enforcing silos. If you've delegated the abil-Oity for individual users or teams to create groups, networks or forums, what's the first thing they do? They create an online group that repli-

> > cates their offline hierarchy. Great! Only that doesn't really add much value over their existing email dist lists and SharePoint sites and in fact can cause duplication and other knowledge management nasties. In addition, too many eager users creating groups with too few members leads to a confusing experience that can put off new users when they're trying to find the active and valuable groups.

Management overhead. If you haven't delegated the ability to create groups then

you've got yourself a huge task of mapping the structures and communities of interest to enable the sharing of information across boundaries. Unfortunately these structures change as often the organisation and finding and managing champions to promote the use of these groups across different hierarchies is difficult to do and requires constant management. Due to points 1, 2 and 3 (amongst others) senior leaders may not be engaged enough to support their staff taking time to manage groups and drive adoption when the benefits are

seemingly spread across other parts of the business. One reason I didn't add to this list is the 'everyone else is doing it so we should to' mentality. I didn't add it because even though it's rife, it's not a reason for failure. It's a reason not to start at all.

Antony Cousins is Director of Customer Success at ProFinda. com. @icommunis



# Australian Privacy Commissioner rules that "metadata" can be personal information

By Cynthia O'Donoghue, Kate Brimsted and Chantelle Taylor of Reed Smith Lawyers After two years of campaigning, Fairfax journalist, Ben Grubb, finally got the decision he was seeking: metadata could be considered "personal information" under the Privacy Act 1988 (the 'Privacy Act').

The landmark decision by the Australian Privacy Commissioner came about after Grubb was refused access to metadata which is available to law enforcement agencies and councils, but not to individuals. Telstra, the data controller in this case, refused access to some personal information described as "metadata" (namely, IP address information, URL information and cell tower location information beyond that retained for billing purposes) on the grounds that it was exempt under the Privacy Act.

The Australian Privacy Commissioner determined otherwise. The Commissioner found that "personal information" includes information whereby an individual may be "reasonably ascertained" from that information. He concluded that, where an organisation is able to link an individual to metadata it has collected via cross-matching information across its systems, the metadata falls within the definition of "personal information". This decision was based on the National Privacy Principles ('NPP') under the Privacy Act and not the Australian Privacy Principles ('APP') which came into force in 2014. However, given the APP did not significantly change the definition of personal information, it is predicted that more types of data could be considered personal information, and the decision is expected to carry substantial weight in future cases considered under the new re-

gime. This decision is likely to have a significant impact on large telecommunications companies holding substantial amounts of metadata; they will have to consider how data are stored, how it may be cross-referenced, and their capacity to perform such cross-referencing. As a result, they could face increased costs in complying with the Privacy Act, as well as a possible rise in personal information requests requiring wider disclosure.

The implication of the decision extends beyond the telecommunications industry. As Anna Johnston, former deputy privacy commissioner for New South Wales, put it, 'any dataset which holds unit-record level data can potentially be linked to data from other sources, which can then lead to someone's identity being ascertainable'. By categorising metadata in such a way, data controllers in Australia will have to assess whether the metadata they hold fall within the definition of personal information under the Privacy Act. Concerns have already been raised that uncertainty as to the personal nature of metadata could stifle innovation. Organisations will not want to risk penalties (financial or otherwise) if they use data which could be classified as personal information. For example, for "serious" or "repeated" interferences, the Commissioner may apply to the Federal Court or Federal Circuit Court for an order that the organisation pay a penalty of up to \$340,000 for individuals or \$1.7 million for corporations. Telstra has announced its intention to appeal and is being supported by the Communications Alliance; this telecommunications industry body represents the communications industry and has branded the decision a "regulatory overreach".

Contact Cynthia at CODonoghue@ReedSmith.com or Kate on KBrimsted@ReedSmith.com

# No matter what the HP Records Manager puzzle...



SOFTWARE • IMPLEMENTATIONS • UPGRADES • HEALTH CHECKS • MIGRATIONS • DEVELOPMENT • SUPPORT • TRAINING







# Electronic signatures and their legal validity in Australia

Hayden Delaney, Partner, HopgoodGanim Lawyers and Law Graduate Briar Francis address the law of contracts formed through electronic means and detail the legal issues surrounding electronic signatures.

We all know that technology is advancing at a rapid pace. The way we contact and interact with one another today would be unrecognisable to anyone who conducted the same tasks 20 years ago. More and more, people are looking for faster and more efficient ways to do business – for ways to close the gap between contacts on the other side of the world.

The business we do across borders is also affected: mergers and takeovers, foreign property investments, IT contracting and mining development deals (to list a few) are all regularly negotiated and solidified through electronic communications.

This leads to the interest in electronic execution tools – a phenomenon that may now seem second nature to some – but there is much concern over whether electronic signatures are in fact legally binding and can be evidenced in court.

The key points to remember are these:

- According to Australian and international law, electronic signatures are a valid way of executing agreements.
- Difficulties with electronic signatures arise when evidence is required confirming the identity of the signor and their intention to be bound by the content of contract.
- Digital signature tools which incorporate technically accepted identity verification and authentication methods (such as public key cryptography) can mitigate these risks. However there are still important issues to consider.

# **Electronic Signatures Legally Enforceable but Difficult to Prove**

For a contract to be validly formed, certain elements must be satisfied. These elements are an intention to create contractual relations; acceptance of an offer; and consideration (that is, a benefit in exchange of obligations – on both sides of the contract – such as payment for services). In usual commercial transactions, the formation and execution of a valid agreement by electronic means satisfies these elements under international and Australian law, and is treated like a paper contract.1

In addition to the usual requirements for a paper contract, a contract formed electronically is legally valid if:

the contract is stored appropriately and can be accessed after execution; and

there has been consent between the parties, expressly or impliedly, to receive information electronically.2

It is important to note that, by law, a purported originator is bound by a communication if it was sent by the purported originator or with their consent.3 This creates problems relating to evidencing that this element has been satisfied, particularly in circumstances where parties to transactions are not dealing with each other face to face (often with witnesses present) and cannot verify each other's identities through traditional means.

# **Electronic signatures**

An electronic signature can be defined simply as a signature used on an electronic document or transmission. They are recognised under both international and Australian law as having the same effect as handwritten signatures, subject to the following qualifications:

- there must be consent by the recipient to receive information electronically;
- the method of signing must identify the person sending the information, and indicate that this person approves of the content of the electronic document signed; and
- · having regard to all of the circumstances of the transaction, (Continued on page 24)

<sup>1</sup> Articles 8 and 9, United Nations Convention on the Use of Electronic Communications in International Contracts (Electronic Communications Convention) (2005) GA res 60/21; s 8(1) Electronic Transactions Act 1999 (Cth); s 8(1) Electronic Transactions (Queensland) Act 2001 (Qld).

<sup>2</sup> s 9(2) Electronic Transactions Act 1999 (Cth); ss 11, 12 Electronic Transactions (Queensland) Act 2001 (Qld).

<sup>3</sup> s 4 Electronic Transactions Act 1999 (Cth); s 4(d) Electronic Transactions (Queensland) Act 2001 (Qld).



# Transform the way you work with PDF files.

ABBYY PDF Transformer+ is a new and comprehensive solution for working intelligently with PDF documents. It covers the entire cycle of a document's life: from creation, discussion, approval, and protection, to the conversion of PDF files into editable formats, merging of documents, and extraction of text and images.

# The only PDF tool you'll ever need;

- · Open and view PDF documents with an intuitive user interface
- · Add and remove individual pages, text or images in PDFs
- · Review and comment
- Transform PDF files into all MS supported formats
- · Transform scanned or digital PDF files into editable searchable formats including PDF/A
- · Split and merge PDF files
- · Create and/or merge from file or scanned documents
- · Edit typos, errors and make small text edits
- Protect and share redact sensitive information
- Flexible licensing model to meet all of your technical and financial requirements.



For more information visit - www.abbyy.com.au/pdftransformer





# **Electronic signatures**

(From Previous page)

the method of signing must be as reliable as is appropriate for the purposes for which the electronic document was generated. Alternatively, evidence of the identity of the signor and their approval of the contents of the electronic document must be self-evident in the document or otherwise available in some other manner. This reaffirms the need as stated above to ascertain the identity of the signor and concretely prove same.<sup>4</sup>

The difficulty in using an electronic signature becomes apparent when you are faced with the task of finding a way to prove the identity of the signor in a setting where the signature isn't witnessed by another person. There is also the risk, as in any other traditional transaction, that the content of the document could be altered after being signed. Digital signatures have been introduced to try and minimise these risks.

# Digital signatures and cryptography

A "digital signature" is a term used by some to describe a type of electronic signature. Digital signatures utilise technology that associates the signature with hidden data which can be used in an electronic communication. The main difference between an "electronic" and a "digital" signature is that:

- a digital signature is linked to certain information and can be verified; whereas
- an electronic signature may just be text on an email.
- Digital signatures are therefore unique electronic "identities" which make them a more trusted and secure way of verifying the author of a document.

Many, if not all, digital signatures rely on public key cryptography as their identity verification core – including popular products like Adobe EchoSign, and DocuSign. The basic premise behind this method is that a cryptographically-generated private and public key (being a randomly generated set of digits) is used for identity verification purposes. The private key is only used by, and known to, the person associated with it. The related public key is shared publicly and visible by anyone else on the receiving end of the document containing the digital signature.

To create a digital signature, the private key is used to generate a unique code from a combination of the private key and the contents of the message. That code is embedded in the document and becomes the digital signature.

Usually an image attached to the digital signature is calibrated as the visual aspect of the signature, such as an electronic copy of the signor's paper signature. This is not legally necessary, however. The party receiving the document can then view the public key associated with the digital signature, however there is typically no way for the recipient of the public key to discover the private key through this process.

- The information that can be gained by having access to the public key is usually:
- the name linked to the digital signature; and
- verification that the contents of the documents have not been somehow altered since applying the digital signature to the document, whether by technical error or tampering.

# **Legal risks**

There remains a risk that the identity of the person using the private key is not accurate, or at least not immune to legal challenge. This would be likened to a situation where a handwritten signature is required and a person fraudulently purports to be the intended signor and signs the contract.

Currently, there is no practical way to verify the signor's identity with one hundred percent certainty using digital signature 4 s 10(1) Electronic Transactions Act 1999 (Cth); s 14 (1) Electronic Transactions (Queensland) Act 2001 (Qld);

tools. Arguably the biggest failing with digital signatures and public-key cryptography generally, is that they are dependent on the private key being kept secret. If the private key is exposed, it is open for someone to dispute that they were indeed the person who "digitally signed" a document. If a targeted cyber attack or data breach exposed a private key, then it would have a cascading effect on the enforceability of digitally signed documents which depend upon that key.

Accordingly, some may argue that this is also true for more traditional methods of signing, although there is certainly still a commonly held belief that wet ink signing trumps digital signatures in security – this is largely due to the fact that a wet ink signing can be contemporaneously witnessed and verified by another person also signing by a wet ink signing.

To help mitigate against this risk, there have been a number of additional verification and authentication techniques made available to users. Most digital signature software products incorporate a range of additional security measures into the sign-

"It is imperative that the digital signature software you choose has an effective archiving system which makes retrieving data as easy as possible."

ing process which can usually be configured by the user. These include the use of biometric authentication, chain of custody features, timestamps, and email and IP address tracking.

Most importantly, software that generates digital signatures encourages the verification of the signor's identity through a certification authority (CA). CAs are usually secure online databases that can be accessed by subscribed users. Here, users confirm their identity by providing certain information to the CA and are issued a digital signature certificate - or a unique ID - that is stored online. The recipient of the digital signature can then find a person's digital signature certificate and compare the public key specified on it to the one they received, thus verifying the signor's identity.

To ensure the security of transactions, it is therefore encouraged that parties have both the digital signature and digital signature certificate systems in place. Also, it is imperative that private keys are not readily accessible on company databases and are instead held by the person named on the digital signature individually.

Another issue to be aware of is the software's archiving capabilities. It is imperative that the digital signature software you choose has an effective archiving system which makes retrieving data as easy as possible. This becomes important when a dispute arises with regards to whether an agreement was signed months or years after the fact.

The sophistication of your contracts and the signors of these contracts will have a large impact on whether you find these tools useful.

Practical problems arise when using digital signature products for smaller contracts. By way of example, it will likely be more difficult to verify the signor of an employment contract as the employee won't have any real need to create a CA. That verification feature will then be non-existent. This limits the ways in which the signature can be verified, although auditing trails and other verification techniques inherent in the digital signature software itself will still store this information, and these features can still be relied on.

If these smaller types of contracts make up a significant proportion of the documents you will be signing with digital signature software, then the tool might not be worth the risk. The key

consideration will be whether, having regard to your company's particular circumstances, not being able to rely on this particular layer of security defeats the purpose of using the software altogether.

# Global compatibility

How frequently you have dealings with other countries may affect whether you decide to use digital signature technology to sign important documents. While the UN Electronic Communications Convention dictates that electronic signatures are to be treated in the same way as handwritten signatures, not all countries have ratified the Convention, thus some international parties may still require handwritten signatures before being satisfied that a transaction is valid. It is also important to note that most companies developing and licensing this sort of software are based in the US.

While most premium products currently adhere to Australian and international law and are used effectively by global customers, their paramount concern will likely be complying with US law. Electronic signature law is inherently local, so should the laws in the US and Australia develop differently, this may become an issue. There has been no definitive case law in Australia relating to the validity of digital signature software, although it is valuable to note that cases have been won in the US based on evidence retained by premium digital signature software.

# **Data retention and the Privacy Act**

In addition to the above matters, there may be informational privacy and data sovereignty issues to consider. This may be an issue where personal information is disclosed overseas, potentially in contravention of informational privacy laws such as the Privacy Act.

Certain information collected in connection with the digital signature process might be personal information. This would mean that copies of the background data, namely the paper trail, auditing and archiving information as well as the agreements themselves may be disclosed outside of Australia. Most products allow users to save any documents that are signed through electronic means locally, however if a cloud storage is being utilised there may be room to negotiate data jurisdiction with the provider of your choice to eliminate this risk.

# Conclusion

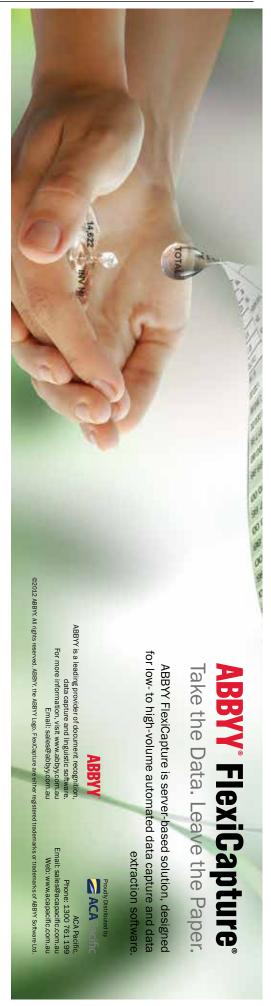
Legally, users should be mindful of the need to prove the validity of a digital signature should it be challenged. The key to this is ensuring that you and the parties you deal with register digital signatures with a CA and have access to an effective auditing system. Ideally these features should be easy to subscribe to in conjunction with using your digital signature software. Most commercially available products have built-in auditing systems which are easily accessible to trace the progress of each digital signature. Ultimately, you will need to make sure that you are satisfied with both your verification practices and the other party's.

Good digital signature products will have more than the bare essential verification and authentication features. Given that electronic security is a constantly evolving phenomenon that has the ability to change the way we conduct legal relations with other parties, it is likely that international and domestic law will be responsive to this progression. It should be noted, however, that the law adapts slowly to technological change, and often relies on applying old rules to new concepts. Because of the rapid nature of technological advance, there is no guarantee that a product that reflects the law currently will still do so in a year's time. Therefore, a product that is constantly updated to reflect this progress is desirable. For now, it is good to see that the legal validity surrounding the use of the digital signature products appears to be at the forefront of any updates to the software.

Accordingly, once you have installed a product it is recommended that a review is carried out periodically to ensure that the product still meets your needs. There are a range of factors to consider when choosing a digital signature software solution. This alert merely covers the legal aspects of digital signature software and does not give a holistic indication of which software will suit the particular needs of your company, employees, and compatibility with existing internal electronic infrastructure.

If you are looking to incorporate digital signature software into your workplace or business policies and would like further advice on the implications particular to your circumstances, please contact our Information Technology and Intellectual Property team.

Hayden Delaney is a Partner at HopgoodGanim Lawyers and member of the Intellectual Property and Technology team. Contact him at 07 3024 0332 or email h.delaney@hopgoodganim.com.au



# Is File Sharing Killing Enterprise Governance?

By William Shute

Content, data, information - no matter what your terminology, it's everywhere and being created by everyone in your organisation. No surprise; that information is not always properly governed by the people creating the content – much less by the organisation itself.

In a desire for more and more convenience, faster access to information and ease of use, users have found more ways to conduct business than ever before. Not only are employees bringing their own devices (BYOD), there's also BYOA (bring your own app) to think about too. Applications such as Dropbox, OneNote and so many others have been created for the sole purpose of helping users collaborate and share files easily.

So what are the implications of using these types of applications and this every-growing "bring your own" mindset?

First and foremost - in an era challenged by the hacker underground as well as increased regulatory demands, we are all concerned with information security and compliance - or at least you would think so. I don't know about you, but those concerns coupled with the innate ability to share documents in a nearly unfettered way via file sync and share technologies have me seeing images of the Wild Wild West with content (rather than bullets) flying all over the place.

Instead of cowboys shooting up the town; I see employees inviting colleagues, partners and other third parties to collaborate on documents with no thought given to compliance issues, secured access nor proper retention policies. This seems crazy. Right?

To my chagrin, convenience and speed outweigh any degree of common sense or corporate policy here every time. Unfortunately, this is human nature. In addition, general BYOD activities and concerns that have plagued organizations for years, have seen many the tablet, mobile device or personal laptop left on a plane or in a restaurant, exposing valuable data to hackers or simple data loss when not properly secured. So what are the implications? In the scenario of BYOD and BYOA - they could be devastating depending on the degree of exposure.

In fact, "Data leakage through employees' use of consumer-grade file synchronisation and sharing programs poses a significant threat to most organizations. Enterprise file sync and share (EFSS) offerings provide security against this threat, along with benefits such as collaboration capabilities, simplicity and a user-centric design optimized for mobile experiences."

So what exactly is EFSS anyway? This new category of tool is defined by Gartner as:

"EFSS (Enterprise File Sync and Share) refers to a range of on-premises or cloud-based capabilities that enable individuals to sync and share documents, photos, videos and files across multiple devices, such as smartphones, tablets and PCs. File sharing can be within the organisation, as well as externally (e.g. with partners and customers) or on a mobile device as data sharing among apps. Security and collaboration support are critical

capabilities of EFSS to address enterprise priorities."

The promise of Enterprise File Sync and Share systems is that by offering these capabilities as part of your corporate IT strategy employees can collaborate effectively within the bounds of your wider enterprise content management and information governance strategy. That, of course, means that these capabilities need to be included and integrated into your strategy. For many, however, this hasn't been the case as many file sharing tools are free for use and easy to deploy outside of your corporate IT.

To be clear, file sharing isn't an entirely new category of productivity products (sharing apps like Evernote, OneNote and Dropbox have been around for years now). And many of us are guilty of succumbing to the allure of the convenience and ease of sharing corporate information with a personal Dropbox account – due to something as simple as size restrictions that kept us from getting our work completed.

This isn't a new information governance issue. We

have been challenged by this issue for years

now, starting with the ability to email corporate information to a personal email account. The difference · Backspace today, however, is that our collaborative device can now fit in a pocket or a purse - and the number of potential BYOA possibilities has rocketed skyward. And, with the Internet

> If you think back to the Wild West analogy, while the West was dangerous, sheriffs routinely collected weapons from everyone entering the town. Town ordinances against carrying weapons helped

of Things (IoT) this will

only continue to increase

drastically. So when I ask,

"Is file sharing killing enter-

prise governance?", it very

well could if you don't get

ahead of this phenomenon.

to limit bloodshed from too much rotgut (i.e., they kept policies in place about what tools could be used and how.) And a cattle drive, barring the odd stampede, was a controlled movement of cattle from grazing land to railway terminal points for shipping to the slaughter yards of Chicago and elsewhere. Cowboys "governed" the cattle and kept them on the trail.

Privacy Policy

So while certainly dangerous, the Wild West wasn't always as "wild" or "chaotic" as popular myth would have you believe. You need to disarm employees while empowering them to be productive via the appropriate vehicles within your information governance strategy. As stated before, convenience and speed will outweigh common sense and corporate policies every time. Even if your plan is to employ Enterprise File Sync and Share, employees who have become accustomed to their tried and true file sharing BYOA of choice will continue unless harnessed and controlled.

William Shute is Chief Strategy and Marketing Officer at Viewpointe, records management consulting form and service provider head*quartered in New York.* 

# **Driving Data Loss Prevention**

# By Scott Swanson

In their efforts to identify and protect information assets, companies are not identifying many information "content" risks that fall between gaps of data stewardship and regulatory compliance. As organisations face heightened data security issues regarding information loss and leakage, the demands for technology, process controls, and information stewardship frameworks have become a key part of how an organization approaches its data compliance and risk functions.

It is estimated that 85 to 90 percent of all content created by an organisation now exists electronically. Business operations continue to generate vast amounts of unstructured data, private customer information, and electronic communications. The amount of content that must be properly managed, stored, secured, and destroyed is therefore a daunting task and a governance, risk, and compliance (GRC) responsibility. With additional pressure to collect more information on customers and business partners, the duty to protect this content is an added bur-

Balance is a difficult issue. The question for your organisation is whether you are taking proactive steps to manage and control your content for optimal use, to facilitate compliance and litigation discovery, or to protect it from inadvertent disclosures, intentional theft, and careless breach. For some companies, the issue is determining what information needs to be protected and what varied threats and vulnerabilities constitute the risks for unwanted consequences of data loss.

Technology makes for greater efficiencies in this area, but organisations require more strategic approaches that involve blending process, people, and technology in the face of today's compliance and risk management challenges.

More often than not, aspects of critical asset identification and protection fall in the seams and gaps of nebulous rules but not corporate culture and existing business processes.

This is a critical component of many regulators' guidelines on cybersecurity preparedness in monitoring for data loss. Companies that don't know what they have, do not consider who would want the information and how someone might access unauthorized corporate information, should ask themselves the following

Where does my information risk management fit into current risk, compliance, and security protocols?

How do current business processes impact IT's critical asset identification and protection to address loss and leakage of sensitive content within the context of how information is being used and flows within the organization?

Have we conducted an information inventory to the extent of balancing information access, control, and stewardship - in structured and unstructured data?

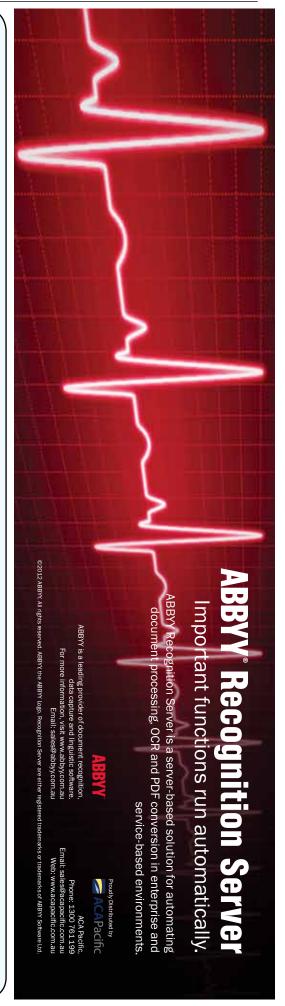
Are our enterprise information management policies and procedures properly aligned to address evolving threats, risks, and vulnerabilities, which is based on differing levels of information value or sensitivity?

What would it take to develop and implement a business unit-driven Critical Asset Identification and Protection Program to identify, review, and remediate weak information risk and compliance programs?

Most companies are going to find it tough to answer these questions. Many organisations still struggle to develop adequate policies, procedures, and processes, and do not socialise those policies, procedures, and processes to ensure efficient management of critical information assets. This is one of the key reasons that companies are not regularly the first to know when a data breach has occurred, with literally millions of records being stolen.

With the ongoing rise in hacking and information theft, it's time for companies to recognise that it is not only information that is poorly managed, but failures in controls and governance demonstrate a compromise in the integrity, confidentiality, and the potentially unauthorized accessibility of the whole company.

Scott Swanson is a freelance advisor for information protection and corporate risk analysis. He has over twenty years of experience in the public and private sector as an intelligence specialist, investigator and fraud examiner. sswanson@donovanrisk.com





# By Paul Ricketts

Let me start by saying that I'm not in the business of knocking solutions from any vendor within the Enterprise Information Management space. All commercial, off-the-shelf solutions have a place within the global market and all suit particular requirements and purposes. Within the EIM industry, we are experience quite a lot of change in the way that we are required to store and manage records effectively, how we respond to discovery requests and how we meet regulatory requirements placed on us by government, industry or other authorities.

My five observations, and this are mine and not representative of the company I work for, are as follows.

- Records management is no longer a single-dimensional
- Thinking about electronic records in a physical manner is no longer appropriate for the organisation
- Why do only a small percentage of the workforce have records management responsibility?
- · All business information has a record context so why are only a small percentage of records managed effectively?
- Whilst the end-state of the record is important, its journey from creation through review, approval to retention and ultimate destruction and all the history that should be retained is critical for a modern records solution.

So let me explain what I mean in a little more detail.

# **Multi-Dimensional Records Management**

Traditionally, the process of formally declaring anything as a record involved categorisation against a file-plan. This hierarchy defined the categories of records for an organisation and typically required 'expert' knowledge of both the file-plan and the rationale behind filing a document in a specific place.

The process of formally declaring a record can become complex and as such, most users in the organisation simply fail to declare records properly. Additionally, the filing of a record in multiple places on the file-plan is usually frowned upon plus usually results in duplication of the record itself (think about multiple copies of a physical record living in multiple record containers in a warehouse)

Today, most records represent multiple contexts at the organisational level. For example, a supplier invoice received will be categorised as a record for this financial year. However, what if there is a requirement to categorise against a project, a supplier, a human-resource or against an item of equipment delivered by the supplier?

What if all of these concepts were important to the business and required different retention and disposition policies to be applied with quite-difference execution dates? Additionally, in today's digital age records can be represented by both physical and electronic mediums - how are these managed discretely as records by the organisation?

The key to solving these modern records-management challenges lie with addressing the file-plan concept. Either the organisation needs to accept that records-management becomes even-more complex requiring multiple-classifications to be made against the file-plan OR a different way of classifying records needs to be adopted. The core principal behind the fileplan was to allow controlled metadata to be applied to a record in order to aide retrieval in the event of a discovery activity. This was historically driven simply because a record was typically physical - piece of paper - and no real way of automatically extracting anything useful from the physical document existed. If it is accepted that the file-plan approach as challenges from a broad-organisational perspective and that a different approach is required then how can this be achieved?

### There is no Physical Warehouse

The cool thing about electronic records is that you don't need to consider the physical warehouse management requirements - storage is pretty-much limitless for most organisations today and a modern RM solution deals with the multi-faceted policy concept without the need to duplicate files.

Of course, for some organisations there remains a need to maintain something physical either in the short or long-term. The management of a record that exists both physically and electronically is often referred to as 'hybrid-records-management'. Again, a modern RM solution can easily deal with a record that exists in two mediums (physical and electronic) and through the multi-policy approach - can apply and manage each independently allowing short-term retention of the physical record and longer-term retention of the digital record(s).

Removing the complexities of both the file-plan and the physical warehouse container principals allows the business to define the context around which records are stored and maintained.

## Manage Your Own Records

Business users need to be responsible for corporate records management! It shouldn't just be the responsibility of the formal records custodians within the organisation. There are challenges however in trying to get the broader user-base involved in the process of managing records and a level of automation is clearly required to do so. So, how do we make this happen?

Any change to the user-experience, the applications, processes or procedures involved in the creation of corporate documents is going to require some management. Any implementation that reduces this change is going to be more successful than

one that disrupts the user's daily activities.

Gartner introduced the term 'Pace Layering' a few years ago and this introduces three terms; Systems of Record, Systems of Differentiation and Systems of Innovation. In the author's opinion, a fourth term - Systems of Engagement - becomes highly relevant when considering any implementation of any system to a user-base.

Within an enterprise content management implementation, particularly nowadays with the wide usage of systems such as SharePoint, the Systems of Engagement already in place should be minimally disrupted. Requiring a user to enter multiple metadata values or classifying a document against a file-plan is disruptive and the more you ask of a user - the more likely they are to reject the change in totality!

Requiring a user to enter multiple metadata values or classifying a document against a file-plan is disruptive and the more you ask of a user - the more likely they are to reject the change in totality!

Records Management should be a non-complex and natural business function where all users in the organisation are empowered to own the records function - albeit through 'invisible' automated systems that drive the application of the right policies with minimal user change.

By leveraging some common document characteristics - its type, its location, the user, their line of business and basic metadata, rules within the system of record supporting the user-facing system of engagement can determine the right policies to apply and the way in which these policies will be enacted. Furthermore, through analysis of the content of the document, more granular classification can occur allowing a more-accurate application of policy.

Of course, automation to this degree requires some thought and work at the time of implementation and beyond but at least by applying the Gartner model - an organisation should only be required to do this once and apply consistently to any 'document' from any source. Sources in this context cover any application or system that requires the management of unstructured informa-

# All Records Must be Effectively Managed

To enable a more effective method of managing corporate records and ensuring that a higher percentage of records are retained and more users are engaged in the process there are six simple guidelines to follow:

Consider and manage the record throughout its journey and

across its different states. I'm finishing writing this article on a plane in the middle of a 12-day business trip taking in Dubai, London and Hong Kong before returning home to Sydney. Imagine if during this journey I carried a camera (ok, let say an iPhone) with me at all times - to every meeting, on every plane, every car journey, every tourist attraction, every meal etc. Imagine if I didn't take a single photo during the entire 12-days but waited until I arrived home on the 12th-day and took a selfie at my front door. We are all getting old and someday, our memory is going to start to get fuzzy and eventually fade away. Imagine me in my 80s sitting in the old-people's home, rambling on about the fantastic trip I took in April 2015 and the only thing I had to prove I went was a faded image of me on my doorstep! You might be laughing or at the very least, smiling right now but the truth is - this is the way of the vast majority of records management systems in place today and most likely the very way that your organisation thinks about records management!

Remember that electronic records aren't kept in a physical warehouse. Strangely, this isn't as obvious to many people as it might seem. The author has been engaged with many organisations over the past 20 years and is still constantly surprised when he hears somebody talking about 'storing the Word-Document in a container'.

Google doesn't represent information in containers and the whole wide world manages to find information so why are corporations still allowing a small team of people to insist that files, boxes and shelves are an appropriate way of managing electronic records? If a record is managed through effective metadata (automated or manually applied) and is indexed appropriately AND the various records policies enacted based upon broad business requirements there is NO NEED to think about physical warehouse requirements!

Enable record automation where possible and applicable. An easy one - asking a user to manually categorise a record against a file plan is simply, plainly and obviously NOT GOING TO WORK. Letting the user continue to work with their currently systems and application and not implementing any change to their user-experience WILL WORK but you have to enable the automation 'under-the-covers'.

Delivering an automated RM capability under all of your 'systems of engagement', delivering the consistent and accurate application of policies to all information will bring the organisation immense benefit and if you're the disruptive leader driving this you will be a hero and deserve to wear a cape and your underwear outside of your trousers!

Seamlessly integrate your records systems with your systems of engagement. If you get this right, and don't get me wrong it's going to take some work to do so, you'll look back and think to yourself 'how did we ever get it so wrong in the first place!'. Then you'll remember what your legacy RM solution provider told you when you bought the software in the first place and

(Continued page 29





New Zealand's New Plymouth District Council (NPDC) recently implemented a cloud and mobile ECM solution with TechnologyOne, replacing a Hummingbird

The local government authority has over 500 staff/users and was increasingly challenged by having to do more with less and at the same time needed to adapt to new technology trends and new ways of working. Managing mobile workers is one of the biggest challenges they have to face, along with increasingly complex legislative requirements.

IDM asked ICT Manager, Kevin Glynn about the decision to implement a cloud and mobile based ECM solution.

## IDM: When did council decide to implement a new ECM platform?

KG: We started our review of options in November 2013 and made the final decision in March 2014 to go with TechnologyOne ECM, migrating 1.6 million documents across.

The first rollout of a document management system was Hummingbird. In hindsight our choice was made with unfortunate timing. In between making the decision to purchase Hummingbird Version 6 and actually implementing it in 2007, OpenText bought them. Pretty rapidly Version 6 became unsupported as the majority of the user base was on Version 5.

This started to cause us a number of problems, so much so that we decided to change our document management system sooner than initially planned.

### IDM: What other enterprise systems do you have deployed?

**KG:** We are fairly heavily invested in TechnologyOne Solutions. We've got their Financials, Property and Rating, Service Request and Asset Management Systems. We are looking at moving towards their concept of a One Council solution.

The standard operating environment is Windows and Microsoft Office with Exchange/Outlook, physical desktops, rather than virtual, and at the backend we employ fully virtualised servers, a MetroCluster SAN and Commvault archiving.

# IDM: Why did you choose the Technology One ECM solution?

KG: We're in the process of becoming a digital Council. This is a true business transformation looking at all of our business processes from end to end and reimagining them in a digital world for how they can be most efficiently done.

Good data quality is obviously fundamentally important to a digital Council as it underpins automation of processes and good quality business reporting and having good access to the right information, at the right time. All those things are really at the heart of building out a digital Council, so this was a really Coastal Walkway in New Plymouth, NZ

important decision for us.

The new TechnologyOne ECM product is actually a complete rewrite of the underlying code set. They've taken what was their client based application into being a completely browser based application so staff will be able to access the on-premise ECM content anytime, anywhere, on any device.

We were looking for something that would work without a deep level of integration that was used in the Hummingbird implementation as this was one of the sources of the difficulties we had with our first EDRMS implementation.

### IDM: Did you consider SharePoint at all?

KG: SharePoint was an option that we considered, as we're Microsoft Shop, but it was ultimately rejected. Whilst we were seeking to avoid a deep level of integration to the desktop, we would have been happy with integration between different Microsoft products. In our initial investigation stage we discovered that SharePoint out of the box would not enable us to be compliant to the records management standards to which we are held accountable. That compliance capability would require some pretty significant plug-ins, which adds that extra layer of complexity we were seeking to avoid.

### IDM: What did you learn from the first ECM rollout?

KG: We learnt a lot by having done an ECM implementation first time round. Hummingbird was a good modern system and enabled us introduce records management compliance. However the implementation was very compliance focussed, which caused usability issues. So in reality we ended up with suboptimal records management compliance because when things get too hard for users, they find ways around it.

For example, we had quite a complex file classification structure based along functions, which was six or seven levels deep in places. Users basically found it too hard to know where to put their documents. They had their own way that worked for them and, from a corporate point of view, they just put records in relatively random places, but in places that worked for them. But of course that causes problems when others are trying to find context relevant documents.

Users have a good understanding of which emails constitute records but it involved a number of steps, which acted as a barrier to users. Now that it's drag and drop, we're getting much better take up. As a failsafe we also use CommVault to store all of our emails, inbound and outbound.

This time round we ensured that our implementation was completely user-centric. The outcome had to be a really intuitive, easy to use system. A phrase used to capture the approach was, 'good records management practice will be a by-product of using the system that helps you do your day to day job.'

Because the ECM search is so good, so intuitive, and so easy to use, we've gone for more of a big bucket approach in terms of file classification. We have still use file classifications, but it's a two level deep file classification. Importantly you can add as many index tags as you like to documents. Helping users understand the difference between a paper-based world view and a digital world view is important. The old file classification replicated paper-based filing in that documents were put in a specific 'place'. With the ability to tag multiple indices, documents can be put in multiple 'places' from a user perspective, even though there is only one copy of the document stored in the system. This makes documents relevant and searchable in a variety of different contexts. This is an extremely valuable capability for an organisation as diverse as a local Council.

### IDM: Are there any other benefits?

KG: ECM has a feature called Ouick Add Profiles. This is useful when a team gets a lot of correspondence that is all very similar and is processed in a similar way. It lets you create a template that has got nearly all the metadata already populated. You then just have to type in the one or two fields that you need to iden-

# Legacy EDRMS challenge

smile to yourself quietly! Consider how you are managing your non-documentary records, e.g. Social Media. As an organisation you publish information to your websites, to Twitter, Facebook, LinkedIn and a whole other list of different online channels. What you say through these channels is equally as important as the information you attempt to manage within your current record processes.

Of course, from your marketing team you are highly unlikely to receive an internal envelope with their latest Tweet nicely printed out on a sheet of A4 paper for your records manager to nicely categorise against their file plan and store away for evermore in your off-site warehouse!

Educate your user community on the importance of good record-keeping practices. Of course, if you've read this article you'll already realise that this is completely unnecessary if you get your record keeping right across the organisation. Users should not have to think about record-keeping practices - it should happen seamlessly without any change to their daily lives!

A record simply represents the end state of a piece of information. Dependent upon the system used to create the record itself can be simplistic or complex in structure detailing minimal supporting metadata or 'everything' ever known about the records journey. Of course, the complexity of information retained in support of the record is highly dependent upon the systems and processes followed to create and manage the record across its entire lifecycle - from initial creation, through review and approval, publication, access, retirement and ultimately - destruction. The more systems used across this journey and the more people involved in the processes PLUS the added dimension of metadata requirements leads to a potentially massive change in the user-experience should the organisation want to do more in the corporate-records arena.

As previously described, where an automation-centic approach to records management can be adopted - minimising user-change in the process - it becomes much more feasible to capture a richer set of supporting information about the record than simply the fact that it exists and the dates when it is to be destroyed (typical of the information currently held in the vast majority of legacy records management solutions!).

The beauty of this approach is that not-only is the document managed as a corporate record - its entire lifecycle can be captured and maintained dynamically allowing the history and usage to be retrieved in the event of a discovery process taking tify that specific document. That really speeds up the process of putting documents into ECM. There are a range of documents that get created by other parts of our TechOne system. Now that we're using ECM, those now automatically create entries into ECM with fully populated metadata fields. We can also now share secure, links to documents outside of the organisation, making documents available to non-Council staff in a controlled

### IDM: Have you been able to move everyone off using file share folders?

**KG:** We had a go at shutting down people's access to file share on the last document management implementation. Given the usability issues we had, overcoming people's natural resistance to change proved too hard in many cases.

We are now working on this again throughout the organisation and seeing what we can do to make this easier for people. Some examples include scripts that take folder names and, migrate content across to the new file classification structure and automating naming and metadata entry. We are having much quicker success and encountering much less resistance this time

place. The use of a semi-structured file format such as XML easily allows this to take place and in-fact, authorites such as the Victorian Electronic Record Standard has documented an appropriate schema for over a decade.

Legacy records management solutions don't really provide the capability to extend to this level of dynamic management and this is where a hybrid-approach to the top-to-bottom records keeping requirements can really play a role.

A dynamic record repository function maintains the record dynamically through its useful lifecycle and at the end of this process, the entire records can be passed to the legacy RM system to meet any existing record keeping policies already in place.

The additional value provided through this approach PLUS the fact that all users and all records are now maintained properly should be clearly recognisable!

# In Summary

We are all guilty of making records management really hard to achieve across the entire organisation. By just accepting what our internal 'experts' tell us about record-keeping and not challenging the arguments that have been put forward for many years - we are effectively preventing change from taking place and suffering from the inability to deliver 'Modern Records Management' to the organisation.

Consider that typically, only 5% of corporate records are formally retained and that a lower percentage of users in YOUR organisation understand how records-management works and its value you'll realise the importance of change in this area.

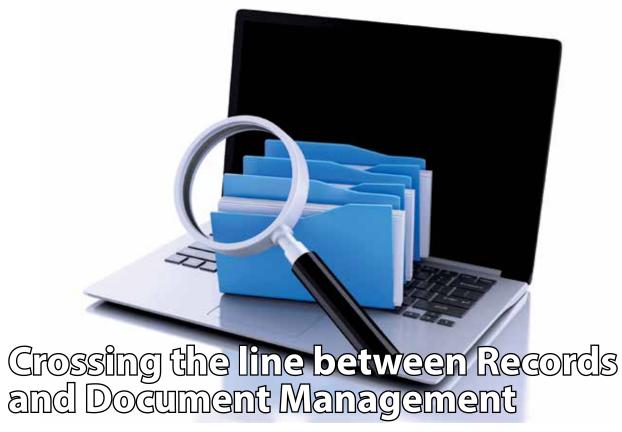
Also, you'll understand some of the risks your organisation currently faces should it undergo some legal eDiscovery exercise or face any other litigious event.

Modernising your organisation's approach to records manage-

ment will go a long way to improving the percentage of records managed across your business and significantly reduce your risks.

Paul Ricketts is technology program director and strategic architect for Oracle Asia-Pacific. paul ricketts@me.com





# By Charles Lattuca

Over the last few years there has been a shift in how information is managed (captured, stored, and indexed). One could say it's the next generation in the management of information (documents & records plus all objects). A shift from having two separate and different disciplines of Document Management (DMS) and Records Management (RM) to a single discipline of Information Management (IM).

This evolution has resulted in the need for products and solutions which treat information differently than what we have been used to, products which are a fusion of Document Management and Records Management systems into a single product or solution.

Products which provide the organisation and end-users with a single environment to work in and a single "source of truth" for information of all types.

Products which allow an environment which seamlessly integrates the various and different disciplines. Products are required that incorporate Business Process thinking into DMS and RM processes.

The business case for Information Management systems has been well made and most organisations have accepted the fact that it is a key, if not a critical component of their overall strategy. So the dilemma for many is not whether an Information Management system is required but what form should it take. Is it Document Management or Records Management or a combination of some or all of these and other related components?

The reality is that many products have their roots in one discipline or the other. They either started as a DMS or as an RMS and over time the missing piece or pieces have been added.

As a result we have products which have strengths in one discipline, and weaknesses or less of a strength in the other.

Whichever way it has been done, there are limitations and weakness in such consolidated products. The weaknesses may be in the functionality provided, usability or user interface, a weak-

ness in the single approach in the management of the information, with more focus on one at the expense of the other.

There are few products which can boast of having a single and homogeneous foundation or platform and thus both DMS and RM disciplines have been treated equally and consistently.

The newer products or those that have had the luxury of building products based on a single platform are reaping the benefits as well as providing invaluable benefits to the customers and users using them.

Such a product allows the development of a solution that supports the business functions of the organisation by being a service provider of information to other functions and systems of the organisation.

Thus allowing the organisation to meet the challenges caused by the increasing speed of business and exponential growth of information.

The solution then becomes a foundation or platform for other applications, such as ERP and CRM. A solution providing information related services, and linking corporate applications to the information repository.

Such a solution is the path for transformation of the organisation, from current inefficient processes to more streamlined, cohesive and standardisation in the way the organisation does business, and the alignment of the organisation's objectives and processes with the information.

## The Benefits of fusion

This fusion leads to the realisation of benefits across the board at the organisational level as well as at the end-user level. Benefits from the having a DMS and RM solution and benefits by the fact that they are all in the one environment.

The organisation does not have to make the choice of whether to go for products with a focus on DMS or one with a focus on RM. The end-users don't have to choose or make the decisions which do they use: the Document Management or Records Management system or is this a document or record or can a document become a record?

The features and functions of one can be applied to the other uniformly and consistently, rather than applying the same organisational rule in two different ways.

Using such a product, the final solution can look something like this:

- A single-source of truth for the capturing, storing, indexing and sharing of all its information (documents, images, objects, physical records, electronic records, business processes) for the entire organisation.
- A single environment, of DMS & RM for the organisation to meet its obligation to manage and tracking, disposal and retention of information based regulatory requirements by relevant authorities.
- A single solution for the management of all the documents / records / objects for a transactions which may span multiple departments within the organisation
- · A consistent structure for the management of all documents for regulatory requirements
- Consistency across the various modules and functions within each discipline
- · A platform that allows seamless integration into other products such as ERP or CRM systems
- A product that may be used in-house, in the cloud or as a hybrid

# A single solution with some "nice" features:

- · Flexible and adaptive structures making it easier for the user to store and retrieve information:
- A single Business Classification Structure (BCS) which supports both DMS and RM requirements based on Storage Locations (file) where the location controlled the security, retention and disposal of all types of information;
- · Simplified and consistent filing methods, such as drag & drop, automatic inheritance of security and meta data based on location of document;
- Graphical view of the BCS allowing the user to drag & drop documents into the location and the system provides the necessary classification automation;
- · Integrated auditability of all types of information;
- A single and consistent strict Security Model which may be integrated with Active Directory and applied consistently across both sets of structures and information;
- · Consistent usability features, nice features such as drag and drop;
- · Access to all information anywhere, anytime on any device;
- · Application of unique document management features that increase usability and acceptance such as on emailing and creating single pdf from multiple documents at a single click
- · Application of the same retention and

disposal policy on documents and records and any object;

- Application of automation services and processes irrespective of the information
- Capability to initiate workflows, such as document lifecycle management, irrespective of the information type.

# **The Deployment Challenges**

The deployment of such a product into an organisation does have its challenges, for obvious reasons. There has to be also a shift in the mindset and the methodology or approach in the deployment of the product and the development of the solution.

The new approach applies not only to the product but to the project team charged with the deployment of the product and turning the product into a solution for the benefit of the organisation.

As DMS and RM are different disciplines, the related requirement's analysis or discovery are necessarily different also. As a result deployment consultants, similar to the products themselves, have strengths in one and weaknesses or less strength in the

Without a change in mindset during the analysis and deployment phase of the project, one discipline may unwittingly suffer simply because of the experience of the consultant or the approach of leaning towards what one is familiar with and the way one views information.

This fusion of disciplines is one of the components of the next generation of Information Management tools that provide end-user a better and more intuitive way to use, share, and interact with information in any number of the organisation's activities.

There are very few providers who have attempted the Fusion and even fewer have achieved this.



Charles is the Business Development and Major Accounts Manager at ELO Digital Australia and most recently has been involved in overseeing the deployment of ELO enterprise wide within Queensland Treasury Corporation. Charles has over 35 years' experience in the IT industry, including over 20 years' experience with ECM/Document Management system in design, development and deployment.





Just 10% of organisations have a workable **Information** Governance policy

> Implementing an Information Governance program enables you to keep just the valuable information you need, reducing cost and compliance risk.

RSD can help you get started on your **IG** Journey

Find out more www.rsd.com/dyk



# By Daniel O'Connor

As per usual inspiration struck me while biking through my neighbourhood one weekend. Before you assume incorrectly I am not an avid cyclist, nor an athlete of any note. It is a form of masochistic torture I endure to avoid feeling my actual age while making myself feel way beyond my actual age.

The inspiration was this: My neighbourhood is right next to the worst maze of streets I've ever encountered. To understand this let me set a stage. I left my house, and turned left on the first major street. I then turned left on the next major street. A mile later I turned left on the next major street. Seems simple, doesn't it? I could concentrate on breathing, staying straight, monitoring my heart rate, and cursing myself for being on the bike again.

Then I decided to take the tunnel under the highway back to my house. I could avoid having to cross four lanes of traffic that tends to do 20 miles per hour over the speed limit, and seemed like a logical shortcut. This involved riding into a neighbourhood that is a series of cul-de-sacs and dead-ends. I turned left into the neighbourhood, which was my first mistake. I then turned right. And then left. another left. a right. down the hill, and to the right again. Left. Right. Completely lost. And out of blind luck I found the road to the tunnel. There was no sense to the layout of the roads in this neighbourhood. There were three unconnected roads with the same name. The road I could have followed all the way to the tunnel had two breaks in it that I had to navigate around. It was truly a maze of streets.

Imagine these two different sets of roads are your taxonomy. I realize that most site navigation specialists will state "Nobody uses taxonomy anyways... they all use search." This is arguable, but not at all my point. This is about data collection, and how most data collection starts from a point of failure; placing an item correctly. How many times have you browsed a Web site to see a boot rack in the middle of a bath towel experience, an Easy-Bake oven in the appliances section, or other obvious miscategorised items? How many times didn't you see the miscategorised items?

Imagine you are attempting to place an item into your taxonomy. Which would you rather have: A map, or a maze? This should be one of the first concerns when setting up a taxonomy, especially if you have a dedicated data collection taxonomy.

If an item cannot be easily placed in the correct node in your taxonomy every data quality element that comes afterwards is suspect. How can your data inputters possibly answer the correct responses to your data questions if they are answering attributes that aren't designed to be asked about that item? Correct item placement is the most important starting point in data collection, and often the most overlooked.

In my years I have seen many methodologies to solve this problem. Most involve remediating the issue after it occurs, which readers of my posts know is my least favourite response. Scraping your Web site to find items that are incorrectly classified or waiting for customers to point them out bleeds confidence in your Web site. It's unprofessional, and your Web site experience suffers.

I've also seen process attempted as a solution for this. Attempting to have a human with vague knowledge of a taxonomy layout attempt to make decisions to influence others with vague knowledge of that taxonomy is - for lack of a better description - silly. The academic world and the non-retail world have been using automated classification techniques for years with varying levels of sophistication. At Taxonomy Boot Camp last year all the non-retail environments weren't talking about how to do automated classification: They had already completed it and were on to the next level. Retail is still playing catch-up.

Automated systems are not simple, nor are they a maintenance-free environment. Retail taxonomies are fluid, and therefore automation systems require similar maintenance. This is an investment in data quality, not a one-time endeavour. For smaller taxonomies, taxonomies that aren't dedicated to data collection, or where the maintenance costs are too great this may not be a palatable solution.

This is where taxonomy development becomes the solution. Simply put, if your taxonomy is a maze it will be difficult for your data inputters to put their items in the correct location. What does a taxonomy maze look like? There is no one magic silver bullet answer to this. It involves many different factors. Here is the short list:

- The top level nodes are not mutually exclusive. The ambiguous top level nodes leads to confusion.
- The naming of nodes is not in common language. Calling a sledge hammer a "Macro Adjuster" doesn't describe the items you expect in that node.

- · There are no definitions or synonyms documented and available for each node, parent or child.
- · There are multiple paths to set up a single item.
- There are "miscellaneous" categories, more commonly known as dumping grounds.

All of these factors lead to items being set up in the incorrect node. Conversely, a taxonomy map has the exact opposite traits. It's mutually exclusive, has available documentation, and uses common terms. The ambiguity is limited. (Let's face it... Ambiguity exists in almost every taxonomy. If they were perfect we'd never have to maintain them.) Item classification is simplified, and therefore there are fewer points of failure in your item setup process. Data quality improves just by having items in the node with the correct attribution to describe them.

And here is the most important part: The people who classify items in your taxonomy generally think the same way your customers do. If you only have display taxonomies having a map taxonomy is more intuitive for those quests that, believe it or not, still use navigation to filter to items. (I'm one of those people... we do exist.) A more natural map-like taxonomy, where the path to one node is guiding by the path from the previous

road, can only improve site experience.

Even if your business has a data collection taxonomy the fundamentals of data quality should always include improving your taxonomy towards meeting these goals. Neglecting item placement is another way to let data quality issues occur, and the rework involved in resolving these kinds of issues is expensive and time consuming. Starting items in the correct classification is paramount to having good controls over your data quality.

Once again, this isn't an entire solution. This is a piece to a puzzle for both taxonomy development and for data quality. There are dozens, and possibly hundreds, of other ways you can influence your data quality that may be cheaper and provide results in a shorter time frame.

However, neglecting to understand that your taxonomies are assets to be maintained instead of costs to be incurred, and that your taxonomies are the starting point for all item data, is another way to fail at data quality.

Finally, sometimes the shortcut isn't as short as you think it is. Dan O'Connor is a business process manager for data solutions at Target Corporation and has worked on retail taxonomies for multiple Fortune 500 retailers.

# Taxonomy Design Best Practices

# By Zach Wahl

Over my years of taxonomy consulting I've often been asked to codify the best practices regarding taxonomy design. A simple search online shows that this is a common question, though one where a lot of the current answers appear outdated. Taxonomy design, as well as the information systems that leverage taxonomies and the business needs that drive them have evolved over the last several years.

Taxonomy management tools and auto-categorisation systems are more mature and easier to use. Many content and document management systems (and really, the broader set of information management products as well) have grown into suites of products through a multitude of acquisitions by industry leaders, while open source upstarts have introduced some much needed volatility and new functionality into the market. Most importantly, businesses themselves are much savvier regarding the value of their information, the needs to use and reuse it, and the reality that everyone is not just an information consumer, but a potential information creator as well.

As a result of these dynamics, many of the taxonomy best practices from a decade ago have shifted or changed. Others are as critical as ever. The below represents the core set of today's business taxonomy design best practices.

Define and Document Your Purpose - Taxonomies, despite a lot of improved understanding over the last decade, can still be somewhat esoteric to the non-indoctrinated. As such, I too often see a stakeholder group that is confused about the need for taxonomy and the value the taxonomy will provide. Every taxonomy design effort should begin with a clearly documented and shared understanding of the Who, What, and Why of taxonomy. Who is our audience? What are we "taxonomising" or tagging? Why are we doing it?

Focus on the Business User – I often tell my clients that this is the only best practice that is non-negotiable. Every design decision should come down to that which would best serve the end user. This is also why the development of personas is so important. An early stage in any taxonomy design effort should be the identification of your audience/users and a clear under-

standing of your "lowest common denominator" user. If you can design for that person, you will best serve the interests and needs of all your end users, be they customers, the public, your own employees, or a mix.

Understand your Publishing Process - Depending on the type of system, type of organisation, and, purpose for the system, the content creation and publishing workflows can vary wildly. Some systems have content published only by a few, fulltime content strategists. Others have a fully democratised content management approach where any user of the system also has the ability to publish into it. The number of tags you can expect to have consistently and correctly applied to your content is heavily dependent on who will be applying those tags. Systems with a broad base of content publishers must sacrifice some level of taxonomy and tagging granularity for overall usability. I will always take a smaller and simpler set of tags that are consistently applied over deep and detailed taxonomy that is used sporadically. The use of auto-categorisation tools also comes into play here. A system leveraging auto-categorisation (if designed and implemented properly) will decrease tagging time and increase consistency, allowing for a more granular taxonomy design.

Use the Simplest Language Possible - One of the best taxonomy consulting services I can provide an organisation is sometimes to serve as the outsider that doesn't recognise their internal jargon and acronyms. Internal taxonomy designers too often get overly comfortable with their own terms and concepts. I always encourage organisations to "burn down" their language into the most simple and cleanest terms possible. It is this language that will most make sense to a first-time visitor to a site, an employee on their first day, a beginner, or any other lowest common denominator. As an added value, this clean language is also the easiest to translate for internationalised taxonomies and the easiest to maintain in order to minimise longterm costs and administrative burdens.

Deconstruct your Taxonomy - One of the keys to today's taxonomy design efforts, and one of the major changes from

(Continued over)

# 3 Bad Reasons Why Businesses Stick With Paper

By Brianna Smith, Konica Minolta

Doing away with outdated, paper-heavy processes might seem like a daunting task for a business to tackle, but what business leaders need to remember is that it is a gradual process.

You can't expect to go from a paper process one day, to a fully functioning, paperless ECM solution overnight. But even though there are tools and help available to help business make the switch to an electronic system, there are still some who refuse to hop on the ECM bandwagon, but not for very good reasons.

Here are three common reasons why businesses are reluctant to implement an ECM solution, and why they're poor excuses:

### 1. Only accepting paper documents with wet signatures

We live in a digital age where everyday tasks and business operations can be completed without ever having to use or sign a piece of paper. For example, you can file your taxes, apply for social security, make purchases at stores, etc., all from the comfort of your office or couch.

From the business end of things, Australia has actually passed legislation that govern the legality of digital signatures and electronic documents to help keep businesses and consumers safe, The Electronic Transactions Act 1999 (Cth). Since then, using electronic documents and a simple typed signature has been accepted as standard procedure for most consumer transactions. Only accepting paper documents with actual, wet signatures is no longer a valid excuse, not in a time with modern technology and laws in place that protect the legality of digital signatures and electronic documents.

### 2. Using electronic forms is too expensive

This is a common, albeit false, reason holding back many busi-

nesses from going digital. They assume that investing in an ECM solution will be too expensive, but what they aren't taking into account is the fact that they're already spending a lot of money on their outdated, less efficient processes that have become more routine than efficient. Paper, ink, copy machines, and manual processes all cost money — money that would be better spent on an ECM solution that will end up saving you both time and money in the long run.

There are many ECM options out there at varying price points, meaning that there's one out there well suited for every business. Businesses need to look at an ECM solution as an investment, and often the ROI on a scanning project and/or document management system will be enough to convince a business that they made the right decision.

### 3. If it ain't broke why fix it?

Many people are hesitant to embrace change, and businesses are hesitant to make changes to a process that has been working fine for them for so long. People like routines, even if they're outdated. But in the business world, change is how businesses stay relevant and successful. Businesses should always be striving to improve their operations to boost productivity and rake in more profit while mitigating costs. Out-dated paper and manual processes will get in the way of this, especially since the societal trend is to embrace all things digital. It's important for businesses to embrace change and new technologies that can improve their processes and overall operations.

Konica Minolta works closely with businesses to deliver a range of multifunctional digital imaging solutions for document scanning, printing and electronic archiving and distribution. Tel: 1800 789 389. www.konicaminolta.com.au

## (From previous page)

the past, is that the concepts of faceting, along with advances in taxonomy management and information management technologies have given us the ability to step away from the "one taxonomy to rule them all" model. As opposed to a terribly deep and detailed taxonomy with a mix of different terms, today we strive for clean and simple taxonomies, each of which may power a separate metadata field in a one taxonomy for one metadata field type of model. This easily enables the concepts of faceted navigation and search now available out-of-the-box in most information management systems. It also improves the accuracy of auto-categorisation tools and creates the potential for much easier taxonomy and content governance by ensuring mandatory fields are completed correctly. Moreover, a deconstructed taxonomy design yields simpler and flatter taxonomies that are much easier for the average business user to leverage and understand.

Leverage the Wealth of Information that Already Exists -Thanks to today's analytics tools, most organisations have a pretty good understanding of user behaviours. Understanding what words people are searching on, what information they're accessing the most, and how they're navigating a site are all extremely valuable tools to taxonomy design. For instance, recognising a particular term has been searched upon more than any other can be an important key to recognising that term should be included in a core taxonomy design. Equally, knowing what your most sought after content is plays a critical role. I often work with organisations to understand that and then focus on a first implementable version taxonomy design that primarily serves that "MVP" content.

Plan for the Long-Term – We all know that no taxonomy is ever finished. An organisation's needs and strategies change, as do their mission, services, products, and employees. As a result, content is constantly in flux and a taxonomy design must be adaptive in order to address these changes. Moreover, on an average taxonomy design effort, the world of potential users will not be able to respond to it until after it is deployed. Every organisation needs to have the resources in place to capture and respond to both the active and passive feedback that will come after rollout.

Leverage Governance – Though taxonomy governance many not be the most exciting topic, it is by far one of the most critical to long-term success. Taxonomy governance will ensure a design evolves to better reflect the needs of the business and users, but does so in a sustainable manner that doesn't "break" the original design and functionality.

Look to Usability Best Practices – The concepts of taxonomy design and usability are rather similar. When designing taxonomy, I always encourage my clients to consider usability as well. As more and more taxonomies are "front-facing," leveraged directly for navigation and findability, this becomes even more important. Even "back-end" taxonomies need to be usable for the taggers. Traditional views of navigation and "clicks to content" hold true for taxonomy design. The days of six-level deep business taxonomies are long gone, or at least should be.

Zach Wahl is Principal, Knowledge Management and Taxonomy at Washington, US based consulting firm Enterprise Knowledge. zwahl@enterprise-knowledge.com

## Let your users roam free without sacrificing gover

By Stephen Duncan

Advancements in broad based consumer based technology is having a profound impact on business. Particularly where the behaviours of individuals have been influenced by the shift of anywhere, anytime collaboration and content sharing.

This is one of many examples where the 'Consumerisation of IT' is challenging business to adapt and respond to the following trends:

- Consumers IT habits, behaviours and expectations are influencing and driving technology
- Individuals are being asked to be more productive and innovation is being demanded to achieve this
- The need for productivity outcomes have started to override governance responsibilities

Sharing digital content has become second nature for individuals and the ways to manage it are plentiful and easy to adopt. In business, where content drives operational workflows and where collaboration with partners is increasingly necessary, the sharing of content is creating increasingly complex governance issues. For example, sharing a photo of your weekend with friends is quite different to sharing a photo of a damaged business asset that may one-day might become evidence in court.

Consumers can now easily solve their problem of access, collaboration and productivity of content on their own, with public cloud sharing services (PCSS). But users evoking shadow IT is risky. If the tools are not consistent with the overall information governance and security guidelines of the wider business, they could be placing themselves and the organisation at risk of exposure, particularly within regulated industries or the public sector where more stringent governance is required to comply with legislation. Will the business be forced to stifle innovation to mitigate risk or can they change their staff's behavioural patterns by introducing more appropriate enterprise technology?

This has a direct impact on the Information Mangers (IMs), whose role is ensuring that the governance framework and policies are adhered to. Balancing an organisation's regulated obligation for control while empowering users with the content that supports their tasks is the new reality, and it is a conundrum.

So can you have both, in essence your cake and eat it too? The short answer; yes. There's a new generation of information solutions and providers amalgamating the core needs of the organisation where information is secure, managed under the rules set by the Enterprise Content Management (ECM) solution, yet users are empowered with share capabilities to better manage their work environments and own productivity.

As new technology designed to empower collaboration via sharing enters the market it needs to be seen as tools that empower users, while enabling IMs to mitigate risk to the organisation. They begin with ensuring there's central control of the information governance rules. ECM solutions are where information managers typically place these, as well as access rights around the organisation's content.

With the introduction of PCSS the concern for IMs is how severely will these impact the governance controls that are in place? By extending the rules already contained within the ECM system, PCSS capabilities can be an effective extension to the information management platform with less exposed risk of managing a separate set of rules as well as provide transparency to the user. The business classification scheme should be respected within

the shared service and user access controls inherited as if they were in the ECM solution. These extensions will typically be multi-purpose but should be seen as complementary in nature to the wider enterprise making adoption higher.

The ECM should contain the single source of the truth. Placing content in the public cloud introduces risk, so security is paramount where it involves sharing sensitive and confidential information. For information mangers it's a must to have governance over content and its use including collaboration. Having visibility of how content is being managed is key, so security and audits across the platforms must be in place to provide accountability and mitigate risk around the deletion of information via shares.

Where content of a sensitive nature is being managed, organisations, particularly those in the public sector or regulated industries need to be cognisant of the issues around data sovereignty legislation. And with the proliferation of mobile devices and external shares the question of sovereignty becomes very real. For example within the NSW government cloud services policy there are clear guidelines that cover the collection, storage, use and disclosure of personal information.

Australian agencies must ensure they comply with the Privacy and Personal Information Protection Act 1998 & Health Records and Information Privacy Act 2002. They must ensure that they do not do anything that contravenes the Information Protection Principals, particularly when it relates to cloud computing. This includes the disclosure of personal information to cloud service providers, ensuring there is data security and safeguards against misuse, alteration, loss or unauthorised access and governance is adhered to around retention and disposal. It is the responsibility of the agencies to ensure this when contracting a cloud provider.

In the absence of common agreed technical standards, businesses may be at risk of losing their content during transfers between their ECM and shared service. For next generation information solutions, certification with bodies like IRAP look to provide security protocols around the external exposure of information. The new generation of information solution providers will ensure that this is critical and will have secure links integrated with the ECM that manage the secure access and sharing of content.

There is a path forward for organisations wanting to be able to provide their users with easy-to-use (consumer style) sharing applications, while retaining the control, security and governance of their ECM systems. As PCSS applications continue to enter the enterprise space, connectors are being offered which link to a core ECM repository providing an extension to the rules within the ECM application. This approach delivers an enterprise methodology as opposed to trying to retro fit a set of rules within the PCSS that either mirror or manage access to the ECM. Exploring what solutions provide this ability and which providers

appreciate the importance of amalgamating the technologies is a great step in the right direction. It means that the organisation and its Information Managers can foster productivity through innovation without sacrificing governance.

Stephen Duncan is Product Marketing Manager, Objective Corporation





By George Kesteven

Most documentation goes unread, for good reason: most documentation isn't worth reading. It is rare to find an organisation where the documentation isn't a shambles. Most often, you find a mess of documents that are badly written, incompetently edited, at least partly out-of-date, inconsistent, and boring.

An organisation's documented knowledge should be a core asset. Poor documentation leads to poor performance and poor compliance. At its worst, bad documentation kills people. Good documentation adds value at every point in the business cycle, from start-up to exit. Documentation matters.

## The practical problem

So why is most corporate documentation so awful? The first problem is simple lack of competence. Many people are lousy writers. That's a given. But even worse, most people are terrible at documents. 'Editing skills' doesn't often show up in management resumés. And even with the skills, no-one has the time.

Unless you have dedicated personnel who do nothing else. trying to manage your documentation as a set of manuals is doomed to failure.

You can't create a good manual unless you can dedicate uninterrupted time to the task. No manager with a day job can do this. If there are multiple contributors, there is no way to maintain consistency of content across a set of manuals. Even if you start

with a vision for what belongs in which manual, that vision won't survive the rough and tumble of the organization's real life activities. Something happens; someone creates a new document and adds it to the collection. No-one goes back to review the old documents to remove duplications and superseded content, or to ensure mutual consistency.

The older a manual gets, the more reluctant managers will be to make revisions, for fear of opening a can of worms. Changing a procedure implies a change to a position description which requires a change to the compliance schedule ...

Document management systems (like SharePoint) don't solve these problems. They just motorise them.

## The three types of user

Documentation has three types of audience:

- End-users: the people (employees, for the most part) who are expected to follow the documentation;
- Managers: responsible for the content of the documentation;
- Auditors: the people who verify and validate the organization's activities.

To be effective, documentation must meet the needs of all three groups. Too often, documentation is prepared with just one group in mind, such as quality system documentation written solely for the use of the auditors.

End-users have to be able to find the information they need very quickly, and must have confidence that the content is correct. People don't read documentation; they refer to it.

For managers, there are two requirements:

- They must be able to reach consensus on how the organisation is intended to function. The documentation must provide a clear definition of the boundaries and relationships between functions. If managers are accountable for content, they have to know where their accountability begins and ends.
- They must be able to make changes guickly and precisely, without getting caught up in the documentation chores of cross-referencing and indexing.

Auditors must be able to validate and verify the organisation's activities reliably and efficiently: the documentation must explain what the organisation is aiming to achieve, the standards to which it is subject, and how its activities are intended to comply with those standards. They shouldn't have to read entire volumes to make sense of what's going on.

Here are some suggestions for creating documentation that works —

### 1. Create an integrated body of knowledge

Think of your documentation not as a set of manuals, but as a single, integrated body of knowledge. All the elements of a business have to function together: you carry out procedures to achieve your objectives; your people carry out your procedures; your governance systems control how your procedures are carried out ... The elements of your knowledge system should similarly function together.

For example, in traditional documentation there will be procedure documents of various kinds (work instructions, standard practices, operating procedures, and the like). Separately, there will be position descriptions, listing the responsibilities of each position. At best, this separation leads to duplication of content; more commonly there is no coordination at all between the two types of document.

A better approach is to document your procedures with direct reference to the positions involved, and create your position descriptions primarily by cross-referencing the relevant procedures. This has these advantages:

People have an accurate statement of their responsibilities and direct access to the documentation relevant to those responsi-

Position descriptions are always up to date because they are updated immediately when a procedure changes;

If a position title changes, all references to the position in procedure documents can be updated automatically;

People can be notified automatically if there is a change to a procedure for which they have responsibility;

It reduces the total quantity of documentation; and

It's much less work to maintain (a good knowledge management system handle the updates and notifications automatical-

## 2. Define your elements

Define the types of documentation you will have in your system, such as: policies, procedures, position descriptions, guidelines, governance requirements. The fewer types, the better.

Specify the type of content expected for each type, and set the rules for creating and issuing that type of content. Don't try to be subtle in your definitions: the subtlety will be lost as soon as people start creating content. If you have trouble defining the difference between two types of document (e.g. work instruction vs. operating procedure), then merge them into a single

## 3. Don't repeat yourself

There should be a single place for each item of information. Don't allow content to be duplicated across multiple documents. Apart from the duplication of effort, the different versions will inevitably become inconsistent.

When work instructions have been written by different people at different times, you often end up with sequences of steps repeated in multiple instructions (for example, the paperwork and filing instructions repeated in each of a set of maintenance procedures). Those common steps should be documented separately, in their own document, and cross-referenced from all the other documents. This reduces the total quantity of documentation; more importantly, it standardises your procedures. If the common procedure changes you have just one document to update. (In the example, you don't need to update every maintenance procedure when the filing step changes.) The more you standardise, the less work you have to do and the less scope there is for error.

In traditional documentation it is common to find a glossary in each document, with the same set of terms defined repeatedly (and often differently). It is better to create a single Definitions section, containing all your defined terms in one place. This ensures consistency across your entire knowledge set; and if you change a definition, you need to make the change in only one place. If your documentation is delivered online (as it should be), your definitions can be linked as popups.

### 4. Define the accountabilities

Every item of documentation must have an explicit owner, who is accountable for the content and who has final authority for approving the content for use. Approval means certifying that using the documentation (e.g. carrying out the procedure, following the guideline, etc.):

- · is legal and safe;
- is consistent with policy;
- is in the organization's best interests; and
- is the best available way to achieve the stated objective.

The documentation owner is also responsible for reviewing the item regularly. All documentation should be reviewed at least annually. In some jurisdictions this is a legal requirement for some types of document; it is good practice in all cases.

## 5. Demand management commitment

You can't expect the employees to be committed to following the documentation unless their managers are equally committed to keeping the documentation up to date. In change programs, updating the documentation is often the last item on the task list: it should be the first.

Disrespect for documentation is contagious. The moment any part of the documentation is disregarded — because it's out of date or unintelligible or unworkable — then the rest of the documentation becomes suspect. Hold the document owner accountable for this.

## 6. Hide the document control data from end-users

It is common to see factory-level work instructions containing many pages of control data and half a page of actual content: a page of signatures, document history, references, definitions ...

The control information may be essential for compliance purposes, but it has no value to the worker trying to do the job. Organize your documentation so that the control information is available if needed, but is hidden by default.

## 7. Monitor usage and feedback

Monitor feedback: Every item of documentation is intended for some audience. Check that the audience does, in fact, receive the content and can understand it.

If your documentation is delivered online, check which pages get looked at, by whom, and how often. Like everything else in management: measure your performance.

George Kesteven is a management and documentation consultant specialising in the design, development, and documentation of corporate management systems. http://phrontex.com/

## **Building an effective capture solution**

By Kevin Neal, Director, Strategic Innovations Group, ABBYY

With information capture being such an obvious way to decrease operational costs, increase efficiency, reduce risk and assist with compliance, then it begs the question of why wouldn't everyone be using capture? I think the answer lies in the fact that as an industry we have done a disservice to our community.

Every vendor's product is the best \*sarcasm\*. Everyone can offer the complete solution \*everoll\*. Vendors compete for business on a list of features instead of a genuine desire to assist their customers become more productive \*disgust\*.

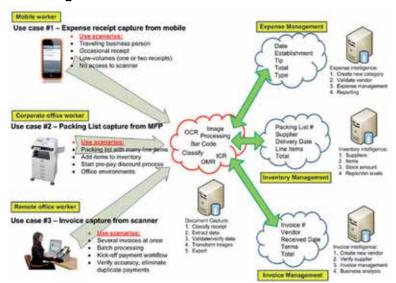
We need to breakdown the components of a capture solution to their lowest common denominator and share with others how to achieve an effective capture solution so that everyone can benefit from a technology that has a proven track record of success. Breaking down the components of a capture solution involves three basic parts: User Interface, Processing and Storage. It's really that simple. Of course this is an oversimplification but those are the basic three components.

## Eating my own dog food

Having spent nearly my entire professional career in the document capture/ECM industry you would think that someone like me might suggest that a 'solution' starts with consideration of capture hardware or capture software. Not true. An effective capture solution, to the contrary, does not start with capturing information from an image. Rather it starts with a well-defined process. Capture is an extension of a process that makes things more efficient.

To give some specific examples I would like to provide four different business processes and breakdown the 'Activity', as it might happen in a manual process, and the 'Benefit', which is the result of what we are trying to achieve (see the table below). You will notice, while it's pretty obvious, that the 'Activity' in each case can be slow, costly and inefficient yet many organisations continue to operate in this fashion because it's the traditional way of doing business. However, if you truly consider the 'Benefit' and know that in each 'Process' example below there are well established document capture solutions that can drastically improve these processes then hopefully this will drive more adoption of such a fantastic technology:

First, before any technology is ever considered the prudent thing to do is to clearly understand the use case for capture. In other words, think of real world scenarios and carefully consider the user experience of capturing information. The ultimate success, or failure, of the entire system can depend on whether users themselves feel comfortable with the capture experience. If the experience is not easy, available at all times or effective then regardless of how fancy the back-end technology is, they will surely resist.



Let me give some examples of use cases and how understanding the user experience first, before considering back-end technology, will help define the proper hardware device for capture:

### Use case will determine choice of capture hardware:

- Imagine the user works in the sales department and receives various Price Lists often with many line items that they must enter into the company's inventory management system. In this case a dedicated document scanner is most likely a logical choice of capture device hardware because they are frequently scanning documents.
- Next, consider the use case scenario of a traveling business person that needs to capture an image and details from an expense receipt. In this case using a mobile device with a camera is much more convenient and practical because they only need to capture information every-so-often and, of course, a mobile device is portable.
- Finally, in typical shared office environments where groups of users need to occasionally capture information from business documents then a shared network scanner or multifunction scanning device might be most appropriate. These devices have higher costs so it's not practical to put them on everyone's desk and the size is not reasonable for a desktop.

After you determine the proper hardware device based on user experience the next thing you must decide on is how information will be presented to users on the hardware device. Or, in other words, the User Interface. There are several options and whether you choose to design your own application or source an existing application a decision should be made wisely. The implications are tremendous, and in particular when it comes to system maintenance and scalability.

User interface considerations for an effective capture appli-

Process	Activity	Benefit
Contact Management	Typing the information from a Business Card into Contact Relationship database	You want to be able to organize and retrieve contact details
Expense Management	Entering the information from a receipt into an Accounts Payable system	You want to get reimbursed for your expense
Invoice Management	Manual Data Entry of vendor, terms and total information into ERP application	The organization would like to realize pre- pay discounts
Inventory Management	Keying the line item details from a Packing List into inventory system	The business can be more efficient by making product available for sale quicker

- An application that is compiled and installed on a computer depending on the developers' preference of operating system and development environment to create this application. This is typically one of a few flavours including Microsoft Windows, Apple Macintosh or Linux. This approach typically offers the most feature-rich user experience and historically been the most common method to deploy an application.
- Web-based is a newer, popular method for creating capture applications due to the fact that web browsers are nearly ubiquitous across the various operating systems and devices; especially mobile. Industry accepted standards such as HTML5 and XML are quite appealing for application development. This makes supporting the widest variety of devices do-able and thus more attractive from a software development standpoint.
- · Another emerging popular option is to build a highly-effective, and extremely functional, user interface is using a Hybrid approach. With the Hybrid user interface design this allows a developer to use both the native functions of a hardware device such as the camera on a smart phone or image processing of a scanner, yet still make the application itself open to the widest variety of devices because the application can be run in a web-browser via HTML5, for example.

## Below is a high-level summary of three possible deployment methods for a capture solution:

- On-premise deployment is the method which is most familiar. This simply means that the capture technology is connected to a capture device. The device could be a scanner, camera, fax machine or even image import.
- · On device capture means that the software capture technology is embedded or part of the overall capture solution. Basically, the technology is 'face-less' and is integrated with some other software.
- · Hybrid is an emerging capture deployment method which is quickly gaining popularity with the emergence of mobile and cloud computing. This method provides for maximum efficiency and typically the best performance. Hybrid is a system architecture that is constructed where each component performs some function in the process. Some of the interesting things that can be accomplished with a hybrid deployment method is that an application can, for example, take a picture of a document with a cell phone camera and perform image enhancement such as crop, deskew and auto-rotate on the phone itself. Then, on the server-side, perform the rest of the capture process such as classification, data extraction and export.

One of the next steps in building an effective capture solution is to decide if your organisation will utilise off-the-shelf software, create something custom or use capture as a service. There are many decent off-the-shelf capture applications yet all will need some degree of configuration. This type of application usage is typically for smaller, less demanding types of requirements.

When customisation of a software application is desired, or required, then several capture software vendors offer Software Developers Kits, SDKs or Software Engines. Last, but not least, is the "As a Service" option for document capture or conversion. This means that an organisation would 'rent' or 'lease' these services from a provider.

The real value of capture is realised when the information extracted from images is used within a business process whether this information is used, for example, to kick-off an approval process for expense reports, or this information is a Medicare Number used to retrieve your medical records. The 'index values', 'metadata', or 'tags' (whatever) you would like to call these extracted keywords help create the workflow that helps make processes more efficient. After all, an image itself without recognised characters, numbers or words is useless to a computer for knowledge of what information is contained on the document. It's the information on the document that is of most importance, not just the image.

These days there are many great storage options for images and metadata captured but not all are created equal.

## Storage considerations for document capture applications:

- · Does your storage, and image viewer, support well known document formats such as TIFF, PDF, JPEG, DOCX, XLS and others as well as emerging formats such as PDF/A or XML? A universal viewer that supports a wide range of formats is preferable because you never know how requirements might change in the future. Also, you might want to consider a viewer that allows for annotation, or markup, of images with items such as sticky notes, highlighting or shapes if your process requirements dictate these needs.
- The capture process is all about extracting metadata from images so, therefore, does your storage provide a metadata framework in which you can store this information to enhance search and retrieval? Basically this means does the storage provider offer a method to map captured index fields to database storage fields.
- Security. Of course security should be a major concern if your information is not intended for public consumption. While it's an important issue, in general, if you ensure three simple features of your solution then you will address 80% of potential problems: (1) Secure disk-wiping of temporarily image files, (2) Encrypt data in motion and (3) Encrypt data at rest. Of course these are not the only three items to consider but start with these and research other security techniques based on the sensitivity of your information.

However, and as I stated earlier, before considering all the technology and architectural options you should careful consider the business process or process workflow first. Capture does not begin with a scan of a paper or picture of an image from a smart phone, it begins with process.

Below are a few considerations of business applications providers as it relates to document capture specifically:

## **Business rule considerations for capture:**

- Data Type constraints. If the field is a 'Date' field then restrict the data in this field to only date values. Or if the field is a 'Medicare Number' or 'Phone Number', then, naturally, allow only number instead of letters. Conversely, if the field is a 'Name' field then the data type should only allow for letters.
- One of the greatest ways to ensure business continuity, as well as reduce errors in your document capture solution, is to perform database validation. This helps to achieve the highest level of accuracy.
- Handling exceptions is a critical, yet often overlooked part of the overall capture strategy. We all hope our system works 100 percent perfect but this is just not reality for many reasons. After all, there are a lot of moving parts in these types of solutions: People, process, hardware, software, client, server, etc. Be prepared, and actually expect the fact that 'things' will happen. Try and define the possibilities. For example, if you are automatically classifying documents, expect that the system will have unrecognized documents and be prepared to send those to an exception gueue for manual classification. Consequently this is also a great opportunity to 'tune' the system by adding a classification technique to recognize this document type in the future. It's an opportunity to create a process to improve the system accuracy over time from an activity that might have been perceived as a negative had exceptions not been considered.

Finally, if I could leave you with one bit of advice, or wisdom, from my industry experience is that in order to build a highly effective capture solution you should reverse-engineer the solution starting from the process and, ultimately, the choice of device and other considerations should be fairly obvious. Not device to process. Start by defining the process then build accordingly. This will ensure the highest level of success, efficiency and high user adoption.

## Fuji Xerox Australia

101 Waterloo Road, **NORTH RYDE NSW 2113** Phone: 13 12 14 Web: fujixerox.com.au

## **FUJI XEROX**



Fuji Xerox Australia is part of a world leading enterprise for business process and document management services. Our technology, expertise and services enable our clients — from small to medium businesses to corporate organisations and government departments — to focus on their core business. Through the implementation of efficient business processes and effective communication, we deliver the right information to the right people in the right format. A continuous source of innovation help us optimise IT and print infrastructures to deploy document strategies that are waste-free, faster and more productive. We're experts at getting everyone and everything working together. Happily. Efficiently. Reliably. Whether it's integrating web-based eForms, easier hard copy digitisation, simpler cloud based networking, or doing many of the other things you might already know us for (and others you mightn't), we focus on making your everyday smarter.

## EzeScan

Phone: 1300 393 722 Fax: (07) 3117 9471 Email: sales@ezescan.com.au Web: www.ezescan.com.au



EzeScan is Australia's most popular production document scanning software solution and product of choice for many Records and Information Managers. This award winning technology has been developed by Outback Imaging, an Australian Research and Development company operating since 2002. With 1000's of seats world-wide, EzeScan enables its clients to substantially reduce the cost of deploying batch scanning and data capture solutions for documents of all types. With "out of the box" seamless integration with many industry standard EDRMS and/or ECM systems including SharePoint, EzeScan saves both time, money and lowers the risks associated with developing and integrating third party scripting or custom programming. EzeScan solutions range from basic batch scanning with manual data entry to highly automated data capture, forms and invoice processing. EzeScan benefits include: initiate intelligent automated processes; accelerate document delivery; minimise manual document handling; capture critical information on-the-fly; and ensure regulatory and digitisation standards compliance

## Obiective

Phone: 1800 065 640 Email: enquiries@objective.com Web: www.objective.com



Objective Corporation is an established leader and specialist provider of content, collaboration and process management solutions for the public sector and regulated industries. Its solutions empower effectiveness, efficiency and transparency, helping organisations deliver better customer outcomes at a lower cost. Objective ECM is widely used by organisations around the world to effectively manage the large amount of content and knowledge that proliferates all levels of government and highly regulated industries, which have complex business environments and stringent security requirements. Designed to maximise user adoption, Objective ECM manages electronic data and information securely and ensures transparency and auditability of documents is maintained with information only accessible by authorised employees. Objective ECM delivers a truly Connected Process Management platform that is designed to be the backbone of an organisation's information and process governance strategy.

## Blumark

Contact: Mark Grimes Phone: 07 3010 9515 Fmail: sales@blumark.com.au Web: www.blumark.com.au



Most businesses look to technology to support their activities but as they grow and change, more systems are added and more employees create a greater number of emails and documents. Not surprisingly, IT becomes more complex and there is a risk of workflow becoming hampered by the distraction of managing essential business functions.

Blumark are experts in ECM and process improvement, assisting organisations with the difficult task of managing business processes and content in an efficient and cost effective manner. Blumark becomes the organisation's trusted partner as an advisor, implementer, trainer and support provider.

Blumark specialise in the content lifecycle and provide solutions for the diverse electronic and physical content types which organisations work with today. Leveraging technologies such as IBM FileNet and OnBase by Hyland, Blumark focus on delivering ECM solutions which support the way that organisations do business minimising change management, enabling users, ensuring compliance and empowering records specialists.

## Information Proficiency/

## Sigma Data

Tel: 08 6230 2213 Email: info@sigmadata.com.au Web: infoproficiency.com.au/

siamadata.com.au



Information Proficiency and Sigma Data are at the forefront of Information Management Services and Streamlining Business Processes. We supply and support HP and Kofax software solutions, as well as developing our own range of productivity and connectivity tools based around Kofax and HP Records Manager (HPRM). Focusing on Information Management Technology and Services, we work hard to understand our client requirements, and implement solutions to match. Implementing efficient processes are critical to enhancing productivity, transactional speed, reducing costs and achieving regulatory compliance for your organisation. Our team of industry certified professionals are able to design and deliver systems to meet your requirements. We strive to build lasting relationships with our clients, providing continuous

## Glentworth

improvement and mature solutions.

Tel: 1300 364 430 Email: why@glentworth.com Web: www.glentworth.com



Information is every organisation's greatest strategic asset. Glentworth is a team of specialists who help organisations solve real business problems through your data and information holdings. In a world where organisations are overwhelmed by millions of pieces of data each day, we enable organisations to take control over their most important asset - information. The core of what we do is based on harnessing the value of information, and enabling organisations to make better, evidence-based decisions. We are trusted advisers to organisations across the commercial, not-for-profit and government sectors. Glentworth consultants specialise in analysing and understanding social and organisational networks, enabling targeted workforce engagement and enhanced employee collaboration and productivity. With a headquarters in Queensland, Australia, Glentworth was founded in 2007 to support the growth of information and data as a strategic business asset.

## Brother

Tel: 1300 885 989

Email: corporatesales@brother.com.au Web: http://corpsolutions.brother.com.au/



Trusted worldwide and always with a "Customer First" approach, Brother continuously meets the needs of consumers through a comprehensive range of quality solutions. Committed to the advancement of printing technologies, Brother also offer business solutions designed to fit perfectly in the SOHO, SMB, SME and corporate environments. With a skilled team specialising in assisting their customer's corporate growth, Brother's business categories such as portable printers and scanners, commercial desktop scanners and high volume corporate printers can help businesses achieve in any industry. With resellers located Australia-wide, readily available product and a locally based product support team, Brother is always 'at your side'. Contact the Brother Commercial Division today to find the best solution for your business requirements.

## Konica Minolta

Tel: 1800 789 389



Email: info@konicaminolta.com.au Web: www.konicaminolta.com.au

Konica Minolta Business Solutions Australia Pty Ltd is a market leading provider of integrated solutions and managed services with the power to transform the business environment.

Konica Minolta Australia works with organisations large and small to provide integrated print and content management solutions and services to improve productivity, reduce costs, increase security and achieve sustainability outcomes.

Headquartered in Sydney, Konica Minolta delivers expert professional services with experienced and responsive client support, in addition to the world-class service provided through its extensive network of direct sales offices and authorised dealers.

## ABBYY

Phone: (02) 9004 7401 E-mail: sales@abbyy.com.au Web: www.abbyy.com.au



ABBYY FlexiCapture 10 is a powerful data capture and document processing solution that provides a single point of entry for automatic and accurate conversion of forms and documents into business-ready

FlexiCapture recognizes multiple languages and automates a variety of tasks, such as data entry, document separation and classification by type - providing the data you need, fast. Thanks to its up-to-date technology for document classification and data extraction, this software is easy to configure, use and maintain. The state-of-the-art architecture of ABBYY FlexiCapture 10 allows building solutions that meet a wide range of throughput needs - from cost-effective standalone systems for small-to medium businesses and departments to highly scalable server-based solutions for medium sized and large businesses and government projects. In addition, ABBYY FlexiCapture can be integrated with back-end systems and into specific business processes to improve overall efficiency and reduce costs.

## Knowledgeone

Phone: 02 8913 9300/1800 221 061 Email: sales@knowledgeonecorp.com Web: www.knowledgeonecorp.com



Knowledgeone Corporation has been a leader in the Australian Records and Document management sector since 1986 when the very first RecFind was released.

Our latest product RecFind 6 is a fully-featured Enterprise Content Management solution used by our customers all around the world

- Physical/Paper Records Management;
- Electronic Document Management; Document Imaging;
- Business Process Management/Workflow; and
- · A huge variety of Information Management applications (e.g., mortgage application processing and contract management)

We are renowned for the quality of our support and the robustness of our products. We believe that RecFind 6 is both the most scalable and most configurable product in the market. Using the free high-level tools supplied, the customer can change almost anything (e.g., data model and work processes) and still have a standard product able to receive regular updates from us. The user interface for each class of user is configurable such that the user only see the data & functionality required to do his/her job.

## **OPEX Corporation**

Contact: Jon Stevens Phone: +1 856.727.1100 Fax: +1 856.727.1955



Web: www.opex.com/contact/sales-contact/

OPEX Corporation is a recognised global technology leader in document imaging, high-speed mailroom automation and material handling. Since 1973, OPEX systems have provided performance enhancing workflow solutions and cost-effective results to thousands of organisations worldwide. OPEX systems are designed for a wide variety of industries including financial services, insurance, healthcare, government, retail, non-profits, utilities, telecommunication, service bureaus, educational institutions, and fulfilment operations. OPEX has developed innovative prep reducing scanners that address the

root causes of workflow issues our customers face. Minimising preparation, paper handling, and other manual tasks not only improves efficiency, but also results in superior transaction integrity and information security. As documents are removed from envelopes/folders and scanned, operators can view each image to ensure it is properly captured. This prevents time-consuming and costly re-scanning later in the process. Moving image capture upstream also reduces information management risks.

## **ELO Digital Office**

Contact: Rainer Krause – Managing Director Tel: 02 9460 0406 Email: info@elodigital.com.au Web: www.elodigital.com.au



ELO Digital is a truly global ECM company with Australian expertise! With subsidiaries in 48 countries and hundreds of thousands of users, ELO has become the natural choice in ECM. Having been voted ECM company of the year in 2013 and 2014, ELO was officially recognised for its comprehensive functionality, user friendly design, trend-setting innovation and modern technology. The Australasian HQ of ELO was established in 2005 and has gained an impeccable reputation on all levels of Government, the Private Sector, NGOs and Not-for-Profit Organisations. The completely scalable product allows ECM implementations from as little as 5 users to solutions for many thousand staff members. With reputable certified business partners such as Toshiba (Australia), Iron Mountain (Australia), AMS Imaging (Australia) or Jardine OneSolution (Hong Kong) ELO customers are assured of quality implementations, successful rollouts and continued support - 24/7/365. The VERS compliant ELO product provides solutions for Document Management, Records Management, Workflow, Accounts Payable Automation, Imaging, Contract Management and mobile applications for all industries. ELO can be deployed onsite, in the cloud or as a hybrid solution. ELO is THE complete ECM solution for all organisations, departments and industries.

## Kapish

Tel: (03) 9017 4943 Email: info@kapish.com.au Web: http://kapish.com.au/



As a HP Software Gold Business Partner, we aim to provide our customers with the best software, services and support for all versions of the Electronic Document and Records Management System, HP TRIM & HP Records Manager (HP RM). We understand that it can sometimes be an all too common problem where document and records management is seen as being just too difficult. To help improve this perception we offer easy to use business solutions to overcome the everyday challenges of information governance using HP TRIM / HP RM. As a software and services company focused exclusively on HP TRIM / HP RM, we work with customers to improve their everyday use and experience with the system. Designed to bridge the gap between users and technology, our software solutions are easily integrated into existing systems or implemented as new solutions. Quite simply, our products for HP TRIM / HP RM make recordkeeping a breeze.

## Fuiitsu Australia

Tel: 02 9776 4555

Email: Fujitsu.direct@au.fujitsu.com Web: au.fujitsu.com/scanners



Fujitsu, as one of the world's leading document scanner companies for both Desktop and Workgroup scanners, offers compatibility with over 200 different document imaging applications. The result is state of the art image solutions from innovative portable units all the way to large centralized production environments. Fujitsu document scanners are renowned for their performance, remarkable image quality, fail-safe paper handling and Fujitsu's legendary reliability. New innovations include:

- Overhead contactless scanning of fragile documents, thick books and oversized items:
- Ability to input and sort multiple small documents, business cards, etc., just by laying them on the desktop;
- · Ultra-sonic and patented ISOP paper sensing technology that prevents batched document damage; and
- Mixed batch scanning & automatic paper skew correction capabilities

## Best Practices for Document Management in SharePoint

## By Marissa Hart

SharePoint document management is by far a much more efficient way to store data than by using network drive folders. The use of network drive folders are an archaic idea. They had their place in back in the day, however, a much more effective way of storing data today is with the use of meta tags.

Meta tags are meta rudiments used in HTML and XML that offer meta data about a given web page. Utilising meta tags allows a cleaner and faster way to access information to documents rather than having to search through network drive folders to find the same content.

Organisation is key when it comes to document management and SharePoint is the best way to ensure that your documents are in top order.

There are several features to assist you in keeping your documents managed well, organized, and safe. These advantages include alerts, check out feature, content type for driving meta tags, document libraries, meta tagging itself in lieu of network drive folders, and version control feature.

## **Different Views**

It is a good idea when using SharePoint to create several views, which will be discussed as well. All of this can be done in an efficient and neat organizational style with the many Share-Point features.

Alerts are a great way to ensure that other individuals are not tampering with your documents. Alerts can be set up in a document library. They will inform you if someone is trying to change or delete your documents in some form or fashion.

This is a wonderful tool for professors to ensure students cannot hack into their computers to change grades or that a disgruntled colleague cannot alter work you have done for a large presentation out of spite, for example.

The check-out feature may or may not be necessary to utilize, but it is available should you require it. The function of this feature is to prevent alteration of a document by multiple individuals. This is a good feature to have when there is more than one person working on a specific project or to prevent another from making changes to completed work without consulting you about it first.

Content type can be utilized to drive meta tags anywhere they need to go with the SharePoint system. It is able to read the data and determine where to send it based on what the meta tag says. This is much faster and can make a much better impression on a potential client than having to hunt around in file folders for information during a presentation.

A sharper presentation is provided by utilizing the Share-Point system. You can just click on a meta tag and be exactly where you want to go in a presentation in one smooth, easy motion. This provides for a much more professional presentation.

## **Document Library**

Setting up a document library is not difficult with SharePoint and it is very accessible to the user. This is another feature that helps to increase safety for documents. It helps you to stay organised as well. You can have as many document libraries as you

require. The key to SharePoint management is utilizing the system effectively and in an organized manner that allows you to do away with the old system of network drive folders, which simply take up too much space and take too long to go through to find what you need.

The version control is similar or in many cases, another name for the check-out feature. This control inspires employees to observe the rules and stay focused on job tasks. It is a strong deterrent against individuals trying to sabotage each other in the workplace.

Hopefully in your workplace this is not an issue, but if you are worried about someone interfering with your documents, this is a good way to protect them.

Another feature of SharePoint is that you can make as many views as you like of a project. For important data, you can use the "simplified" data setting for important points so that you have easy access to this information at your fingertips.

The views feature allows for many significant points to be pulled up quickly as they are right at your fingertips. Solid presentations will have a good visual aid. SharePoint allows a flawless production and there is no rummaging through network data folders required to find your PowerPoint Presentations.

Your views come up fast because you are now using meta tags to access your PowerPoint files without having to stop and pause. This provides for a more professional demonstration regarding your project.

## **Internet Exposure and Web Pages**

Your views should be made public if they are going to be on the Internet. You want to make sure you utilize the following functions as well to maximise exposure – filters, group, and sort. This is necessary if you want to get seen. They serve the purpose of displaying what you want online so that web surfers can see what you have to offer.

Your web pages only have so much space and you want to use that space effectively. SharePoint is a great tool to assist with this. It can help you set up your pages to look good so they are not too busy or cluttered.

The SharePoint system is much more effective than the antiquated network data folder system of yesterday. It is more efficient, faster, and safer for many reasons.

Meta tags are the better way today to access information. This system provides individuals a clean, flawless, organized way of collecting data, presenting it, and storing their data in a way that is far superior. SharePoint just makes more sense. It is setting the new standard in data management.

File servers are no longer the best way to manage your files. There is a better way. So get ahead of the curve today. The Share-Point document management practices that can save you a great deal of time and money are here to stay.

Marissa Hart is Enterprise Applications Manager at WalkMe, a cloud-based platform designed to help enterprises to guide and engage employees through any online experience when operating their business applications. www.walkme.com

## How to overcome the SharePoint 5000 item limit threshold

By Gregory Zelfond

If you are reading this article, you have probably already encountered or are concerned about the infamous 5000 items threshold limit in SharePoint. I would like to clarify on what exactly the issue is, how to prevent it and how to fix it, in case you encountered it. The following article provides tips and recommendations for addressing this issue in case you have or plan to have a really large document library.

First, let me explain in non-technical terms, what the issue is all about. Many mistakenly confuse this issue and incorrectly think that the list or library cannot hold more than 5000 files or items. This is not true.

According to Microsoft, the list or library can hold up to 30,000,000 documents or items. That's a LOT of documents! So, what's the issue then?

Well, the issue is not necessarily with storing, but rather with displaying the information. The SharePoint 5000 item limit threshold applies to the limit of items that are displayed in a given view.

Every time you access a list or document library, there is a search query happening behind the scenes that returns all the results. If you say have 20,000 files in a document library and all of them stored in a single folder or at the root of the library, when you try to display that folder or library root – you won't be able to see more than 5000 items on a page/view and the library will run into the 5000 item limit threshold. Item is not just a file (document). Folder also counts towards the 5000 items limit.

That is because to display those 20,000 documents, servers behind the scenes do a lot of processing and querying. Imagine, you have a really big box with 20,000 pairs of various shoes all mixed up. Now imagine I would ask you to organize the shoes by size, starting from small to large. How would you go about achieving this request? Well, it is really a 2-step process.

Step 1. First, you have to retrieve a pair of shoes, take a peek at the label inside and note its size

Step 2. Next, you would need to organize those shoes by size. Remember, we have 20,000 pairs!

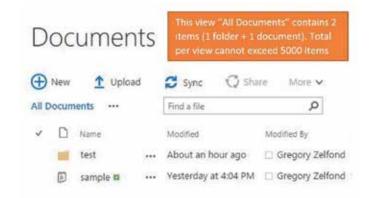
How long would this exercise take you? A long, long, long time. Same thing with SharePoint. Just a single click on a folder to display the documents inside of it is equal to one shoe request above! So not to overload its servers (just multiple the # of clicks times # of users Microsoft has and you get the idea), Microsoft set this infamous SharePoint 5000 item limit threshold (per

### Workarounds

Now that we are clear on what this SharePoint 5000 item limit threshold is all about, how do we get around it? As with the rest of things in SharePoint, there are few ways to tackle this:

Option 1: Don't put all your eggs in one basket - If possible, move the content from a single document library and move to separate libraries and sites. Do the all the documents belong to one category, department or business function? If the answer is no, they probably belong in different libraries and sites.

Option 2: Convert to metadata and enable indexing of (metadata) columns - If you encountered SharePoint 5000 item limit threshold, you most likely are utilising folders with lots of files inside each folder to store documents in SharePoint or your metadata columns are not indexed. That issue you encountered is yet another reason to convert to metadata.



Why will the indexing and metadata help? Well, remember that shoe example request to organize them by size? When you convert to metadata and index those columns, you essentially complete Step 1 (looking up the shoe size step) before any search requests are initiated.

So in other words, with metadata and indexing, SharePoint kind of already knows it all about a file or item in a list. So when you are retrieving a view that relies on metadata/indexing, the servers don't have to work as hard, since the background work (lookups) has already been done.

## Configure metadata

As a side note, make sure you also configure your metadata and views accordingly. If you created metadata columns and your view returns > 5000 results, you probably did not configure your metadata or view correctly. The whole idea behind metadata is so you can slice and dice your files and items in a list anyway you

Think form a user perspective. How do you expect a user to find the right document when he or she is presented with 5000 results? You really to add additional metadata columns to reduce amount of data presented based on your query.

The steps described above work best when you are just starting to design your taxonomy, metadata, configure document library and views.

But what if you already have a library and ran into the threshold issue? Well, it is still possible to follow all the steps above, but it just becomes a much harder project.

Step 1: First, you will need to bring down the number of files in your repository to go lower than the threshold limit. Once you crossed into the above 5000 territory, it "locks" the document library from trivial operations like adding columns, making certain adjustments to views, setting permissions, sharing and even managing column indexes. That means that you won't be able to index columns until you are below the threshold level. So take care of this first.

Step 2: If at all possible, consider the whole re-organisation of your existing document library. May be it is OK if certain chunks of documents sit in a separate library or site? If you are up to the challenge, you can also create metadata properties and apply default column values to folders in your existing repository. If you do that, you can then index columns and either utilize a hybrid folder/metadata approach or hide folders altogether

Greg Zelfond is an independent SharePoint & Office 365 Consultant focusing on SharePoint implementations within small organisations and non-profits. greg@sharepointmaven.com

# Bringing off-line records management into the fold

By Frank McKenna

Typically, ECM companies like Knowledgeone Corporation deal direct with customers wanting records and document management software and those same customers deal direct with offsite records storage companies like those that run O'Neil software.

In our 31 years in the records management business we have rarely been involved with the records storage companies. However, it is now a new day.

It is true however, that the customers use our software to manage both active and archived records and that in most cases, our software RecFind 6 contains a record of what has been sent off-site for safekeeping.

It is also rare that the record of holdings in RecFind 6 matches the record of holdings of the records storage companies; primarily because in the past we have not communicated.

This complex relationship is soon about to change for the better now we have developed a full integration with O'Neil software. We are about to become the technology partner that facilitates the seamless communication between the customer and the commercial record centre.

It is clearly our job to both develop relationships with records storage companies and to develop a business model that provides tangible benefits to the records storage company as well as to the most important partner, the customer.

## Bridging the gap

Managing in-house corporate records can be tough, and that challenge compounds when utilising off-site storage. Updating data and ordering services from an off-site vendor all require time-consuming steps, creating an additional burden and possibilities for errors. However, O'Neil DataTech has 'bridged' the gap, so that in-house Enterprise Content Management (ECM) software solutions like RecFind 6 can talk directly to off-site commercial records centres.

O'Neil DataTech has released oneilBridge, a series of web services that enables end users to simply, seamlessly and securely manage their corporate records. oneilBridge allows ECM providers like Knowledgeone Corporation the ability to have an integrated, virtual real-time interface, which automates and standardises the access and management of physical records stored in off-site records centres, using O'Neil Software's RS-SQL. These web services provide a 'bridge' that can be used to access, manage and control records in a consistent manner, utilizing just their ECM software solution.

With oneilBridge and RecFind 6 we now have the opportunity to put complete control into the hands of the customer's records manager. oneilBridge marks a significant step forward in helping to manage staggering amounts of corporate information.

## **Unified Records Management**

Having off-site records able to be accessed directly from RecFind 6 delivers increased productivity, efficiency and accuracy. Being an Internet-based service, the solution runs on cloud-based servers for 24/7 availability.

A straight link between RecFind 6 and O'Neil's RS-SQL software simplifies the ordering process by allowing the customer to perform tasks such as searches, item updates and service requests directly from RecFind 6.

Security is provided by a series of barriers that maintain a high



A screenshot of RecFind6 making a request in relation to records held off-site. This is received at the record centre as a 'Web' order.

degree of data safety and integrity.

Passwords, encryption, firewalls, authentication protocols, and physical restriction of access to servers are all incorporated for end-to-end protection.

What does Knowledgeone Corporation bring to the party? We bring simplicity and we bring accuracy and we bring efficiency and speed. This is because:

RecFind 6 already includes full details of all boxes and box contents, down to the details of individual documents in file folders.

RecFind 6 now includes a standard function to communicate to any records storage company via oneilBridge.

The customer's records people can now do everything from a single system and do it far faster and more accurately that they could do previously.

The list of transactions we support are as follows:

- Move records to the records centre
- Request records from the records centre
- Track records at the records centre
- Request materials & supplies from the records centre
- Request service from the records centre
- Track orders for materials or service from the records centre

RecFind 6 supports the complete list of oneilBridge transactions which means the customer rarely if ever has to resort to a fax or email or phone call to request service from the records storage company. Every request can be made from within RecFind 6.

The customer knows exactly what it sent for storage and can find any box or record in seconds using the sophisticated searches in RecFind 6. Once a record is found, RecFind 6 also tells the customer exactly where it is. That is, with Joe Brown in legal or at Access Records in Box AR333555777.

When records are sent to the records storage company we provide all the details online via oneilBridge. There are no faxes or emails or Excel spreadsheets to process. We make it as easy as possible for you to run your business profitably and with far more accuracy than was ever possible previously using a combination of faxes and emails and Excel spreadsheets.

Because we streamline all services and make it much easier for the customer to interface with the records centre we add value to the relationship saving time and effort for both parties.

Finally, here are a couple of testimonials from the O'Neil website. "oneilBridge gives us the ability to seamlessly manage a wide range of documents stored off-site with Advanced Data Storage, an O'Neil Software RS-SQL User. These documents are tracked

(continued opposite)

## You want me to OCR that!

## By Brooke Martin

Thinking about OCR technology to help you extract data from paper or pdf documents? There are a number of things to keep in mind when you begin your evaluation of this technology. This discussion is more related to advanced data capture requirements and to give you some high level information and thought direction.

Some quick things for you to be prepared to have ready when engaging a vendor:

- Understand your document type: invoices, EFT transactions, work orders etc.
- How do they come into your organization along with the quantity: via email, paper and/or fax
- Have ample samples available to discuss
- Know what data you want extracted from the documents, high-light in yellow the data sections
- Know your bench marks, how long does it take to data enter information into your system now? How many key strokes and as an example how many invoices per day can a A/P clerk
- Look for independent knowledge information or network with your peers

The simplest—but perhaps most awkward—step of the document receipt process is the preparation and physical scanning of the documents. Separating and opening mail, flattening and separating its documents, removing staples, and putting the documents through a scanner are all a highly manual process. You need to determine if this is a skill and resource that your organization is willing to invest in.

This greatly determines the success of your OCR project. If your documents come to you via email or some form of FTP, then even better.

## Classifcation?

The next step in an OCR solution is to understand if classification of the documents is needed or you will scan all the same type of documents, such as invoices. If it's always the same document type, this determines whether classification automation is needed in the software.

How will the software be programmed to set up and recognise the data you want to collect? There two primary industry methods:

**Template based** - you or the solution provider must program the OCR application for each document, in the case of invoices, each vendor will have to be set up in the system.

Pros: Much more effective recognition of data, workflows and data integration is better.

Cons: special skill set needed or advanced product knowledge needed in house or you need to rely on your solution provider. More time is needed in the project, can add to project

Learning based - learn as you go, the software is configured to allow you team teach the system where the data is per document, so the next time the system sees same document, it gathers the data.

**Pros:** lower project fees, project is up and running faster, easy to configure

Cons: not as advanced, not all documents are created equal and at times advanced programming will be needed. Therefore you need to work with your provider and let them assess your documents complexity... if they're complex go with template based system.

With some discovery with your vendor, they will be able to direct you to which solution is best. Does your vendor offer different data capture technologies?

Once the document is scanned and released to the OCR software those that need some validation (meaning the OCR failed to recognise some of the data) will be presented to the user.

The User Interface is an important aspect of this process and not all vendors are created equal. Does the process of identifying and correcting data seem user friendly? If not your project could be at risk- low user adoption, frustrated users, abandoned use, loss of efficiency gains.

Export, what type of export of data do you need? Is it easily configurable? Where will you want to send the data? Does the vendor have integration experience? Where do you want the documents to go; ERP, CRM, DMS or EHR? Is there advisability to the process and how important is that?

## **Data Accuracy**

Like all good software there are risks. There will be times that the software thinks it's correct and will pass the information through the system without the operator knowing. Test for this in your evaluations.

Understand the risk to this and what level is acceptable? You can mitigate this by putting controls into the capture and OCR process before the documents get to the verifying operation. Ask your vendor to explain how they would handle this.

You need to know you will not get 100% data extract accuracy, but what is important and it's back to your current KPI's. Can you scan and verify data from your documents faster than I can do data entry? If the answer is yes, your project can be successful. You may be present with information that a certain document is not suitable for the software solution and recognise it might be better to manual data enter.

Be prepared to ask for references and project challenges! Brooke Martin is a Senior Solutions Consultant with Canada's Process Fusion Inc. brookecmartin@gmail.com

internally with our Iron Mountain Accutrac System. O'Neil DataTech's oneilBridge provides us with greater control and visibility into our complete document base and has resulted in a unique process improvement." - Richard Daley, Director of Information Management at Tejon Ranch, California

"The ability to partner directly with O'Neil DataTech and access the oneilBridge web services results in a productivity improvement for our clients, who need to manage their off-site records. The need for a disparate system such as FTP transfers, or other direct contact to commercial record centres is eliminated with this new capability." - Gary Sanders, CEO Intandem Solutions Ltd., United Kingdom

Frank McKenna is CEO & Sales & Marketing Director at Knowledgeone Corporation. Contact him at f.mckenna@knowledgeonecorp. com or via www.knowledgeonecorp.com



## **HP adds File Analysis software**

HP has announced the availability of two software solutions that help businesses leverage advanced analytics and policy management technology to address the rising information management, governance, and data storage challenges resulting from the growth of big data.

HP ControlPoint and HP Storage Optimizer aim to help organisations lower data storage costs, drive stronger compliance and information governance initiatives, and accelerate their path to hybrid cloud environments.

With unstructured (human-generated) data volumes increasing 43% annually and shrinking IT budgets, organizations are being forced to rethink how, where and what information they should store and backup. File analysis-based solutions can play a key role in this endeavour, and HP is investing in innovative solutions that help organizations solve their most pressing information challenges.

HP Storage Optimizer is a new offering that combines file analytics with policy-based storage tiering and information optimisation. The combination of these technologies allows users to intelligently reduce the total volume of storage, shrink the cost and complexity of managing unstructured data and intelligently distribute information across multiple storage repositories including the cloud. Analytics plays a key role in helping CIOs, IT, infrastructure and storage executives realise these advantages. With deeper information quality and insight, more granular policies can be applied for each set of data, before the data is stubbed and stored according to policy. This provides a holistic view of all unstructured data within the organization.

HP Storage Optimizer provides connectivity to a wide range of repositories including Hadoop, SharePoint, Exchange and others, and offers enterprise-grade scalability, built-in workflow security and audibility features and seamless retrieval by end users, as needed.

HP also announced a new solution based on its ControlPoint file analysis product that analyses enterprise information and automates the migration of data to the most appropriate on-premise, cloud, Hadoop, or virtual repository.

This solution, which is an integral part of many cloud modernisation strategies, helps organisations prioritise which information is moved to the cloud, as well as the appropriate cloud deployment to move it based on the content's business importance, risk profile usefulness and governance policies. By delivering added insight prior to migration, organisations are able to better manage retention, reduce complexity and improve searchability, resulting in improved security, productivity and lower overall storage costs.

ControlPoint is integrated with HP Helion, an open, scalable, extensible cloud platform for large businesses and service providers. With a built-in connector to Helion, ControlPoint can apply intelligence to data that is earmarked for the cloud and then migrate only the most relevant data to the Helion cloud instead of transferring the access, control and management problems intrinsic in one repository to another.

Leveraging HP Haven technology, a next generation analytics engine, HP ControlPoint bridges the gap between IT, legal and compliance departments to ensure appropriate information is transparently and defensibly disposed, and delivers intelligence for more-informed migration decisions. Its latest integration with HP Helion gives customers an all-HP solution for analysing, migrating, governing and managing information throughout its lifecycle for additional risk and cost savings benefits.

Earlier this year, HP launched Connected MX, which brings together policy-based endpoint backup with policy-based file synchronisation and sharing capabilities for desktop administrators as another Information Management and Governance that helps customers accelerate their path to the cloud.

## Brother adds high volume scanners



Brother International Australia has launched two new desktop scanners fit for high volume scanning. The PDS-5000 (pictured above) and PDS-6000 are targeted at the document lifecycle of small and mid-sized businesses (SMB) in industries such as healthcare, retail, education, finance, legal and more. Features include increased speed and throughput allowing for higher quality images and larger file sizes, as well as improved image processing and compatibility through drivers and bundled software solutions.

Kofax VRS compatibility enables the PDS-series devices to deliver the best-possible image quality through improved optical character recognition (OCR) processing.

Barcode batch scanning support allows SMBs to increase efficiency by rapidly processing multiple mixed sets of documents without pre-sorting or stopping and starting.

These models also support a USB 3.0 interface as well as speeds of up to 60 pages per minute (PDS-5000) or up to 80 pages per minute (PDS-6000). Multi-Page Scanning is provided from the 100-sheet capacity automatic document feeder (ADF)

The PDS models deliver superior image quality required for precise document handling. These solutions provide significantly improved OCR capabilities, transforming documents into usable data that can be integrated into workflow processes easily via expanded integration with the TWAIN driver.

Other features include:

- A daily duty cycle of up to 6,000 pages
- Scans single and double-sided materials in a single pass, in both colour and black/white, at up to 60ppm
- High-Precision Scanning Up to 600 dpi optical resolution, plus a robust collection of image optimisation features including multi-stream, dynamic threshold, edge clean-up, hole punch removal, de-speckle, colour matching, and more
- Rapid Image Processing via the SuperSpeed USB 3.0 interface
- Including ultrasonic multi-feed detection with reversing roller to ensure each page is properly scanned, and batch barcode support for simplified file sorting and searching
- Versatile Media Handling Easily scans business and plastic cards, including embossed plastic cards, and a variety of documents up to 236" in length
- Scan Destinations E-mail, OCR, File, Image, FTP, Network, Print, and Microsoft SharePoint
- Kofax VRS Compatible

The PDS-5000 has a recommended retail price of \$A1399, the PDS-6000 is \$A2199. Each scanner is Windows, Mac, and Linux compatible

www.brother.com.au

## A public view of TRIM

Information Management and Governance (IMG) specialist iCognition has launched a new product, RM Public View, to allow organisations to publish HP TRIM/HP Records Manager information directly to the public. It has also rebranded its product line of TRIM/RM add-ons, formerly known as Diem Solutions

"iCognition recognises that our Diem Solutions has reached a level of maturity and needs to be well aligned to the system it adds value to, HP Records Manager. So today we are renaming our products in line with the RM branding, and this will help us push the products out worldwide", said company Principal Nigel Carruthers-Taylor.

"And to celebrate this, we are excited to announce a new member of our product line, RM Public View", said Mr Carruthers-Taylor, "this product meets the needs of organisations that want to provide correct and comprehensive information to the public from a trusted source, in a safe and secure way. RM Public View allows organisations to quickly and easily configure and publish what HP TRIM/ HP RM information public can search and view".

One client, New Zealand's Hutt City Council, has set RM Public View up to allow users to search on cemeteries, drainage plans, newsletters and their archives. It facilitates public access to search information, while allowing Hutt to easily configure and publish new categories of information over time. Check it out at http://iportal.huttcity.govt.nz/.

www.icognition.com.au

## **PSIGEN expands ACE functionality**

PSIGEN has released PSI:Capture Version 5.4.1. The new version contains an array of useful updates to improve the user experience and reduce the time it takes to perform functions like Classification and Data Extraction.

In April, PSIGEN released the Accelerated Classification Engine (ACE), which allows users to classify new document types in the middle of a batch, without having to stop the workflow. With ACE's improved functionality, it won't matter whether you are doing the very first setup of your documents or if it is your one millionth run - if ACE has never seen a certain document before, the document will be classified with the information ACE has accessed, and the user will simply verify that ACE is correct.

Auto Generate Forms from a Database. With the 5.4.1 release, ACE will be able to connect to the user's database and preconfigure Classification Forms and rules using already existing data. The end-user's only job will be to validate the information the first time a new form is classified. With the ability to use existing data to create Classification Forms, ACE will make the process of setting up an organisation with PSI:Capture faster than ever, with users able to easily configure the classification of a document in less than a minute.

**Auto Zone Creation:** This feature expands ACE's functionality into the indexing/data extraction process, greatly reducing the time it takes to extract data from your documents. By utilising information about what index data you want to collect, PSI:-Capture will look throughout the document at configuration time and auto-place smart zones when it finds the information needed for extraction. As with ACE's database classification function, all the user will have to do to index the data is validate the placement of the smart zones one time for each document/ record set combination.

Accelerated Zone Profile Configuration: If Zone Data Extraction fails on a document due to either misplaced zones or the absence of a matching Zone Profile, the end user can now edit the assigned profile, create an entirely new profile, or manually select an existing profile to assign to the document. This brings the power of ACE and Classification Forms to the Index module and Zone Definition Profiles.

To learn more, contact info@upflow.com.au

## FileBound 7.2 enhances Compliance

Upland Software has announced that the latest version of its FileBound document and workflow automation application is now available, incorporating new features for the web-based platform to enhance compliance.

With expanded electronic signature capability, multiple parties, inside or outside of an organisation, can now add validated signatures to documents, such as contracts or approvals related to regulated processes. Authors are able view and verify these signatures to ensure legality and accountability.

In response to customer demand for regulatory compliance that is easier to use than traditional solutions, new functionality to create and manage corporate records. This allows organisations using FileBound to create classifications and rules that support the legal information governance with minimal impact on users.

"Many organisations struggle to bring people, processes and information together in ways that are both easy to use and secure," said Sean Nathaniel, senior vice president of technology at Upland Software and general manager of FileBound.

"Upland Software's goal is to break down barriers that interfere with the flow of work while also reducing organisational cost and risk."

FileBound offers automated workflow, electronic forms, analytics, public access and more, with a flexible licensing model that includes unlimited user access.

www.filebound.com.au

## **IBM customises Predictive Analytics**

IBM has announced 20 new industry-specific predictive analytics packages, intended to allow organisations across industries like retail, banking, telecommunications, insurance and others, to uncover and act on critical business insights.

Each solution includes pre-built predictive analytic modelling patterns and interfaces for focused industry use cases, as well as data preparation capabilities to manage unique data and streamline collection and preparation of data for analytics.

With interactive and role-specific dashboards, business users can share predictive insights across teams and organisations that can give them a deeper understanding of their customers, assets and operations to help them make better decisions and act with greater speed and fewer resources.

"We are very excited to be working with IBM to develop a deeper understanding of our customers," said Kevin Dole, Head of Technology Services, at Bendigo and Adelaide Bank.

"We are continuing to advance our use of cloud based technology and exploring advanced analytics options so that we can provide an even greater level of service and value to our customers."

IBM cites examples of use cases such as:

Banks using customer spending patterns to predict financial and life events and deliver more relevant offers;

Retailers understanding the potential overall revenue impact of individual products and product lines to make smarter decisions about what products to carry and how to best promote them;

Wealth management firms understanding behaviours associated with higher profit clients to determine who they should target and how to drive increased activity;

Oil & gas companies reducing high costs associated with inspections and maintenance of submersible pumps to predict outages before they occur and optimize production; and

Media & entertainment companies better understanding their audience and viewing behaviours to deliver advertisers higher value micro-segment targeting capabilities.

For more information on IBM's Industry Analytics Solutions, please visit: http://www.ibm.com/analytics/us/en/industry/

## **Proficiency Group announces new CEO**

Australian solutions provider Proficiency Group has announced the appointment of experienced executive and CIO Cathy Ndreca as its new CEO.

Proficiency Group Directors, Lisa Read White and Alex White said "We welcome Cathy's experience and leadership to the Proficiency Group Team.

She has extensive knowledge and understanding of program and project management, commercial management, strategic consulting, business improvement, change management and the conceptualisation and implementation of new processes, practices or technologies. Cathy is a fantastic asset and great addition to the team."

Ms Ndreca's previous leadership appointments include General Management and CIO roles, and she brings a combination of general management, commercial and delivery expertise to the Proficiency Group's Senior Management team. She has developed a comprehensive background working across the utilities, mining, oil and gas, insurance, health, professional and financial service industries.

"We have some very big and exciting projects in progress at the moment and more on the horizon," said Ms White. "As a Company our brand is becoming better known and our growth is continuing year on year. It is the perfect time to welcome Cathy to the team so that we can continue to grow and service our customers with the same focus, energy and dedication we are proud to be known for."

"I'm excited to be given the opportunity to lead this company with such excellent brands and incredible talent - a combination that sets us apart from our competitors," Ms Ndreca said. "The Proficiency Group is at the forefront of Information Management consulting, and I'm looking forward to building on the great brands and fully exploiting the opportunities available in this tough market."

http://www.infoproficiency.com.au/

## **Kodak Alaris appoints APAC chief**

Cássio Vaquero has been appointed as the new Kodak Alaris Regional Director, Information Management division, for Asia Pacific and Latin America. Based in Singapore, Vaquero succeeds Susheel John, who has accepted a global leadership role with Kodak Alaris in Rochester, New York.

Vaquero will head up the Asia-Pacific operations with a special focus on verticals such as government, banking and financial services. In his previous role, Cássio was director of Kodak Alaris' Information Management (IM) business in the Latin America Region (LAR), with responsibility for sales, marketing, service, and business operations.

"The Asia-Pacific region has a mix of developed and emerging markets with different adoption rates for information management solutions. The region is full of growth opportunities and offers us a really exciting challenge," said Vaquero.

"I look forward to sharing ideas and best practices across Asia Pacific and Latin America and helping our customers and partners unlock the power of our Information Management portfolio for their organizations."

## IRIS scanning launches in Australia

A range of mobile scanning peripherals and Intelligent Document Recognition (IDR) software from IRIS (a Canon subsidiary) is being launched in Australia through local IT distributor Anyware Corporation.

The range includes single and multiple sheetfed mobile scanners, pen scanners, and All-in-one Scanner & Mouse and Business card scanners. IRIS Readiris OCR software is included to enable conversion to Word, Excel, PDF, HTML, TXT, ePub, etc.

"In order to accommodate the growing interest in IRIS' products

## **PEOPLE & INDUSTRY**

in Australia we have decided to enlarge our presence on this fast-moving market. Selecting the right distributor was a critical aspect of this decision," said Bernard de Fabribeckers, Worldwide Sales Director of IRIS.

"With Anyware Corporation as our National Distributor, we have found experienced and ambitious partners that will help us attract technically sophisticated private and professional users and thus successfully pursue our growth strategy."

www.irislink.com www.anvware.com.au

## **EMC unloads Syncplicity product**

Private equity firm Skyview Capital is acquiring the Syncplicity enterprise file sharing unit from EMC. Terms of the deal were not disclosed, but EMC will keep an interest in the new business.

"This move is designed to ensure that Syncplicity is adequately positioned for success in the evolving EFSS market and to enable EMC to increase our focus on core EMC Information Infrastructure investments," says Jeremy Burton, president of products and marketing at EMC Information Infrastructure.

"EMC remains a financial stakeholder and committed to Syncplicity's growth."

## **CONFERENCES & EVENTS**

## The Australian Library Evolution 2015

## Aug 19-21, Rydges Sydney Central, Sydney

A Two Day Highly Developmental Tool-kit with Interactive Workshops and Case Study Sessions http://www.arkgroupaustralia.com.au

## **RIMPAA InForum 2015**

## Aug 30 - Sep 2, MCG, Melbourne

The conference theme for 2015 is Digital Dreams (not digital nightmares). It is intended that the conference theme will touch on a range of areas of interest including: Data, the Cloud, digitisation, digital repositories/disposal/destruction, automation, content management, context management, EDRMS and mobile technologies, as well as personnel areas such as up-skilling staff, change management, etc.

http://inforum.net.au/

## **HP Records Manager End User Training**

## Adelaide, Sep 8; Sydney, Oct 20; Darwin, Nov 10; Midland WA

Designed for NEW users of HPRM, focusing on how to apply the functionality in TRIM to get your work done. Duration: 4 Hours Prerequisites: Nil. Course Content: Navigation around HP Records Manager; Customising the view to suit your requirements; Saving, creating and editing documents; Searching and using data; Sending documents via e-mail; Saving emails. For details and to register contact Phillipa on 0478 221 055 or training@infoproficiency. com.au. http://www.infoproficiency.com.au/Training

## **Sydney Account Payable Executive Lunch** Sep 9 11:30am- 2:30 pm, Quay Grand, Sydney

Are you ready to unlock the potential of your Accounts Payable Department? Learn from Chemist Warehouse and Dean Crawford, Accounts Payable Manager, Stockland Development, who will share a real life case study and the ROI achieved through the implementation of the Xcellerate IT solution. Learn best practice principles within Accounts Payable and learn how some of the major organisations in Australia have already cut invoice-processing costs and time by over 90%. Enquiries to Alexandra Khalifa 02 8228 6618 alexandrak@xcellerateit.com. To reserve your seat contact Alex Khalifa on 02 8228 6618



## Transform the way you work with PDF files.

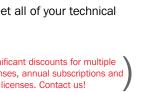
ABBYY PDF Transformer+ is a new and comprehensive solution for working intelligently with PDF documents. It covers the entire cycle of a document's life: from creation, discussion, approval, and protection, to the conversion of PDF files into editable formats, merging of documents, and extraction of text and images.

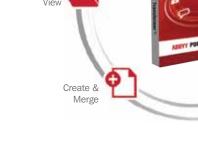
## The only PDF tool you'll ever need;

- Open and view PDF documents with an intuitive user interface
- Add and remove individual pages, text or images in PDFs
- Review and comment
- Transform PDF files into all MS supported formats
- Transform scanned or digital PDF files into editable searchable formats including PDF/A
- · Split and merge PDF files
- Create and/or merge from file or scanned documents
- · Edit typos, errors and make small text edits
- Protect and share redact sensitive information
- Flexible licensing model to meet all of your technical and financial requirements.



For more information visit -  ${\color{red} www.abbyy.com.au/pdftransformer}$ 





Edit &

Review & Comment

Protect &

Extract &

Reuse





## Don't get buried

Turn your documents into data and save stress, time and money

Get started with a \$500 voucher\*

\*Terms and conditions apply

Call 1800 789 389 or visit konicaminolta.com.au/docstodata to learn more