Executive Edge
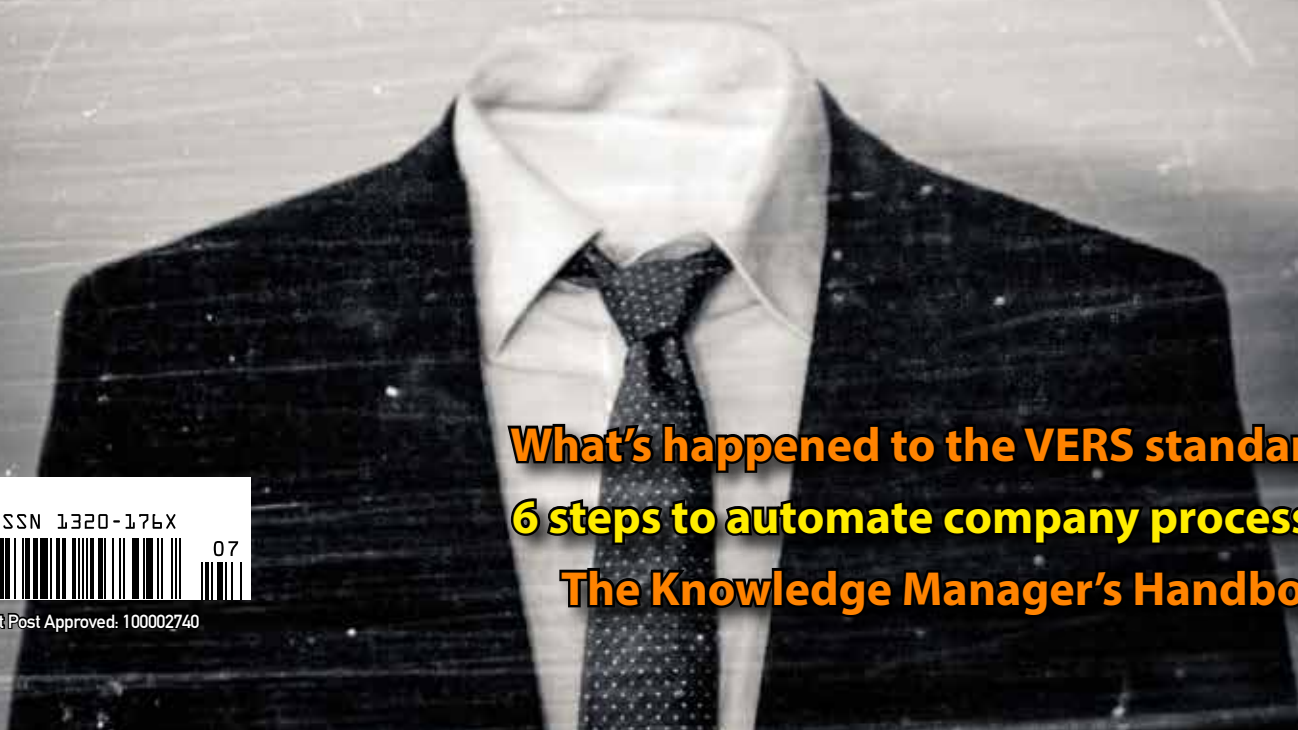Narelle Lovett, Chief Information Officer, Australian Crime Commission (ACC)

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ezescan.
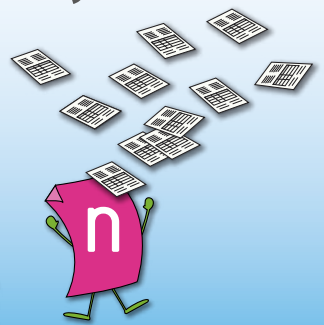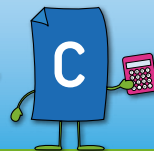# WebApps

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Nuix helps reveal Panama papers secrets

Australian technology company Nuix has revealed its role in assisting the examination of leaked documents from Panamanian law firm Mossack Fonseca, currently causing embarrassment to British Prime Minister David Camron and other global figures

Nuix supplied document processing and investigation technology that was essential to the Panama Papers investigation conducted by German newspaper Süddeutsche Zeitung and the International Consortium of Investigative Journalists (ICIJ).

Süddeutsche Zeitung received an anonymous leak of approximately 11.5 million documents, totaling 2.6 terabytes of data, detailing Mossack Fonseca's role in assisting clients to set up anonymous offshore companies.

The data included nearly five million emails, three million database files, two million PDFs, one million images, 320,166 text documents and 2,242 other unclassified files.

"Nuix technology was an indispensable part of our work on the Panama Papers investigation, as it has been with Offshore Leaks and many of our other in-depth investigative stories," said Gerard Ryle, Director of the International Consortium of Investigative Journalists.

Süddeutsche Zeitung and ICIJ used Nuix software to process, index, and analyze the data. Investigators used Nuix's optical character recognition to make millions of scanned documents text-searchable. They used Nuix's named entity extraction and other analytical tools to identify and cross-reference the names of Mossack Fonseca clients throughout millions of documents. More than 400 journalists in 80 countries around the world then investigated the data before publishing the first set of results on April 4, 2016.

Nuix donated the software to Süddeutsche Zeitung and ICIJ for the purposes of the investigation. A Nuix consultant also advised the investigators on hardware configurations and workflows. Nuix employees never saw or handled any of the leaked data – that task was undertaken by the journalists involved in the investigation.

"This is a huge trove of data by investigative journalism standards—around 10 times the data volume and five times the number of documents of ICIJ's Offshore Leaks investigation in 2013," said Eddie Sheehy, CEO of Nuix.

"At the same time, this is only a medium-sized document set in the worlds of eDiscovery or regulatory investigations—some of our customers handle similar volumes of data every day. Nuix is the only technology in the world that can handle this much data and that many documents with speed and precision."

Lexmark finds Chinese buyer for $US4B

A Chinese consortium led by Apex Technology, which manufactures ink cartridge chips, has agreed to acquire Lexmark for approximately US$4 billion in cash

Lexmark was spun off from IBM in 1991, and now offers a full suite of capture, enterprise content management and workflow solutions, following acquisitions such as Perceptive Software, ReadSoft and Brainware.

In 2015, Lexmark announced its biggest-ever acquisition, paying $US1 billion to buy Kofax, a move that doubled the size of the company's enterprise software business.

The Chinese buyout, which is expected to close in the second half of 2016, is subject to regulatory approvals in the United States, including by the Committee on Foreign Investment in the United States, or CFIUS.

Lexmark's CEO Paul Rooke said, "With the consortium's resources, we will be able to continue to invest in and grow the business to more fully penetrate the Asia Pacific market for hardware, software, and managed print services," he added.

Lexmark said its two business groups, as well as the company's regional and country operations, will continue unaffected and its headquarters will remain in Lexington, Kentucky.

Defence needs $A5B IT fix

A White Paper produced by Australia's Department of Defence has identified a need for $A5 billion in additional funding over previous plans to meet Defence's information and communications technology needs across the next decade.

It notes that "Underinvestment in information and communications technology over the last decade, coupled with the lack of a coherent enterprise-level strategy for Defence's complex and rapidly evolving information and communications requirements, has led to serious degradation across the information and communications capabilities of Defence.

Some of the areas identified for remediation by 2026 include Enterprise Information Management ($A400m–$500m), Enterprise Resource Planning System/Service ($A1-2B) and deployment of a single unified desktop operating environment ($A500m–$750m).

Defence has indicated it will work with the newly established Digital Transformation Office to ensure that its information and communications technology architecture reflect best practice.

The scale of the challenge is immense, with Defence currently supporting more than 100,000 workstations at over 200 processing locations across Australia and overseas.

There are around 800 networks and more than 3 000 applications that need to be streamlined substantially to more manageable levels.

The White paper notes "There has been underinvestment in key enablers over the decade, including in the area of information and communications technology.

"This underinvestment has been compounded by Defence's struggle to establish a coherent enterprise-level strategy for its complex and rapidly evolving information and communications technology domain.

It lists three main priorities.

1. establishing an Enterprise Information Management Program to enhance decision-making through access to a unified information environment

2. standardising business processes via a consolidated Defence Enterprise Resource Planning system

3. delivering an enterprise-wide framework for identity and access management to provide users with trusted access to applications, facilities and information and communications technology assets

Objective acquires Onstream Systems

Objective Corporation is acquiring specialised technology for in the capture, collaboration and manipulation of large documents, complex drawings, maps and plans with the purchase of New Zealand's Onstream Systems.

Onstream's flagship software, Trapeze, has a user base of over 2 million users at more than 2000 sites around the world.

The Trapeze technology has become pivotal in the digital transformation of local government and statutory authorities, and strategically in the paperless processing and stakeholder collaboration related to Building Consents and Development Applications.

It is used in over 80 councils in Australia, 50 councils in NZ, 100 councils in the UK and has a growing footprint in North America.

The underpinning Trapeze technology is licenced to Hewlett Packard (HP) and is used for image viewing and manipulation in all HP Records Manager (TRIM) solutions globally. It is also licenced by Northgate Information Solutions and Idox plc in the United Kingdom, giving the Trapeze technology a presence in more than 2000 customers globally.

The company also has successful regional distributor and reseller partnerships in Australia, North America and the UK. The acquisition price was not revealed. The purchase will be funded from Objective's cash reserves in addition to the issue of 100,000 Objective shares to each of Glyn Williams and Brent Foster, key executives who will remain with the company post acquisition.

kCura clicks with Text Analytics suite

kCura, developers of the e-discovery software Relativity, has acquired Content Analyst Company LLC, developers of the CAAT analytics engine. The analytics engine has been fully integrated into Relativity Analytics for eight years, and more than 70 percent of current kCura customers have licensed analytics.

With further court acceptance of the technology in the US and abroad, as with the use of Relativity Analytics in the UK's recent Pyrrho decision, growth in Analytics is expected to continue for the foreseeable future.

The analytics engine can be applied to a variety of tasks, from organizing unstructured data to email threading to categorisation that powers flexible technology-assisted review workflows.

"In the future, we believe all ediscovery matters will use some form of text analytics because of the advantages it provides at every stage of the process," said Andrew Sieja, president and CEO of kCura.

"We believe we can accelerate adoption for our customers by bringing Content Analyst onto the team. By aligning our technology roadmaps and organizations, our users' feedback on Analytics can get into the engine right away."

"We believe CAAT offers the most precise analytics engine on the market and a powerful breadth of functionality," said Kurt Michel, president and CEO of Content Analyst, who will continue to lead support, service, and all operations in Reston supporting development of the CAAT engine.

www.kcura.com

Basware buys Verian cloud P2P

Basware, a provider of e-invoicing and purchase-to-pay solutions, has acquired Verian, a cloud-based solution provider in the US purchase-to-pay market.

"Verian is a strong fit with Basware's strategy, cloud-focused business and culture. This acquisition will strengthen Basware's sales momentum in the U.S., add new customers, and additional e-procurement capabilities to help accelerate growth.

"Verian created a strong position in the industry with its 100 percent cloud-based purchase-to-pay solutions, as evidenced by its annual subscription revenue growth exceeding 40 percent.

Jointly we will continue to enable our customers to buy and pay for goods and services in a simplified, paperless and cost-efficient way," says Esa Tihilä, CEO, Basware Corporation.

"We are tremendously excited about the combined value Basware and Verian will bring to our customers and the overall market.

"The Basware and Verian solutions complement each other to offer customers the most comprehensive purchase-to-pay, commerce network and financing services globally available today," says Tehseen Dahya, CEO, Verian.

Foxit adds PDF tools developer

Foxit Software has announced the acquisition of Debenu, a provider of software developer and end-user solutions for the global PDF market. Debenu's CEO, Karl De Abrew, a long-time entrepreneur and visionary in PDF technology, was also a Founder of Nitro.

The Debenu team has extensive knowledge in architecting, developing, marketing, and selling PDF-related products, particularly PDF software development solutions. Debenu brings strong technical expertise in business verticals, including pharmaceuticals, healthcare, banking, and government.

The team will play a lead role in managing Foxit's SDK business unit at a time when Foxit is preparing to deliver new technology to the global PDF market.

"We are excited to welcome Karl De Abrew and the entire Debenu team to Foxit," said Eugene Xiong, Foxit Founder and Chairman of the Board.

"PDF is a vital and ubiquitous standard for digital documents. Yet, there is much to be done to advance the technology for today's and tomorrow's increasingly connected and data-driven world. The addition of Debenu, its technology, and talent to our team further positions Foxit to lead in this transformation."

Debenu is another in a series of strategic PDF-industry acquisitions Foxit has made over the past two years.

In October of last year, Foxit announced the acquisition of Germany-based LuraTech Imaging, a provider of scalable PDF software solutions for server-side document conversion.

In 2014, Foxit acquired Dataintro Software, headquartered in Spain, and maker of Ultraforms, a patented 2D barcode generation technology for PDF forms to enable fast and accurate data capture from paper documents.

https://www.foxitsoftware.com/

Xerox and TIS unite on workflow

Top Image Systems (TIS) has announced a global reseller agreement with Xerox to give customers end-to-end automation solutions for industry-specific, content-driven processes. Content processing solutions from TIS will be integrated into Xerox's workflow automation suite, which helps simplify end-to-end processes for a range of industries including financial services, healthcare and government.

Alex Toh, TIS Managing Director, Asia Pacific, Japan (APACJ), said, "The Xerox agreement further substantiates the partnership TIS has with Xerox and Fuji Xerox over the last decade.

"Fuji Xerox and its various subsidiaries and operating companies around Asia Pacific have been clients as well as partners with TIS APACJ and will continue to go to market together.

"We envisage that activities with both Xerox and Fuji Xerox will increase substantially given that both entities have now validated eFLOW is their capture platform of choice."

The solutions will help enterprises improve their day-to-day effectiveness and streamline content-driven tasks, such as customer on-boarding, manual data entry, claims administration and invoice processing.

LinkedIn to your goodwill

By James Mattson

The days of an employee photocopying the client list or saving it onto a USB may be dwindling. Employees are now "connected" to your customers and key contacts on social media. Such connections occur as a matter of ordinary course with the approval of the business. LinkedIn and other social media platforms provide a de-facto client list at an employee's ready disposal.

Social media also provides an ex-employee a powerful marketing tool. An ex-employee remains in front of clients more readily and with more immediacy than in the past. An ex-employee's active use of social media will make it more challenging for an employer to sever the special relationship built up between the former employee and the client. An unfair advantage?

In this article, we examine recent decisions and debate measures business can take to protect its goodwill from misuse by a departing employee. Managing customer connections post-employment requires careful planning and management. A valid non-solicitation restraint is part of the answer but a more comprehensive strategy is required.

A debate waiting judicial comment is who owns connections on LinkedIn: the employee user or the business. The debate is perhaps distracting. Connections are, in one sense, electronic business cards widely distributed. Business cards themselves are not confidential information but public advertisements. During employment, the employee ordinarily establishes connections for genuine purposes. It is difficult to see how such a connection on LinkedIn will itself be the property of the business.

Non-solicitation clauses have utility

Focusing on the interest to be protected, such as goodwill, it can be seen that non-solicitation clauses continue to have utility. In *Planet Fitness Pty Ltd v Brooke Dunlop* [2012] NSWSC 1425, the NSW Supreme Court enforced a restraint against solicitation of customers when a fitness trainer placed a post on Facebook advising clients that her new gym would provide the same training at reduced fees. What happens however when the contact is more subtle, like a mere notification on LinkedIn of new employment?

What is solicitation?

It has been said to 'solicit' is to 'ask', 'to call for', 'to make a request', 'to entreat' or 'to persuade'. Solicitation does require some influencing or encouragement of a client to leave the former employer. In the US, it has been held that merely announcing on Facebook that the employee had a new job was 'somewhere between very weak to non-existent' evidence of a breach of a non-solicitation restraint. In other cases it has been held that merely advertising a new business on Facebook, or posting a job opportunity on LinkedIn, did not amount to solicitation. Neither was it solicitation for a new employer to post on the ex-employee's Facebook page that the ex-employee was now working for the employer's business or for that ex-employee to befriend a client on Facebook.

Recently, the NSW Supreme Court had to consider a clause that prevented an employee from *"contact [with] clients"* during a restraint period. In *Tipto Pty Ltd v Yuen* [2015] NSWSC 1086, Tipto discovered that its ex-employee (Mr Yuen) was advertising his new business on LinkedIn. Mr Yuen's connections included clients of Tipto. Tipto alleged that Mr Yuen requested some of its clients to connect with him.

The issue under the restraint was whether Mr Yuen was prevented from contacting clients, irrespective of whether he took any steps to persuade clients to cease to deal with Tipto. There was no evidence of Mr Yuen soliciting these clients.

The Court was not impressed with Tipto's justification for a prohibition against mere contact. Absent any evidence of solicitation, the Court said a prohibition against mere contact could not be seen as reasonable to protect goodwill: at [156]. Interestingly, there was a dearth of evidence as to LinkedIn and its impact on relationships with clients: at [122]. Absent any detailed evidence, the Court could only draw the conclusion that Mr Yuen and his former employer's clients "were [simply] connected" on LinkedIn. No adverse inference could be drawn from mere connection.

Controlling the LinkedIn content published by the departing employee - how far can you go?

Appreciating the power of social media, employers have used interesting tactics to protect goodwill and sever an ex-employee's connection with customers.

An example is the U.S. case of *Robert Half International Inc v Ainsworth 2014*, WL 7272405 (S.D.Cal Dec 17, 2014). Robert Half International (RHI) is a recruiter that invests in its employees, systems and processes. Aside from the usual non-solicitation restraints, the employment contract had clause 13 that prohibited employees after their employment indicating that they were an employee of RHI. As such, no references to their employment with RHI could be made on LinkedIn.

RHI wanted to prevent employees demonstrating their expertise to competitors. RHI argued that former employees use the RHI name, goodwill and connections to boost their future endeavours, resulting in an unfair advantage. The former employees argued that their background was a fundamental sales tool for future business. Clearly, employment with RHI was a benefit for future endeavours against RHI.

Perhaps not surprisingly, the Court found clause 13 invalid. It was found to be a mere restraint against competition and void. It is hard to see a legitimate basis to merely prevent an ex-employee documenting and using their employment history.

Some lessons for business

Dealing with social media post-employment requires careful consideration and strategic thinking. Some suggestions have included requiring employees to disconnect with clients on termination. Good in theory, but what message does it send to clients and contacts who are disconnected, not knowing that your employee is departing? Does this approach prevent the ex-employee re-connecting later?

Some more sensible approaches (aside from a well drafted restraint) may include:

 • requiring the employee to provide a copy of all their connections on LinkedIn to the business, so that the business is kept informed of important contacts for its business;

 • having a carefully crafted non-disparagement clause in the employment contract covering remarks on social media concerning the employer's business, personnel and products post-employment; and

 • requiring the employee to advise connections on LinkedIn of their departure in terms approved by the business, including requiring the employee during the notice period to advertise and promote the employer's business and their replacement to all connections.

Smarter use of social media may enable a smooth transition of connections from the employee back to the business.

James Mattson is a lawyer who specialises in employment and industrial relations at Sydney law firm Bartier Perry.

eSignLive now stores esignature data in Australia. Here's why it matters

By Mark Howarth

If you're an Australian business considering an electronic signature solution, I have good news. Axient partner eSignLive has just announced it will store local signature data in two Australian data centres.

By leveraging IBM Cloud SoftLayer data centres in Sydney and Melbourne, eSignLive now guarantees data sovereignty for all Australian customers. This includes Axient clients that already use eSignLive electronic signatures, as well as prospective clients that want to add electronic signatures to their digital automation toolkit.

In this article I'd like to briefly explore what the announcement means for Australian businesses. From now on, all local transactions processed through eSignLive's cloud electronic signature solution will be stored on Australian soil. This means signature data will be protected by tough Australian corporate and individual privacy laws.

We know that data sovereignty is a significant concern for Australian businesses. Before you move to the cloud, you want to know that your data is safe and protected.

This means choosing cloud products that are secure, legal and compliant, such as eSignLive for electronic signatures.

With strict security measures and audit trails that capture when and where a document is signed, eSignLive signatures are often more legally binding than regular signatures. It also means paying attention to where your data is stored. Clients often say they avoid storing information in overseas data centres. They

don't want data governed by less stringent international laws, particularly when it involves sensitive data like signatures.

A recent eSignLive poll conducted by Galaxy Research confirmed this sentiment. It found that over 50 percent of Australians worried that information in the cloud might not be stored within an Australian jurisdiction, and therefore not subject to Australian privacy laws.

eSignLive President Tommy Petrogiannis says the new data centres address the market's preference for storing data on Australian soil. They also meet Australia's in-country data residency requirements. From my perspective, this is a big step in the right direction. After all, over 50 percent of 18-34 year olds say they prefer to sign documents electronically.

"Many Australian organisations are enabling digital transformation strategies because the benefits and the laws are clear," Petrogiannis said.

"Organisations and their customers understand that not only is this technology more secure than 'ink and paper', it is also more cost and time efficient and ultimately provides a better customer experience, delivering faster approval times for applications and reducing error rates on forms," he said.

With signature data now stored in Australia, there's no better time for banks, superannuation funds and professional services firms to gain a competitive edge with electronic signatures.

I've seen first-hand how electronic signatures transform business processes into the engaging digital experience your customers expect. If you'd like to find out more, download the electronic signature data sheet.

Mark Howarth is Managing Director of solution provider Axient, experts in Digital Automation of Documents and Forms.
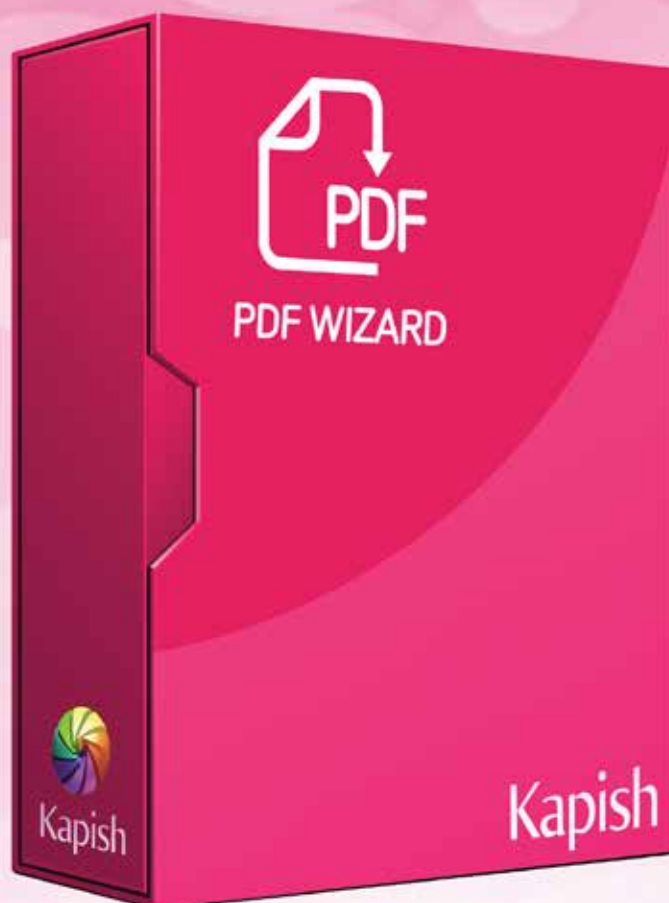
http://www.axient.com.au/

Optical Disc doubles storage in 2nd Gen

Sony has unveiled the second generation of its Optical Disc Archive System, which adopts a new, high-capacity optical media developed jointly by Sony and Panasonic. This newest media, rated with a 100-year shelf life, doubles the capacity of a single cartridge to 3.3 TB. Generation 2 of the Optical Disc Archive System also introduces an 8-channel optical drive unit and doubles read/write speeds over the previous generation at four times faster than that of Blu Ray.

Sony launched the first-generation Optical Disc Archive system in 2013. Since then, there have been six drives released spanning a single-slot stand-alone drive to a model packed with 101 slots. Optical disc-based cartridges for these drives include both write-once and rewritable media, and range from 300GB to 1.5TB.

Optical Disc Archive technology is designed for use in near-line applications, deep archive storage or disaster recovery systems. Hardware configurations range from stand-alone to large, scalable robotic archive systems. The main components include: a standalone USB drive unit, an 8 GB fibre channel library drive unit, for use in robotic systems, and the Optical Disc Archive media cartridge.

A recent market research report says that the demand for recordable optical discs is diminishing due to the adoption of newer storage technologies such as cloud storage. Nevertheless, increasing demand for reliable archival solutions, especially for the media and entertainment industry to store classic works of art for future generations will lead to consistent growth. It expects that the recordable optical disc market will rise at a CAGR of 5.60% by volume from 2015 to 2025.

Sony Optical Archive Inc. (US), a fully owned subsidiary of Sony Corporation, recently announced a new library system called Everspan. The new system incorporates the newest optical media and new drives for large-scale robotic systems targeted specifically at data centres.

Veritas launches Oz cloud data centres

Veritas Technologies has announced a multi-million dollar investment in dedicated cloud data centres in Australia targetting the email archiving and e-discovery market.

The first application hosted in the new data centre is Veritas Enterprise Vault.cloud, an archiving and ediscovery solution that complements Microsoft Office 365 email and helps simplify compliance with data retention regulations. Enterprise Vault.cloud also works with on-premise email systems such as Exchange and Domino.

The new Veritas data centres will not be linked to data centres outside Australia, ensuring that data is stored solely in-country.

Veritas' Enterprise Vault.cloud solution captures, stores and indexes business-critical information, including emails, attachments, Microsoft SharePoint, Box files, as well as content from unified communications and instant messaging systems, into a single, legally searchable, online repository.

The multi-year agreement will host primary data storage at Equinix in Sydney as the primary data centre and Melbourne as the backup data centre. This is Veritas' third data centre infrastructure investment in Australia over the past three years.

KPMG turns to IBM Watson

Consulting firm KPMG has announced plans to apply IBM's Watson cognitive computing technology to its professional services offerings. The agreement, including a focus on auditing services, builds on several recent KPMG initiatives demonstrating the promise of cognitive technologies.

Cognitive technology enables greater collaboration between humans and systems, providing the ability to communicate in natural language and analyse massive amounts of data to deliver insights more quickly. Watson integrates machine learning and other artificial intelligence technologies into a scalable system that can be accessed through a range of applications.

Many of KPMG's audit, tax, advisory and other professional services rely heavily on judgment-driven processes. Adding cognitive technology's massive data analysis and innovative learning capabilities to these activities has the potential to advance traditional views on how talent, time, capital and other resources are deployed by professional services organizations.

One current KPMG initiative is focused on employing supervised cognitive capabilities to analyse much larger volumes of structured and unstructured data related to a company's financial information, as auditors "teach" the technology how to fine-tune assessments over time. This enables audit teams to have faster access to increasingly precise measurements that help them analyse anomalies and assess whether additional steps are necessary.

This example also highlights how cognitive technology is further advancing improvements to sampling processes, in which auditors review subsets of data to analyse thousands or millions of actions to draw conclusions. Cognitive technology helps allow for the possibility of a larger percentage of the data to be analysed, providing KPMG professionals the potential to obtain enhanced insights into a client's financial and business operations. At the same time, cognitive-enabled processes allow auditors to focus on higher value activities, including offering additional insights around risks and other related findings.

CHL Victoria moves ahead with ELO

Toshiba (Australia) has announced a win with document management partner ELO to implement document management solutions for Victoria's Community Housing Ltd (CHL). CHL originated in Australia in 1993 and is a national and international housing provider delivering affordable housing in four regions of the world.

CHL was looking to implement an electronic document management system which would immediately minimise the overwhelming burden of paper invoices in the accounts payable department, as well as becoming the main repository for all electronic documents across the organisation in the long term.

"We wanted to streamline the accounts payable process by implementing approval workflows, together with integration with CHL's existing finance system, facilitating the creation of relevant metadata for individual invoice documents," said Tonya Wild, Business Systems Co-ordinator, Corporate Services at CHL.

"We also needed to establish a document management regime for other areas of CHL's business, including HR, compliance, learning and development, quality assurance and project tendering," she continued.

CHL decided to implement Toshiba and ELO's document management solution based on enhancing CHL's existing valued relationship with Toshiba.

"The collaborative solution offered by Toshiba and ELO seemed to be cutting-edge, simple and 'no fuss', and the professionals from both companies were experts in the field and a pleasure to deal with. Our existing relationship with Toshiba also instilled a level of confidence that the ELO solution would be of benefit to CHL," said Tonya.

www.toshiba-business.com.au

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Crimefighters seek a digital advantage

As an Australian police officer prepares to encounter a suspected terrorist or criminal gang member, arrayed on his or her iPad mini screen are the up to the minute results of a comprehensive search of more than 1000 federal, state and territory police databases detailing all essential facts about the individual. This may not be the case today, but is the future aim of a major IT collaboration and consolidation program underway at the Australian Crime Commission (ACC). IDM spoke with Chief Information Officer Narelle Lovett to learn more about the quest.

Programs to improve enterprise search are typically driven by a desire to have staff spend less time looking for information, with success measured by the impact on productivity. However in the case of criminal and terrorist investigations the improvements may have a tangible impact on the success or failure of law enforcement operations in life or death situations.

A proposed National Criminal Intelligence System (NCIS), currently at the Proof of Concept stage, is seeking to update a 30 year old legacy database used by 24 law enforcement agencies country-wide as an information repository and analysis tool.

It is also seeking better ways to mine the unstructured data that sits within the 3.5 million documents the ACC holds in its records. Most of the datasets are text, and the ACC is currently working with researchers from the University of Sydney on text analytics to get the most of out the data. For this it is using a range of analytics tools including Palantir technology used by the US Intelligence Community and Department of Defense.

Narelle Lovett, A/G Chief Information Officer, Australian Crime Commission (ACC), said, "The Australian Criminal Intelligence database is based on old technology. It also didn't lend itself to sharing, where appropriate, information across state and federal boundaries. Within law enforcement, criminals don't stay within their state boundaries, let alone their international boundaries."

The Proof of Concept trial is exploring multiple strands including entity extraction, data mining and natural language processing. This work builds on the ACCs Fusion project completed in 2014, to provide better search engine and analytics capability.

The ACC is not proposing to build an Australian criminal "data warehouse" by extracting data from the many existing state and territory police databases.

"The ACC doesn't want to own the primary copy of that data. But to be able to do essentially one search that points the officer to where to find all of the information that pertains to that entity," said Lovett.

"It something within law enforcement that we've struggled with for a significant number of years, as across the Australian law enforcement community there is a significant difference in technology with different databases, methodologies, network connectivity, etc."

"The fundamental objective is officer safety, so our officers go into situations as fully armed as they can with knowledge about that situation. It's also to look at indicators and warnings to say, 'Well, okay, this type of behaviour has been noticed in Perth, a similar type

"The fundamental objective is officer safety, so our officers go into situations as fully armed as they can with knowledge about that situation" - Narelle Lovett, Chief Information Officer, Australian Crime Commission (ACC).

of behaviour's been noticed in Sydney; are these two things connected? Is there a link here that we're unaware of?

"We also need to be smart about the results, so an officer is not required to scroll through 200 search results on an iPad mini. It's about delivering the most appropriate information for the situation they're in."

Delivering this kind of search nirvana won't be easy. In addition to technical divergence between police data platforms, taxonomies and the legacy issues common to most large enterprises, there is another challenge in dealing with differences in state and territory legislation.

 "You don't want to be doing any operations work on old information, so our officers need to find out if the information in the Australian Criminal Intelligence Database is the most up to date available. If they find out its not then it may become a legal issue to get access to any new data revealed in a search.

"That's not to say that you'll automatically get full access to all of that information, because your user profile may only give you some; but at least the search will tell you there is information contained within a database relating to the entity you are looking for.

"We're not looking to tackle the legislation. If we tried to do that we'd be here forever.

"We're not in the business of doing any fishing exercises across the databases, we're just looking to get access to the indexes so that we can do one search to find out if there is anything relating to a particular entity."

In addition to the challenge of gaining access to state and territory databases, there is the difficulty of querying the vast amount of unstructured data that is either in digital file shares or still held in paper form. Like all Australian government entries,

different state and federal police forces are at varying stages of digitisation and centralised content management in terms of current workflows and historical records.

"Most agencies are working through it," acknowledges Lovett, "but there is a significant amount of paper that we just won't be able to tackle.

"We won't be able to see anything that's not in a database to start with.

The Australian Crime Commission has around 650 end users while a proposed merger with CrimTrac and the Australian Institute of Criminology (AIC) will add the challenge of integrating 200+ new users

Like all state and federal police forces and agencies at all levels of government, the ACC is doing a lot of work internally around how it stores digital records, its long term archiving strategy, how to cope with the increasing storage demands, and understanding the frameworks for the provenance of the data

"TRIM is our main document management platform and most of our information is stored within that system; but there is obviously still a lot of content in emails and file shares. Making it searchable internally is something that we're working on as well," said Lovett.

While the Australian government has set a deadline of 2020 for federal agencies to make the digital transition, the ACC envisages a much longer time frame to perfect the National Criminal Intelligence System.

"This is a significant body of work over a significant period, and we're looking to achieve a realistic outcome. We will bite off what we think we can achieve, prove the value in that work, and then move onto the next challenge. This is not something that's going to happen in two years' time," said Lovett.

Digital Continuity 2020: A Vendor's Perspective

By Rainer Krause

The National Archives of Australia's Digital Continuity 2020 Policy is a cornerstone mandate that underpins the Australian Government's wider digital transformation initiatives, as well as driving the adoption of e-Government.

Part roadmap, part rulebook it's the vital 'go-to' guide for all public sector executives and professionals working in, and around, information management and is based on three individual policy statements that are all intertwined.

How industry and suppliers to government interpret and respond to mandates like Digital Continuity 2020 is important – not just for today's public servants but those who will work in government for years to come.

Underpinning the transition to entirely digital work processes, which is a fundamental plank of the Digital 2020 Policy, is successful implementation of a digital Enterprise Document and Records Management System (EDRMS).

Key success factors of modern EDRMS systems include:
- automation where possible;
- information management by users for users; and
- ease of use.

To ensure that information becomes an asset in the mind of the users, innovation must address the human factors up front. That way, a chosen EDRMS is seen as a helpful tool that facilitates and simplifies human interaction with the information – not one that makes it more difficult.

From the outset, the system must be easy to use. It also requires that that there is no difference between a tangible asset and a digital asset.

Entirely digital work processes

The truth is, a 'paradox-of-perception' issue exists in the minds of some users. We see and hear this, for example, when we think documents as something physical: yet the general public at the same time knows and accepts that order processing can be completely digital; that accounts payable can paperless; and that warehouse systems must be entirely digital.

The fact is that the business processes that have already successfully gone digital got there by embracing the user's terminology to perform duties; at ELO we think the same needs to apply for EDRMS.

It is paramount to start business processes as digital workflows from their inception to deletion and thus cover the entire life cycle.

It's just as important to analyse a business process and treat it accordingly. When viewed from a records management perspective, we can see and ensure that all the compliance requirements are met while users feel comfortable applying respective metadata. That means the business process is in the foreground, not the retention policy.

And because retention policies are vitally important, those policies need be applied in the background without a "disturbing" effect on the users that creates an inhibitor.

It means that teamwork and effort (business process) can be reconciled and audited, allowing different stakeholders to contribute, approve, decline, change, forward or delegate – all while maintaining compliance. And, very importantly, creating trust as a result.

Governments now need to respond almost instantaneously to circumstances, and through a variety of channels. Taxpayer expectations will also keep growing thanks to the strength of 24/7 online information pools like Google, web sites and other digital channels.

Whether workflows need to be approved while travelling, or emergency information sent out in real time, innovative and flexible systems are those that allow users to be connected 24/7.

Put simply: The tool shall not limit the information.

While the public often asks for or expects work-life balance for themselves, in a digital age the demands placed on information and its availability simply don't take this balance into account anymore for government.

Learning to deliver despite paradoxes is where success lies.

Integration

Interoperability between information, systems and processes is a major theme of the Digital Continuity 2020 Policy.

We are often asked whether we have an interface to enterprise application suites like SAP, or SharePoint, or Dynamics AX, or Microsoft CRM, or Technology One, or Kofax, or Civica … or, well, take your pick.

The answer is always yes – but we will necessarily ask for a real world clarification of what "having an interface" means for our customers and what they want to achieve through that.

A critical component of interoperability – really at its heart – is an accurate and clear definition what the customer really wants.

Take this simple example: if a customer wants search capabilities from SAP to extend into their EDRMS, we would deploy a simple very cost efficient search tool; if we need data exchange, we may use staging tables; if buttons are required to execute a command within the 3rd party system, we will require a different kind of effort, so the same task can be performed with a keyboard shortcut.

Of course there's no 'one size fits all' approach to the NAA's policy mandate and it can be met through many approaches. The pathways that will be established will necessarily come on a case by case basis, ensuring that the most cost-effective and "outcome oriented" approaches prevail.

Rainer Krause is Managing Director of ELO Digital Office AU/NZ.

Invisible ECM

By Paul Sherlock

The term ECM is actually an abstract and entirely unhelpful label when attributed to data systems – attempting to describe a world that is rich with tools, methods and consultants, yet equally endowed with resistance, frustration and cost.

These days it is giving way to more contemporary pursuits such as Big Data or Content Analytics, yet those still rely on ECM to deliver a managed platform of content necessary to make sense of the domain. Even if it's still defined as the ECM project, part of the official definition of a "project" is that it is temporary – which flies in the face of what ECM is and should be.

We need to start thinking of ECM as a permanent investment to sustain human behaviour and cultural change throughout an organisation and its entire operating ecosystem.

Wait, ECM is what now? ECM is always a "people" project, first, and by an order of magnitude compared to any spend on related projects, systems change or technology implementations. While most technology implementations tend to skimp on the enablement budget, this phenomenon is no greater than in ECM. For self-sustaining purposes, I feel the industry has danced around this inconvenient truth for many years.

Let's look at the classic signs:

 • An ECM project's genesis is usually a discrete departmental need (e.g. case management), or as an adjunct to a major platform (e.g. Oh yes, we need cheque and remittance scanning and storage for our new Accounts Receivable system.) This quickly gets out of hand, demanding major IT integration, data migration thus generating systems duplication and cost across the business;

 • An ECM platform project promises go-live in 3 months, yet is still failing to get traction years later and has diluted to just an expensive file share. CxOs are left underwhelmed and the workforce is wondering what all the fanfare was about. The business case dies;

 • Employees are entirely confused by the repository concept; flatly refusing to move away from email attachments. The white elephant lives;

 • Months on, file shares (heck, even SharePoint sites) are as prolific as ever.

Is it that unstructured data is just too hard? Why is there is always another project more tangible, more compelling, more "now" that wins the investment round. So why is this, and how should we think differently?

Enterprise Content Management itself does not exist. It is invisible. Its benefits are abstract, its full realisation obscured by the delivered application, thus unquantifiable. This somewhat explains (not justifies) the plethora of terms, jargon, concepts, features and widgets available to try to control this data space. Taming 80% of an organisations data correlates with a vast array of consultancies, methods, preconfigured platforms and IP that try to apply a technology solution to a people problem.

Let's take a different tack for a moment. Human Capital Management as a discipline came about when organisations programmed people to perform repetitive tasks (akin to the factory model), to adopt productivity goals and to adapt to job design initiatives (cue the Industrial Revolution). What this means for ECM, is that the wrong assumption is made - one that people are prepared for, and willingly adapt to new ways of working and fundamentally, already subscribe to the implied benefits of ECM.

Beyond the Hype Cycle

Gartner's hype cycle ends at the plateau of productivity, but with ECM, what happens beyond this is more interesting.

Business activities that involve Information creation are many and varied, as such the processes and methods are unbounded and difficult to normalise. The lifecycle of content is equally varied; consider the breadth of sources (where it's generated and by whom), surfaces (who needs it, when and where) and sinks (where does it live, where should it be stored and for how long).

As such, it is easy for users to return to, or invent new ways of working with Information that diverge from the (normalising) productivity objectives of the ECM initiative. The costs of not doing "information" right are incipient and near impossible to distinguish from the ambient noise of business operations. Consider a few minutes failing to find a document, a re-write of a report in the wrong template, a clumsy ediscovery search, a lost customer letter; all are highly human-oriented.

ECM done right is equally difficult to quantify. Such is the nature of productivity measurement and the difficultly in detecting well informed business decisions influenced by proper information usage. In other words, when a person finds the right information first time in an efficient way, there's no fanfare. Maybe data growth rates in back end systems are slower than initial predictions but how is that attributable to an ECM initiative?

What are the steps?

To design the business around information, be prepared for a multi-year transform. Know that ECM is a sustaining initiative, not a project. For good practice in Information management to be an embedded, cultural norm some very specific user experiential design work is needed. For example "In 2022, as a first principle; our employee on boarding process will focus on understanding our relationship networks, our Information assets and how Information flows around and within our business. Ongoing, each team member will account for their role by their ability to find and act upon authoritative data and do their part in maintaining it." This is easily deconstructed into specific, measurable embedded tasks.

Incorporate Information discipline into role definitions. Rewrite job descriptions and give data the gravitas it deserves - account for every person's data activity in the organisational design and labour cost planning. The ability to find, maintain and share Information Assets should be a core, embedded skill.

At the operational level, develop contemporary training materials written in personal relatable terms. Explaining fiduciary information governance requirements top-down is impersonal and unactionable. Rather, demonstrate transferable concepts from home life to the workplace. For example: your passport, the deed to your house or your notarised will may not be important today, but you'll certainly want them protected and accessible and you'll take action now to make sure that's the case. Model the practical tasks.

Permanently develop and invest in the Information Ecosystem. This is a new operating model for the business, rather than a temporal project that could deliver a higher plateau of maturity. Users will fall back to old behaviours, or adapt with workarounds without constant reinforcement clearly correlated to the expectations of the role definition. I would test constantly for Context – do you know why you are doing, what you are doing?

Do not implement feature-rich user experiences until the user behaviours are right and the user demand proves it necessary; they will thank you for the up-front focus on adoption, rather than the infliction of complex tooling.

The predominant shift that any flavour of ECM project is trying to achieve is generational sustained behavioural change for the ultimate benefit of the business, so it follows that the predominant budget is allocated to the human factors.

Data is nothing without people.

Paul Sherlock is a Senior Managing Consultant for IBM's Digital practice. He specialises in Information Management strategy, content analytics and technology adoption. These are his personal views

Is digitising your physical records worth the financial investment?

By Mark Salmon

The short answer is: no. Before I explain why, let me take you through a real world (and very common) scenario that I recently encountered.

Public and private organisations accumulate paper-based records during the course of their business. When left unmanaged, these records build up and up until the cost to maintain and store becomes unreasonable. While some organisations are finding success moving into the digital world through the use of electronic document and records management systems (eDRMS) and recordkeeping compliant information systems, there are still organisations that struggle with the sheer amount of work required to manage and maintain physical records.

We see this in many organisations: a tendency to keep records and never dispose of them. Most often this is simply due to a lack of awareness of how long to keep records, and the lack of a retention and disposal schedule to inform when a record can be legally destroyed.

I recently worked with a client who wanted to do away with their legacy physical records by digitising what they could and disposing of the rest. The problem was that they had little understanding of what records they were storing and if any could be legally destroyed.

Following our SHRINK methodology, we appraised 800 boxes of records using a retention and disposal schedule and we were able to identify 360 boxes (45%) that could be disposed of immediately. The remaining 440 boxes were to be digitised and captured within an eDRMS which was going to require an initial investment of more than $A88,000. (*This is displayed in the infographic at right*)

For the moment, forget about the intrinsic benefits associated with having digital records

• The standard archive box can hold on average up to 2500 – 3000 pieces of paper (i.e. preservation and accessibility) and think about the cost of digitising.

• The average cost to scan an A4 page is between 8c – 20c per image (one side of the page).

Let's assume we don't include some of the additional costs associated with digitising e.g. setup fees, data entry and indexing fees, optical character recognition, scanning resolution and storage options (these costs contribute to a higher per image cost) and we pay the minimum 8c per image.

If we have 2500 pieces of paper (single sided, loose and no staples – yes that costs more too) then we are looking at roughly $A200 per archive box.

That means that the organisation's 440 archive boxes would require an initial investment $A88,000 to be digitised. Compared to the current cost to store

the physical records of around $A400 per month (or $A4,800 per annum) this means that it would take 19 years to recoup the cost of digitisation assuming no more physical records are stored. (*See below*).
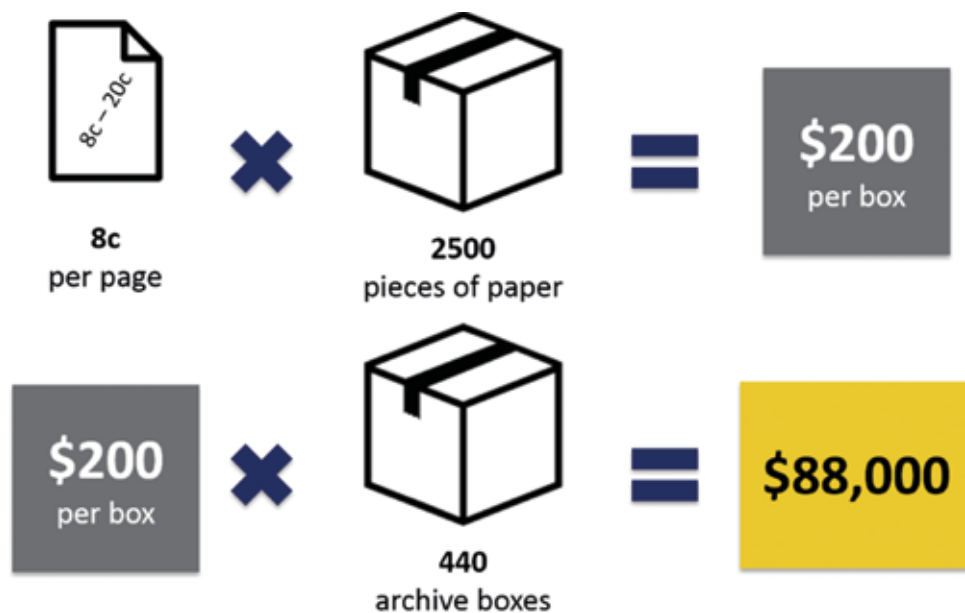
The majority of retention periods applied to the records being digitised is 7 – 12 years, so would it even be worth the investment given that these records would be deleted long before the 19 years are up?

So, why digitise?

While digitisation requires a large investment, records that are required to be retained for a short period of time (between 7 and 30 years) provide little to no return on investment.

However, organisations can expect to receive a return on investment for digitised records that are required to be retained for long periods of time, roughly 30 years or more.

A cost-benefit analysis should be performed before undertaking all digitisation projects to look at whether digitising long term records is worth the investment against how often the records are accessed. If records are only required to be retained for compliance or 'in case something happens' then there may be a case to retain these records physically because it will be more cost effective. On the other hand, permanent and vital records

8c – 20c
8c per page

$200 per box

2500 pieces of paper

= $200 per box

440 archive boxes

= $88,000

440 archive boxes @ $400 per month = $4,800 per annum

may require frequent access and preservation, and this is where digitising has its benefits.

Digitising just to reduce physical storage costs does not stack up

Mark Salmon is a consultant with Glentworth. Email him at mark.salmon@glentworth.com

Man or machine? The rise of automation

By Stacy Leidwinger

We now live in what Gartner calls an 'algorithm driven' world. Everything from ordering a taxi to finding a date involves complex algorithms, whether you know it or not. The world is shaped by algorithms which predict and execute against defined rules in order to automatically carry out every day processes.

On the surface this form of evolution seems highly beneficial. And in many ways it is. But as automation increases in all industries, and as the Internet of Things becomes the norm, are we inadvertently exposing ourselves to significant risks?

Automation in business is on the rise and there is no sign that it will slow. The cloud, smart phones and other such devices have created a digital mesh, meaning that information is readily available and accessed more easily than ever before.

The lines between work and play are now very much blurred, and with this, certain elements of businesses must always stay switched on. This is where machines step in to save the day. Technology and algorithms can take on routine tasks which relinquish staff from time-consuming and often menial tasks, whilst also maintaining the 24/7 culture of consumption.

Take Amazon for example, the figurehead of consumerism in today's world. Understanding the importance of automation, Amazon put drones to work in their warehouses 24/7. Their small army of machines is able to deliver goods within Amazon's colossal warehouses, a task which would otherwise be undertaken by workers – night and day.

But, whilst such automation is an amazing feat of innovation, what happens if the underlying algorithms are incorrect or unable to self-learn? Facebook felt the negative effects of this first hand with its 'Year in Review' feature. The campaign displayed images from the past year to remind you of pleasant memories. However, the algorithm which made this possible did not understand context, meaning that some users were presented with ex-partners, horror holidays or even deceased pets. Facebook, rather red-faced, had to reprogram the function when it released 'On this Day' so that it could delve deeper and analyse context before posting an image – increasing probability that only good memories were shown.

Facebook's initial error should strike a fervent chord with businesses. Automation is necessary, but companies must make smart decisions and understand and monitor their algorithms to ensure that they can adapt to the changing context of both the user and machine.

This situation is further augmented by IoT which has given rise to more machine-to-machine conversations. Think about

self-parking (or even self-driving) cars, wearable devices and most importantly medical devices that take actions based on a person's health condition.

Facebook's algorithms have the leeway to make mistakes, but with healthcare there is no room for error. If a device monitoring the heart rate of a person suffering from coronary heart disease relays incorrect information, the consequences could be fatal.

The very nature of automation, however, means that errors are a real possibility as they allow a company to forget about certain processes. An effective analogy is to compare automation to a tap. Most individuals will turn on a tap and expect it to provide water, without thinking about it.

Companies act in much the same way, expecting their machines to undertake what they have been programmed to do without the need to oversee them.

This mindset could be dangerous. Whilst a human may understand that a context or scenario has changed, and flag this to management, a machine would not. It would simply continue its process despite the fact this may now be incorrect.

A company cannot afford to let automation run away from them. Instead, automation must be aligned with business processes and be flexible enough to change as rapidly as the business.

Another factor to consider is that machines connected through IoT present both an insider and external threat. Although we have entered an age where drones may be able to take the role of humans, it is still the case that often we cannot even gift or restrict access for employees to certain parts of the business.

With this in mind, how will a company determine whether a machine is accessing only the parts of the network it has been granted permission to? Businesses will naturally monitor their own employees to prevent insider threats. But, machines must also be closely monitored to ensure information is not being leaked.

Insider threats are one issue to consider, but what happens when a company's machines are compromised by a cyber criminal? If a CTO or CIO does not effectively supervise their technology, a hacker could infiltrate a weak spot and have access to the network – and who would know?

Sensitive customer information or confidential data could be redirected through the automation process – and those in charge would be none the wiser. Companies previously had to consider securing just their users, but now they must secure their machines too.

A hospital for example now has a hundred things communicating with each other through Wi-Fi, so each and every digital communication has to be secured.

Ultimately, automation is a blessing for companies in order to free up resources and concentrate on issues that are more closely linked to strategic activity. But they must be aware of the dangers and have a plan of action in hand to keep on top of these. Companies must ensure their automated processes can adapt to change, and if they can't then they must ensure that they keep their hand on the automation tiller.

At the same time, they must also ensure that automation is secured against insider and outsider infiltration. So how can we benefit from automation and avoid falling victim to its dangers? By not considering automation as a tap but rather an extension of the workforce – and monitoring, nurturing, and securing it in much the same way.

Stacy Leidwinger is vice-president of Product Marketing at RES Software

Cognitive Systems market to reach $US31B

Industry analyst firm International Data Corporation (IDC) forecasts global spending on cognitive systems will reach nearly $US31.3 billion in 2019 and change the way work is performed.

IDC predicts more than 40% of all cognitive systems spending will go to software, which includes both cognitive applications (i.e., text and rich media analytics, tagging, searching, machine learning, categorization, clustering, hypothesis generation, question answering, visualization, filtering, alerting, and navigation) and cognitive software platforms, which facilitate the development of intelligent, advisory, and cognitively enabled solutions.

As both the largest and fastest-growing category of cognitive systems, cognitive applications spending is forecast to approach $US13.4 billion in 2019.

Cognitive-related services (business services and IT consulting) represent the second largest spending category while hardware spending (primarily on servers and storage) will grow nearly as fast as software spending.

"Unstructured and semi-structured data is fuelling a renaissance in the handling and analysis of information, resulting in a new generation of tools and capabilities that promise to offer intelligent assistance, advice, and recommendations to consumers and knowledge workers around the world," said David Schubmehl, Research Director, Cognitive Systems and Content Analytics at IDC.

"These cognitively enabled solutions are being developed and implemented on cognitive software platforms that offer the tools and capabilities to extract and build knowledge bases and knowledge graphs from unstructured and semi-structured information as well as provide predictions, recommendations, and intelligent assistance through the use of machine learning, artificial intelligence, and deep learning.

"The markets for these cognitively enabled applications and cognitive software platforms is just beginning, and IDC expects spending to accelerate throughout the forecast period."

Banking is the vertical industry that spends the most on cognitive systems with nearly a 20% share of the worldwide total throughout the forecast. Leading uses of cognitive systems in banking include fraud analysis and investigation, automated threat intelligence and prevention, and program advisors and recommendations.

Retail and healthcare are the second and third largest industries with combined spending on cognitive systems forecast to reach over $US10 billion in 2019. The leading use cases in retail are automated customer service agents and merchandising for omni-channel operations while the leading use case in healthcare is diagnosis and treatment systems.

"The potential use cases for cognitive systems are as wide, varied, and rich as the imagination. Automated threat intelligence, for instance, is helping organizations connect the dots between pieces of information to improve security, while in healthcare, cognitive systems are improving the quality of people's lives by assisting in diagnosis and treatment at the individual patient level," said Jessica Goepfert, Program Director, Customer Insights and Analysis at IDC.

"Wherever cognitive systems are in play, workers and organizations can expect to be impacted by the power of more information, intelligence, and automation."

The difference between truth and ediscovery

By Tim Williams

Startups are addictive. When you set a milestone and then meet it, it's like a rush of adrenaline. I'm on my third startup, a company focused on enterprise-class content indexing, and I still remember clearly the excitement I felt years ago when we first started receiving an influx of calls from law firms after announcing our ability to directly index backup tapes.

As any IT professional knows instinctively, there is no better place to find responsive data to past events than backups. They are read-only copies of data made at the time of the event and stored on backup tapes: complete, timely, and unspoiled. Up until our announcement, we thought the only remaining problem was the cost. Pulling that data off of legacy tapes was so complicated, expensive and service intensive, that it was easy to exclude it with a burden argument.

Our software fully automated indexing the data on tapes so they could be searched directly, and only the responsive data restored. And since it was all done with software, we could afford to sell it for orders of magnitude less than the then-current service-intensive alternatives.

So the phone would ring, someone from a law firm would ask the price, we would proudly announce it, and far more often than not ... we would never hear from them again. We were puzzled. We thought price mattered. Why weren't we winning? How we could have gotten it so wrong?

It turns out, the prospects were calling us and our competitors to find out who had the highest price, not the lowest price. They didn't want to find the data, they wanted to build a burden argument to prove it was too expensive to find. So they threw out our number and went with the highest they could find.

We learned the hard way the difference between truth and ediscovery ... it's the difference between the value of the former and the price of the latter. In this case the value was zero, so no price could justify ediscovery.

Value of backup data

I was reminded of this bit of personal history when I noticed that Craig Ball recently released an updated version of his now-titled backup format magnum opus, *Luddite Lawyer's Guide to Computer Backup Systems* (https://ballinyourcourt.wordpress.com/2016/04/05/luddite-lawyers-guide-to-computer-backup-systems). Craig is both a lawyer and a technologist. In that post, he elegantly summarizes the value of backup data as the best source for accurately identifying legally responsive data:

"Ideally, the contents of a backup system would be entirely cumulative of the active online data on the servers, workstations and laptops that make up a network. But because businesses entrust the power to alter and destroy data to every computer user - including those motivated to make evidence disappear - and because companies configure systems to purge electronically stored information as part of records retention programs, backup tapes may prove to be the only source of evidence beyond the reach of those who've failed to preserve evidence and who have an incentive to destroy or fabricate it."

Ball also recognizes that when the price of ediscovery is high, backup tapes can be used to cover the truth rather than reveal it:

"Backup tapes can also be fodder for pointless fishing expeditions mounted without regard for the cost and burden of turning to backup media, or targeted prematurely in discovery, before more accessible data sources have been exhausted."

It's a compelling piece, a deep dive into everything a lawyer should know about backup. I recommend you read it all.

I'd like to think that the one fundamental flaw with his update is that it doesn't account for recent market changes, changes that my company has helped accelerate, that have dramatically lowered the price of backup tape based discovery. But the truth is, even if the cost to process data on backup tapes is equal to the cost to process data on the network, there are other factors that can lend credence to backup tape burden arguments:

If your backup tape catalogue isn't up to date, or if your search terms are broadly defined, it may be hard to find which backup tapes contain the responsive data.

It's likely that your backup tapes are stored off site, and there is cost and effort in bringing them back.

Indexing backup tapes is a more arcane process than indexing network data, so you have to search for the right experts to do that.

Backup tapes are far more redundant that network data, so the amount of source data needing processing to arrive at the same amount of responsive data can be far greater than network data.

> "... when the price of ediscovery is high, backup tapes can be used to cover the truth rather than reveal it."

Let me summarize: backup tapes are a pain in the neck. Eliminate the processing cost disadvantage, and the burden of the handling the media still remains. Ball agrees:

"But, as theory and practice are rarely on speaking terms, companies may keep backup tapes long past (sometimes years past) their usefulness for disaster recovery and often beyond the IT department's ability to access tapes created with obsolete software or hardware. These legacy tapes are business records—sometimes the last surviving copy—but are afforded little in the way of records management. Even businesses that overwrite tapes every two weeks replace their tape sets from time to time as faster, bigger options hit the market. The old tapes are frequently set aside and forgotten in off-site storage or a box in the corner of the computer room."

So what's the solution? Ignore the truth...that backup data is more accurate, more complete, and completely unspoiled when compared to network data...and continue arguing burden? That's not working anymore. More and more, courts are recognising the value of backup data and the plunging cost of processing it, and are ordering that backup data be discoverable.

The solution is to take the backup tape out of backup data. Preserve backup data in an on-disk, compact and easy to search archival format, and the cost/value equation tips dramatically in favour of backup vs. network data.

As Ball notes in the quote above, after about 30 days, backup data loses its value for disaster recovery and becomes archival in nature. It's possible to avoid the burden of backup tape completely by backing up to disk, and by migrating that data to an archival format at the end of the disaster recovery window.

Products that enable that kind of migration easily pay for themselves, both in operational saving, as well as the near total elimination of eDiscovery costs. The past becomes immediately searchable. Early case assessment is available proactively. Simply search, cull, and review. No need for outside eDiscovery consultants, no network searches, no backup tapes.

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Blockchain solution for financial records

Mizuho Financial Group, one of the largest financial institutions in the world, and Cognizant, a provider of information technology, consulting, and business process outsourcing services, have announced a strategic agreement to develop a blockchain solution for secure record-keeping of documents among Mizuho Financial Group companies around the world.

This agreement marks the beginning of a strategic program at Mizuho to leverage blockchain technology for building new work processes. Initially developed for the Bitcoin currency and payment network, blockchain technology utilises a system of distributed ledgers, i.e. a list of transactions that is shared among a number of computers, rather than stored on a central server

Cognizant aims to design and develop a blockchain solution for Mizuho's customers, counterparties, and group companies to exchange and sign sensitive documents in a secure and transparent manner, resulting in faster, more efficient processing and multi-party verification. This engagement will initially focus on New York and Tokyo, where most Mizuho group companies are based. There are Mizuho branches in Sydney, Hong Kong and Singapore.

"Blockchain technology is a game-changer for the financial services industry," said Prasad Chintamaneni, President, Banking and Financial Services, Cognizant. "We continue to invest in our blockchain capabilities and are going beyond cryptocurrencies into newer areas such as smart contracts and P2P transactions. This agreement will pave the way for increased adoption of Blockchain technology at Mizuho Financial Group to minimise counterparty risks, speed up settlements, improve contractual performance, and enhance regulatory reporting."

Dropbox goes to Infinity

Dropbox is developing a new way for its users to access every file even without sufficient storage on their local PC or device, dubbed Project Infinite.

It works by making all non-synced files available as placeholders on local devices.

"While teams can store terabyte upon terabyte in the cloud, most individuals' laptops can only store a small fraction of that. Getting secure access to all the team's data usually means jumping over to a web browser, a clunky user experience at best.

"Project Infinite will enable users to seamlessly and securely access all their Dropbox files from the desktop, regardless of how much space they have available on their hard drives. Everything in the company's Dropbox that you're given access to, whether it's stored locally or in the cloud, will show up in Dropbox on your desktop. If it's synced locally, you'll see the familiar green checkmark, while everything else will have a new cloud icon.

"Every file you've been given access to - even ones that aren't stored locally - will appear in Windows File Explorer and Mac OS X Finder. You can quickly drill down through folders to find what you need, without the lag of a network drive or the inconvenience of a web app. Plus, you can view key info like file size, and creation and modification dates through your desktop file system, no downloading required.

Dropbox has announced the feature only for Windows 7 and newer, and Mac OS X.

The company has also announced a new File Properties API that will allow people to apply custom metadata to files stored in Dropbox for use with third party tools.

Risk & Compliance driving Information Management

The number of large organizations citing risk and compliance as the largest driver for Information Management (IM) has risen hugely in the past year, from 38 percent to 59 percent, according to new AIIM research launched recently. Nearly half (44 percent) of mid-sized organisations also cite this as the biggest driver, although smaller organizations say cost savings and productivity improvements are more significant drivers for IM.

The new report, Information Management: State of the Industry 2016, revealed a lack of alignment between IM / Enterprise Content Management (ECM) systems and Information Governance. Less than one in five organisations align their IM/ECM system strategies with agreed IG policies, while 15 percent have IG policies but they do not drive decisions. Twenty-nine percent have no IG policies whatsoever.

"Organisations are rightly concerned about corporate risk but are not aligning their systems so that they can comply," said Bob Larrivee, chief analyst, AIIM. "Many existing systems are not fit for purpose in the social, mobile and cloud age, but before embarking on upgrades and replacements, organisations need to address the lack of information governance policy as a priority – this has to be the first step in minimising risk."

Despite the growing worry over risk, half of the organisations surveyed by AIIM admitted they would struggle to defend deletions in court, particularly with cloud file-shares and business social, but also SharePoint and email too. Even where organizations have IG policies, half are not auditing compliance and 15 percent admit they are mostly ignored.

Content overload threatens around one-quarter (24 percent) of respondents who have no mechanism to limit stored content volumes, and while 47 percent have an IG policy that defines retention periods, more than half (51 percent) rely on manual deletion versus 25 percent that have automated deletion. Seven percent are using analytics tools for data clean up.

"The findings reveal that the Information Management industry is in a state of flux and many organisations are adapting a 'bury your head in the sand' strategy," continued Larrivee.

"Organisations know that they need to manage their content and information much better than they are, and are also aware of their shortcomings should they ever be required to go to court. Yet they are still not doing enough to address this, and one feels that it may take one huge compliance case to shake organisations into action."

Other key findings in the AIIM report include:

Eighty-seven percent are concerned about cloud chaos and 75 percent agree that email management is still the 'elephant in the room' with Information Management.

• Sixty-three percent of organizations use SharePoint as a main, secondary or legacy ECM/DM/RM system, including 27 percent using the online version.

• Only 22 percent have mobile access to ECM/RM content. Twenty-one percent have mobile capture and 20 percent have mobile content creation and commenting.

• Seventy-nine percent feel that they still have plenty of scope for extending and enhancing their ECM/BPM/RM systems.

The research for Information Management: State of the Industry 2016 was underwritten in part by Iron Mountain, Kofax, Nitro, OpenText, Onbase, Precision Content and Systemware. The survey was taken using a web-based tool by 266 individual members of the AIIM community between January 28, 2016, and February 21, 2016.

Is PCM a forgotten component of ECM?

By Reynold Leming

By PCM I mean Physical Content Management - registering, managing, tracking and tracing "stuff" that isn't digital.

Definitions of Enterprise Content Management bring together an array of components, including imaging, document management, collaboration/social computing, records management, business process management/workflow, e-forms, digital asset management, web content management, archiving, mobility and content analytics. I think that shoehorning the management of files, boxes, physical artefacts and evidence into other areas of functionality - for example by adding markers in EDRM systems to assign retention policies to stuff - isn't enough. Nor is relying on the data held within the system of a storage company as this only comes into being once something has been archived.

I still come across many environments where paper files are in day-to-day use, including for example law firms and legal departments, medical records, scientific and product development projects, human resources, contract management, etc. While documentation can of course be digitised, there are processes where the originals are valuable to support the active process and of course there are physical items that could be associated with a process - such as samples, prototypes, equipment, forensic evidence - that cannot be digitised. Recent work on a couple of client projects has illustrated to me the value of a dedicated PCM solution, with specific functionality that has evolved and matured over time:

• Registering a file from the moment of its creation, including specific capabilities to manage related volumes;

• Tailored metadata for physical objects to describe them and record histories of related actions, e.g. file closure procedures;

• Leveraging barcodes/RFID to track and trace physical items within the client's office(s), when moved externally to third parties engaged in a business process or when archived off-site,

• Maintaining a corporate inventory of active and archive physical holdings, including file and box relationships, integrated with the warehouse systems of off-site storage companies to provide for seamless order/picking management of retrievals, deposits, scan on demand, etc.;

• Applying security policies to meet the specific requirements of user interaction with files, boxes and objects during various phases of their lifecycle;

• Assigning retention policies and recording disposal approvals and activities;

• Integral label design capabilities; and

• "Out of the box" integrations with the readers and printers of leading manufacturers.

A PCM solution can also, for relevant business processes, provide an integrated front-end for "hybrid" paper file and electronic record management, managing metadata, security permissions and retention policies holistically for both physical records and their electronic counterparts. In summary, if an organisation has a large volume of physical files and other stuff supporting its business processes, a dedicated PCM solution could be beneficial. This is a shrinking market in terms of vendors, but I am glad that there are some still out there providing the dedicated functionality still required within certain business environments.

Reynold Leming is an independent consultant, specialising in Information Governance and Records Management, and a Director of the UK Information and Records Management Society.

Do your Digital Records have an Expiry Date?

By Jon Tilbury

Hmmm … how long has that carton of milk been in the fridge? Take it out and give it a sniff, then check the expiration date. Whew, still good for tomorrow's coffee. Unfortunately, knowing if your digital records will still be usable in the future isn't quite so easy.

As companies think about their digital information and preserving both critical business records and unique company heritage, some data specialists are considering how they will store, protect and read digital files 100 years from now.

Yet, we're finding that the "freshness" date on digital content may be closer to 10 years than 100. All of this prompts growing in interest in the topic of data preservation. But many IT leaders want more information on what data preservation is all about.

Will your critical corporate information be useable 10 years from Now? Think about the changes we have seen in technology over just the last 20 years – some of us remember floppy disks, Smart Drives and CD-ROMs, right? More importantly, what about Lotus 1-2-3, WordStar, PageMaker, and early versions of Word and Excel? These and many other formats are now unreadable, yet critical corporate information may be saved in these formats.

It's because of this rapid evolution that digital preservation technology is moving from niche to mainstream. Digital preservation has been recognized for a long time as an essential service by memory and cultural institutions such as museums and archives such as Yale University, the UK National Archives, and the Museum of Modern Art.

However, digital preservation is now moving up the corporate agenda as senior executive stakeholders realise that storage on its own is not enough. As more "born digital" content is produced every day, requirements get more complex, and the need for organisation-wide digital preservation strategies becomes greater. This is why corporations such as the Associated Press, HSBC, and Lloyd's Banking Group have joined the fray.

Vint Cerf (one of the fathers of the Internet and now a Google VP) has recognized this risk, and has warned us about a "Digital Dark Age" whereby all the records of the 21st century could be lost forever as hardware and software becomes obsolete, and digital files become unreadable. As Cerf commented, "What can happen over time is that even if we accumulate vast archives of digital content, we may not actually know what it is."

The new "Tipping Point" for content

Due to file format and software obsolescence issues, along with the pace of technology refresh cycles, the consensus is that the "tipping-point" for accessing digital data is not 100 years after it is stored, but more realistically, around 10 years. So, if you have digital files and records being created today that have a 10 year+ retention time or are indeed already 10+ years old, you run the risk of not being able to read or use these when they are required. Ten years is a more realistic time-frame to consider when planning protection for critical and unique digital information assets. Building on reliable storage, digital preservation adds tools to accurately identify which formats are being used, pinpoint those at risk, and reliably recycle these into newer formats that can be read.

Over the past 18 months, we've seen a growing number of large corporations begin to wake up to this as they have realised that digital preservation isn't just about storing digital assets, but also about being able to find and use them as well as to prove their trustworthiness. This means that the storage landscape is changing, as many organisations add digital preservation technology to their content management and information archiving systems. In addition, digital preservation is being used to accelerate legacy application decommissioning. This also helps free up vital IT budget by ensuring the records that those applications contained are safely stored and accessible into the future.

Although many companies would like to think about managing their corporate information assets as a "set it and forget it" process, in reality, you need to take an active role. For many organizations, a proactive approach to safeguarding critical long-term digital records using digital preservation technology is fast becoming a critical part of the overall information governance lifecycle.

Jon Tilbury is the CEO of Preservica, a leader in digital preservation technology, consulting and research.

Report shines a light on dark data

A global study of information management conducted for Veritas Technologies has found that 52% of all information currently stored and processed by organisations around the world is considered 'dark' data, whose value is unknown.

Analysing data from some 2,550 respondents across 22 countries, including 100 from Australia, research firm Vanson Bourne concluded another 33% of data is considered redundant, obsolete, or trivial (ROT) and is known to be useless. It found that if left untamed, this dark and ROT business data will unnecessarily cost organisations around the world a cumulative A$4.6 trillion to manage by the year 2020.

Organisations are creating and storing data at an ever-increasing rate due to a 'data hoarding' culture and an indifferent attitude to retention policy. This data could be anything from valuable business information to non-compliant information. The report reveals that IT leaders consider just 15% of all stored data to be classified as business critical information. For the average mid-sized organisation holding 1000TB of data, the cost to store their non-critical information is estimated at more than $A900,000 annually.

Chris Lin, Veritas' Senior Vice President & APJ Sales Leader, said, "There is an immediate need for organisations in Australia to take control of their 'Databerg' and identify business value and risk. Today, only 13% of Australian organisations do so. Data needs to be classified based on the organisation's data retention policy and there is a growing demand for an effective information journey for dark data to be implemented."

The survey found that the average Australian organisation has 10% of its data tagged as Business Critical, or clean data, which has a recognizable business value, as compared to a global average of 15%. This is one of the lowest rates globally.

At 28%, ROT data is 5% less than the global average of 33% but Dark Data is 10% worse. At 62%, Australia has the third highest rate of Dark Data globally.

As more Australian organizations migrate to the cloud, the number of employees using corporate networks for their personal use is growing, leading to more type of files such as personal legal and ID documents (70%), photos (69%) or non-approved software (47%) being stored at work. Due to this growth, 49% of respondents in Australia stated IT professionals should be worried about employees being careless with how they handle company data.

Common email management mistakes

By Paul Bamrah

US computer engineer Ray Tomlinson sent the first email back in 1971. The World Wide Web wasn't invented until 18 years later, when CERN computer scientist Tim Berners-Lee came up with a solution sharing information on different computers. While email began as a simple communication tool, it's had almost 45 years to evolve.

Today it is also widely used as an information and storage platform. Instead of deleting an email after it is read, for example, most people archive or file it away for later reference.

This can be a good thing. Email trails keep people accountable, and information is documented that would otherwise be lost.

The downside is that it can also lead to information overload. If your inbox has over 100 unread emails, you know exactly what I'm talking about. So here are three of the most common corporate email culprits:

Document collaboration

How many of these emails are sitting in your inbox right now? You know the type, the email sent to all marketing and IT staff requesting feedback on the new public website, or the draft tender response forwarded to the entire sales team for review.

Each person sends their feedback in a separate email, or as tracked changes in an attached document. The result? Multiple emails that reference the same document, but with no easy way to track or manage feedback

Internal process information and help-desk requests

These emails relate to how certain tasks need to be performed. If you've ever emailed your boss to find out how to submit a document for approval, or contacted the office manager about sending a leave application, you've sent an internal process information email. Helpdesk requests are similar. How do I send a package to the Sydney office? What do I need to do to connect remotely to the CRM? Internal process information and helpdesk request emails are usually easy to answer, but answering the same questions repeatedly can be time consuming.

Knowledge sharing

"Hi finance department, I would like to salary package my car. Can someone please tell me where to find the paperwork?" An email to an entire department is one way to find the information you need. Unfortunately, it's also likely to irritate many recipients.

While you can rely on email as your sole knowledge management platform, it isn't always a good idea. The disadvantages include:

Lost time - Even if your inbox is empty on a Monday morning, it doesn't take much to get swamped with hundreds of emails by mid-week. This is particularly true if you receive multiple document collaboration emails, and recipients hit "reply all" instead of responding directly to the sender. Reading, replying and actioning these emails can take hours.

Difficult to search - Emails are only a valuable information source for those included on the original email trail. As people leave and join your organisation, details about client projects and processes are lost. This means the same questions are re-asked and re-answered time and time again.

Information silos - When your team conducts all of its conversations by email, it's difficult for other teams or departments to benefit from your knowledge. They can't contribute to conversations, and they can't see what you're working on. This lack of transparency can stifle innovation and prevent people from working collaboratively.

To address the issues outlined above, organisations need a more diverse information ecosystem. Email is still a valuable platform, but it should be supplemented with collaboration tools including:

Instant messaging - With Skype for Business, you can text, call or video message team members in real-time. A series of back-and-forth emails can be reduced to a five-minute conversation or instant message chat.

Skype for Business also integrates with calendars, which makes it easy to identify when others are busy. You can use time more efficiently, rather than waiting for an email response from someone who is in meetings all afternoon.

SharePoint or other knowledge-sharing platforms - We love SharePoint because it provides a range of collaborative features like document management, company-specific wikis, blogs and business process automation.

Documents and information are stored in a fully searchable platform that allows users to contribute information and discover relevant content more efficiently.

This means teams can collaborate on documents without sending dozens of emails. It also means organisations can upload information about how to submit leave requests, send a package to Sydney or get document approval, to avoid employees answering the same questions over and over again.

Paul Bamrah is a senior consultant at Professional Advantage, specialising in SharePoint.

What's happened to the VERS standard?

Adherence to the influential Victorian Electronic Records Strategy (VERS) standard is an important yardstick for assessing Electronic Document and Records Systems (EDRMS) beyond the borders of the southern state. The Public Record Office Victoria (PROV) has just finished its first major revision of the VERS standard since 2002, acknowledging government's need for increased flexibility in where digital records are kept and how they are represented.

By Andrew Waugh, Public Records Office Victoria

The Public Record Office Victoria (PROV) has just finished revising the standard that underpins the Victorian Electronic Records Strategy (VERS). The new standard:

 • allows far greater flexibility in representing digital records,

 • is more efficient when including large binary objects (such as videos and databases)

 • provides more format options to reduce the costs of format conversion, and

 • is much shorter and easier to understand.

From a user/implementers point of view these are significant improvements as they lower costs, increase usability and provide more flexibility.

We have released the new standard now so that vendors and users can become familiar with it. However it is very important to note that PROV will not accept records in the new VERS standard until the new digital archive is commissioned (around the middle of 2018). Agencies can use the new long term preservation formats immediately as these have been added to the old VERS standard. To protect agency and vendor investment in the existing VERS standard, PROV has committed to continue accepting records in the old VERS format.

The Public Record Office Victoria (PROV) developed the Victorian Electronic Records Strategy (VERS) in 1998 to manage the preservation of digital records in government and in the archives. As part of this work a 'Standard for the Management of Electronic Records' (PROS 99/007), also known as the VERS standard, was developed. The standard was revised in 2002 as part of the process of building PROV's digital archive.

Why renew the VERS standard?

In digital terms, 1998, and even 2002, is a long time ago. Digital preservation knowledge and technology has moved on a long way in that time. But more importantly, experience with implementing VERS and transferring records in the VERS format showed that we could improve the standard, and we could improve it a lot.

The problems we identified were:

 • The standard was too tightly linked to EDRM systems of the 1980/90s . Records were structured into files organised in a classification scheme. The record-keeping functionality required was modelled on EDRM systems. The metadata was focussed on record-keeping metadata. But digital records are held in many systems within government, many of which bear little resemblance to a traditional EDRMS. Even modern EDRMS are more flexible than the simple models supported by VERS.

 • Inefficient storage of large binary records (such as digitised paper records, databases, videos and geospatial files).

 • Migration of record content to an accepted long term preservation formats was often expensive. The expense was particularly hard to justify for formats that were unlikely to cause preservation problems.

 • The size and complexity of the standard made it very difficult for people to understand and implement.

 • Poor use of metadata. Much of the metadata provided by the standard was never used. It was also difficult to add non-record metadata (e.g. to support graphical information system data and digitisation).

In renewing the standard we addressed each of these problems.

The original preservation VERS vision, however, has not changed. Digital preservation in VERS continues to be based on:

 •Migration of record content to a long term preservation format.

 •Capture of appropriate metadata that describes the record and allows access and reuse.

 •Encapsulation of the record content and metadata into a

single object to allow efficient management of the record over time

•Securing the record by means of digital signatures to detect corruption of the content or metadata.

Flexibility in representing records

A key change in the renewed standard is the increased flexibility in representing records. This has two aspects:

- organising the information in a record; and
- metadata associated with the record.

The renewed standard removes the restriction that a record must consist of a simple fixed tree of file, record and document. Instead, records can be represented by an arbitrary tree – which can be as deep or as shallow as necessary. This allows great flexibility. For example, a single VERS encapsulated object could contain a single document, an unstructured series of documents, a single record, a file with all the contained records, a branch of a classification scheme with all the files and records, a complete record system or a SIARD capture, screen shots, and database documentation.

This revised standard allows a records manager to use any convenient elements in the structure.

The fixed set of metadata used in the original standard has also been discarded. Instead, multiple packages of metadata can be associated with objects in the tree. Each package represents a collection of metadata, typically the metadata from one metadata standard. Examples of packages could be record metadata, graphical information system metadata, and digitisation metadata. It is up to the records manager to decide what packages of metadata make sense to include. The only restriction in the standard is that the metadata must be expressed as XML, and, ideally, as RDF (the W3C standard for representing metadata).

To ensure that every record has at least some standardised information associated with it, the new standard has one metadata requirement. Each VERS record must contain one of two standard metadata packages: AGLS or AS/NZS 5478.

AGLS is a simple and widely used Australian metadata standard that is normally used to describe web resources. We have added an element to AGLS that describes disposal of the record. AGLS should be used where only a simple description of the record is available.

AS/NZS 5478 is a new Australian/New Zealand standard for record-keeping metadata. It is based on, and almost identical to, the existing NAA and Archives New Zealand record-keeping metadata standards. AS/NZS 5478 should be used when an extended record description is available, such as when the description is sourced from an EDRMS.

A major goal of the renewal was to improve the handling of large binary objects (e.g. video and databases). In the previous standard, all binary record content had to be encoded using Base64 before being included within the XML document representing the record. This increased the size of the record content by a third – making already large objects even larger.

To avoid this, we abandoned the use of a single XML document to encapsulate the record. Instead, the encapsulated object is a ZIP file containing the record content and XML files representing the record structure, metadata and digital signatures.

ZIP was chosen as the encapsulation format as it will handle extremely large file sizes, supports compression, and is extremely widely deployed. The specific encapsulation mechanism used is not a critical decision as it is very easy to re-encapsulate the records if ever that becomes necessary.

Long term preservation formats

A key plank of the VERS strategy is that record content will only be accepted in an approved long term preservation format. The formats are chosen because they are not expected to become obsolete for a very long time. The number of formats accepted is limited to reduce the long term cost of maintaining access to the formats. Record content that is not in one of these approved formats must be migrated.

The list of approved long term preservation formats has been extended in the renewed standard. Some of the new formats deal with types of information that had not previously been covered, such as web archives.

However, some of the new formats were added to reduce the cost to agencies in preparing records. Migrating to a long term preservation format is challenging. Properly done, migration is expensive as it requires obtaining migration software, pretesting for conversion accuracy, running the migration, and finally post migration auditing of the converted files. It is important to minimise migration, particularly migration from formats that are unlikely to have long term preservation issues.

Ubiquitous formats that dominate their market segment are unlikely to cause preservation issues for the foreseeable future. Examples of such formats are the core Microsoft Office formats (Word, Excel, and Powerpoint), and MP3 sound files. Products in these market segments must support these ubiquitous formats to be viable – the body of legacy content is simply too great for anyone to use a product that does not support them. It is consequently extremely unlikely that these formats will become obsolete within the foreseeable future.

And even if the formats do become obsolete, the body of legacy content means that format converters will be a viable product. For these reasons, PROV had added several such ubiquitous formats to the acceptable long term preservation format list, including the core Microsoft Office formats Word, Excel and Powerpoint. Agencies and vendors using the previous version of the VERS standard can use this expanded set of long term formats as we have revised PROS 99/007 Specification 4 (Long Term Preservation Formats).

Simplification

We worked hard to reduce the length and complexity of the previous VERS standard. This was challenging because we also wanted to make the standard more powerful and flexible.

Significant simplifications were made by:

- cutting out features and metadata that were rarely used
- referring to external specifications and standards (such as ZIP and the two metadata standards)
- describing the process of constructing a VEO, rather than its specification.

The size of the standard, specifications, and supporting advices has been reduced from 401 pages to 64.

Victorian agencies can use the renewed standard for internal archival purposes immediately. However, PROV will not be capable of accepting records constructed by the new standard until 2018 when our digital archive is redeveloped. The renewed standard was released early to assist vendors and agencies to understand it. Agencies can use the additional long term preservation formats immediately as we have updated the previous version of the standard to include them.

Agencies should continue to use the previous VERS standard for transfers to PROV until the new digital archive is commissioned.

Agencies and vendors have already made significant investment in VERS. For this reason, PROV will continue to accept records from systems that have been certified as compliant with the previous version of VERS.

The renewed VERS standard has been released and is available from the PROV website (*http://prov.vic.gov.au/government/vers/implementing-vers/standard-2*). The web page also contains tools that will create and validate the new VEOs. These tools are written in Java, and are can be used by vendors and agencies under the CC-BY license.

The Knowledge Manager's Handbook

This extract from The Knowledge Manager's Handbook by Nick Milton and Patrick Lambe is ©2016 and reproduced with permission from Kogan Page Ltd.

What is knowledge management?

There's a saying that if you put five knowledge managers in a room, they will come up with seven definitions of what KM is. This is apocryphal, but it reflects reality. There is a lot of debate and confusion about the nature of KM, none of which is helpful to you as you attempt to implement it within your organisation. Hence, your first step, together with your line manager and the steering group for the KM implementation program, should be to come to a common definition and understanding of what 'knowledge management' means in your organisational context.

Our view is that KM is the latest in a range of management disciplines, and is the discipline with knowledge as its focus. 'Knowledge management' (or KM) represents a way of managing work, paying due attention to the value and effect of an intangible asset, namely, knowledge.

Knowledge is one organisational asset among many. For centuries, organisations have managed their visible assets, such as money, people, property and equipment. More recently organisations have been addressing their intangible assets, such as their reputation, their IP, their customer base, the diversity and talent of their staff, their ability to work safely and sustainably, and how they manage their knowledge.

Knowledge management is therefore just the latest management discipline dealing with intangibles. Risk management, quality management, customer relationship management, brand management, reputation management, talent management and safety management all also deal with intangibles and the implementation programs for these analogous disciplines can all provide a model for implementing KM. Look at the closest discipline that is already embedded in your organisation, and ask, 'How did we implement this? How are we sustaining this? What lessons are there for the KM program?'

> Tip - Find the people who were responsible for implementing the latest new management framework in your organization (e.g. risk management, quality management, diversity management, or safety management) and conduct a learning session with them. Probe for the things they did that were successful, and ask for their advice. Find out the things they tried that did not work, work out why they did not work, and discuss how you might avoid these pitfalls yourself. Focus on what was needed to fully embed the framework.

In the industrial sector, probably the closest analogue disciplines for KM are safety management and risk management. Neither of these disciplines are about the management of tangibles – neither safety nor risk are things you can pick up, weigh and put in your pocket. They are about how you manage your organisation so that safety and risk are given priority, and so that people's safety behaviours and risk behaviours change. This is exactly what we are looking for from KM. So if your organisation has, in the past, successfully introduced risk management and safety management, then you should be greatly encouraged, as KM can then follow a proven implementation path.

KM can also be placed within the same governance framework as the other disciplines. You can position it within the same structures and expectations, and you can review it using the same review processes; the stage reviews of the project management framework, for example. In other words, you can (and should) embed KM within 'normal work'. How are the other disciplines sustained? Do they have a company policy? Support staff? Roles embedded in the business? KM will probably need something similar. This does not mean that you reproduce the frameworks from other disciplines, but it means you can learn from them. Any analogue that has successfully been embedded is a learning opportunity for your KM implementation.

Knowledge management element	Percentage of respondents that judged this element to be the highest priority
Connecting people through communities and networks	22.2%
Learning from experience	17%
Improved access to documents (including search and portals)	15.3%
Knowledge retention	13.5%
Creation and provision of best practices	9.4%
Innovation	8.7%
Improved management of documents	4.8%
Training and development	3.1%
Accessing external knowledge and intelligence	2.4%
Knowledge-based engineering	2.4%
Big data	1%

Table 1. Survey results showing the priority given to different elements of KM. Source: Knoco Ltd

The six main components of KM

Looking at KM as 'intangible asset management with knowledge as a focus' may help us align it with other management disciplines, but does not particularly help us understand what KM entails, and what it could look like in your organization.

A 2014 survey of knowledge managers from around the world explored this issue by asking the respondents to prioritize, from a list of 11 potential KM approaches, the ones that they focused on as part of their KM implementation (Knoco, 2014). Table 1 shows which elements were given highest priority.

The big percentage jump between the 6th and 7th items suggests that the top six are perhaps the core components to KM. These six include:

- connecting people;
- learning from experience;
- improved access to documents;
- retention of knowledge;
- creation of best practices;
- innovation.

Different industries and markets may favour different components, and priorities will shift depending on circumstance and need, but in combination they seem to pretty much map out the mainstream field of KM as it is currently understood.

Translating KM into business terms

All of the six KM components above are expressed in KM terms. When we communicate to the business about KM, we need to avoid using KM terminology and instead talk about business issues. We need to identify the business problems or issues that the KM solutions will address, and talk about KM in business language.

We can think of an organisation as a large-scale entity that needs to solve three broad types of business

> Tip - Use Table 1 as a discussion point with your manager. Decide how you will, in your organisation, prioritise the six core components of KM. Avoid the temptation to ignore any of these six completely, but they will not all be of equal priority. When you have to rank them, you will find yourself discussing important distinctions for your business.

problem in order to function effectively. Each of these problem types generates specific business problems that KM solutions can address.

Coordination

The different parts of the organization need to be able to coordinate their activities, maintain shared objectives, avoid mistakes in hand-offs, and keep track of how they are making progress on common tasks. Business issues here include:

• Collaboration – bringing together knowledge from different parts of the business to develop better ways of working, using the knowledge you already have, but which is scattered and siloed. Here you use KM approaches from the 'connecting people' component, such as communities of practice.

• Hand-offs and situation awareness – ensuring effective communication of knowledge between teams and workgroups. Here you can use taskflows, shared calendars, shared knowledge bases and standard templates, as well as the processes and policies that guide their use.

• Document and information management – making sure that important shared documents and other information content are made easily accessible to those who need them, regardless of which part of the organisation produces them. Here you would use knowledge asset audits to identify high-priority information for sharing, and taxonomies and information architecture to ensure they are easily findable. You may also need to align your knowledge sharing and information security policies to ensure that this information is actually accessible to those who need it.

Memory

The organization needs to be able to retain key capabilities such as skills, stakeholder/partner relationships, experience and expertise as people come and go, and to keep track of its plans, decisions, activities and commitments. Business issues here include:

Record-keeping – ensuring that critical decisions, plans and activities are documented and made easily accessible to anyone who needs to refer to them. Here you use records management approaches, alongside the use of standard templates for capturing key information in a predictable and easy-to-use format.

Maintaining capabilities over time – addressing the risk of loss of critical knowledge and capability as people retire, and ensuring that this knowledge is retained, made available to, and used by the remaining and replacing workforce. Here you use approaches from the knowledge retention component.

Learning

The organization needs to be able to internalize learning from changes in its external environment and adapt its practices accordingly. Business issues here include:

Speeding up the learning curve – making sure your employees get up to speed quickly in new jobs or when dealing with new areas of work (new projects, new markets, new products, new geographies). This is of particular importance for organisations seeking to grow, diversify or explore new frontiers, or organisations with rapid turnover of staff. This can use a combination of

> Tip - It may be too soon to map out the knowledge supply chain in full as we haven't yet covered the knowledge assets audit, but try this simple exercise. Choose a key knowledge user in a critical role, in an activity you are familiar with. Map out the knowledge they need to do their job, their knowledge sources, and the knowledge assets they produce. Determine who the key knowledge users for those assets will be. Note that sometimes the supply chain is a loop – the same group of people may create the knowledge, and use it.

many of the KM approaches above.

Continuous improvement – involves ensuring your projects and business activities do not repeat the mistakes of the past. Learning is built into the organisation's memory so that it can build on its solutions and successes. This is the whole area of project-based learning, which KM will address through processes from the learning from experience component.

Standardisation – comparing and learning from the disparate practices across the organisation, to find the ones that work best in given circumstances. Here you use approaches from the 'best practices' component. This may also include arming your customer-facing staff with the knowledge they need to close the deal, or delight the customer, or providing self-help material for your users and customers.

Business intelligence and decision support – systematically collecting, analysing and disseminating information about your organisation's external and internal environment, to support decision-making, strategies and plans. Here, dashboards, data visualisation and analytical tools may help.

Development of breakthrough products and services – is a business problem which requires bringing together the knowledge of all relevant staff, as well as external knowledge, to build new ways of doing things, new products, and new lines of business. Here you use KM processes from the innovation component.

The supply chain analogy

A particularly useful analogy for KM is to liken it to a supply chain. We generally think of a supply chain as giving a worker the supplies they need to do their work. When they are constructing an airplane or selling tins of beans in a supermarket, the materials they need have to be sourced, assembled and supplied. For a knowledge worker, the raw material of their work is knowledge. Knowledge management can provide the supply chain by which that raw material is sourced, assembled and supplied.

The analogy of the supply chain has the benefit of thinking about KM from the point of view of the knowledge user. What knowledge do the knowledge workers in your organisation need to be able to make the right decisions and take the right actions? How can that knowledge be supplied to them both efficiently and effectively? How can it be sourced (the source often being the experience of others), how can it be packaged in support of their work, and how can it be transported to the user?

John Browne, the CEO of British Petroleum, was quoted in Prokesch (1997) as saying that 'anyone in the organisation who is not directly accountable for making a profit should be involved in creating and distributing knowledge that the company can use to make a profit'. This is a vision of the organisation as a knowledge supply chain, with the profit-makers as the users.

Dealing with common objections

There are a number of common objections to KM that you will hear as you deliver your implementation programme. It is worth

anticipating these and preparing your reply in advance. Here are the five most common, and how you might address them.

Objection 1. 'We do this already' - 'We already have a training programme', 'all of this is covered by staff induction', 'we have a library that takes care of this', or 'we have SharePoint'. These are the objections of someone who wasn't listening when you explained that KM is not a single tool. You need to explain again how KM is a framework of people, processes, technology and governance. It's not training (because KM deals with organizational learning, not individual learning), it's not staff induction (because learning is for all staff, not just new staff), it's not just a library (because KM is as much about conversation as content, and as much about tacit knowledge as it is about explicit knowledge), and it certainly isn't just SharePoint.

Objection 2. 'We tried knowledge management. It didn't work' - This is a common objection in a company that has already unsuccessfully attempted KM, and it's a valid objection. Why try again? What's different this time? You need to firstly understand why it failed last time (usually this will be due to one of the KM pitfalls listed in Chapter 3), and then you need to explain how you have learned from the failure, as well as from successful implementations in other companies, and demonstrate how your approach will be different this time.

Objection 3. 'It won't work here; we are different' - 'It may work in western engineering companies, but we are different. We are lawyers/non-profit/Venezuelan, etc.' Firstly, it is very useful if you have a few case studies of KM working in a similar context, so you can say, 'it works at organization X, and they are lawyers/Venezuelans/not-for-profit'. However, at its heart, KM is about how people work effectively while interacting with and learning from other people, and all organizations are made up of people who are supposed to be working effectively. Unless they can argue that their people are really not like other people, their argument doesn't really stand.

Objection 4. 'Our people are too busy for this. It will take too much time' - Too busy to learn, but not too busy to reinvent wheels, rework solutions, and revisit old problems? Going back to your business case and ROI analysis for KM, you need to explain that KM is a time saver that can cut project times by up to X per cent, and that it's the efficient person's way to work. As one of my colleagues said, 'You work surrounded by the knowledge of others, why on earth would you not use it? It will save money and time, it will make your life easier, and you will do a better job'. Basically, if people are too busy, there is a strong signal that KM is needed.

Objection 5. 'It's simple – let's just do it' - this isn't really an objection; it's more of a misunderstanding, but it can short circuit the careful preparation, planning and resourcing required for effective implementation. Certainly KM is simple, but it's not easy. Getting people to change the way they prioritize things, and to move from seeing knowledge as a personal property to seeing it as collective property requires a significant culture shift, and culture change is never easy. So you need to recognize the enthusiasm of this person, and then explain why you can't just 'tell people' to do KM – it requires a hearts-and-minds change.

Challenge scenario 1: over-enthusiastic support

One of us worked with a client where there was a clear business focus, a well-articulated strategy, and where some early proof of concept projects had been very successful. These successes were used to build enthusiasm and support at senior leadership level. Soon they had the strong endorsement of the Chief Executive who would, at every meeting where an organizational challenge presented itself, translate it into a 'knowledge-related' challenge, and call on the KM team to pick it up. The team struggled to integrate these requests into their KM roadmap, which became progressively more complex and unwieldy.

The core elements they were working on stalled, and the calls for support to the middle management layer became increasingly tiresome and were ultimately ignored. Two years later the team found themselves being heavily criticized by the same Chief Executive for slipping behind on their roadmap, and failing to deliver what had been promised. As quickly as he had given support he withdrew it, the senior KM sponsor was moved to another position, and the team gradually fell apart.

Screening efficiently with digital workflow

BreastScreen Victoria has developed an automated data capture solution to improve its interactions with women seeking to obtain early detection of breast cancer, resulting in a major improvement to workflow.

A recent report found that breast cancer is now the most common new cancer diagnosed in Victoria, representing 29% of all new cancers for women.

BreastScreen Victoria CEO, Vicki Pridmore, says the figure is a stark reminder of the importance for women aged 50-74 to have a regular breast screen, every two years.

'We know that 1 in 9 Victorian women will be diagnosed with breast cancer in their lifetime, and today's report is an important reminder that from the age of 50, we must all make the time to book that appointment for a breast screen, every two years."

The public health program is currently on track to provide 246,000 free breast screens to women across the state this year, a number that has continued to grow over the last decade. Women are invited into the program on a two-yearly basis from the age of 50 to 74, initially by mail with notifications then able to be shifted to electronic methods should the woman indicate their preference.

The number of women in BreastScreen Victoria's program, in line with Australia's ageing population, is set to increase with the proportion of the population aged 65 and over by 2040.

Repetitive and time consuming paperwork is one obstacle to efficient screening, something that BreastScreen Victoria is tackling with data capture and automatic population of forms from enterprise applications.

This process began in 2014 with the implementation of Objectif Lune PlanetPress for output management, as a way to generate client centric communications to women including invitation, confirmation and result letters.

Within the confirmation letter, the women also receive a registration form which is now pre-populated with personalised customer data.

This has delivered a more streamlined process for women in completing the form, and also for BreastScreen Victoria in that the woman can be processed much faster when the woman attends a screening appointment.

The software also provided the option for women to receive their reminder and appointment confirmation via HTML enriched emails utilising Objectif Lune's PlanetPress Connect platform.

By reminding women to book their screening appointment electronically, BSV has seen an increase in usage of their online bookings system from 8% to 30%. Meanwhile 40% of women are now opting to receive their appointment confirmation via email realising a significant saving in paper and postage cost savings.

Solution provider Pitney Bowes has now taken the solution further with an ABBYY FlexiCapture solution to capture key field data from the client registration form. The scanned image of the form along with some key data is extracted from the form, is passed to the patient management system for permanent storage.

A second FlexiCapture workflow is used to OCR and automatically classify nearly 200 different types of paper forms. BSV is currently scanning historical client paper files as part of moving to a fully electronic workflow.

In order to efficiently scan this historical data, the software has enabled 85% of forms scanned to be automatically classified without intervention from the operator.

The remaining forms (or exceptions), are routed to operator(s) at remote site(s) to verify the classification of the document. Classification is a highly important part of the process as if a

document is miscategorised, there is a possibility that key information is lost or valuable time may be wasted by the healthcare professional trying to find required files.. This is why the automation of this process by ABBYY FlexiCapture was such an important part of the overall solution.

The forms are then stored in BSV's patient management system (Gecko) as part of the electronic client record. Once scanned, the need to retrieve the paper client file from storage each time the woman is screened is removed, thus realising a significant cost savings to BSV.

FlexiCapture saves staff time from sifting through hundreds of paper client files trying to locate the forms(s) of interest. Having this data available electronically, it can be readily accessed realising further efficiencies in the BSV workflow.

Henry Patishman, Director of Sales at ABBYY Australia, said "Healthcare professionals at BreastScreen Victoria are being saved a lot of time doing administrative work. The solution has also brought significant scalability and knowledge sharing into the organisation.

"These cost savings are redirected towards BreastScreen Victoria's key performance matrix which is screening more women as the program continues to expand. "

"This partnership has enabled BreastScreen Victoria to deliver significant change to the program in a cost effective, and timely manner," explained BreastScreen Victoria's Senior Project Manager, Greg Maudsley.

"Women in our program have embraced the option to be contacted electronically and now enjoy more personalised correspondence. This has realised a project outcome that exceeded expectations."

ABBYY adds linguistics tools

ABBYY has announced two new language-based products enabling businesses to understand and act on complex, unstructured information. Based on the company's Compreno natural-language processing (NLP) technology, ABBYY InfoExtractor SDK and ABBYY Smart Classifier enable development of next generation smart business process applications, accelerating business decisions and insights for industries, including oil and gas, insurance, healthcare, financial services and government, among others.
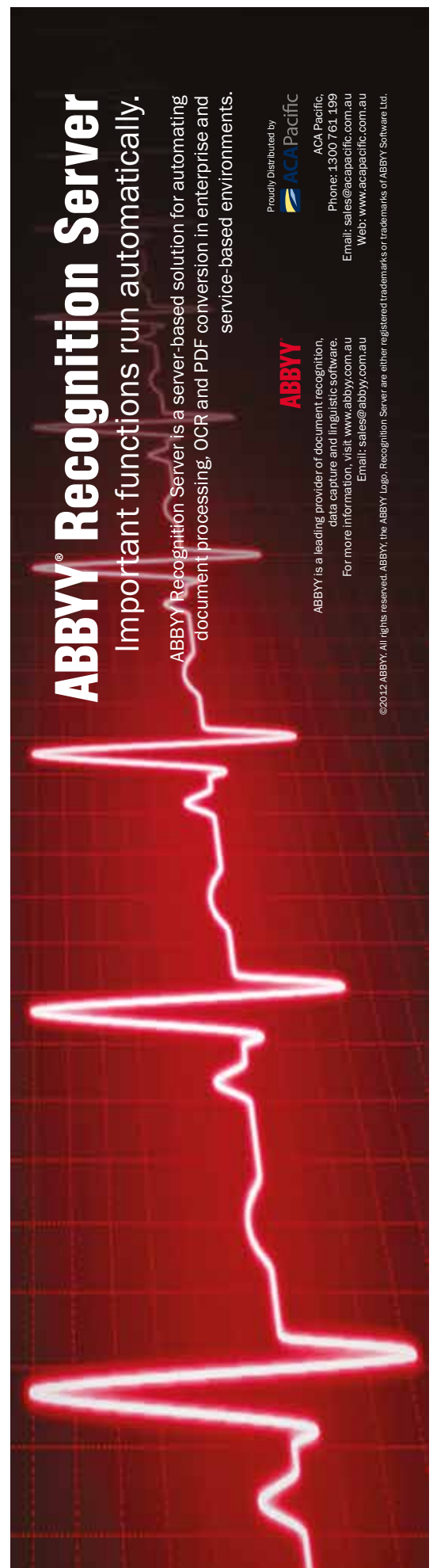
The ABBYY InfoExtractor Software Development Kit (SDK) enables enterprises as well as software developers to automatically identify and extract entities and relationships from complex text documents. It uses facts and events to reconstruct story lines in documents, providing insights that can directly impact business decisions and outcomes for professionals such as oil and gas land managers, patient care providers, or financial services risk managers.

ABBYY InfoExtractor creates operational efficiency by automating the processing of complex, business-critical documents, and providing information transparency to reduce risk and optimise case/asset management. ABBYY InfoExtractor's NLP is designed to be enhanced with domain-specific ontologies to accurately extract complicated or industry-specific terms, clauses and facts. ABBYY InfoExtractor supports a wide variety of formats including Microsoft Word and XML, PDF, Tiff, JPEG and other graphic formats enabling businesses to work within established workflows.

ABBYY Smart Classifier is an intuitive classification application module that enables enterprises and software developers to overcome implementation and usage complexities that have hindered widespread adoption of classification technology, causing it to remain more of an art form than a trusted, easy-to-deploy capability.

Smart Classifier combines robust text- and semantic-based classification algorithms, an intuitive, graphical Model Editor interface, and automatic optimization algorithms to make classification dependable for information governance, email and content management, data migration and other critical processes. The Model Editor workflow interface allows IT and line-of-business users to easily create, evaluate and refine taxonomies and classification models, and adapts to organizations' unique needs by providing the most accurate categorizations possible. With simple REST APIs and support for 39 languages, including English, ABBYY Smart Classifier delivers highly accurate classification to mitigate risk, ensure defensible retention policies and organize large repositories to enhance information retrieval in global organizations.

http://www.abbyy.com.au/

Is a File Plan and a Taxonomy the Same Thing?

By Julie Lintner

Of course a File Plan and a Taxonomy are not the same thing, but I bet that title got your attention! Although, I would bet that many folks from the document imaging industry do not really understand what a File Plan is, because most of the time Records Management is outside the bounds of what they are implementing.

I came from the Enterprise Content Management (ECM) industry and lived, ate, slept, breathed "Taxonomies" for many years. It was the cornerstone of what we did from a Consulting and Implementation standpoint. If you got the Taxonomy wrong, you were likely to pay the price of that for many years to come.

My goal of this article is not to define what they are, that has been done 100s of time in the last decade. So if they are not the same thing, what do a File Plan and Taxonomy have in common?

1. They are the cornerstone of their respective disciplines: Records Management - File Plan; Document Imaging - Taxonomy.

2. If you get them wrong, they can cost your organisation a lot of pain and lost productivity.

3. They both define important aspects of the content they control. The File Plan defines what to do with the content and when (e.g. Lifecycle) and the Taxonomy is about ensuring you can find the data quickly using the information you know about the content.

Are File Plans and Taxonomies both equally important to an organisation? I think they are both important, but I would contend that the Taxonomy is more important because is the cornerstone of how the data is structured and stored. The File Plan can be incorporated in Phase II, and it can also be changed much easier than a Taxonomy, assuming your Records Management solution supports dynamic policy changes.

Can you have a successful ECM solution without a File Plan? The answer to that is "yes" as well. But if you don't have a File Plan, you are putting your organization at risk because you aren't applying retention schedules, documenting policies and properly disposing of your obsolete or expired information, records and files. If you have implemented a ECM solution, the next logical step is to ensure you also have a Records Management solution for that same content. And part of a Records Management solution will be to create and implement a File Plan.

From a Records Management standpoint, if your content is being stored in a repository (and not a Shared Drive) you probably already have some sort of Taxonomy. The question is "is it a properly structured Taxonomy?" In summary, a File Plan and Taxonomy are very different things, but you should have both of them, and they should work in tandem with each other. Since my background is in the ECM industry, as I learn more about Records Management and Information Governance, it is shocking to me that Records Management isn't the next logical step for organizations that have already implemented a ECM solution.

Julie Lintner is a consultant with information governance and records management specialists RecordLion and an Adjunct Faculty member at St. Louis University.

When the PDF will be a thing of the past

By Rado Kotorov

Anyone working in today's business world is familiar with the Portable Document Format (PDF), and for good reason. PDFs offer a great convenience. They can be taken on the road, read on any device, emailed to other people and easily printed.

They are also cost-effective and environmentally friendly, saving print costs and paper. From a business perspective, the fixed layout also offers a certain level of security, knowing that the content is difficult to alter. That said, the rise of sophisticated BI and analytic tools is changing how organisations operate and communicate. As users demand more and more out of their analytics, the 'fixed-layout flat document' begins to appear insufficient, losing its appeal. Today's users want more than just static documents; they want to interact with the data contained within the documents. Today's users demand an Analytical Document Format.

Large organisations have to distribute documents to many internal users on a daily basis. For example, think about account management. For a global organisation it's not unusual to have 5000 or more account managers worldwide, many of whom are often on the road with limited or no internet access.

They visit clients and have to review account details. Frequently they have to scroll through static PDFs, identify facts of interest and jot down calculations on old-fashioned notepads. In some cases, custom complex Excel sheets have been built to provide the desired interactivity. But those custom applications cost millions of dollars, and they're prone to errors. An Analytical Document Format would offer businesses all of these important business functions, but without the inconveniences or costs. One may argue that many of these interactive analytic functions are available online, so what advantage would an Analytical Document Format bring? What these documents can deliver that online functions can't always promise is portability.

In fact, it's the 'P' in PDF that makes it so valuable, and that portability is a critical feature of the Analytical Document Format. It guarantees use anywhere — on a train, on an aircraft or in a park where there's no internet connection. It's unreasonable to assume that users will always be tapped into a Wi-Fi network. Today's BI is mobile, and users want access to their analytics data from any location. This gives rise to the need for an Analytical Document Format that offers portability, interactivity, layout and print capabilities.

There's no doubt that as users become more advanced, the demand for smarter documents will increase. We've already started to see the emergence of these types of collateral, and they're already saving users money, providing more fact-based decisions through the organisations, and delivering more meaningful customer experiences. By the year 2020 I predict that the concept of Analytical Document Format will be far more mainstream and the old reliable PDF will be a thing of the past.

Rado Kotorov is Chief Innovation Officer for Information Builders.

O365 tool for NZ government agencies

Information Leadership has released iWorkplace Records Manager 365, a new SharePoint 365 tool that aims to make good recordkeeping straight-forward and cost-effective for all NZ government agencies, particularly those that are smaller or more budget constrained.

The Chief Archivist's report to parliament in December 2015 on the state of government record-keeping highlighted disappointing progress by many government agencies.

Microsoft 365, a cloud-based solution, is being adopted by many agencies who do not want to be locked into on-premise IT environments or expensive proprietary cloud solutions that may become obsolete.

Information Leadership's iWorkplace Records Manager 365 is designed to provide those organisations with a robust and cost-effective Microsoft 365 cloud option for PRA-compliant document and records management.

Information Leadership Director, Sarah Heal, says "We already provide a highly successful and cost-effective approach to over sixty New Zealand on-premise SharePoint implementations. However, we recognise that the cost and complexity of on-premise solutions can present a barrier for some organisations, which has led to our work in developing SharePoint 365 solutions such as this."

Information Leadership's iWorkplace Records Manager 365 directly addresses key concerns raised by the Chief Archivist, namely effective reporting on record-keeping to leadership within public offices and appropriate records disposal.

A preset reporting toolbox gives records managers and their leadership a wide range of meaningful reports on the state of recordkeeping inside an organisation, including user adoption, quality of metadata and splice/dice reporting on vital records and paper-based records

Digital workspaces are attuned to the needs of users, so the business records actually make it into the system; as well as a proven methodology for implementation and for bringing internal staff up to speed

A sophisticated, yet straightforward to use, retention and disposal toolset manages the records 'in-situ' through their lifecycle.

"As an innovation we have developed here in New Zealand, the price point for iWorkplace Records Manager 365 is also well below most offers on the market and does not include any 'administration fees'," says Ms Heal.

The pricing model also enables agencies to progressively implement their record-keeping solution as funding and priorities allow. Instead of being priced on a per user basis, iWorkplace Records Manager is priced on the volume of records.

"We think this is a much fairer arrangement especially for large organisations that may have a small number of users creating content, while a large number of people consume that content. For example, in health boards and similar organisations, organisation-wide policies and procedures tend to be authored by a few, but read by many," says Ms Heal.

This also means that organisations are not paying the full cost of licence fees while their implementation is in its infancy, meaning their initial budget can focus on business and risk priorities, user adoption and organisational change. As the implementation grows and the organisation starts to manage more records, licence fees can be extended.

Some organisations need to have on-premise SharePoint for its additional functionality and integration with other systems; but they also want to have Microsoft 365 – perhaps for making documents available to external parties, or for cheaper SharePoint for people who are not heavy creators of content. With the coming release of SharePoint 2016, Records Manager 365 allows organisations to manage both sources of content including moving or copying content seamlessly from one system to the other.

"Our philosophy is all about helping our clients find the best – most cost-effective and fit-for- purpose – ways to meet their needs, including PRA compliance, which is also reflected in our iWorkplace Design Bank," says Ms Heal.

Many Information Leadership clients use iWorkplace Design Bank to access the designs and retention rules implemented by other member organisations that have decided to share this knowledge. This saves time and money and avoids agencies reinventing the wheel. They can also ask questions and get answers directly from their peers.

http://www.informationleadership.co.nz/

6 steps to automate company processes

By Edmundas Vasonskis

During meetings, conferences and training sessions, I am often asked "What can we do to make business processes more efficient? What tools do we need and, most importantly, where do we begin?" It is an absence of answers, experience and motivation that form the greatest obstacles to progress.

In this article, I would like to share my experience of process automation. I am not going to describe how and which system I chose for document and process management. My goal is to share best practices on how to implement one and the methods to apply, as well as to offer practical advice on how and where to start the automation process. The purpose is to help companies experience an improvement in efficiency and make customer services, contract alignment, the approval of invoices and a multitude of other processes many times faster and more transparent.

1 – Knowing your purpose, needs and the benefits sought

I think it is almost impossible to find a company that would not benefit from the automation of processes. Take our company: here, it helped the productivity of our administrative work increase several times, with processes for agreement adjustment and the management of personnel documents becoming noticeably faster. Obviously, I am talking about the benefits of processes that have been successfully automated. Before any company accepts the challenges of such a project, it is important that it:

- Understands the inefficiency of its current situation.
- Is willing to change.
- Knows the outcomes it seeks.

Begins by focusing on a single process that it wants to resolve.

The last point is the most significant, because the best intentions often remain at the level of thoughts and discussions. Where do we find the motivation to move ahead? You need not look far: changes could be encouraged by employees who want to make the most of opportunities provided by a document-management system (DMS). Processes that take place outside the company (such as the need to have an electronic signature) and a drive towards real benefits could also stimulate changes. For Avia Solutions Group, the stimulus for change was a desire to solve efficiency problems related to certain processes, as well as manage risks and exceptions.

2 – Appointing a project manager

Now that we have a goal, what next? It is time to find a responsible person. I need to make it clear straight away that it is not important who oversees the project: it could be one employee or a team. It is much more important that this person or group has an in-depth knowledge of the organisation's operations, and knows the aims and needs of process automation and other factors involved. It is risky to choose the process owner as project manager, because their list of priorities will include the benefits of a functional subdivision or department instead of the entire organisation. For example, in the course of process automation we set up a separate unit under the IT department.

What should small companies do? I would suggest finding an employee who is willing and able to become a delegated project manager. Ideally, it should be a person with good qualifications who also possesses strong management and negotiation skills. Of course, these skills will also be acquired during the process, and the person is not required to know everything. Personal dedication is the most important factor.

3 – Determining priority areas

The moment that you start designing a plan for the automation of all processes is the perfect time to come up with priority

areas. You will need to decide which processes you want to focus on first in terms of automation. I found the following two rules very helpful:

Choose short, frequently recurring and simple processes. This will allow you to achieve early results with minimum resources, inspiring you to continue with automation.

Do not force your way into areas with the highest resistance and/or lowest benefits from automation. These employees will join later themselves.

I would like to draw your attention to the fact that during later stages of process automation, you could encounter some of the following issues:

 • The DMS is in order and processes are automated, but nothing is being used.

 • The process is automated, but it contains errors (read below about how to avoid this).

 • The company has only one non-automated process remaining, but its owner still opposes changes.

If you experience such issues, do not ignore them and ensure that you find solutions. Begin by clarifying the questions raised, and then move on to methods for improving the situation. For example, if employees are not using the system, ask them why. Perhaps the process is lacking a specific participant, or maybe this person is not trained to use the DMS.

4 – Handling obstacles and exceptions

One of the biggest obstacles we had to overcome was the scepticism of employees about the technologies and system implemented. In conversations about process automation, we heard the most negative responses: "No, this is impossible to achieve"; and questions such as: "What do we do if the system freezes?" and "Why doesn't it work here and now?". The main source of these questions is fear and natural resistance to change. Communication, transparency and the support of directors helps to overcome these issues.

During the initial stages of process automation, strongly articulated support from directors is a must. Directors need to prevent employees from going back to traditional document-management methods and exceptions, in which a DMS is not required. These obstacles can be overcome through risk and personnel management.

Another important aspect is the management of employees' expectations about receiving everything here and now. They cannot expect the immediate automation of application approval, and that it will be automatically linked to the accounting and warehousing programme. Try to communicate two things to your employees:

 • The benefits offered by process optimisation;

 • That automation is a gradual process;

 • What is happening at the moment?

Remember that a "No" from an employee may be about changes, not process automation itself. I recommend clarifying employees' responses or legal aspects of electronic document management at the level of governmental institutions as well.

When faced with the fears and distrust of employees, it is the task of a person responsible for automation to explain how the system's stability is ensured, who may join in, and how and where copies of documents can be made by those who cannot participate. When I managed to verify these aspects, employees started to display more trust and I received a green light to implement changes.

Another thing to note is that you will not find a single person at a company who knows all the specifics and exceptions of a document's journey from point A to point Z. Your task is to find out all aspects of a process through discussions and surveys, describe them, and then transfer them into the system. I speak from experience when I say that knowing the obstacles and exceptions, and having examples, is probably the key part of implementing process automation.

5 – Making the entire process more efficient

I would like to encourage you not to attempt to automate processes in a way that means you remain where you were before. I know from experience that if you address an inefficient process using an ineffective IT solution, you will create double the inefficiency. Should we blame the IT tools though? This is why, before automating a process, you need to refine it, know everything about it, consider all exceptions, and discuss whether all participants are really necessary and whether there are any redundant steps. Do not be surprised if the refinement of processes takes as much as 80% of the time spent on automation.

6 – Measuring outcomes

All, or almost all, company processes are finally automated. What's next?

Next you should measure the results. Establish the real benefits created through automation. Maybe there is room for improvement?

Publicise your success story. Think about how your experience could help others. If some processes in a company remain unautomated, a positive experience will provide an incentive for further changes.

Continue to improve the automated processes. Remember that processes are constantly changing. These changes must be reflected not only in reality, but also in the DMS.

Edmundas Vasonskis is Head of IT at Avia Solutions Group, a listed European company with more than 20 subsidiaries globally providing aviation business solutions.

Stepping up to the big data challenge

Crossing the gulf from managing data to fine-grained information management is not just a challenge being faced by large organisations, the same journey is underway at many vendors of traditional backup and recovery solutions.

Commvault is already a strong player in the data management market for backup and restore software. For some years it has been seeking to extend the use of this end-to-end platform to improve the ability to manage stored information through features such as search and access. Under the broad umbrella of Retention & Compliance, Commvault offers a range of solutions in Content-Based Retention, Enterprise Search & eDiscovery, Email Archiving and Secure File Sharing.

Commvault Chief Marketing Officer Christopher Powell said, "As organisations become aware that they need to treat data as a corporate asset, make decisions based on facts, provide insight and enhance their customer/client experiences, the need to respond with comprehensive information and data strategies grows in importance."

The value that can be delivered by high level information management was explored in a recent study of Commvault's worldwide customer base, undertaken by the analyst group, International Data Corporation (IDC) in late 2015.

Over 700 companies were surveyed ranging in size from 300 to 2000+ employees and with data storage from under 10TB to 5000TB. Around half of the companies surveyed were using Commvault data management solutions for advanced file and email archiving, including importing and analytics, in addition to basic backup and duplication. Those who did so found that their annual costs for exposure to compliance failures, audit failures, and/or data theft or breach were reduced by around 70%. There was also a marked improvement in data coverage for protection, analytics, encryption, and reporting. Particularly in Commvault's home market in the US, a highly litigious business environment, compliance costs that a company will incur come from an inability to meet the demands imposed on them by courts.

"Commvault solutions dramatically reduce the amount of time it takes to search across an entire enterprise and pull forth data that is required for compliance needs," said Powell.

"The customers that we surveyed had an average of more than two ediscovery requests coming in per month with costs of over $US2 million per year. Over half of that cost derived from paying court fines through not meeting compliance."

The federated search capability provided through the Commvault Data Platform helps mitigate against this, but Powell points out there are other applications.

"Whether you are in a highly regulated industry or not, the federated search capability that is provided through Commvault can be utilised in many different ways," he said.

"As companies are shifting to having less in the on-premise data centre and more in the cloud or on mobile devices, the need to know who has that data and who has control over it becomes more and more important."

The ability to manage and search unstructured data is becoming ever more important. Many companies are just looking at the basics of how to protect it and keep their risks down, but the Holy Grail is understanding documents with enough detail to be able to automatically decide where they go next in a workflow or whether they should be retained or destroyed.

"Being able to index data at the file level and look at the data within the file and not just the associated metadata is crucial," said Powell. "It also enables the business to be more productive with end user self-service access to files and documents."

Companies viewing a vast pool of unstructured data sitting on fileshares and network drives that is unable to be categorised are crying out for tools to deal with this.

"A lot of CIOs don't want to ever delete anything but many are looking for smarter approaches to reigning in storage volumes."
- Christopher Powell, Commvault Chief Marketing Officer

"The Commvault platform can identify data that is due for deletion and put it in a staging area to be assessed. Eventually intelligent software like IBM Watson may be smart enough to delete things for us and we will feel comfortable about it, but until those things mature a bit there are ways to automate steps of the process."

"The real value of data is in what you can do with it. Our single virtual content repository makes it easier to index, archive and search for the information you need to get business done - turning your retained data into a strategic business asset," said Powell.

Can you search annotation/ redaction data in your ECM?

By Xiaopeng He

Annotation and redaction capabilities are advanced features of document/image viewers. A group of users who share documents among themselves can collaborate via annotations on the contents of the documents. Redactions provide content level securities that enable the protection of sensitive information in portions of a document from users who have access to the entire document.

Redaction is a special form of annotation. Many document viewers and image viewers support annotation/redaction capabilities. In ECM repositories, annotation/redaction content is normally stored separately from the content of the documents that they are associated with.

Such separation has several advantages. First, it allows the documents in the system being annotated or redacted without the content of the documents being modified. Many users can annotate/redact a document simultaneously without worrying about the loss of annotation content due to the potential concurrency issue. Second, it allows users annotate/redact documents of different content formats with the same set of annotation/redaction objects. There are many file formats, PDF, MS Office, Text, TIFF, PNG, AutoCAD just to name a few. Without a document viewer, an ECM application must rely on native applications to display the documents in the repository.

Some of the applications come with annotation/redaction capabilities. For example, Adobe Acrobat allows users annotate PDF documents. However, Microsoft Office supports a completely different set of annotations. A document viewer control with the annotation/redaction capabilities not only displays documents of many file formats, but also displays a document embedded in web browsers or mobile apps so that users don't have to switch back and forth among different applications, and yet allows users annotate/redact various documents with a predefined set of annotation objects. This is regardless of the native annotation data format that the native applications may have. For example, the 3Si hViewer supports the display of documents of many file formats inline and embedded in HTML5 browsers. It also supports the annotation/redaction of documents in many file formats including PDF and Microsoft Office. Thirdly, it allows annotation content to sit on the side of structured data while document content is treated as unstructured data in the ECM repositories. Searching the structured data is easier and more efficient than searching the unstructured data.

With annotation/redaction content stored separately from the document content, annotations/ redactions are qualified as document indexes that are capable of pointing to specific areas of document content. Imagine having a search hit that points to an annotation object on page Z of a document, and by clicking the search hit the user is taken to a document viewer displaying the page Z of the document where the hit annotation object resides and possibly the annotation object focused and selected in the viewer. This is a huge productivity improvement given that many files in the repository may have multiple pages.

One extreme case we have run into is a single PDF file with over 22,000 pages! Providing indexing into a specific page of a multi-page document saves users time and effort.

This is all great. However the question is whether your annotation data is searchable in the repository? If you create a text annotation from a document viewer, and save the annotation object in an ECM repository, is that text searchable? Or if you create an arrow annotation from a document viewer and give a tooltip to the arrow object, is that tooltip text searchable?

As corporate data volumes grow exponentially, it becomes more urgent to answer these questions than ever before. Without being searchable, annotations/redactions are not qualified for document indexing. Unfortunately, the answer to this question is negative for many commercial ECM products. To avoid the data transparency problem and other issues associated with annotation/redaction data in ECM repositories, some organisations go backwards by restricting the ability of document viewers to generate annotation/redaction contents in the repository. This practice is commonly seen among popular EFSS (Enterprise File Synchronization and Sharing) sites such as Dropbox From these cloud storage services, users can view documents from a document viewer. But the document viewer does not support annotation/redaction capabilities. Users simply cannot collaborate on the documents via annotations/redactions.

Disabling annotation/redaction features avoids the issues of the annotation data. But this approach is throwing out the baby with the bathwater. Instead of facing the root issue and finding a sound solution, these applications threw away a significant productivity feature.

Many other EFSS services do not provide a document viewer at all. They rely on native applications to handle the display of the various formats of document contents. We have not yet seen an ECM application that allows users to collaborate on documents via annotations/redactions and at the same time makes the annotation/redaction contents searchable outside the document viewer. Would it be nice for an ECM system to allow collaborations via annotations from a document viewer, while enabling the search component to finds hits from annotation data?

Xiaopeng He is Founder & CEO of 3S International Corp, a Washington, DC based consultant specialising in ECM solutions and viewer integrations. http://www.3sillc.com/
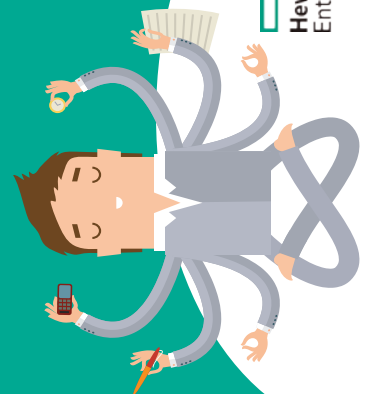
Barwon Health builds metadata registry

Hospital and healthcare provider to Geelong and south western Victoria, Barwon Health, has deployed a metadata registry and information asset register based on the aka software platform from Australia's Synercon Group. This followed a successful proof of concept in early 2015.

The Barwon Health metadata registry (or data dictionary) delivers a critical component of a new a business intelligence platform known as HEART (HealthCare Excellence Analytics and Research Tool). The HEART project was set up to establish a standardised reporting environment providing a single source of truth.

Metadata values are drawn from METeOR – an online Metadata registry managed and published by the Australian Institute of Health and Welfare (AIHW) augmented with Barwon Health metadata.

Using the a.k.a. Designer tool the a.k.a. team configured a metadata model that replicated the entities and relationships represented in METeOR.

METeOR Extraction APP

The team built an Extraction APP which enabled the Barwon team to read the METeOR database, flag and store metadata items and extract the metadata items into CSV files. The items are then loaded and managed within the a.k.a. library.

The data design enables a governed approach to metadata management improving the consistency of information collection and supporting the maintenance and use of information over time. The design clearly indicates who is responsible for the definition of the data and the source of the information, and provides an audit trail to manage changes over time.

The a.k.a. team also built a set of XSL templates enabling the publication of the datasets for browser based viewing.

The Interactive report format means that users can slice and dice the database to extract exactly the information they need.

The latest release of a.k.a software has recently been released. Version 3.5 offers additional functionality including operation in the cloud.

The a.k.a. cloud installation uses the Microsoft Remote APP and Desktop Connection as the platform, SQL server as the database engine and Active Directory for creating user accounts. A trial version is available.

http://www.synercon.co/

CBP Lawyers switches to e-contracts

Colin Biggers & Paisley, an Australian law firm with a focus on property development, has slashed thousands of paralegal hours and drastically reduced paper consumption by digitising its contracts with DocuSign.

With one of the largest project conveyancing groups in Australia, Colin Biggers & Paisley's property development team is responsible for preparing and processing thousands of property sale contracts a year.

During high volume conveyancing projects, the law firm will process sales of as many as 200 apartments in a day. With contracts averaging around 600 pages, and two copies of every contract required, it can result in up to 240,000 pages of contract documents being circulated in a single day.

"The amount of time and resources required to manage paper contracts during high volume conveyancing projects was staggering," explained Mark Morgan, Partner, Colin Biggers & Paisley.

"With these enormous volumes of paper, the costs of printing, scanning, filing, archiving and couriers were running into hundreds of dollars per contract. On top of that, every contract needed to be manually checked and cross-checked by paralegals before and after contracts were entered into. This checking

digital @ work

process required hundreds of staff hours and, due to time pressures on staff, there were constant concerns about staff growing tired and missing errors, such as pages being left out or details overlooked.

"Now, many of our contracts are managed digitally using DocuSign's digital transaction management technology. With these e-contracts, we no longer need to manually check each page in every document. Instead, once the master contract is set, we simply check the correctness of each contract's front page. Purchasers can then read and sign their individual contracts on any internet device, no matter where they are in the world, and soft copies of completed and signed contracts are automatically available to all parties for download.

"Our staff time in the preparation of contracts and administration of the contract process is reduced by over 90%, and our hard costs of printing, scanning, filing, archiving and couriers are done away with all together. It's completely changing the way we do business."

Mr Morgan continued, "However, this is not just a cost cutting exercise. For us as a law firm, contract security is paramount. The great thing about DocuSign technology is that it ensures that a finalised contract is secure and cannot be changed without detection. We can be 100% confident the e-contracts meet all legal requirements, while being able to redirect valuable resources to other areas of the business.

"It will take time for us to shift our entire conveyancing practice over to DocuSign's Digital Transaction Management technology but, since our introduction of the technology in September last year, Colin Biggers & Paisley's e-contracts have been used in the sale of 184 apartments in a single Sydney building, 600 e-contracts in total have so far been entered into, and e-contracts will be used in upcoming projects comprising no less than another 2000 apartments in Sydney and Brisbane over the next 12 months."

Colin Biggers & Paisley has developed the DocuSign e-contract system for use in NSW, Queensland and Victoria, with the goal to expand its use Australia wide in as short a time frame as possible.

Deloitte wants to drive workplace AI

Deloitte has announced an alliance with Kira Systems to bring the power of machine learning to the workplace, an innovation it believes could help free workers from the tedium of reviewing contracts and other documents.

The alliance combines Deloitte's business insights in cognitive technologies with Kira Systems' advances in machine learning in creating models that quickly "read" thousands of complex documents, extracting and structuring textual information for better analysis.

This capability holds broad applications for the marketplace, said Craig Muraskin, Deloitte LLP, managing director of Deloitte's U.S. Innovation group, as the extensive review of documents underpins many pressing business activities, including investigations, mergers, contract management and leasing arrangements.

"Wading through miles of corporate jargon hunting for key words and patterns can consume considerable time and resources," said Muraskin. "By teaming with Kira Systems, we can help organizations reduce their review time while redeploying talent to higher value activities – let's save our eyes for more strategic matters."

Noah Waisberg, CEO of Kira Systems, said recent innovations by his company, such as Kira Quick Study, are graduating machine learning to new levels of accomplishment. "Artificial intelligence has arrived to a point where machines can scale human expertise by extracting information from complex documents," said Waisberg. "It accurately identifies information by learning from examples versus just reflexively identifying pre-programmed clauses."

Deloitte has been using the Kira platform internally for more than a year, creating custom models that generate quicker insights into client challenges. It's now possible for client teams to analyse hundreds of thousands of documents in weeks, putting them in a stronger position to advise clients in completing major business transactions under tight deadlines.

Deloitte-customized instances of the Kira platform together with Deloitte-trained models have been rolled out across the organization's audit business under the name Argus and its consulting business under the name D-ICE, with applications being explored for its tax and advisory businesses.

"Our approach to innovation is to use creativity and ingenuity in finding practical applications for the latest technologies," said Ragu Gurumurthy, chief innovation officer, Deloitte LLP.

"That's what Deloitte and Kira Systems are doing with this alliance – it's bringing together two organizations working on the forefront of innovation in a way that can bring pragmatic yet powerful benefits for businesses in a range of industries."

Law firms join paperless push

More than $A11 billion in Australian property transactions have been taken online, with the country's online property exchange platform reaching another milestone last month. Electronic conveyancing platform PEXA welcomed the 2000th Australian firm to the world's first national electronic conveyancing platform, which removes the need for practitioners to attend property settlements in person and exchange physical documents.

With PWC research sowing one in five paper-based property settlements were delayed, and one in three people finding the settlement process stressful, a leading technology firm said the process was ripe for change.

Peter Maloney, CEO of GlobalX Legal Solutions, a PEXA provider, said thousands of practitioners across the country now have a faster and more reliable way to complete the lodgement of land registry documentation and financial settlements.

"Just like the ASX changed the share market, PEXA is indelibly changing the manual property settlement process as we know it; we believe the best way to support practitioners through this transition is to offer them the new electronic workflow option integrated with their current infrastructure" Mr Maloney said.

Nationally, more than 100,000 property transactions totalling in excess of $A11 billion have been taken online through PEXA. The platform is expected to account for the transfer of over 85 per cent of property transactions by 2019.

"This reform delivers buyers and sellers long overdue efficiencies that internet banking and other forms of e-commerce delivered to consumers some time ago," Mr Maloney said.

PEXA is currently rolling out across the nation, with the electronic platform live in New South Wales, Victoria, Western Australia and Queensland.

Mike Cameron, PEXA's Group Executive of Operations said that the platform is seeing an influx of practitioners and financial institutions making the switch online to bring their businesses into the digital era.

"Moving property transactions online is now ramping up and gaining momentum," Mr Cameron said.

"Banks, conveyancers and lawyers realise that a future that's part paper and part digital is not sustainable and adds unnecessary business operating costs."

Western Sydney's leading law firm Coleman Greig Lawyers celebrated being the 2,000th active member to the national platform.

Coleman Greig Lawyers' CEO Warrick McLean said the introduction of electronic conveyancing represented significant opportunities for Australia's conveyancers and property lawyers.

"By facilitating property settlements online with PEXA and GlobalX Legal Solutions we foresee an improved success rate of settlements and significant efficiencies gained in our workflow," Mr McLean said.

Importantly this technology will bring efficiency, providing our team with greater flexibility and in turn enhancing our client service delivery," he said.

ViFX simplifies data management

New Zealand technology consultancy, ViFX has selected Commvault as its single data management solution to protect and manage the company's strategic information assets.

ViFX has recently enjoyed solid growth in its customer base, resulting in a need to rein in costs and complexity in the storage and management of its information, including better optimisation of IT resources to manage the primarily virtualised environment.

ViFX says it has been able to reduce data under protection by 83 percent itulising Commvault's deduplication capabilities, translating to substantial savings in storage-related costs, network efficiencies and significantly reducing their reliance on tape.

The decrease in data under management has also enabled ViFX to increase the number of backups stored locally on disk, improving their available retention from 5 to 28 days. This has injected greater reliability in ensuring restores can now be serviced immediately, while eliminating the previously lengthy tape recall process.

"As the single solution that underpins our data management, Commvault has enabled us to simplify our business, reduce operational burden and instill greater confidence that our strategic information is protected and available," said Derek Leitch, Director and Co-Founder of ViFX.

Commvault has also helped ViFX reduce the daily write outs to tape, which are now only 5% of the previous writes. This has been achieved through Commvault's incremental snapshot replication, which reduces wear and tear of the tape assets, and ensures backups can be transported offsite on the same day, injecting resilience and reliability for ViFX.

3 Reasons why tape should be included in your DR strategies

By Andrew Ysasi

I frequently hear chatter about using tape technology online, at conferences, and even in meetings that can be summed up in one statement, "Tape is dead. It is old technology and the Cloud, or an appliance, can do it all."

For those of you who disagree, I'm with you. However, the Cloud is here to stay and can offer significant advantages over traditional computing. Further, the Cloud provides additional benefits to disaster recovery, data protection, and data back-up/recovery that tape does not. However, abandoning tape without looking at all of its benefits is a hasty and possibly costly decision.

According to LTO.org, approximately 90% of Fortune 500 companies have tape implemented in their infrastructures, so there is some credence to consider that tape should be part of the discussion.

I'm not here to stand on my virtual soapbox pontificating tape is better than using the Cloud for backing up data. I do hope to provide some insight about tape that can aid you in making a decision about continuing to use tape or investing in tape as a solution.

Below are the three reasons to consider tape:

Cost

According to LTO.org, the cost per Terabyte when using LTO-6 media is $US8, and the cost per Gigabyte is $US.08. "As the price per gigabyte for tape storage continues to drop, LTO plays an increasingly vital role in the data centre for a range of unique datasets and stages in the data lifecycle," said Rob Clark, Senior Vice President, Quantum Corporation."

"The cost of energy alone for the average disk-based solution exceeds the entire total cost of ownership for the average tape-based solution," said David Reine, senior analyst with The Clipper Group.

If you don't need to have the data available, why have it on spinning disk? How often do users really get into data that is over a year old, and/or is the data required to be kept? The answer about the data on your own network may surprise you.

Aside: For those reaching for calculators to determine the cost to store files in Google Drive or Microsoft OneDrive, I don't consider storing files on these types of mediums as a sole viable backup solution for organizations. Why? If those services became unavailable or lost your data where is your backup? Treat these solutions like files on your desktop that you can access anywhere. Just don't consider them as your backup because they aren't responsible for protecting your data-unless you are paying them to do so.

Portability

Veeam is a company that has burst onto the Cloud Backup marketplace. They have claimed that 50,000 companies switched to Veeam in 12 months. This is an impressive number. However, even Veeam sponsored an article, written by Orin Thomas, contributing editor for Windows IT Pro, that supports the concept of using tape as a means to move large amounts of data.

"An advantage of shipping tapes off-site in a courier van is that even though it is an old technique, it's a very effective method of moving terabytes, even petabytes of data from one location to another and can, in many cases, be much faster than transferring the same amount of data over the Internet."

Further, tape provides a solution to not only be offsite, but off network as well. Tape can also aid in recovering from ransomware attacks. Source

Efficiency

"DreamWorks Animation estimates it saves 15 to 20 kilowatt hours per petabyte of spinning disk eliminated, lowering data centre ownership costs by implementing a tape-based active archive solution."

Hard to argue that tape uses less power than archiving data to spinning hard disk. Knowing that LTFS enables tape to be mounted and used as an external drive, there are even more benefits (note the pros and cons of this is a whole post unto itself that can explored here). It is important to note Blue-ray disc and solid state technology are being considered for data archives for companies, like Facebook, that require petabyte-level storage solutions.

Tape isn't a perfect solution on its own. Chain-of-custody, encryption, wear, and physical damage are concerns that need to be addressed. With the proper plan these concerns can be overcome-much like the concerns around using the Cloud. Further, why protect information you don't need? Having a solid information governance program to address data no longer required can reduce risk and help control expenses around storing and protecting data.

So what is one to do? Orin Thomas, author of the article referenced earlier sponsored by Veeam, said it best, "By partnering with an organisation that is experienced with cloud backup and recovery, it's possible to find a balance that's right between the cost of cloud storage and the speed at which data can be recovered from the cloud. Often you might find you need a mix."

Oh…and don't forget to test your backup…regardless of what you are using.

Andrew Ysasi is the Executive Director of Kent Record Management, Inc. in Michigan USA.

A new approach to OCR quality

By Alexander Goerke

More than a year ago we announced the European grant we had received for a development and research project to improve OCR on historical documents.

The goal of this project is to use an unsupervised learning and clustering algorithm to improve OCR on a specific page. This is especially useful on deteriorated documents or low quality scans. Because in many of these cases a standard omnifont approach fails for characters that simply are not distinguishable any more.

The current results of this project, run with our partner company Lumex in Norway, are already quite impressive. OCR Accuracy Extension achieves improvements of up to 15% on standard OCR results. The lower the quality of the images the higher the improvement. For exotic fonts (like Fraktur) the improvement is even higher as the variations of historic fonts are significant over the time. Since the software is using only image elements for the matching it is also very fast.

The method used to improve OCR on a given document is very similar to that of human cognitive capabilities.

Just imagine that you see a document with very difficult hand-writing. In the beginning you will be able to distinguish some of the more distinct characters which in turn allow you to conclude the meaning of other characters as you can derive them from the characteristics of the writer. The same is done in unsupervised machine learning in the OCR Accuracy Extension.

We use object detection and classification to create clusters of all possible characters on a specific page and then use easily recognisable characters to automatically label these clusters with their meaning (e.g. these are all capital "E"). From these a prototype can be derived and then applied in a second round to all the unknown characters. This helps the system to identify even deteriorated or distorted samples confidently thus boosting OCR quality.

A complex example is the recognition of a complete old newspaper page (as shown below). This page contains 16,837 characters. This is actually an advantage because a high number of available character is beneficial for the automatic creation of good proto-types which in turn can be used to improve the quality.

In this case the first pass of OCR with ABBYY FineReader 11 yields a decent quality of 78.4% correct characters when compared to a manually corrected ground truth file. If the AE OCR booster is initialised by unsupervised learning, the recognition rate goes
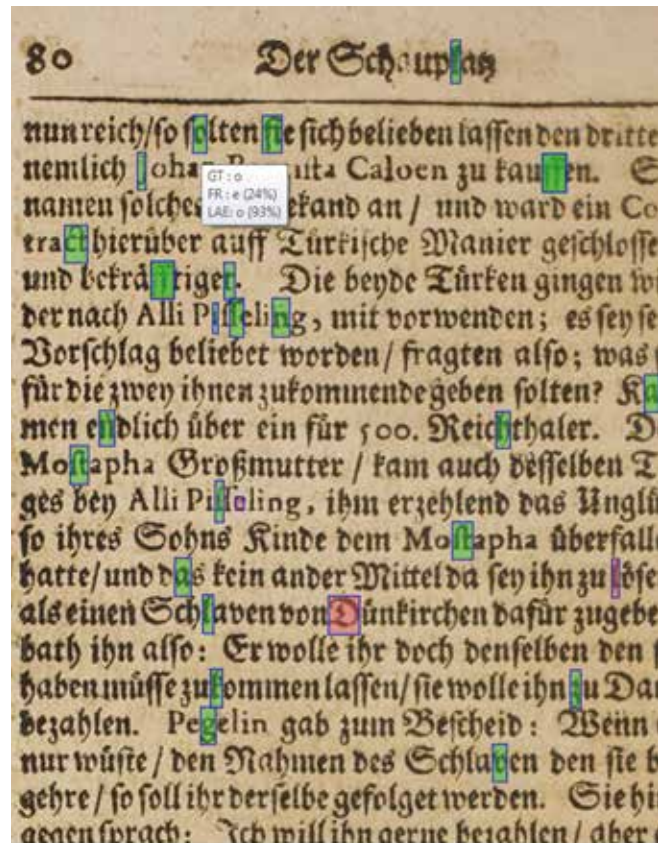

An example for a very old book is shown displayed in our test and benchmark tool, the Accuracy Extension (AE) Studio. The green blocks highlight characters that have been corrected by the AE. In the tooltip you can see that in the first line in the word "solten" the character, which is an "o" in GT (ground truth), has been incorrectly recognised as "e" but has been corrected back to an "o" by AE.

up by 6% to 84.5%. If in addition when we use another page of the same newspaper for the learning step, the system achieves an improvement of more than 10% to 88.7%.

These are promising first results for improving OCR on difficult documents using unsupervised machine learning techniques. The project is ongoing and will for sure yield even better results in the coming year, allowing researchers to access cultural herit-age easier and faster.

Alexander Goerke is founder of Skilja, a European consultancy work-ing on a project to improve OCR for historical documents with the support of Germany's Federal Ministry of Education and Research (BMBF) and the European Union.
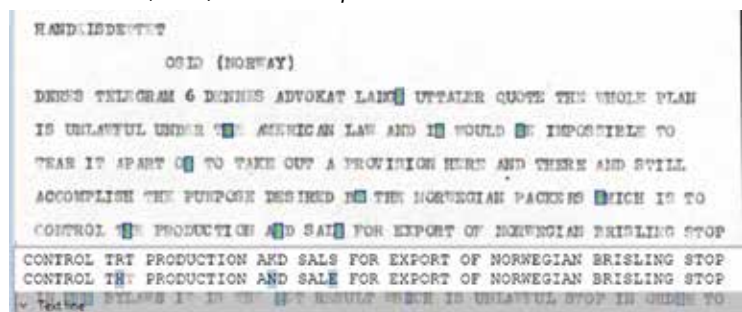
Another example is a typical old typewriter document (actually a tele-gram). All the faint characters have been well corrected. The text line at the bottom shows the comparison between original OCR and the magi-cally corrected result.

EzeScan

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EzeScan is Australia's most popular production document capture 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, EzeScan provides the fastest most cost effective method available to digitise business processes. EzeScan solutions range from basic batch scanning with manual data entry to highly automated data capture, forms and invoice processing.

EzeScan provides both centralised solutions for records professionals and decentralised business process digitisation for entire workgroups. 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.

Knowledgeone

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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 customers all around the world for:
• 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.

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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.

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As a Tier 1, HPE 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 & HPE Records Manager (HPE 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 / HPE RM. As a software and services company focused exclusively on HP TRIM / HPE 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 / HPE RM make recordkeeping a breeze.

ELO Digital Office

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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.

Epson

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Epson is a global innovation leader dedicated to exceeding expectations with solutions for markets as diverse as the office, home, commerce and industry. Epson's advances in scanning technology deliver the perfect balance of speed and reliability for image reproduction of unbeatable quality. From compact mobile scanners to A3 flatbed scanners that operate at speeds up to 70ppm, the range is designed for a variety of demanding organisations where fast and easy document management is required. Combine that with high productivity software that allows networking and 'scan to' options including the cloud, its versatile functions dramatically expand data usability and online document workflow. A high quality scanner is a powerful tool. For unbeatable reproduction of photographs, documents and graphics, you can't do better than the Epson scanner range - outstanding results, simple operation and value for money.

ABBYY

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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 data. 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 stand-alone 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.

OPEX

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OPEX 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.

Objective

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Objective Corporation (ASX:OCL) is an established leader and specialist provider of proven content, collaboration and process management solutions for the public sector, healthcare, financial services and regulated industries. Objective's solutions empower effectiveness, efficiency and transparency, helping organisations deliver better services at a lower cost to the community.

Objective is committed to delivering tangible business outcomes for our customers. Since 1987, we have been trusted by Government and the Top 1000 corporations to deliver long-term valued business outcomes.

CloudRecover

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As the newest member of the HPE Information Management partner community, CloudRecover is proud to offer both HPE TRIM and Records Manager in a cloud environment delivered and supported by your existing HP Partner. While CloudRecover has over 10 years' experience as a Managed Service Provider in DRaaS and maintains over 9 petabyte of restorable data in Australia, we plan to grow the HPE information management market by uniquely offering a Bring Your Own License (BYOL) or full subscription based EDRMS/ECM solution. Our mission is to bring the benefits of a robust Information Management and Governance solution to a broader audience.

We work with existing HPE partners, who remain the customer facing organisation, to meet the demands of many CIOs to deliver more and more applications hosted as a service.

Hosted in a Federal Government approved Tier III Australian Data Centre, our solution can dramatically reduce risk and improve productivity of your IT resources. Contact your HPE Business Partner or CloudRecover for a demonstration or more information.

Fujitsu Australia

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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.

Brother

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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 and scanning 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.

RM docs converted to PDF in a click

Ever wanted a simple way to create a PDF revision of a document in HPE Records Manager (RM)? Or perhaps just send a document as a PDF in an email? Kapish has launched its new Kapish PDF Wizard to solve the problem.

The Kapish PDF Wizard can convert various file formats to PDF instantly with a simple click. Rather than fiddling around trying add a PDF revision to a document manually, simply select 'New PDF Revision' and the new PDF revision is created.

The Kapish PDF Wizard can also attach a Long Term Storage PDF as a Rendition and attach a document as a PDF to a new email message using your native mail client for easy distribution.

Key Features & Benefits:

 • Converts documents and images to PDF as a new Revision

 • Creates Long Term Storage PDF Renditions

 • Sends documents as a PDF via Email

 • Simple and intuitive for users

 • Supports multiple file formats including; Microsoft Word, Excel and PowerPoint; Microsoft Visio; Microsoft Project; Images (PSD, TIFF, GIF, BMP, JPG and PNG)

 • Minimal set up required

 • Integrates with Kapish Explorer

http://kapish.com.au/products/pdf-wizard/

Smart analytics for SharePoint

BA Insight has launched a new packaged software product that that provides insight into how users are interacting with SharePoint to help improve the user experience. Smart Analytics for SharePoint automatically collects data about the operation and usage of SharePoint sites, content, and search, whether on-premise or online, and distills it into a dashboard and an extensive set of pre-built reports.

"SharePoint administrators have been flying blind because the out-of-the-box SharePoint reports are inadequate, especially around search and content usage patterns," said Sean Coleman, Chief Customer Officer of BA Insight.

"Now, Smart Analytics for SharePoint takes the guess work out of driving value from intranet projects. Companies get real-time actionable data to guide their deployments, increase user engagement and productivity, and speed troubleshooting."

Smart Analytics for SharePoint provides approximately 50 reports that are all interactive, fully searchable, and exportable. They include KPIs and diagnostic measurements grouped into five key areas: Search Analytics; User Analytics; Query Analytics; Content Analytics; and Search Diagnostics.

On the internet, analytics packages for SEO are recognized as essential for success. Smart Analytics for SharePoint provides the level of insight and ease of use found in the best internet search analytics, but built specifically for SharePoint Intranets.

IM Solutions for Google Cloud

Veritas Technologies has announced support for Google Cloud Platform with its NetBackup 7.7 and Backup Exec 15 solutions. Organisations can use the Google public cloud as a backup destination, run back up and perform disaster recovery to or from the Google Cloud Platform.

 "Our Hybrid Cloud research shows that 31 percent of organisations are already looking to the cloud for their backup and recovery workload, and that percentage will grow even more in the future," stated Ben Gibson, Veritas CMO.

Veritas NetBackup 7.7 supports Google Cloud Storage Nearline with enterprise-grade capabilities. The combination enables use of cloud storage as an alternative to tape, when choosing long-term storage of backup data. It also allows backup of large volumes of data at a low cost, while providing access to it at anytime and anywhere. Using the uNetBackup OpenStorage Technology (OST) layer, NetBackup easily monitors and manages data protection both on-premises and to private and public clouds. Regardless of location – disk, tape, or cloud - NetBackup lifecycle management capabilities manage when and how information is moved from online disk to Google Cloud Storage.

NetBackup v7.7 greatly enhances the performance and interoperability of backups directed to cloud storage services, such as Google Cloud Storage. One of the innovative capabilities of NetBackup, Auto Image Replication (AIR), provides a unique capability to extend disaster recovery to the cloud by efficiently replicating and managing catalogue and backup data from multiple locations to a secure cloud environment.

 www.veritas.com

Sony unveils 100 year optical library

Sony Optical Archive Inc., a wholly-owned subsidiary of Sony, has launched the Everspan Library System (Everspan), a scalable optical library system solution with a 100-year warranty.

Everspan utilises Sony's 300 GB Archival Disc to store data. Unlike tape or hard disk drives which need to be refreshed/replaced every 5-7 years, the Archival Disc can support data storage for over 100 years in data centre environments. Sony is offering 100 year warranty for optical media.

Everspan is comprised of three units: the Base Unit, the Robotic Unit, and up to 14 Expansion Units. Capacity can be increased by adding Expansion Units, which require a nominal increase in power consumption, and cooling requirements. Up to 64 Sony optical array drives can be incorporated into the system, each of which has an average transfer rate of 280MB/s.

Everspan has the ability to store 181PB (Petabytes) of archival data. Up to four systems can be connected in a single system, giving access to 724PB of total addressable storage.

Everspan utilises fully automated robotics, providing both high speed and efficiency between the stored media and optical drives. It is able to transfer almost 18 GB of data per second, outpacing the best performance of tape libraries and archival drive platforms. This performance level is especially important when dealing with loading or restoring data as well as handling requests for unstructured or random data.

Everspan is designed with industry-standard system interfaces to help integration into existing applications and environments. Everspan software support includes the S3 object store as well as file system support. With these options, redundancy is provided through erasure coding. For those who prefer to create their own direct interface, Sony delivers an optical drive interface that leverages the Sony MMC-6 SCSI multimedia command set. Alternatively a tape drive interface lets users easily transition from tape library to optical library.

In data centre environments, at approximately 9kW for a typical 181PB system, Everspan is claimed to far more power efficient than conventional archive alternatives. When the system is idle, power consumption drops to less than 2kW for a complete 181PB library.

The Everspan Library System is currently being evaluated by several companies and institutions, including Los Alamos National Laboratory (LANL).

"At Los Alamos National Laboratory (LANL), a multidisciplinary research institution engaged in strategic science on behalf of national security, very large, multi-terabyte data samples are routinely processed," said Brett Hollander, High Performance Computing Archive Lead at LANL.

"LANL has evaluated the specifications of Sony's Everspan optical storage library and are expecting to see significantly reduced recall times when dealing with extremely large files for analysis. "

For more information, visit www.everspan.com.

Brother MFCs pump up scan rates

Brother International (Aust) Pty Ltd is introducing a new series of laser printers and Multi-Function Centres (MFCs). The new Brother L5000 and L6000 Series add advanced scanning capabilities, mobility features and access to business cloud services.

Users can scan to popular online cloud services including Evernote, OneNote and more. Other business-focused scanning destinations include SharePoint, SSH Server (SFTP), Network Folder (CIFS) and more. The devices have been certified for use with enterprise capture software such as Kofax, Canon Uniflow and IRISPowerscan.

"Knowing the business user is focused on results, we created this next generation of printers and MFCs to dependably and consistently perform with the features and functionality needed to improve and enhance workflow," said Luke Howard, Brother International Australia's Commercial Market Development Channel Manager.

This new range includes the first Brother laser models to support Google Cloud Print 2.0. These printers also support a wide range of other mobile print technologies, including AirPrint and Mopria.

Most of the machines feature a colour touchscreen display for easy access to the Brother Web Connect interface to directly print from popular business cloud services, including Dropbox, Google Drive, Box, and OneDrive.

The Brother MFC-L6900DW MFC (RRP $A1,799) offers a monochrome scan speed of up to 50 pages per minute; plus, single-pass, two-sided (duplex) monochrome scanning at a rate of up to 100 images per minute. Additional paper trays are available in 250-sheet or 520-sheet capacities – up to 2,650 sheets total capacity, enabling more flexibility and expandability based on business need and potential growth.

Both of these models also help deliver wireless mobile device connectivity including NFC for convenient printing and scanning and network user authentication.

For more information about the new Brother Monochrome Laser Series, visit www.brother.com.au/ProfessionalMonoSeries

http://corpsolutions.brother.com.au/

Field force automation solution

A new field force automation solution called Capture OnTheGo provides organisations inundated with transactional forms an automated and portable solution for their employees to access and update crucial documents while in the field. It has been developed by two Canadian companies, Objectif Lune (a technology company that develops solutions for data-driven communications and business process automation), and Nu-book (a specialist in integrated digital platforms for mobile documents).

Capture OnTheGo is designed to addresse a major paradox in the market. About 80% of corporate printing resides with transactional forms – and yet 80% of all this printing comes from documents that were created electronically.

Installed on any smartphone or tablet, CaptureOnTheGo enables users to upload signatures, multi-media content, geo-localisation information and more. Because of its structured framework and use of companies' existing documentation, CaptureOnTheGo users can also ensure regulatory compliance in legal, medical and insurance fields. It's compatible with all iOS and Android smartphones and tablets. Objectif Lune Asia Tel 02 8852 2599 Email: sales@au.objectiflune.com

Nuix goes beyond keywords

Nuix has launched three upgrades to its investigation product line, adding functionality for cybersecurity incident response and data visualisations that help investigators find key facts quickly without relying on keyword searches.

Nuix Investigation & Response is a major enhancement to Nuix Investigator Workstation, combining all the functionality of the company's core investigative product with advanced visual analytics and innovative features for cybersecurity incident response. The Nuix Context interface automatically extracts and groups the most important forensic artifacts and gives investigators new ways to slice and dice evidence to get better results, faster. Nuix aims to drive greater speed and scale by offering Elasticsearch as an alternative alongside its traditional database structure. This new option in Nuix 7 will make it possible for investigators to search and correlate across even larger volumes of Nuix case files simultaneously.

A new user interface is being added to Nuix Web Review & Analytics, as well as further improvements to security controls and a taxonomy system to help automate common workflows.

http://www.nuix.com/

Worksite protection with RBRO Sentry

RBRO Solutions has launched a real-time, web-based monitoring solution for iManage Work (formerly HP WorkSite) document management system (DMS) environments, enabling administrator's unprecedented access to information in real-time from a very simple but powerful user interface.

Sentry enables administrators to setup rules for monitoring activity and provides the ability to take immediate action when rules are breached.

Sentry reduces the risks associated with unauthorised access to and improper use of data. Immediate notification of selected activities enables quick response to risk events, reducing liability and increasing client confidence around content security, as well as a greater ability to respond to regulatory requests.

"Sentry proactively answers critical questions about abnormal user access of iManage Work content in a way that is enlightening and helpful without being complicated," said Howard Russell, Co-CEO, RBRO Solutions. "It offers greater insight into what is actually going on in your DMS, significantly reducing risk and eliminating 'surprises'.

http://www.rbrosolutions.com/sentry or phone: 03 9024-1738 or email salesAPAC@rbrosolutions.com

Cloud invoice capture solution

Lexmark has announced the release of ReadSoft Online R8, a cloud-based invoice processing solution designed specifically for accounts payable functions in small and medium businesses.

Invoice capture and process automation with ReadSoft Online reduces manual data entry and cost-per-invoice processing by as much as 90 percent, while helping eliminate duplicate or lost invoices.

ReadSoft Online integrates with many ERP systems and incorporates business logic with country-specific knowledge to efficiently capture data from vendor invoices.

Invoices can be uploaded into ReadSoft Online or it can be used to scan paper-based invoices and capture invoices received via email. After the business-critical content has been extracted and verified, that invoice data can be automatically routed to an optional approval workflow. Invoice images and data can then be transferred to downstream applications and repositories.

Running on Windows Azure, the ReadSoft Online multi-tenant cloud solution offers secure 24/7 availability and access to real-time product updates.

More than 2,700 small and medium businesses already rely on ReadSoft Online to improve their operations and productivity.

ReadSoft Online R8 Features Include:

Enhanced line item extraction and verification

Enhanced user experience with a more intuitive, modern user interface

Excel imports for supplier and purchase order master data

Support of 18 different languages of invoice origin, including simplified Chinese

Expanded supplier recognition capabilities

"ReadSoft Online R8 brings an affordable accounts payable processing solution to the SMB market," said Reynolds C. Bish, vice president of Lexmark and president of Lexmark Enterprise Software.

"As a cloud-based, multi-tenant platform, ReadSoft Online can be provisioned and ready to use in a matter of hours, giving small and medium-sized businesses access to a powerful solution that can significantly improve their operations and productivity."

http://www.Lexmark.com

Free data analytics tools

A new software service to make large volumes of complex unstructured file data more visible and accessible to users, IT managers and CIOs has been launched by Kazoup.

Kazoup integrates policy-based file sync and data archiving to major public cloud-based object storage providers including AWS, Azure and Google. It uses a combination of file analytics, easy cloud archiving and powerful, content-level search,

Johan Holder, co-founder and CEO, stated: "Of the businesses we work with, only a handful can say with any certainty how much data they have. Much of it remains invisible. It's rare for an organisation today to have a clear grasp on just how much data they are carrying, much less where that data is, how often it is accessed and its ultimate value to the business. Even if they do have an accurate idea of where the data resides, there's a notable lack of available tools powerful enough to do anything about it."

Radek Dymacz, co-founder and CTO, added: "Everyone is struggling with unstructured data growth, but the available solutions are too time-intensive and costly, so file analytics is regarded as a luxury. We believe data analytics should be free to help IT professionals combat this storage growth.

"The beauty of Kazoup lies in its simplicity. What would usually take you weeks of work or expensive consulting, can be achieved within 15 minutes of installing the software. It's going

to be an invaluable tool for IT managers and CIOs who need to demonstrate they have a plan to grow intelligently, instead of just throwing more storage at the problem."

The solution also supports automated, encrypted and vendor-agnostic archiving to cloud-based object storage. This in turn delivers simple and fast searches directly from AWS S3, Google Cloud Storage and Microsoft Azure Blob Storage. It makes archive storage a strategic asset by truly integrating it with existing storage environments.

Holder concludes: "Unstructured data is just information that exists outside of database systems – mostly file data - and until today it has been relatively easy to ignore. But file sizes are increasing as a result of rich media content like photos, audio and HD video. Equally, storage governance is not where it needs to be, so businesses are holding on to useless data far beyond its end of life. This means that most organisations are simply throwing storage at the problem, instead of addressing the cause of growth.

"With users demanding that information and documents are instantly available to them, data duplication and storage growth have risen inexorably. The challenge for businesses is to find tools that can distinguish between data that is valuable and data that is not.

"With Kazoup you can set automated retention policies to move inactive, historic data, which is still required for compliance reasons, to the cloud and then delete it out once your specified time-period has passed.

"Kazoup makes managing and archiving data easier and more accessible, ensuring businesses can reset the clock on the storage time bomb and grow intelligently in future."

www.kazoup.com

Illuminate your unstructured data

Data classification specialist TITUS has launched a new tool known as TITUS Illuminate to examine and automatically classify files discovered on-premise as well as in the cloud.

Illuminate features include the ability to:

Discover data in network file shares, SharePoint, as well as cloud shares such as SharePoint Online, OneDrive, Dropbox and Box to determine where sensitive data resides.

Identify the business value of data so an organization knows what data it has and how it should be protected.

Classify any file type based on the content (PCI, PII, PHI or intellectual property), context or file properties (author, location, etc).

Apply content protection to files where they reside, quarantine files that are stored inappropriately, or flag files for follow-up where risks are identified based on the combination of content and location.

Analyse data with built-in analytics and reports or through third-party business intelligence tools to help identify risk areas for the organization.

Integrate with other security solutions such as DLP and ERM that can access TITUS metadata to enforce appropriate protection policies.

Work seamlessly with TITUS Classification Suite to enforce rules on files in motion, ensuring the right people have access to the right information at the right time.

Tim Upton, founder and CEO, TITUS said, "The amount of data being created, shared and stored is growing exponentially, and with people accessing and storing information in a multitude of network and cloud repositories, sensitive data could be anywhere. With TITUS Illuminate, organisations now have a way to easily and effectively discover, identify and analyse all of the files that an organization has stored either within the walls of the company or in the Cloud."

http://www.titus.com/illuminate

MFP high speed colour scanning
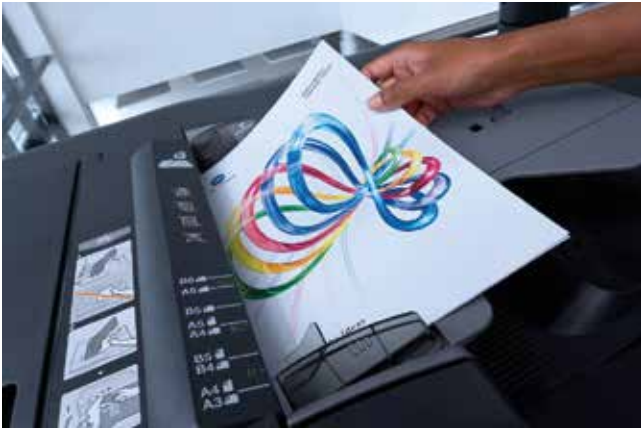
Konica Minolta has integrated dual sided, high speed colour scanning and a flexible OpenAPI interface into its new bizhub PRO 1100 multifunctional printer (MFP).

The high speed colour scanning capacity of up to 180ppm in the bizhub PRO 1100 is in addition to print speeds of up to 100 ppm, and the availability of the Tandem printing functionality allows two PRO 1100 systems to be combined, doubling output speeds for the biggest of print jobs on the tightest of deadlines.

The bizhub PRO 1100 can handle expected average volumes of between 150,000 and 300,000 prints and peaks up to 2.2 million black and white prints per month.

The MFP is equipped with the new user-friendly developer platform, bizhub OP. This open platform contains an OpenAPI communication system that allows application developers to create applications that communicate with the bizhub PRO 1100.

The monochrome printer is the first production printing device from Konica Minolta to support the bizhub OP open platform technology. It allows the use of third-party applications for accounting, authentication or scan-routing applications including YSoft, Safe Q and eCopy.

The PRO 1100 is available with a wide range of finishing options including production of stapled documents of up to 100 pages, booklet creation, punching 2 and 4-hole and automatic ring binding. The optional GBC punch unit is available with a wide range of die sets, which ensure compatibility with most popular punching schemes, such as metal-based (wire) binding or plastic (comb) binding. The folding options include a Z-folding unit for including A3 documents in A4 printouts and a letter-folding function.

www.konicaminolta.au

Context classification delivers on-the-fly data protection

Israeli developer Covertix has added a patented dynamic real-time context classification engine within its SmartCipher data protection product. The dynamic real-time context classification engine can determine is the right action to take when an end user accesses sensitive content. The same document may require different levels of security based on access parameters and usage.

Traditional classification determines what kind of policy should be on the file: category A for financial data, category B for HIPAA information, etc. Covertix takes this further, classifying security in context in real time. For example, it prevents a user from printing sensitive documents if he or she is not using a specific printer or allowing access to certain documents when working onsite. Even copying and pasting can be controlled.

www.covertix.com

Redact PDFs with Office plug-in

A new Microsoft Office plug-in from Foxit Software, developed in cooperation with Microsoft, allow users to protect confidential copy in Word, Excel, and PowerPoint. Users simply mark confidential copy for redaction within the Office application and then generate redacted PDF documents.

The company says that unlike other redaction tools, Redactor for Office offers the flexibility of creating a simple redacted PDF or, alternatively, a hybrid PDF that redacts sensitive content by default, while making it visible to authorised people under Microsoft Rights Management Services (RMS).

Threatened by potential brand erosion, lawsuits and privacy regulations, organisations are seeking foolproof methods to securely redact confidential information. Additionally, they frequently want to preserve the confidential data and make it visible to select people who should have access.

The Foxit Redactor is recommended for anyone who highly values information security, governance, and control, especially those who need to restrict access to documents. With it, users who create documents with sensitive information in Word, Excel, and PowerPoint can create redacted PDF documents where sensitive information is whited out (or blacked out) within the documents for sharing or archiving.

Foxit Redactor for Office allows knowledge workers and organizations to secure confidential sections of documents against unauthorised access or modifications.

Users can generate simple redacted PDF documents or hybrid RMS-protected PDF documents. People with RMS access rights to a hybrid document will be able to view the full content. People without access rights can only see the redacted file.

It is available for an introductory price of $US9.95.

https://www.foxitsoftware.com/products/redactor/

Forensic Detective 8.3

Oxygen Forensics has released Forensic Detective 8.3, which expands data extraction features and adds new acquisition methods.

"With most of today's mobile devices utilizing the cloud to store data, extracting that data in critical times is even more challenging," said Lee Reiber, Oxygen Forensics COO.

"Our ability to acquire data from iOS and Microsoft devices will help our customers, who see many iOS devices in their work in the United States."

Oxygen Forensic Cloud Extractor can acquire data from Apple's iCloud on all Apple iOS 9 devices including the newly released iOS 9.3. Using the appropriate credentials, experts can extract information from data backups of all devices associated with a unique Apple ID.

In addition, experts will have access to three cloud backups for each device – the original backup and the two most recent data backups. This will allow forensics experts to compare data and track information changes on each device.

Microsoft mobile devices also depend on storing information in the cloud. With Oxygen Forensic Detective, experts can analyse the JTAG images of any Windows mobile device to acquire securely stored logins and tokens and then retrieve all data from Facebook, Instagram, Microsoft and other available accounts.

While cloud data is more and more important to forensics experts, Oxygen Forensic Detective 8.3 also provides greater support to experts to extract data from memory cards of FAT32 and Ext format and extract all available data including deleted records from memory cards, which provide a plethora of forensically important data.

Australian resellers are CBIT Digital Forensics Services and Fulcrum Management

Civica launches SharePoint for councils

Local Government software developer Civica has launched a new SharePoint platform to provide online portals, enterprise workflow, and integration and CRM capabilities. Contact360 is decribed as a customer contact and transactional platform for councils in Australia and New Zealand.

The platform allows residents to use a wide range of automated communications channels when dealing with the council – from contacting the council via Facebook, to booking and paying for services online.

Built on Microsoft SharePoint, Contact360 can be fully integrated with Civica Authority as well as third-party software systems, hosted in the cloud or as an on premise installation.

Matt Burgess, Managing Director, Local Government, Civica, said Contact360 provided a comprehensive solution to help local governments transform service delivery.

"Councils need to transform the way services are delivered to meet the changing needs of citizens and consistently deliver improvements and efficiencies, particularly when it comes to citizens' increasing need and expectation to engage digitally," Mr Burgess said.

"Tailored public service requirements that meet the needs of all citizens must be effectively captured, delivered and communicated through multiple channels. Civica's Contact360 is now setting the standard for this new world of public service delivery, and we believe this will be especially relevant in an environment of local authority consolidation."

Contact360 has a range of features designed to effectively capture, deliver and communicate interactions and requests from customers, employees and partners across a number of channels. These include:

Capture – A multi-channel solution that effectively captures data and information from all customer and employee interactions across online, social media, call centre and office queries.

Deliver - Seamless front-to-back office integration ensuring every interaction is processed efficiently and effectively.

Communicate - Empowering customers with real time updates to reduce avoidable contact. While also providing employees and partners enriched business intelligence for improved decision making.

The Contact360 launch follows a recent study commissioned by Civica, The Changing Landscape for Local Government, which found that councils were increasingly concerned about the way they interacted with citizens.

The study was conducted by the University of Technology Sydney Institute for Public Policy and Governance and included the opinions of 250 council CEOs, Corporate Services Directors and other senior executives from across ANZ. Key findings included:

67 per cent of councils agreed that faster provision of information and services would be a priority for residents in the future

83 per cent of survey respondents said a mix of communications tools such as Twitter, Facebook, email, phone and printed materials would be mandatory for councils by 2025

79 per cent said interactive self-service portals would be increasingly important in interacting with residents

Mr Burgess said residents want the same level of digital service from their council as they receive from other online services such as banking, shopping and travel.

"Local authorities not only need to deliver a future proofed digital strategy but also continue to meet the needs of citizens who still require, or indeed prefer, face-to-face or telephone communication," Mr Burgess said.

"To fully respond to the digital agenda, local authorities need to go beyond channel shift and deliver a '360-degree' approach to service delivery. Digital transformation that simply moves services online can only partially address these challenges. Contact360 allows government organisations to fully respond to current consumer demands and prepare for future expectations of service delivery."

For more information visit www.civica.com.au/digital360

SearchBlox enhances text analytics

SearchBlox has announced the release of version 8.4 of its Enterprise Search software. New features include indexing support for 35 data sources through database collection, sentiment analysis, entity extraction, and HTTP API, which allows external applications to programmatically setup and control Web site indexing.

SearchBlox's software catalogues business data from a multitude of sources. With its Enterprise Search applications, businesses can collect information across file systems with tools such as intranet search, cloud search, big data search, and website search solutions. The software also offers text analytics to pinpoint customer and employee trends and helps businesses build custom predictive models based on the data.

With the release of 8.4, SearchBlox implemented several improvements for performance, usability and scalability. The update also increases the number of of compatible data sources, bringing the total to more than 60.

Through these data sources and more, users can perform federated searches across any collection type. They can also access customised analytics, sentiment analyses, visualizations and a range of data filtering options to further customize their search and text analytics. The service costs $US5,000 per server, per year, and comes with upgrades and customer support. SearchBlox provides professional services to implement solutions.

http://www.searchblox.com/

Healthcare solution promises 360-Degree View of Patient Information

Information Builders has updated its Omni-Patient offering, an information management solution that integrates and cleanses disparate sets of healthcare data, including multiple electronic medical records (EMRs) as well as financial and HR systems..

Omni-Patient provides a multi-domain data repository, with mastered subjects and transactional subjects organized into business domains, including clinical, financial, patient, provider, payer, facility, and more. The solution delivers an accurate, integrated picture of each domain, enabling a 360-degree view of mastered subjects, their origin from source records and their history over time. It also includes views over that repository to facilitate business intelligence and analytical use of the data.

"For healthcare providers, having access to a complete and accurate view of all patient, clinical, operational, and financial data together enables them to not only improve care, but also to reduce costs by streamlining processes and improving efficiencies," said Gregory Dorman, senior vice president and general manager of iWay Software.

"Omni-Patient is designed specifically to give providers means and ways to integrate, cleanse, and master disparate data sources, and by doing so to enable trustworthy analytics across the spectrum of care in order to achieve these goals."

The latest version of the solution concentrates on product features designed to reduce costs and durations of products' implementation cycles, including simplification of integration tasks and methodologies, improved performance, and increased ease of data stewardship and data quality operations. It also includes a number of enhancements to the repository data model, including additional data subjects and elements, as well as more powerful structures for handling codes and code sets, which are prevalent in healthcare systems.

informationbuilders.com/solutions/healthcare.