idm.
information & data manager

April-May 2019

RECORDS MANAGEMENT BY STEALTH

IS BLOCKCHAIN A FALSE IDOL?

HOW TO GET CORPORATE POLICIES UNDER CONTROL

Our Nation's Identity.

The new cyber frontier

ISSN 1320-176X 07

Print Post Approved: 100002740

The role of unstructured data in AI.

Conundrum of the collaboration tools.

The big challenge of Small Data.

ezescan

making digital work

A records manager's job is ALWAYS ~~never~~ done ..WITH EZESCAN!

Publisher/Editor
Bill Dawes
email: bill@idm.net.au

Web Development & Maintenance
Cordelta

Advertising
Phone: 02 90432943
Email: idm@idm.net.au

Published by
Transmit Media Pty Ltd
ABN 631 354 31659
PO Box 392, Paddington NSW 2021, Australia
Telephone: +61 (2) 9043 2943
Fax: +61 (2) 8212 8985
email: idm@idm.net.au

Audited Media Association of Australia

Printed in Australia by Spotpress

All printing paper is from mills and distributors that have received and maintained accreditation with the Forest Stewardship Council (FSC), the Programme for the Endorsement of Forest Certification (PEFC) or the Sustainable Forestry Initiative (SFI) Certification certifying that the paper mills and distributors manage their forests under the strictest principles of conservation.

DTA whole of government messaging trials

The Digital Transformation Agency is inviting Australian local, state, territory, and federal government agencies to access a free trial of a notifications platform it has developed called Notify.gov.au until 30 June 2019.

Based on open source code developed by GDS UK, the Notify platform is currently in private Beta, during which Beta, participating government agencies will be given a password to access the platform in a closed environment. From here, they can set up a password protected user account to send unlimited emails and up to 25,000 free text messages.

The DTA hopes the platform will provide a means to cut down on the millions of calls and enquiries made each year to government agencies to find out about the progress of applications, payments and obligations.

The system allows agencies to upload a list of email addresses or phone numbers as a spreadsheet, or send directly from another "web application or back-office system" via the Notify application programming interface (API).

ABBYY smartens up RPA

A new platform to make OCR and machine learning more accessible for business users implementing robotic process automation (RPA) and business process automation (BPA) has been launched by ABBYY.

Known as ABBYY Vantage, the platform adds the ability to configure text recognition, machine learning, and artificial intelligence (AI) from within the RPA tools that are used to configure software robots

It integrates with a range of RPA tools from Blue Prism, UiPath, and others. It also can be leveraged by ISVs, System Integrators, BPOs, and IT technology strategists to incorporate ABBYY's tools into their automation platforms.

Enterprise customers and consulting partners participating in the Vantage early adopter program, include Merck (MSD), Symphony Ventures, RoboRana, and RPAbox.

Common 'content-centric' pain points for RPA that Vantage is designed to address include: lengthy set-up and configuration, shortage of training data, shortage of skilled experts in areas like machine learning for automating unstructured content, and inability to scale across an enterprise organisation resulting in missed efficiency and cost gains.

"For the first time, enterprises can automate content-based processes without requiring users to be tech experts. ABBYY has revolutionised the way organisations accelerate their digital transformation initiatives by simplifying technologies like AI and data capture. This makes content-centric processes easier to set up and configure with out-of-the-box core skills and advanced cognitive skills that make robots smarter," stated Anthony Macciola, Chief Innovation Officer at ABBYY.

"Vantage delivers the technology as consumable skills that are combined with automation platforms like RPA to accelerate enterprise self-service automation. Organisations can quickly leverage these skills directly in their process automation platform cutting down the time it takes to deploy and realise the benefits. Vantage sets a new bar by simplifying how cognitive skills are designed, deployed, and consumed."

The new platform minimises the complexity of processing content such as documents, forms, images, and email communications with a set of cognitive skills that allow digital workers to identify a document, find specific information, understand the content, and route the document or process the information on its content.

Core cognitive skills include text recognition, classification, and data extraction coupled with learning and can be plugged into any type of document workflow. Advanced cognitive skills can be developed by partners and customers to perform specific tasks unique to a business operation, such as processing a loan application, insurance claim or bill of lading.

The platform offers a simple pricing and licensing model based on document transaction volume making it easy for business users to quickly determine cost and ROI.Vantage is a componentised service platform with 100% HTML interfaces, therefore requiring no desktop installation.

Vantage is available now for early adopters and will be generally available in Q2 2019 via www.abbyy.com/vantage.

WA invests $A34.7m in digital transformation

The WA state government has announced it will spend $A34.7 million over four years on the Office of Digital Government to transform digital processes in the Western Australian public sector.

The Office of Digital Government will use the money to improve the delivery of online services to the community, implement higher cyber security standards, improve data protection and sharing, build data analytics capabilities, support the implementation of ICT procurement reforms and investigate strategies to reduce the digital divide.

WA Innovation and ICT Minister Dave Kelly said this is the first time the WA government has provided ongoing funding for digital reform.

Google finds new Document Understanding

Among a range of new artificial intelligence (AI) tools that have been announced by Google is Document Understanding AI, promoted as a way to automatically classify, extract, and structure data within scanned documents

Currently in Beta version, the tool is designed to help automate document processing workflows via a scalable, serverless platform.

Google Cloud Group Product Manager Levent Besik in a blog post, said "customers that use custom document classification have achieved up to 96% accuracy.

"Document Understanding AI easily integrates with technology stacks from partners and third parties—Iron Mountain, Box, DocuSign, Egnyte, Taulia, UiPath, and Accenture are already using it today."

Jim O'Dorisio, Senior Vice President for Emerging Commercial Solutions, Iron Mountain, said "As the world's leading information management provider, Iron Mountain scans over 627 million pages every year as part of our digital transformation solutions. Google Cloud's Document Understanding AI helps us identify form fields, text passage, tables and graphs, as well as customer-specific keyword matching, for customized workload.

"Document Understanding AI provides a foundation to help us deliver a far more valuable set of services to our customers - assisting them in automated data understanding, enabling compliance, business value, and delivering peace of mind."

Andrew Moore, head of Google Cloud AI, told the Wall Street Journal, "The CIO is the critical person in this. We're focused on specifically transforming companies' digital presence, and we're really determined to go [after] central business problems."

In a related announcement, Google revealed that Contact Center AI, is now in beta, along with Virtual Agent, Agent Assist, and Topic Modeler.

Contact Center AI builds on Google's Dialogflow Enterprise Edition and interacts with customers over the phone, fielding incoming calls and using natural language processing to suggest solutions to common problems.

If the virtual agent can't solve an issue, it hands the caller off to a human agent and presents the agent with information relevant to the call at hand.

Sydney University rolls out RPA for services

The University of Sydney has revealed details of its extensive rollout of robotic process automation (RPA) at an event held by Blue Prism in London. The University launched its automation focused AI Hub in 2018 to improve service levels for staff and students, release staff time back to the business; and reduce risks.

Working with partner EY Australia and using the Blue Prism Platform, the University of Sydney has automated 33 processes to date across six functional areas including Student Administration Services, Finance, Human Resources, Campus Infrastructure and ICT functions. It is now piloting the use of cognitive services to augment the Blue Prism solutions.

According to Steve Blunt, General Manager of the University's AI Hub, "The AI Hub team has had an immediate and significant impact on service improvement, implementing a range of automated processes to improve student and staff experience while mitigating the challenges of disaggregation, complexity and volume for staff and students.

"Our decision to focus on a service improvement ethos as the overarching metric has seen the AI Hub gain momentum across the University in a very short period. Business units across the University are seeking out the automation team as they see the tangible benefits for their staff," said Blunt.

The AI Hub was launched with a broad proof of concept approach to both maximise visibility and include a range of stakeholders. The program automated a range of processes across functions delivering real value across multiple internal processes, including estate management (space bookings), student administration, procurement, exam management, document verifications, etc., with high customer satisfaction.

Ean Evans, EY Oceania Intelligent Automation Lead Partner, whose team supported the University in cognitive RPA deployment at the AI Hub commented, "What makes the Automation & Innovation Hub achievements so compelling is the University's commitment to improving service delivery to students and employees alike. This focus has supported rapid adoption of automation across a range of key processes across the University. We believe service delivery improvement and augmenting staff capabilities need to be key objectives to maximise the enterprise value possible from intelligent automation."

Citadel Wins in Health & Education

The Citadel Group has announced a number of significant contract wins in the health and education sector, including an $A33 million contract over 10 years with the new Royal Adelaide Hospital.

Following the successful design and installation of collaboration technology into the new Royal Adelaide Hospital, culminating with its opening in 2017, Citadel has been working closely with the Spotless Group to support and manage the hospital's software and hardware infrastructure. The Company has now signed a 10-year, $33 million managed services contract with the Spotless Group to provide support, maintenance and technology refresh services to the hospital.

Andy Elkin, ICT Service Delivery Manager with the Spotless Group remarked: "Citadel have proven to be a reliable, cost-effective, and innovative partner providing technology services to the new Royal Adelaide Hospital. Testament to our relationship and our faith in their delivery is the length of this new contract. Broadening our relationship is the next logical step, and discussions in this direction are progressing well."

John Hunter Children's Hospital (JHCH) recently went live with Citadel's CHARM oncology information management platform, successfully prescribing and administering chemotherapy to their paediatric patients.

Citadel is also now providing digital services to six leading Australian universities following a contract award from the University of Melbourne which has engaged Citadel to install 13 Proof of Concept (POC) facilities for extensive end-user testing. Following the successful completion of this POC, the university is looking to enter into a five-year managed services contract with Citadel.

Knosys launches KIQ Cloud

Knosys has launched a new cloud service that aims to bring knowledge management to more mid-sized organisations, called KIQ Cloud. Knosys says KIQ Cloud makes it easy for teams and individuals to find the right information, exactly when they need it, and provides direction for workflows, processes and compliance. It is designed for any business that operates customer contact centres, service desks, frontline offices or online self-service channels.

Knosys' Managing Director John Thompson, said, "We want to bring knowledge management to the masses, by that I mean we want every mid-market business with 200 or more employees to have access to KIQ Cloud and reap the benefits previously only available to larger enterprises.

Customers will be able to sign up to one of two service subscription types, 'Teams' or 'Business', and will have the option of paying yearly in advance or monthly.

"This initiative is not without risks, but the rewards to the company and our investors could be enormous in the medium to long term. In today's world the most successful cloud companies are those that integrate with other solutions, hence we are building connectors to other services and recently added cloud storage Dropbox and Box to our platform. In the next 12 months we will have more," said Thompson.

Alaris

Kodak Alaris Scanners

Trade-in and Recycle Offer

Promotion extended until June 30, 2019

Information Capture and Document Imaging Solutions from Kodak Alaris

Your new scanner: think big benefits

Technology

- New scanners are fully supported by the latest version of Microsoft Windows.
- LED illumination allows for greater color stability compared to lamps in older technology, plus they never need to be replaced.
- Scan instantly with LED lamps – no warm-up time needed.
- Maintain full-rated speed – even with valuable features like auto orientation, auto crop, and skew detection enabled.
- Get all the advantages of Kodak Alaris' Perfect Page image processing, providing exceptional scans and image quality while reducing the need for rescans and post-image processing.
- Get new Perfect Page features like streak filtering for correcting conditions you can't control like dust – plus auto orientation, image edge fill, hole fill, sharpening, auto brightness/whiteness, and image merge.
- For environments using VRS or image controls connectivity, now you have more options than ever.
- Enjoy new features including five ultrasonic multi-feed detection zones, four feeder settings, Dynamic Flow Technology, controlled stacking, and more.

Cost savings

- Benefit from reduced service contract costs – save up to 42% (compared to cost of plan for older scanners).
- Go a step further by purchasing a multi-year extended warranty. Save up to 50% from old to new contract pricing – and protection from annual price increases plus built-in discounts.

Your old scanner is worth money

- Trade it in. Every dollar gets you closer to new technology and greater productivity.
- We'll responsibly recycle your old scanner to help protect the environment.

The payback is fast

Service savings and trade-in value pays for your new scanner in no time.

Save more. Do More. Learn More.

Call today to see how your business can benefit from a solution or upgrade from Kodak Alaris. **1300ALARIS (1300252747)**

Guidelines*

1. The Promotion starts on **1ST February 2019 and ends on June 30, 2019** (Promotion Period). All claims must be received during the Promotion Period and any received after it are invalid and ineligible to receive the Trade-in Value. No extensions will be given under any circumstances.
2. Eligible Claimants purchasing a new Kodak Alaris scanner and, at the same time, trading-in a pre-owned and unencumbered Kodak Alaris, Fujitsu, Canon, HP, Avision or Epson - branded scanners that (Trade-in) for recycling by a third party may submit a claim for the Trade-in Value (Eligible Purchase).
3. Only purchases of new (not pre-owned) Scanners are eligible. Kodak Alaris Scanners sourced from any source other than the Promoter directly (including 'grey', 'parallel' or 'direct' imports) are not Eligible Purchases.
4. Once Claimant has sent all relevant details, Promoter will organise the pick up of the customer trade in unit. Once received back to Promoter, Claimant will be paid via discount.
5. Promoter will pay the cost of collecting the Trade-in from the Eligible Claimant's location.

*Terms and conditions apply

Please contact:
Kodak Alaris Australia Pty. Ltd.
Toll free No: 1300 ALARIS (1300 252 747)
Email: askme@kodakalaris.com
www.alarisworld.com

For Contract and Warranty/Extended warranty customers only
Go to: https://support.alarisworld.com/en-au#ServiceRequest

SCANNER LINE OF THE YEAR 2018 BLI BUYERS LAB LINE OF THE YEAR

Digital Amnesia - The Challenge of Digital Transformation

By Pavel Kraus

Several years ago, a Swiss Government ministry was sued after it imposed a ban on travellers from Asia entering Switzerland. The reason for the ban was the outbreak of an infectious epidemic in Asia. The ministry wanted to prevent infections in Switzerland, however the ban prevented a group of Asian business people from attending a very important conference, which for them was the key business event of the year.

Legal action commenced, and in order to avoid significant financial penalties the ministry was required to provide proof of information flow and the state of knowledge during the critical days surrounding the ban. Lawyers representing the Asian business travellers were very demanding and wanted to know what the ministry knew and how that changed over time, even down to hourly incremental steps.

In crisis situations the DMS stops working

In quiet times each document that goes in or out of the ministry is recorded meticulously in a document management system. However, in a crisis situation such as this one, procedure goes out the window and the desks start to pile up with paper, higher and higher. Snap meetings are held, and decisions made on the fly with nobody caring to record the kind of information the lawyers were now asking. The decision process was were no longer reconstructable.

Following this experience, the ministry undertook a knowledge management project. The main objective was to create traceability for important decisions with unparalleled granularity and simplicity. We reached this goal by creating a semi-analogue and semi-digital working process.

Practically this meant working analogue with papers during the day and digitizing and filing the paper documents at night, a task undertaken by a special records management task force. Processed documents were marked and returned to crisis centre in the morning in special filing box.

Digital content tsunami

I am reminded of this project when looking at the culture in many companies. Today, there are so many tools which allow collaborators to create a tsunami of messages, be it in Teams, Slack, Email, text messages, Twitter, Office 365, SharePoint, etc. The golden rule, that decisions should be traceable, has been lost. The information that ultimately led to a decision is somewhere in the digital stream, but it typically stays hidden.

Many companies and organizations are faced with this issue. I like to call this Digital Amnesia: The thoughtless exchange of information through so many different channels that leads to a dissipation.

One loses the ability to have an overview and it is too expensive to restore order afterwards through content structuring and metadata insertion.

Digital amnesia has even more facets. With the introduction of every new application or change of the operating system more information and more documents are at risk of being lost.

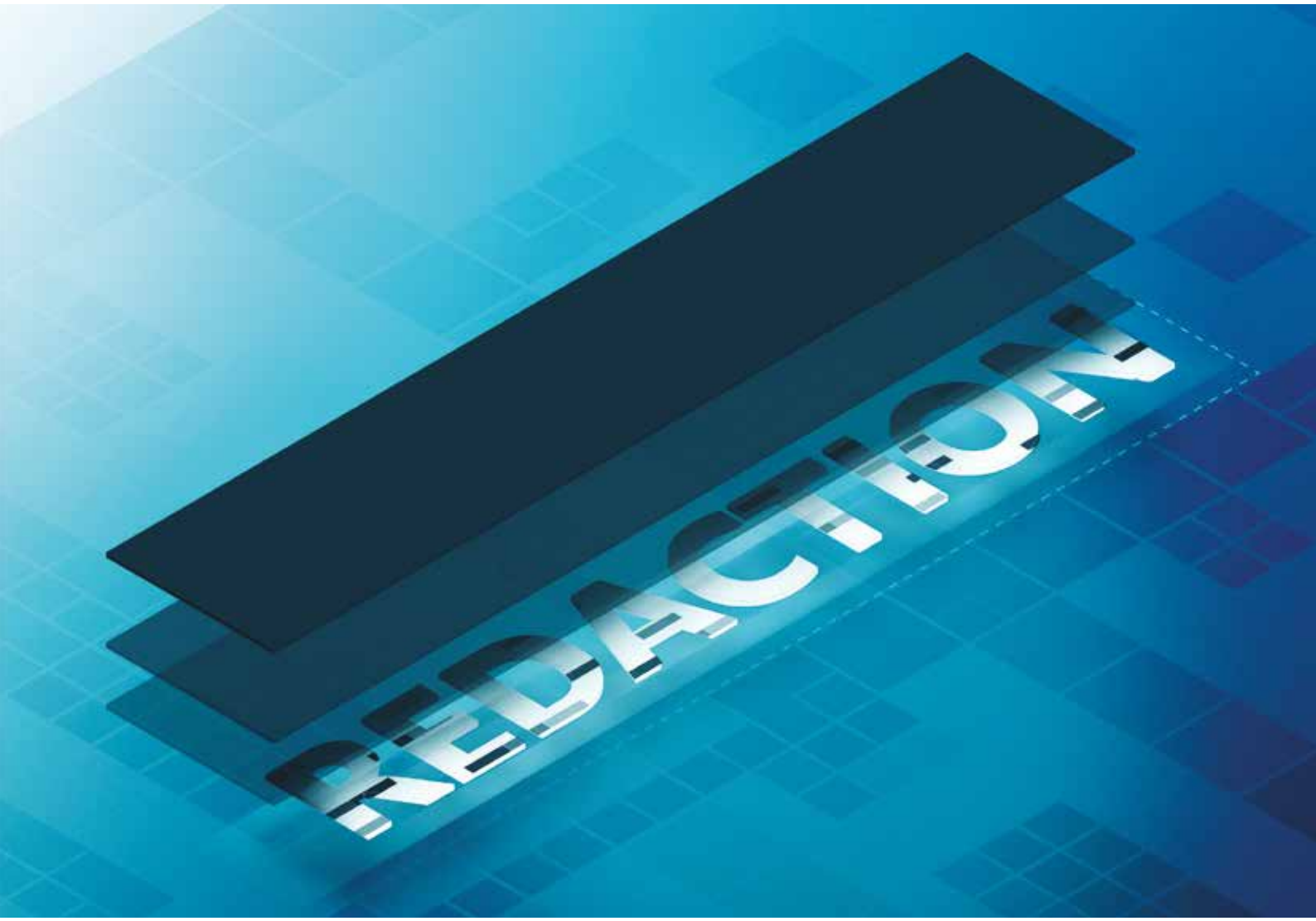
Digitalization has had the unfortunate consequence that we are less and less able to discern the status of a project from the case-file at any given time. With so much information in transit through so many different channels, the ability to track the information flow is being lost. Emails are sent simultaneously to so many people in a star pattern. One recipient does not know if and what the others are doing or saying. One cannot reconstruct a logical step-wise progress.

What is ultimately needed is the thing what nobody wants to hear. Namely, some type of agreed governance, some guidelines for naming, rules how to structure the information. And the discipline to do it. This takes effort and logical work.

We expect somehow applications magically doing this for us automatically. And the software suppliers keep us promising they would do. But they don't. The AI magical fairy is not yet here.

Pavel Kraus is a knowledge management consultant and President of the Swiss Knowledge Management Forum.

pdfDocs



Only a true redaction tool will do.

Permanently removing content from a document to ensure confidentiality is a common practice that is all too frequently attempted with the wrong tool.

Prevent improper redaction with pdfDocs – simple to use, efficient, and eliminates risk.

Learn more about redaction at **docscorp.com/redaction**

DocsCorp
Work smart

Conundrum of the collaboration tools

by Jason Piccinin & Aravinda Samarasinghe

Technology in the communications space has evolved and there are now so many more choices now than there were 10 years ago. Platforms have also become more affordable compared to the expensive systems of yesteryears.

In addition, the need to maintain on-premise infrastructure for collaboration tools has reduced or is non-existent in many companies. Workplaces are moving at a rapid pace in the modern day, bringing with it the need for the workforce to adapt to that pace quicker than ever.

In this adaptation one key area that is making headway progress is collaboration & communication. People need to communicate fast and reliably, and the expectation is that others respond at the same pace.

With work practices like Agile methodology being adopted, the modes of collaboration at many workplaces have changed along with them. Taking Agile work practices for example, these require workers to be able to communicate quickly and in realtime to make sure everyone is involved.

For these purposes the tools and modes of collaboration need to be fast, agile, intuitive and responsive.

Lotus Notes, Microsoft SharePoint and Outlook are some of the tools that were heavily used and popular in the past. Though email remains a popular mode of communication in modern workplaces, the times now demand realtime, simultaneous modes of communication.

For these reasons, tools such as Slack & Confluence are the buzzword products at present.

Videoconferencing used to be a highly privileged mode of workplace communication. It was expensive and required companies to maintain expensive set of infrastructure components. With technologies like Skype & Hangouts it has evolved to become less expensive, highly available, easy to use, mobile and infrastructure-agnostic.

Consumer-grade tools such as Skype & Google Hangouts have evolved as enterprise tools. The number of tools has grown enormously and choices are overwhelming.

Any good tradesperson will tell you that you need to use the right tool for the right job. In the world of collaboration tools, there is an abundance of tools on offer, and it is easy to get distracted picking the right tools needed.

One can have multiple tools which essentially have the same capabilities. This can cause confusion, lead to miscommunication or worse, no-communication. Ultimately this creates a management nightmare.

Also, in the midst of a digital and a data driven age, it could lead an organization to missed opportunities resulting in reduced revenues. Hence some thought process is required to apply in choosing the right mix of collaboration tools. One model does not fit all.

Identify the needs v wants - Firstly it is imperative to know the needs of the organization. 'Needs' and 'Wants' are different. It is the duty of the organization to provide for the 'needs' of all teams. Once this is gathered the best approach will be to match those requirements with the current collaboration tools in place.

As the technology has advanced there is a good chance your current toolset may offer the functionality you require and is a fruitless exercise to introduce a new tool. If you do, then this is the first step towards introducing collaboration chaos to your organization.

Attempts to entertain both needs and wants will contribute to collecting multiple tools or put off making a decision at all.

Avoid different tools for different teams - There are many teams within a department or a division which are differentiated by their function.

Take an IT department as an example; there are developers & product teams, architects, infrastructure engineers, management, security, finance & accounting and DevOps teams. Teams may want to have their own tool for collaboration and they may prefer one over another.

As an example, developers may prefer Slack as their communication channel and infrastructure may prefer Skype and Email. In this scenario three tools for two teams, this can quickly get escalated to add more tools. But both can do with one tool out of the three.

Essentially the question to answer here and the point to start is by asking 'WHY'. Identify why the three tools are needed for what purpose and pin down to one single tool for everyone.

Work towards the company goals & strategy - Company strategy plays a part in setting up systems, technology and processes. This goes the same for collaboration. It is perhaps a good start to looking at strategy to match the requirements of the tools.

Ultimately the tools are the things that contribute to deliver the outcomes and achieving goals. This also helps avoiding personal agendas in introducing tools and systems of a vision far ahead that isn't embedded into the wider operations of the company.

Tools to increase efficiency - Tools are there to increase efficiency and therefore by saving time and money; increasing productivity ultimately.

Given this, collaboration tools should be picked based on their contribution to increased efficiency. There is not much value picking a product simply because it is part of a suite of products and is not offering the right functionality for the organization.

Even though it may seem valuable on surface, in the long term maintenance costs coupled with lost productivity will add up to higher costs. Having multiple channels of communication will also contribute to the loss of productivity.

Having to check on multiple platforms a several times a day will add up minutes to hours & also will add up to disorganised, scattered information.

Costs – With multiple platforms, the costs involved in licensing, most likely a subscription system these days, and maintenance are quickly going to stack up. Hence it is wise to consider which tools provides the best value at present and combine that with the other points discussed here to evaluate financial aspects in the long run.

As mentioned earlier, avoiding individual tools for individual teams and grasping a tool because it is part of a suite will obviously help reduce the bills and will be a good start in merging platforms.

Education and change process – People become comfortable with a certain set of applications and tools after using them for years. Habits are developed and processes become engrained. This is where you can make or break your organisation with a poorly executed change plan, particularly when a new application is introduced to replace an existing one and there's resistance.

Your organisational change process needs to be handled in a consultative and engaged manner rather than pushing and mandating.

Firstly, an educational programme is required to provide

Any good tradesperson will tell you that you need to use the right tool for the right job.

information pertaining to the proposed change, why the change is happening and train a small group as to how to use the new tools then gather quick, conscious feedback.

This feedback loop will form the second key point; facilitating your business impact assessment to take place. No matter how good of an idea it seems on paper or $'000 in savings, until you are able to capture and assess real life, realtime user feedback, it is only theory that is being worked from.

Thirdly; participation. If people feel they are included in these scalable changes it is more likely that they are going to support them, making the transition easier for all parties. It should not be forced upon without following a systematic change process.

None of the concepts discussed above are foreign to any extent; understand your requirements, plan for a core set of platforms and tools, listen to user feedback and train, train train. These are core principles that should drive any change component.

The oversight too many organisations make is to become emotionally connected to a desired state without justification or strategy is a recipe for disaster and a toolkit full of too many overlapping tools causing confusion for your internal customers.

Jason Piccinin is Technology Design & Development Manager at Service NSW. Aravinda Samarasinghe is Network Lead at Service NSW.

RPA surge boosts ABBYY ANZ revenues

ABBYY recently reported its 2018 financial results, which featured 15% revenue growth worldwide, including a remarkable 34% surge in the ANZ region. ABBYY's intelligent capture revenue grew by 34% in 2018, five times the market growth rate.

The worldwide enterprise capture software market is expected to reach $US1.2 billion by 2022 according to IDC.

The past 12 months has also seen ABBYY doubling its headcount in ANZ to meet local demand. IDM asked Henry }Patishman, Director of Sales (Australasia) at ABBYY, to explain the factors at play.

IDM: Henry, what is driving the local growth?

HP: One of the major driving forces has been the local uptake of Robotic Process Automation (RPA). We're seeing that 70 plus percent of all new projects that are coming across are all related, in some way or shape, to RPA.

ABBYY has very strong partnerships with the RPA market as one of the only truly independent software vendors that has the full breadth of capabilities to deliver content to robots to take action.

Many of the RPA use cases are still the same data capture use cases that have been around for many years. But the people in the organisations that are now engaging are very different people. It's now the business users that are capable to engage on this level because it doesn't require high level integration into their back-end systems. They just want a robot that will mimic a human's action on screen, and with ABBYY behind the robot, we can provide that robot with the required information.

IDM: ABBYY also announced it has grown its global partner network by more than 20%. Can you give a bit more specifics on how it's changed in the ANZ market?

HP: There are multiple factors behind our success in A/NZ. One of them is our ability to scale our solutions and deliver required outcomes for SME and departmental tasks as well as for the largest and most complex enterprise requirements.

Another one is our active local engagement with strategic global partners. The most important factor is the contribution of our strong and ever-growing team of local experts providing full Project Solution Lifecycle support to our partners with our unwavering commitment of a 100% Channel project go-to-market strategy.

Traditionally, our partners have been in the ECM space or in the business workflow space. But now, a lot of the new partners are coming from the RPA space. That includes some of the largest consulting firms in the world who are very, very heavily involved in RPA now. And also, some of the world's largest system integration companies are trying to ride this huge wave of RPA. So globally, that's where a lot of our new partners have come from.

But there are also many niche RPA integrators that spun up locally and they are finding that as they're going into RPA implementations, they have a need for ABBYY Content IQ solutions and services for anything that actually requires semi-structured or unstructured data to be extracted for the robots to then action.

IDM: ABBYY is now emphasising its suite "Content IQ" technologies and solutions. What do you mean by that?

HP: Content IQ is a new way of positioning what it is that we do. ABBYY has always been about understanding content and making it useable. So, we are providing, I guess, the brains, the eyes and the ears to the robot.

Simple OCR is the eyes, and then as we find relevant information to extract to pass onto future steps, that's the IQ part, where we are the brain actually intelligently identifying key pieces of information and providing them, and making them accessible for future steps in the business workflow process.

IDM: What are the industry verticals that are driving this growth in ANZ?

HP: For us, it has been banking, finance and insurance that have been the key growth sectors in 2018 and we are still seeing that continue in 2019.

There seems to be a lot more action and willingness for change within the banking and financial services industry to reduce costs and improve the way that they actually interact with customers, and automation is a key part of that.

IDM: Is it specific applications or more broadly Digital Transformation that is driving growth?

HP: I think it's a broad digital transformation. There's no specific application. A number of the banks that we're involved in are looking at pretty much every single data intensive process and looking at how they can automate them.

Obviously, certain processes take priority due to either compliance issues or being particular pain points, but ultimately, it's a complete digital transformation approach across the entire business that's actually driving this growth.

IDM: How advanced is the Australian government on digital transformation? Is there still work to be done?

HP: There are a few standout departments that have taken significant steps forward in digital transformation. But as a whole, there's still a lot of very labour-intensive processes that are taking place across all levels of government.

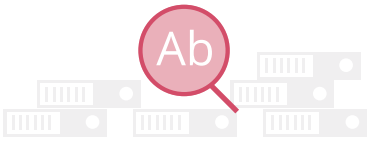
It is something that is looking to be addressed but within government, things tend to move a lot slower than they do in the corporate world. But it does look like government is beginning to focus more and more on that area and introducing digital workers and actually going down the RPA path as well.

ABBYY® FlexiCapture®

Take the data. Leave the paper.

Capture data from any documents, from structured forms and surveys to unstructured text-heavy papers.

Mobile Capture
Captures content from document images and photos via tablets and smartphones for instant integration into organizations' business processes.



Document Archiving
Captures paper documents and converts them into searchable digital files that include metadata, and which are optimized for digital archiving and records management processes.

Accounts Payable Automation
Automated invoice processing can help make AP departments more productive, and offer significant potential for immediate savings and fast ROI.

Mailroom Automation
Replaces time and cost consuming manual work for input-management by digitising, sorting and intelligently routing all incoming mail in one smart software application.

Document Classification
Automatically identifies various types of documents based on their layout, text or images.

Forms Processing
Automates data extraction from paper forms (e.g. credit card applications, questionnaires, damage reports, etc.) to reduce manual processing costs.

- Reduce document and data related Costs — usually by 50%
- Accelerate Transactions
- Fast ROI — usually 3 to 6 months
- Increase Visibility and Control
- Optimisation of data quality
- Reduce Operational Costs

ABBYY Australia: abbyy.com.au • +61 (02) 9004 7401 • sales@abbyy.com.au

Our nation's identity: The new cyber frontier

By Anne Lyons

While companies, governments and individuals scramble to protect important data and critical systems from cyber threats, a sleeping national security issue could become the next cyber frontier.

In fact, it may already be, and we don't even know it.

Our national identity assets - digital evidence of the nation - are a prime and obvious target for adversaries looking to destabilise and corrode public trust in Australia and change the narrative about who we are and our place in the world.

These assets vary from records of births, deaths and marriages to immigration records and land titles, the decisions of our courts and parliaments and the many stories told on our screens and airwaves through social and electronic media.

Increasingly they are becoming more digital, and if we are not careful and treat them with the care they deserve, a calculated and cohesive attack could be catastrophic.

Throughout history, warfare has damaged and destroyed assets vital to nations' cultural heritage and national identity. While physical damage is often clear and immediate, cyberattacks targeting a nation's identity—its way of life, history, culture and memory— wouldn't have the same physical visibility, but have the potential to cause more enduring and potentially irreparable harm.

In our increasingly digital world, it isn't difficult to imagine the types of cyberattacks we'll be likely to face and the degree of impact on irreplaceable national identity assets.

Consider the following:

- The discovery that digital reference legal documents had been altered could bring the court system to a halt while the integrity of the entire system is reviewed.
- The deletion, encryption or corruption of information relating to landholdings or births, deaths and marriages would cause widespread societal disruption, stopping everything from property sales to weddings.
- A synchronised attack on half a dozen key historical archives—such as our entire newspaper archives, historical photo databases, war records and Indigenous archives - would cause an irreplaceable loss that would be likely to cause public outrage and a great collective sense of loss.

Because we haven't anticipated sophisticated attacks against the organisations holding these assets and because they're generally undervalued, the protections in place are inadequate. And it isn't just nation-states, but cybercriminals and hacktivists who may cause serious damage.

In my report for ASPI's International Cyber Policy Centre, *Identity of a nation: protecting the digital evidence of who we are (https://www.aspi.org.au/report/identity-nation)*, I argue that our national identity assets are a prime and obvious target for adversaries looking to destabilise and corrode public trust in Australia.

Gaps in our protection need to be addressed. Australian governments - state and federal - need to begin a systematic effort to identify and value national identity data, ensure their protection and that memory institutions charged with their care are adequately funded to do so.

Recent studies by the University of NSW and University of Canberra identified examples of Russian targeting of Australian voters in 2017. Not only our universities, but businesses and governments are under constant cyberattack.

Added to that, countries such as Israel, Iran, North Korea, China and the US are also known to have publicly used malicious cyber actions against other nations.

A future frontier for these attacks is likely to be national identity assets, but despite this there's a lack of engagement and awareness in government and the community about their safety and security and the government institutions that hold them.

Our critical infrastructure, defence, border security, privacy, personal information and economic assets attract the headlines, the attention and ultimately the dollars.

There's no strong narrative about the need to protect holdings of digital national identity assets nationally or internationally. Many memory institutions find it difficult to be heard and secure funding, except when the need involves Australia's military history, or when a tragedy occurs, such as this year's devastating fire at Brazil's National Museum.

This isn't just an Australian problem. Institutions and governments internationally face the same issue as truth becomes a victim of information warfare, fabricated news, and increasing and evolving cyberattacks.

Until these issues are addressed, this increasingly 'invisible' vulnerability means that the potential loss of the digital evidence of who we are as a nation remains a sleeping, but urgent, national security issue.

Anne Lyons is an Australian Strategic Policy Institute (ASPI) Fellow and former Chief information Officer and Assistant Director-General with the National Archives of Australia, and a Visiting Fellow with ASPI's International Cyber Policy Centre.

Anne will be speaking at Tech in Gov 2019 , co-located with the Cyber Security in Government and Identity Expo shows, which will take place on 6-7 August, at the National Convention Centre, Canberra. For more information, visit www.techingov.com.au .

Register and receive an additional 10% off the Early Bird price, using code IDM10 when you book before 31 May 2019. Interested in exhibiting or sponsoring? Speak with James Delliquanti. Get in touch via email james.delliquanti@terrapinn.com, call him on 02 8908 8515.

Australia is vulnerable to a catastrophic cyber attack

By Greg Austin, UNSW

The government's chief cyber security coordinator, Alastair McGibbon, told an audience of specialists in November 2018 that the prospect of a catastrophic cyber incident is: "the greatest existential threat we face as a society today."

Using a nautical metaphor, he said such an event was not far off on the horizon, but could be on the next wave. He cited what one technology expert called the most devastating cyber attack in history, the NotPetya attack in 2017. NotPetya was a random attack on a single day that cost one Danish global company more than A$400 million dollars.

The latest dire warning from the government is appropriate, yet its policy responses have not quite matched the challenge – or their own commitments.

The government is 16 months into a departmental reorganisation in order to deliver better cyber security responses, especially through the new Home Affairs Department. That department has been very busy with everyday skirmishes in the escalating confrontations of cyberspace – from Huawei and 5G policy, to foreign cyber attacks on Australian members of parliament.

But Home Affairs is not the only department with a broad responsibility in cyber security policy. On the military side, the Defence Organisation has moved decisively and with discipline. In 2017, it announced the creation of a 1,000-strong joint cyber unit to be in place within a decade.

It also announced increased funding to expand the number of people working in civilian defence roles on cyber operations.

Another department with potentially heavy responsibilities is the Department of Education, working with universities, the TAFE sector and schools. Unfortunately, it appears to be missing in action when it comes to cyber security.

Key plans have stalled

In April 2016, Prime Minister Turnbull released a National Cyber Security Strategy. It included commitments to grow the cyber workforce (especially for women), expand the cyber security industry and undertake annual reviews of the strategy itself.

But in key places the ambitious plans appear to have stalled or fallen short. As a result of the Turnbull overthrow, the post of Minister for Cyber Security – which was only created two years previously – disappeared. The 2018 annual review of the strategy was not released, if it took place at all.

The annual threat report of the Australian Centre for Cyber Security (ACSC) did not appear in 2018 either.

In November 2018, AustCyber, an industry growth centre that is one good outcome of the 2016 strategy, published its second Sector Competitiveness Plan. Typical of government funded agencies, it reports much good news. Australia is indeed an international powerhouse of cyber security capability. What is unclear from the report is whether the government's 2016 strategy has much to do with that.

Where we're falling short

One indicator that we're off-track is the fact the AustCyber report of 2018 has no data on the participation of women in the sector after 2016. Reports from the decade prior to 2016 showed a decline from 22% down to 19%, but the government does not appear to be tracking this important commitment after it was made.

In other bad news, the AustCyber report concludes that the education and workforce goals remain unfulfilled. It is hard to estimate how badly, since the initial strategy of April 2016 set no baselines or metrics. AustCyber now assesses that:

the skills shortage in Australia's cyber security sector is more severe than initially estimated and is already producing real economic costs.

On the government's commitment to increase the cyber workforce, AustCyber reports growth over the previous two years of 7% – roughly 3.5% per year. But it probably needs to be of the order of 10% per year for a full ten years if the gap identified by the report is to be met:

The latest assessment indicates Australia may need up to 17,600 additional cyber security workers by 2026 …

The government has provided $1.9 million over four years to promote university cyber security education in two Australian universities. That amount is so small it might not even be called a drop in the ocean.

As AustCyber suggests, though in muted language, Australia does have huge resourcing holes in our cyber security education capability.

The most important gap in my view is the near total lack of university degree programs or professional education in advanced cyber operations, the near total lack of technical education facilities to support such programs, such as advanced cyber ranges, and a weakly developed national capability for complex cyber exercises.

What we should be doing

In 2018, I argued at a national conference sponsored by the government that Australia needs a national cyber war college, and a cyber civil reserve force, to drive our human capital development. I suggested at the time the college should be set up with a budget of A$100 million per year. Based on a recent international research workshop at UNSW Canberra, I have changed my estimate of cost and process.

Australia needs a cyber security education fund with an initial investment of around A$1 billion to support a new national cyber college. It should be networked around the entire country, and independent of control by any existing education institutions, but drawing on their expertise and that of the private sector.

It would serve as the battery of the nation for cyber security education of the future.

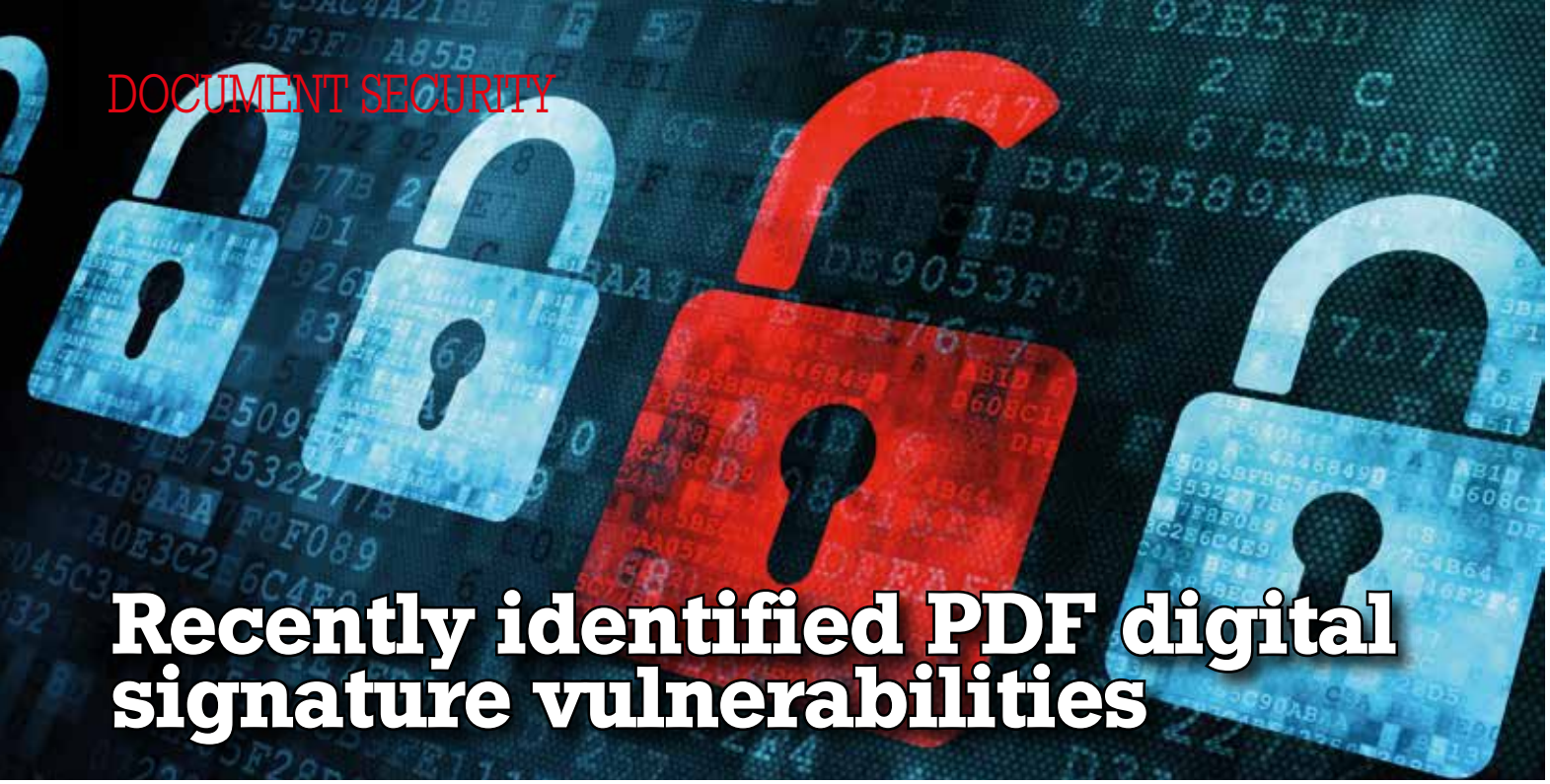
Labor isn't offering a better alternative

The Labor Party, through its cyber spokesperson Gai Brodtmann, has been critical of the government's failure to fill the gaps. But she is retiring from the House of Representatives at the next election.

Labor has no well-developed policies, and no budget commitments, that can address the gaps. There is even reason to believe the party doesn't have a front bench that is engaged with the scope of the challenge.

None of them seem to be as technologically oriented as Turnbull, the last cyber champion the Australian parliament may see for a while.

Greg Austin, Professor UNSW Canberra Cyber, UNSW



Recently identified PDF digital signature vulnerabilities

By Duff Johnson, Peter Wyatt

On February 25, 2019, researchers from Ruhr University Bochum and Hackmanit GmbH published pdf-insecurity.org, a detailed explanation of several vulnerabilities they had identified in PDF viewers and online validation services relevant to signature validation in digitally-signed PDF documents. The vulnerabilities are pertinent only to such digitally-signed documents, and not to PDF in general.

These vulnerabilities identified change an already digitally-signed PDF file in ways that should trigger software to consider the signature as invalid. PDF processors that don't fully implement current standards for PDF or digital signature validation, or attempt to accommodate malformed PDF files without fully considering the risks, can fail to spot these malicious changes.

In keeping with their good intentions, the researchers report that they notified a wide range of developers before publishing the details of these vulnerabilities and that patches were implemented before the research was disclosed.

This article is intended to help ensure that the community is aware of the issue and to support all PDF developers in understanding how to identify and fix their software.

The vulnerabilities identified in PDF software highlight the need for greater adoption of current standards and best practices in validating digital signatures. Following best practice is optimal, because it allows implementers to build highly capable and secure software without themselves becoming expert in every conceivable attack vector.

All these approaches rely on the tendency of PDF processors – especially interactive viewers – to accommodate malformed or broken PDF files.

For marketplace reasons, it is admittedly very difficult for these developers to blindly refuse to process a PDF file that appears to include small syntax errors. But if they do choose to so process a file, then adequate measures – such as close adherence to relevant digital signature standards and a good understanding of secure software design – become vital.

PDF is a file format, not a digital signature implementation specification.

In their detailed report and paper, the researchers identified three types of vulnerabilities, briefly summarized in this article. They also propose a countermeasure algorithm.

Universal Signature Forgery (USF)

The researchers identified 24 vectors for tampering of the digital signature object within a PDF file which is then able to fool some signature verification algorithms.

It might seem that the inability to correctly read a fully valid digital signature object from a PDF file should be categorically treated as functionally equivalent to a missing or invalid signature, but it seems that not all implementations have taken this approach. As the researchers' state in the conclusion of their paper:

"...there can be merely programming mistakes that break the whole cryptography. In the case of USF, an unexpected missing of mandatory information leads to a valid signature."

MITIGATION: This approach does not work on processors that closely adhere to PAdES standards (the technical basis of the EU-wide eIDAS framework) combined with avoiding error tolerant behavior when validating PDF signature objects.

Incremental Saving Attack (ISA)

PDF technology includes the ability to incrementally save changes to a document. The four variants of this vulnerability leverage this feature to "trick" an unaware processor into excluding malicious update data from consideration of the signature. The result is that an apparently-valid signature is simply ignorant of the malicious changes and reports the digital signature as valid.

MITIGATION: This approach does not work on PAdES-conforming processors that ensure incremental saves are correctly accounted-for when validating digital signatures, a clear best practice, and that do not permit error tolerant behaviour when processing PDF signature objects.

Signature Wrapping Attack (SWA)

The SWA introduces yet another way to work around the signature, by inserting a malicious xref table in concert with a ByteRange manipulation to fool a PDF processor into believing that the signature validates the newly added data. This approach also requires zero-padding bytes in the Contents parameter of original digitally-signed PDF file and results in malformed PDF. Nonetheless, many processors will process it anyhow.

MITIGATION: This approach does not work on processors that correctly implement PAdES standards for digital signatures.

A recipe, not a guide

PDF interfaces with many complex 3rd party technologies. For digital signatures, as in many other areas, the file format specification does not define implementation details. The ISO working group that develops PDF has consistently left such matters to the appropriate experts in other groups (i.e., those managing digital signature standards such as ETSI).

Nonetheless, from the PDF technology perspective, it's worth noting that:

- PDF/A-2 and subsequent parts require that the ByteRange entry cover the entire document (excluding the signature).
- PDF 2.0 explicitly aligns PDF technology with ETSI standards.

"The PDF specification"

On page 16, the researcher's report references Adobe's PDF 1.7, first published in 2006 as "the PDF specification":

"Specifying the algorithm in Listing 4.1 requires a change in the PDF specification which defines ByteRange as an optional parameter[? , Section 8.7]."

In fact, the ByteRange entry for digital signatures has always been required in all versions of the PDF specification. It's important to note that, based on the section number, the version of the PDF specification the researchers are referencing is PDF 1.7 (2006) or earlier. The research ignores the subsequent ISO standardized versions of this specification in 2008 (ISO 32000-1) and 2017 ISO 32000-2 (PDF 2.0).

As always in software development, the referencing of the most current applicable standards and industry best practices is crucial. As Munich-based PDFlib's Thomas Merz says:

"Identifying bugs in security-related software is always a good thing. However, the researchers don't take into account that the PAdES standards define additional requirements for PDF signatures on top of ISO 32000 to make signatures more secure.

For example, the PAdES standard (ETSI EN 319 142) explicitly mandates that the Contents and ByteRange entries must be present, and that "The ByteRange shall cover the entire file, including the Signature Dictionary but excluding the PDF Signature itself."

This clause thwarts the attacks if the signature validation follows the PAdES standards - which apparently wasn't the case for many validators."

In light of this research, and as best practice, implementers should always look to the latest PDF specifications (currently ISO 32000-2:2017), as well as review their error-tolerant behaviour in any and all security-oriented algorithms.

The researchers acknowledge that many software publishers have already pro-actively updated their implementations to address the vulnerabilities described earlier. Security is of vital importance in the PDF ecosystem, and the response to this report demonstrates a dynamic, responsive industry.

Given the significance of digital signature validation in the workflows that use them, implementers must consider that developing or maintaining support for these features entails a responsibility to look beyond the PDF specification for wisdom in handling digital signatures.

Originally published on https://www.pdfa.org/

Duff Johnson is ISO Project co-Leader for ISO 32000 (the PDF specification) and Project Leader for ISO 14289 (PDF/UA). He also serves as Executive Director of the PDF Association.

Peter Wyatt is an independent technology consultant and developer/researcher who has been actively working on PDF technologies for more than 17 years. He represents Australia as both Head of Delegation and a Subject Matter Expert at all ISO committees that define PDF standards (ISO TC 171 and ISO TC 130).

Digital transformation delivers dividend for Khan's Supa IGA

Khan's Supa IGA Group was established back in 1981 and currently operates 11 supermarkets with more than 800 staff located throughout NSW. Stores are located across a wide regional footprint include outback towns such as Bourke, Cobar and Lightning Ridge.

Khan's Supa IGA Group is part of a network of 1650 individually owned independent grocery stores across Australia that play in the highly competitive $A110 billion food and grocery market. This includes store brands such as IGA, Supa IGA, IGA-Xpress and Foodland.

Around 70% of the goods sold in Khan's Supa IGA stores are supplied and delivered by Metcash, with the remainder supplied by individual local suppliers.

Listed wholesaler Metcash provides Australia's widest distribution network for the independent retail sector supported through five major distribution centres and smaller regional centres. It recently announced it is chasing sales growth by spending $A300 million over five years buying and refurbishing stores, opening small stores and ramping up digital investment to cater for growing consumer demand for convenience.

Previously, paper invoices would be delivered to the widely dispersed Khan's Supa IGA Group store locations along with the grocery deliveries, these would then be delivered to Head Office in Picton NSW.

The approval process involved shuffling a manila folder full of paper invoices from AP Clerk to Finance Manager to CFO and required manual data entry.

Australian solution provider DataDevice, Specialists in Digital Transformation and Process Automation, began exploring a digital solution in 2015.

As well as the typical problems with managing paper invoices, Khan's Supa IGA Group was keen to provide better visibility, access information on finger tip from anywhere and obtain Clarity of Charge Through.

There was also the potential to eliminate manual stocktakes at individual stores and help prevent potential Double Payments, when a duplicate payment is made to Metcash and the same invoice paid to the product vendor.

To initiate the digital transformation of invoice processing, DataDevice began by exploring the internal systems at Khan's Supa IGA to assess the potential for tighter integration.

Khan's Supa IGA Group use the Attache accounting system for financials and payroll, World Smart Point of Sale (POS) software and BAS-X for centralized stock management, pricing, barcoding and supply chain management.

Each store has its own POS system and database for stock on hand reporting.

DataDevice Account Manager Rob Dawson said, "When we began looking into this project, Khan's Supa IGA were mailing back boxes of invoices from each store to head office and having to manually enter the data.

"We were able to determine that Metcash is able to supply daily invoices and weekly statements in PDF format including a text layer. The solution we have developed for Khan's Supa IGA Group employs ABBYY FlexiCapture to extract relevant data from the text layer and place it in Laserfiche."

"Laserfiche is an EDRMS and we do use it to hold the document record, but it can be used for so much more. Laserfiche includes a bespoke workflow modelling tool that is not necessarily document-centric and you can use data and scripting to create reports. By these means we have enabled the ability to perform reconciliation on Metcash statements held in Laserfiche."

As well as the typical problems with managing paper invoices, Khan's Supa IGA Group was keen to provide better visibility, access information from anywhere and obtain Clarity of Charge Through.

DataDevice is providing the solution on a hosted platform deployed at Khan's Supa IGA Group head office in Picton, NSW.

For non-Metcash invoices, ABBYY FlexiCapture provides the OCR capability as well as Intelligent Data Extraction to extract all of the required invoice information (header, footer and line item data) from scanned images and non-text searchable PDFs.

Once the data held in Laserfiche is reconciled and approved, a payables file is uploaded to Attache to be placed in the next EFT funds transfer run.

Advantages of new solution include:

- The ability to report on P&L a daily basis broken down to store department level to enable better control of bottom line
- Reducing the frequency of in-store stocktake and eliminating the potential for stores purchasing more than required.

Faisal R. Bajwa, Manager Group Controller for Khan's SUPA IGA Supermarket Group, said, "The new solution has saved a lot of work in our stores and helped us transform to paperless operation.

"We have 11 stores spread across the state in some very remote areas and in some cases it was a 10 hour drive to get all the invoices back to our head office.

"We needed to have dedicated staff in store collating all of the weekly documents that were received with the stock. They would need to spend time on the job each Monday and then it was costing us hundreds of dollars per store to courier these documents back to us every Tuesday. We would only have them back to us on Wednesday so there was a big gab in visibility as to what happened in the store the week before."

After installing a suite of Epson multifunction scanners for store invoices and implementing the DataDevice automation workflow, invoices are now swiftly available.

"Now anything that arrives at a store we have access to it in head office by the next morning."

"We have reduced a lot of our labour costs and paperwork, because once documents are scanned, they can be thrown away, nobody needs them. Simply removing the filing cabinets in our head office that were used to store photocopies of invoice gave us room for five more staff workstations.

"Also, as we get the invoices into our system much more quickly. we can pay our suppliers more promptly which improves the relationship. "We are now capturing much more information in realtime which is assisting us to optimise our stock purchasing," said Mr Bajwa.

http://datadevice.com.au *https://www.abbyy.com/en-au*

PAPERLESS
HAS NEVER BEEN EASIER

What if you could prep and scan as fast as or faster than your current prep-only rate?

There is a better way to handle a wide range of media and reduce or eliminate much of the document prep involved in scanning. It is simply not necessary to constantly tape small or odd-shaped items to full sheets, photocopy folders and fragile pieces, or manually flatten sheets before scanning.

Falcon®, the Universal Document Scanning Workstation, allows operators to prep and scan documents at a faster rate than most current prep only processes, which significantly reduces operating costs.

Learn More at www.opex.com.

Falcon®

Houston we have a problem – what do Earth's orbit and enterprise data have in common?

By Mike Kiser

On April 2, 2018, the first Chinese space station – Tiangong-1 – came crashing down to earth. Headlines across the world stoked panic and alarm, and astronomers attempted to predict where the 9.5 tonne object would strike. This is not the first such object to threaten damage and destruction, and nor will it be the last.

Since the beginning of space exploration, countries have raced to put objects into Earth's orbit. As a result, there are objects in space right now providing us with telecommunications, GPS services, weather tracking and contributing to science in ways we can only imagine. But after years of being treated as international landfill, space has become increasingly more congested.

There are over 14,000 objects in space that are actually junk – fragments of spacecraft, old boosters, and forgotten satellites¬¬ no longer serving any functional purpose. Not only are they junk, but they are dangerous pieces of junk, travelling much faster than a speeding bullet at 28,000 kilometres per hour.

Businesses today have raced to launch data into orbit around the business in a way that echoes this rising problem of space debris. This is in part thanks to the arrival of the increase in cloud adoption and file sharing – which has seen employees take data out of structured systems and store it into cloud and network-based storage because it is convenient for their immediate job function.

Whether it's a presentation on SharePoint or a spreadsheet on Box, up to 80% of enterprise data is on the move, being downloaded, accessed, and shared outside of IT's purview. This data is commonly called 'unstructured data' and it is a huge area of exposure for organisations today.

The scary part of this is how much of this data is sensitive. Credit card information, healthcare records, and financial data is all on the move, orbiting organisations despite the increasing risk of cyber-attack.

Even scarier? Most organisations have no idea where this unstructured data lives, what lies within that data, or who owns it. And this is the type of data that adversaries need to potentially hold an organisation, or worse, their customers, to ransom.

When thinking about data orbiting our business, we must think of it like the satellites and other objects orbiting the earth – the majority of it is dangerous, has most likely been abandoned, and is not serving a purpose. This is a challenge the international community has been tackling since it first launched, and it's time for IT teams to do the same.

Since the beginning of space flight, nations collectively created a database capturing all relevant data about the objects being launched into space – dimensions, weight, mission, launch speed, trajectory – to fully understand what was out there. However, it quickly became apparent that there were disparities between what should be (what was logged into the database) and what actually was launched into space.

To accurately know what was out there, governments developed and deployed laser telescopes to provide ultimate visibility and accountability into this orbiting junk for scientists across the globe.

Much like the space agency and its laser satellites, organisations must seek to discover where their sensitive data resides, who has access to it and what they are doing with that data. But this is not as easy as it sounds in the enterprise, as the user frontier is also changing, adding another layer of complexity to the situation.

That is, who, or rather what organisations consider an identity has evolved to include employees, contractors, partners, and more increasingly, software bots (which, like humans, are accessing data and making decisions based on it).

The international community doesn't just rely on satellites to understand the objects in Earth's orbit – it has highly trained physicists determining the responsibility of objects based on their observed trajectory. This is a practice that enterprises need to understand too, as thanks to the huge number of applications entering the business, it's not always obvious where data has come from, where it resides or who owns it.

Visibility into the environment — knowing what data is out there and who put it there – allows organisations to determine the original actor responsible for an objects' creation, and shows how they can establish owners for the sensitive data that is found. This provides a chain of responsibility for review, persistent protection and clean-up of sensitive data usage.

This challenge of discovering and protecting an organisation's sensitive data stored in files is one of the new frontiers of identity governance. Organisations are seeking a way to discover where this data resides and put controls in place to protect it, and the best way to do that is by governing access to this data in the same way they govern access to critical applications.

Extending identity governance to data stored in files helps organisations answer the questions of who has access to what data, who should have access to it and how that access is being used. By building on the lessons learned from sixty years of space debris management, organisations can govern the new frontier of data stored in files, and at the same time, rapidly realise that the path to a more secure enterprise isn't actually rocket science after all.

Mike Kiser

Global Strategist and Evangelist at SailPoint, Office of the CTO.

PURCHASE-TO-PAY AUTOMATION

ACCOUNTS PAYABLE

- Automatic invoice matching
- Accurate and rapid financial closing procedures
- Audit trail and KPI management
- Vendor portal for easy communication

PURCHASING

- Centralised application to raise purchase requisitions
- Supplier catalogue management
- Quote to purchase requisition conversion
- Optimoses indirect spend requests with budget control

RECEIVE & SCAN — EXTRACT — VERIFIY & MANAGE — ANALYTICS & AUDIT TRAIL — SUPPLIER PORTAL

ORDER-TO-CASH AUTOMATION

ACCOUNTS RECEIVABLE

- Automates the delivery of invoices (all formats)
- Reduce receivable and DSO rates
- Get paid faster
- E-invoices compliance (PEPPOL format)

SALES ORDER PROCESSING

- Process orders in all kinds of format
- Issue management workflow
- Respond to inquiries faster
- Measure efficiency and have accurate forecast

QUIT PAPER.

www.esker.com.au
info@esker.com.au
www.blog.esker.com.au

Effective documentation: How to get corporate policies under control

By George Kesteven

Your organization's policies are the foundation of your corporate governance system. If you need to prove that your organization is effectively governed, you need to be able to demonstrate that your policies are under control.

■ There is no doubt about which policies are currently in effect, nor about which policies were in effect at any time in the past. (In the event of an accident or incident, the organization may be called upon to produce them.)

■ You have records to prove that employees are familiar with the policies relevant to their work.

■ There is an assigned accountability for each policy, a documented procedure to ensure that each policy is communicated and implemented effectively, non-compliance is detected, and performance is measured and reported.

■ You have a formal method to ensure that the organization has all – and only – the policies it needs.

Setting up a policy management system is not difficult. Here is one way to do it –

1. Make an inventory of the existing policies

Make a list of all the documents with *'policy'* in the title or listed somewhere under a Policies heading. Check who created them, how old they are, what's in them, and – if there's any way to know – how often they get looked at.

It's not uncommon to find multiple sets of *'policy documents'*:

■ Board-approved policies, under the control of the company secretary or general counsel.

■ Policies used by HR as part of induction for new employees.

■ Framed statements about safety, quality, and environment on the wall in the office foyer, read only by visitors.

It's also common to find shared-drive folders called *Policies* with large numbers of extraneous documents in them (2,400 in one organization we helped): prior and alternative versions, drafts-in-progress, supporting notes, implementation procedures, forms. Valuable information, no doubt, but not documents you'd want to be defending if your corporate governance system were under investigation.

2. Define what 'policy' means in your organization

Some organizations use *'policy'* loosely, for any guideline intended to help employees make decisions. Others use *'policy'* strictly for Board-issued statements of corporate intent. A strict definition is easier to manage for corporate governance purposes:

- A policy articulates a governance objective.
- A policy authorises the use of organization resources.
- A policy establishes management accountability: someone has responsibility for implementing the policy and will be held to account if the objective is not achieved.
- A policy may authorise employees to act outside the normal chain of command (for example, a safety policy may authorise any employee to halt an activity if they think it dangerous).

There is no 'right' definition of policy (although there are plenty of wrong ones). The important point is that you have a definition. In general, the more precise the definition, the fewer policies you will have; and the fewer policies you have, the simpler and more effective will be your corporate governance. If a document is merely a guideline for employees, then call it a 'guideline'.

Your definition will determine, in turn, who may issue a policy: *Board only? Senior management team? Any manager?*

3. Establish what policies you need

Map your policies against your governance objectives. Every governance objective should be supported by a policy; every policy should support a governance objective. This mapping is not necessarily one-to-one. You might have a single sustainability governance objective, implemented through separate policies for health, safety, and environment.

■ If you have a governance objective with no supporting policy, there is a policy missing.

■ If you have a policy that does not support a governance objective, then either there is an unstated governance

objective, or the policy is unnecessary.

Management system standards like ISO 9001 and ISO 14001 mandate the existence of a supporting policy.

4. Create a register

There should be no doubt about which policies are in effect at any time. A folder called 'Policies' on a shared drive is not sufficient. At a minimum, your register should show:

- ID number
- Status: *draft*, *current*, *superseded*, *withdrawn*
- Date issued
- Accountability
- Approved by (if the policy is Board-approved, this should be a reference to the meeting record)

In the event of an accident or investigation, the organization may be called on, as a matter of document discovery, to produce every policy that was in effect at a given date. With an effective register, this is trivial; without, this could be an expensive embarrassment. For the same reason, policies should have ID numbers. Policies are sometimes renamed: the *Policy on A*, *B*, *and C* is re-issued as the *Policy on B*, *C*, *and Q* . Without ID numbers, it might be difficult to prove that the earlier policy is not still in effect.

5. Spell out what it means to be accountable for a policy

It's not enough for a policy simply to make a statement about the organization's good intentions. For every policy there needs to be a position or team accountable for giving effect to the policy. The details and procedures of this accountability should be spelled out in the policy management system. This accountability might cover –

- Determining what the policy means in the context of the organization's actual activities.
- Planning, budgeting, and managing the actions necessary to implement the policy.
- Verifying compliance and reporting performance.
- Detecting and reporting non-compliance.
- Annual review

6. Create awareness and notification procedures

You should be able to *prove* that your people are aware of the policies with which they must comply. This means –

- Induction: new employees, and employees moving to a new position, must be made aware of the policies relevant to their work.
- Notification: all affected employees must be notified if a new policy is issued or an existing policy is updated or withdrawn.
- Annual review: it is prudent to require all employees to confirm, annually, that they have reviewed the relevant policies.

Some organizations use a written *Policy Acknowledgement* form ('I have read and understood these policies….') to be signed by new employees as part of their induction, and by all employees as part of their annual review.

George Kesteven is a Lead Consultant with Phrontex. Contact him on +61 409 606 899 or george2@kesteven.com.au

Is blockchain a false idol?

By Maria Bellmas, Associate Director, Trade & Supply Chain, ANZ

We're well past peak bitcoin. Are we approaching peak blockchain, the currency's much-hyped underlying technology? Sold as a solution to all of life's problems, blockchain offers a ton of legitimate solutions for businesses – but raises just as many questions.

Blockchain has been the darling of the tech world for some time and increasingly so over the medium term, perhaps in part pushed by scorned crypto fanatics grasping for some justification of their obsession in the wake of the bitcoin collapse.

But unlike crypto, blockchain is real and tangible. Its distributed ledger technology is seemingly here to stay; the market is awash with interest in it and a large number of financial institutions – including ANZ – have begun work on projects involving it.

Research suggests by 2022 more than $US11.7 billion will be invested in blockchain solutions, with the total value of the tech to reach $US3 trillion by 2024. Yet while the blockchain hype is unquestionable, voices questioning blockchain's maturity and effectiveness are becoming louder.

In 2018 the CEO of Spanish group BBVA, Carlos Torres, suggested there were some significant challenges ahead for a technology he called "not mature". Like many in the market he sees value in the application of the tech "when it is mature and the regulators are ready".

The question is when – or if – that will occur.

Searching

Writing in Forbes , professor and economist Yuwa Hedrick-Wong says the collapse of bitcoin has left blockchain "an invention looking for a viable commercial application".

"Because… applications of the blockchain technology have yet to be realised, the valuation of the technology today is therefore exactly zero," he says.

"This does not mean that blockchain is useless. It could be the transistor of the 21st century or it could end up in the garbage heap of technological inventions that failed to find a commercial application. We will have to wait and see."

Kai Stinchcombe in American Banker is less subtle, questioning if there is any practical use for distributed ledger tech at all.

"Everyone says the blockchain, the technology underpinning cryptocurrencies such as bitcoin, is going to change everything," he writes. "And yet, after years of tireless effort and billions of dollars invested, nobody has actually come up with a use for the blockchain — besides currency speculation and illegal transactions."

As a 2018 report from the US National Institute of Standards & Technology says, blockchain "relies on existing network, cryptographic and recordkeeping technologies but uses them in a new manner".

Blockchain has only been available in recent times and its scalability is yet to be proven. Some databases offered by leading technology providers have been in the market for years and have a proven record of processing millions of transactions per day without failure.

Companies therefore need to do a thorough exercise to analyse the problem they are trying to fix and assess if blockchain really is the technology that best fits the solution.

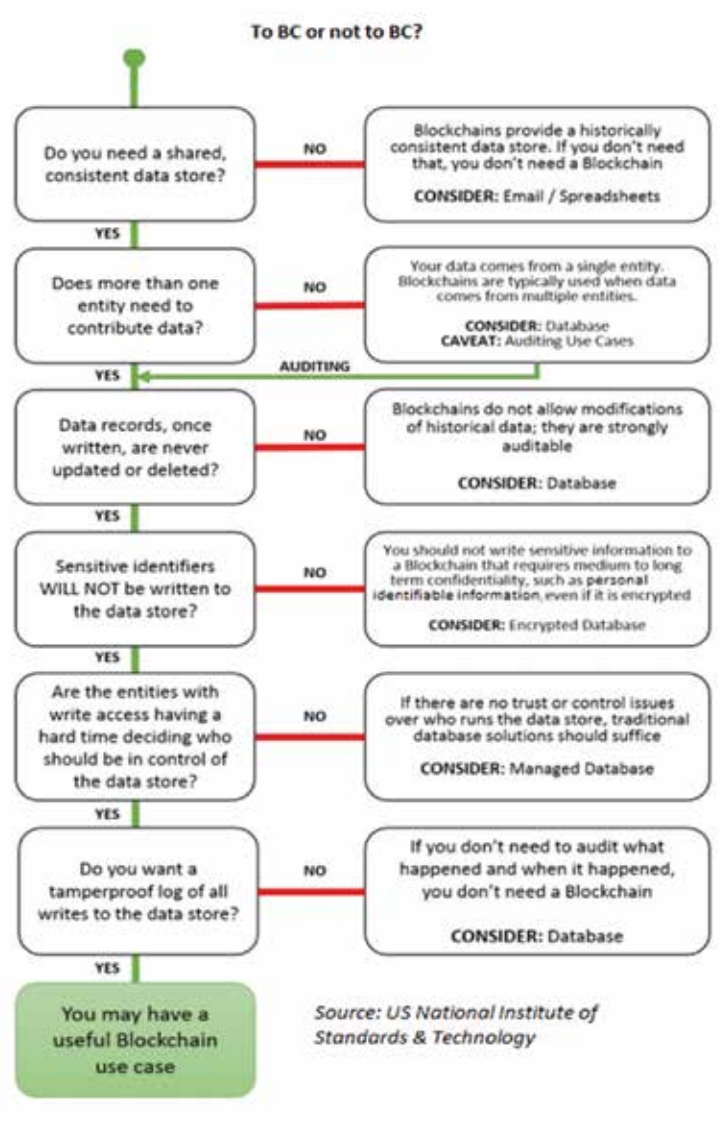
When it works

Don't peg us as philistines; blockchain is a technology with a huge number of benefits and it is particularly proving useful in the trade finance space.

ANZ is one of seven banks participating in the eTradeConnect in Hong Kong, an innovative project led by the Hong Kong Monetary Authority which makes use of blockchain technology.

eTradeConnect is "an endorsement not only of the technology but also a broad digitisation strategy within the trade finance world, which is overdue", ANZ Banking Services Domain Lead, Nigel Dobson, says.

Another example is the digitisation of guarantees in Australia . The challenges many users of guarantees experience such as tracking, reporting and transparency of a guarantee's status and the lack of standardisation highlight the need for a database with several non-trusting writers: banks, applicants and beneficiaries.



The reality is a lot of the problems blockchain projects attempt to fix have already been solved by existing technologies. In many cases, a regular database can solve for the problem with more reliability and for much less cost than blockchain.

A blockchain, which can be relied on as the single source of truth for the existence and status of a bank guarantee, can effectively solve for the issue.

What is blockchain?

Blockchain is a system of record where each participant shares one single ledger – a source of truth maintained by all organisations and/or users.

The 'distributed ledger' is a shared, trusted book no single body controls and everyone can access – protected with advanced technology which ensures authenticity.

As Chris Venter writes, all participants in a blockchain "must agree the ledger and transactions to be stored in it are valid before the ledger is updated."

"Any participating node in the blockchain can review the entries. Once a transaction is written to the blockchain it is extremely difficult to erase. The ledger keeps a record of every transaction ever posted to it since it was started."

Not every one

The truth is blockchain is not the solution for every project that needs a database. A 2018 study out of China showed despite the plethora of blockchain-related projects entering the market, 92 per cent failed – and did so in an average of just over a year.

As the US NIST report concludes, blockchain "is still new and organizations should treat blockchain technology like they would any other technological solution at their disposal--use it only in appropriate situations".

An example of a global project not using blockchain is the recently announced Trade Information Network, a transformational trade information exchange hub based on open architecture that acts as a trusted registry of purchase order and invoice flows across the end-to-end supply chain.

The TIN, in which ANZ is a participant, tries to solve the lack-of-standardisation problem currently in global trade finance. It has the potential to be the first inclusive global multi-bank, multi-corporate network in trade finance, aiming to achieve a utility much as SWIFT does with payments.

The Network in this case acts as the trusted intermediary for the database as it is owned by the industry, operates for the industry transparently and uses open architecture and standardised connectivity.

The project assessed a blockchain solution but decided the tech was not yet ready, on the back of speed-to-market and scalability concerns – particularly around handling high volumes of transactions across more than 100 countries. The network will have the option to move to blockchain when the technology matures.

To blockchain or not?

Many companies fall into the trap of admiring the blockchain technology before admiring the problem they are trying to solve. It's vital to understand what the end goal is and assess what the options are before starting the work on any project where blockchain is being considered. While some projects will benefit from blockchain technology and this has a lot of potential, others do not necessarily need it and are better off using existing good old databases and technology solutions.

Maria Bellmas is Associate Director, Trade and Supply Chain Product at ANZ. This article was originally published on Insititutional.anz.com.

The big challenge of Small Data

By Benjamin Peterson

We're getting used to dealing with Big Data in our organizations. It has its challenges -- Big Data can be too big to ship around easily, too big to back up, too big to aggregate with traditional tools, too big to join quickly to the metadata we'd like to use.

But on the other hand, since it's big and important, you usually know where it is. A typical Big Data item in my sector, banking, might consist of a year's worth of end-of-day risk measures under various scenarios, and it might have a lifecycle roughly like this:

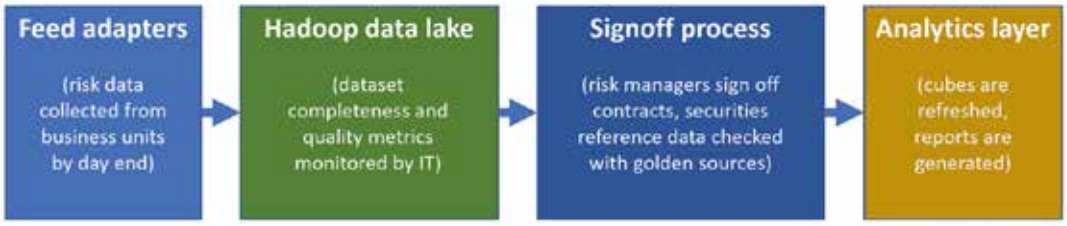


Figure 1: End of day risk data flow (greatly simplified)

It's not an easy pipeline to manage, but at least there's only one of it.

Big Data is a challenge, but in my work in data management and governance, I'd say I may have seen seen more actual money and person-hours wasted by Small Data than by Big. Small Data consists of data sets that are small enough to:

• Distribute by email (effectively creating a new copy each time)

• Edit by hand (effectively creating an ungoverned, unmanaged change history)

• Join, filter and structure via Excel and other end user tools (effectively creating undocumented lineage)

A typical Small Data item in my sector might consist of, say, a list of the ISO currency codes, and it might have a life cycle something like the diagram at the bottom of the page:

Data such as this is small yet highly intractable, rather like a really angry shrew. We can be fairly sure there's only one set of end-of-day risk in the enterprise, but we can be fairly sure there are many, many lists of country codes. And each of those unmanaged, uncounted lists can potentially cause data quality issues in our Big Data, further down the pipeline.

Managing Small Data is hard. On the technical side, one useful step is to centralize, so that at least the emailing of files and the storing of them on local laptops is curtailed. But it's not really a technical problem, because unlike Big Data, Small Data can go through its lifecycle without IT checks and balances, without passing through a chain of formally owned data services; instead, the links in the chain are individual people.

And that makes managing Small Data a cultural and operating model challenge rather than primarily a technical one. Once that's understood, it's possible to gradually rein in the Small Data within an organization.

I'd write more on this, but I don't have time at the moment -- I have to pull together a single, true, final list of our currency codes. When I'm done, I'll mail it out to everyone; that should solve the problem for a while.

Benjamin Peterson is a consultant and data architect for DataOps UK, where he works on planning and delivering programmes, deploying new technologies, and defining best-practice models for data governance.

Figure 2: ISO country code list data flow (even more greatly simplified)

Simply. Better. Organised.

Rated one of the most user-friendly, comprehensive, scalable and affordable Document Management, Records Management and Workflow Systems in the world.

With over 1,000,000 users and more than 30,000 live sites, ELO is one the world's leading developers of modern EDRMS.

STANDARD FEATURES

- Collaboration
- Workflow Engine
- MS Office™ Interface
- MS Outlook™ Interface
- MS Explorer™ Interface
- Autofiling
- OCR for Content Search
- Mobile Capture
- Installed Client
- Web Client
- SmartPhone Client
- Open API

OPTIONAL FEATURES

- SAP Interface™
- Microsoft Dynamics™ Interface
- MS SharePoint™ Interface
- eForms
- System Migration Framework
- Barcode Recognition
- Business Solutions:
  - Invoice
  - Contract Management
  - Human Resources
  - Candidate Mangagement
- more ...

Compare your system with ELO and see why you should not pay for features that are available as a standard.

ELO, a Global Company with Australian Expertise

Contact our channel partners or ELO direct to find out more

ELO DIGITAL OFFICE ELO.COM 1300 066 134 ELOINFO@ELODIGITAL.COM.AU

Memorialising Online Transactions with the Portable Document Format

By Gerald Holmann

Today, more and more transactions are being handled online across a broad range of categories. Transactions can be Business-to-Consumer (B2C) and Business-to-Business (B2B), local and international, goods and services, and can be settled using credit cards, bank transfers or peer to peer payment networks.

While different approaches have been deployed to ensure the safety of data transmission and to verify the identity of the parties, very little has been done to ensure that the transactions are memorialised in a secure and reliable manner.

Memorialising the transaction in a reliable way becomes critical anytime that a transaction needs to be revisited, which can happen for many reasons, including audits, disputes and others. In these situations, it is imperative to have the ability to retrieve the transaction in a human readable form, for close inspection.

Most eCommerce systems in common use do not provide this guarantee, with the potential to cause legal and financial problems when transactions have to be examined.

By far, the most common method to memorialise transactions is to store the transaction data in RDBMS systems, in database records spread across multiple tables. The transaction is broken up into its components ((i.e. item numbers, quantities, cost per item, line items, etc) and then stored as database records that can be spread across multiple tables.

The human readable/visual representation of the transaction is usually not stored at all.

If the transaction needs to be examined at any point in the future, the data is retrieved from the database and a human readable visual representation of the transaction is recreated either in printed form or for display in a browser.

Even when storing simple transactions, and more so for complex transactions, a single transaction will be stored as multiple records in multiple tables in a database. For instance, a simple invoice might be composed of a main record in an invoice table and multiple records in a line items table.

The transaction data then might have a complex structure and so recreating the human readable version of the transaction is not a trivial matter.

This approach generally works because there is a level of trust in the party that is storing the transaction, that the data in the database records will remain unaltered and that the method used to convert the data to a human readable form will remain the same as when the transaction was performed.

Neither of these conditions may be true or may not remain true over time. When either condition fails, it will not be possible to reconstruct the human readable form of the transaction accurately. There are two main reasons why this assumption might fail:

Data Integrity

Once stored in a database, transaction data is supposed to remain unchanged. However, there are many reasons why this may not be the case, including data migration, defects in the eCommerce system and even manual intervention by IT staff or hackers.

Any time that transaction data is modified, it creates the potential that the transaction might be changed in meaningful ways.

To compound the problem, database systems generally do not keep a full audit record of all transaction data, so in most cases where the data is modified, there is no way to tell that the data has been modified at all, much less to verify that the data matches the original transaction data.

Some scenarios where transaction data can be modified:

■ Upgrades to the eCommerce system: Modern eCommerce systems and their components are constantly being upgraded to enhance features, address defects and improve security. The upgrades might include changes to the user interface, the transaction workflows and more importantly to the data stored for each transaction, for instance, to add fields for new options in a transaction. Anytime that the data structures are modified, the current data in the database system must be migrated to match the new structure. This can introduce errors in the data during the migration process, which in turns modifies the historical transactions.

Once stored in a database, transaction data is supposed to remain unchanged. However, there are many reasons why this may not be the case

■ Complete change of the eCommerce system: Transaction handlers will occasionally change their eCommerce system in its entirety. When this happens, transaction data has to be migrated from the old system to the new system. The database structures of the two system will normally be very different, with many cases where there is no one-to-one correspondence between some of the data. This means that the data is not just copied over, but that it has to be transformed to match the new system. Keeping in mind that modern eCommerce systems may have hundreds of database tables, the probabilities of mapping data incorrectly or losing data in the porting process are quite high. Additionally, the new system will probably have a different set of features related to transactions, so there might not be adequate mapping of all fields and records in the old system to the new system. This would make it impossible to create an exact reproduction of the human readable version from the new data structures.

■ Defects in eCommere system: There is no software system that is completely free of defects. Of concern in this context is the code that interfaces with the database systems, especially the code that forms SQL queries to get data in and out of databases. SQL script is particularly fragile with the possibility of extreme consequences. For instance, the exclusion of a single condition clause in a SQL statement can result in the corruption of all records in a table. This means that there is a possibility of old transaction data getting modified inadvertently by faulty SQL queries working on new transactions. These types of defects can go undetected for long periods of time, so when they occur, they can be particularly troublesome in that large amounts of historical transaction data might be invalid. By the time the corruption is detected, it might be too late to recover any of the original

data. Finally, transaction data might be corrupted intentionally, with malicious intent. All data in a database system can be modified given sufficient access, and this access has to be granted at least to the IT staff managing database systems. Additionally, 3rd parties might gain access to these database systems by hacking (yes, it does happen). Once a user with malicious intent has access to the database system that stores the transaction data, all the data is accessible and modifiable.

■ Conversion of Transaction Data to Human Readable Representation: Transaction data is stored in databases as a group of records in multiple tables, connected through references. Even though the raw records can be viewed using a query tool, the data is not human readable for most intents. When a person needs to view a transaction, the data must be transformed into a visual representation that a human can understand. This human readable form can then be printed or displayed in the browser or stored in a PDF document.

Because transaction data is complex, the conversion to a human readable form is not a trivial process. The code that converts the data must gather all the different parts of the transaction, organise them and then create a visual representation that makes sense to a human.

Over time, as eCommerce systems are upgraded, the data that is stored with transactions will evolve, and this conversion process needs to evolve with it. As the data and the conversion process are modified, the converted results will also change, to a point where it might not be possible to reconstruct the same visual representation of the transaction at some point in the future.

Even when the visual representation might be equivalent to the original transaction, and look similar, accumulated changes over time might introduce subtle changes in the interpretation of the transaction until at one point they might make a material difference.

This problem is compounded when a company replaces their eCommerce system with a different system. Not only does the data have to be transformed to fit the schema of the new system, but the conversion methods in the two systems will be very different, resulting in differences in the human readable forms as well.

Proposed Method

We propose that by saving a visual representation of the transaction, created at the time that the transaction is made, these issues will be resolved. The natural format to store this representation would be the PDF format, for a number of reasons. PDF is the de facto universal electronic document format, it is used and accepted by anyone that uses electronic documents, and provides features for long term archiving and document integrity.

By capturing the visual representation at the time that the transaction is processed, it is guaranteed that the data used in creating the document is current and valid and the visual representation of the transaction matches the expectations of all the parties involved in the transaction.

Once capture, the PDF document should be stored separately from the transaction data records, preferably in a system designed to store documents, such as a document or content management system. Once stored, the document can carry a transaction ID or similar reference to be able to connect to the transaction data records.

Some factors to consider when using this approach, and specifically when using the PDF format:

Background vs Foreground transactions

On foreground transactions where there are one or more humans actively involved, there will always be a human readable version of the transaction that is used through the transaction process. For instance, when a shopper is purchasing products online, they will see their cart with the items before checkout and they will see a confirmation screen after the transaction is committed. In such transactions, the confirmation screen (or equivalent) should be saved as the human readable version of the transaction.

On background (automated) transactions, the parties involved should agree on a specific visual representation when the automated processes are put in place, and then produce the views for every transaction at the time that each transaction is committed. On any changes to the view, the parties involved need to approve the new view before it is put into place.

Storing transactions using the PDF/A format would ensure exact reproducibility anytime in the foreseeable future.

PDF/A for Long Term Archiving

The PDF format describes a related sub-format called PDF/A, that is specifically intended for long term archival of PDF documents.

PDF/A compliant PDF files are still valid PDF files but have additional requirements to make sure that the content can be rendered correctly at any time in the future, even on different systems. These requirements include embedding all fonts in the PDF document, strict definition of the colours used in the document and others to remove all dependencies on the environment that the document may be opened in.

Storing transactions using the PDF/A format would ensure exact reproducibility anytime in the foreseeable future.

Digital Signatures in PDFs

In addition to using the PDF/A sub-format to store the transaction view, the PDF documents should also include a digital signature that includes a timestamp from a certified timestamp server.

The purpose of a digital signature in this context is not so much to positively identify the signer of the document, but rather to ensure that there are no modifications done to the document after its creation. Digital signatures in PDF documents can include a timestamp that will certify the time and date that the digital signature was applied.

By applying a digital signature at the time that the document is created, any changes made to the document henceforth would invalidate the signature, thereby protecting the original document against any modifications.

The embedded digital signature can and should also include a timestamp from a certified timestamp server. The timestamp serves two purposes:

■ It certifies the time and date of the transaction.

■ It protects the document against modification: Without a timestamp, the digital signature in a document can be removed, the document can then be modified, and then a new digital signature can be added to make the document appear legitimate. Including a timestamp as part of the signature would prevent this because the new signature would have a different time and date.

Today PDF documents are widely used for statements and legal contracts. We suggest expanding the use of PDF documents to keep electronic receipts of all important transactions. Simply storing scattered data in a database is an unreliable solution for long term archiving. Visual documents that are locked and approved by all parties can provide safe immovable records.

Gerald Holmann is Founder and President at Qoppa Software. https://www.qoppa.com/

The Importance of Record Classification & Tips for Improving Filing Accuracy

By Ellie Kim

A hot topic is Records Classification. Discussions surrounding records classification do not seem to cease, as this continues to be the centre of records management issues experienced by many. In my view as a records manager, the importance of classification often tends to be misunderstood or dismissed by end-users and even IT professionals. On the other hand, I realize that records managers should put more effort into developing strategies that address the concerns expressed by others.

For those new to the concept, classification is the "systematic identification and arrangement of business activities and/or records into categories according to logically structured conventions, methods, and procedural rules represented in a classification system" (ISO 15489-1).

The term is also referred to as classification system, classification scheme, file plan, and records retention and disposition schedule (makes up a part of a classification system). Readers may also point out that classification and classification system are considered two different terms. In this blog, I treat both the same, but either approach is fine; basically, classification is represented in a system (classification system). So, why is classification so important?

Classification provides context of records

Many people, particularly IT professionals, question the need for classifying documents when enterprise systems can fully index content. Indexing of content or metadata is not sufficient for establishing the context of records. This is important because we can segregate records of value from records of little or no value.

While the value of certain information can be a subjective matter and differs depending on the goals for seeking the particular information, records classification helps narrow down places where reliable information may reside.

Subsequently, it aids searchability. When there is a particular topic of records to search but hardly any information other than a few keywords are provided, users initiate the research by identifying classifications that may apply to that particular topic. When records are filed properly and/or they are audited systematically by records managers, the success rate for this methodology is often high.

Classification specifies retention and disposition of records

"Storage is cheap, so why bother deleting data?" is another popular remark I often hear others say. Indeed, portable storage units are getting cheaper. But to acquire sturdy, reliable and corporate-capable storage can be expensive. In fact, why keep records when you don't need them or are not required to keep them and become subject to unnecessary litigation?

Records that are destroyed according to law and organizational policy along with the retention/disposition schedule are far less likely, or not at all likely, to be subject to litigation or accused of spoliation. This is a financially sound risk management strategy.

4 Tips To Improve Filing Accuracy

Many would agree with me that an Electronic Document Records Management System (EDRMS) is only as good as its implementation success rate.

An organization may have purchased the most up-to-date records management application with all the bells and whistles, but if end-users do not favour using it, the application hardly has any value or use to the organization.

In other words, if records are not filed to the correct classification, they cannot be found easily, and the retention and disposition applied to them may be incorrect.

On the other hand, end-users often find identifying the correct classification to file documents a time-consuming task while others fear filing them incorrectly.

Here are 4 tips to improve your organization's filing accuracy while allowing users to classify records more easily:

1. Simplify your file plan scheme

Do you have too many classification code subsets or subsets of subsets? While end-users often favour a desktop folder-like structure, it can also be a cumbersome task to continuously drill down to aggregates of aggregates to find the right classification. Analyse which aggregates can be grouped together and which should be broken down.

Break down groups only if functional activities seem too broad, the volume of records they fall under are so high that it is hard to navigate through them or manage them, or when the retention schedules are significantly different.

2. Use easily recognized codes

File codes should be easy to recognize. Utilize numeric or alphabetic codes that are easy to identify or frequently used by end-users as part of their business activities.

■ Acronyms and abbreviations can be easier to recognize, if they are adopted organization-wide. Incorporate them as part of the classification code. Which classification code is easier to understand and identify? For Circulation – Times Magazine, "055-33" or "055-TIMES"?

■ Incorporate unique identifiers or device numbers that the organization (office of the primary responsibility) uses to specify any procedural or contract documents. The fewer numbers or codes users need to become familiar with, the easier it is to adopt.

3. Create Cheat-sheets For Users

Perform a quick analysis of the end-user's (or his/her colleague's) types of documents they often generate or receive. Find those codes and create a commonly-used-classification list for the user to use as a reference. Or create a list for a group of users who share a similar job responsibility.

4. Consider an Intuitive Solution

What if we can still classify documents correctly while freeing users from having to perform that task? Can we really have the cake and eat it, too? Collabware CLM for SharePoint offers a way to classify documents automatically by utilizing a type of metadata value that end users input or select as part of their regular activities.

For example, when a user creates a Contract document and inputs a contract number into the document, CLM will recognize that contract number value and classify the document accordingly. Furthermore, it can also complete (populate) other necessary values that are associated to the classification to metadata fields in the document's profile. Sounds too good to be true? Brochure

End Note: Some argue records classification does not necessarily work for everyone. It may be true, classification expresses one type of records context that is often not specific enough. In a digital environment, records relationships can be dynamic and can constantly grow. But with the classification as the basis, users can utilize other metadata fields to create different types of records context.

Ellie Kim is a knowledge & information strategist and IT and Adjunct Professor at the University of British Columbia where she conducts a course in Archives (records and information management). This article was first published on Collabware.com

Records management by stealth: An Australian practitioner's view

By Nicola Sanderson

Records management is, and always has been, a balancing act. On one side is compliance. It is at the very core of why records management exists. On the other side is the end user experience with creating, capturing and using records. These two sides usually pull in different directions. It is very difficult to manage a record if it is not identified and captured, and it is unrealistic to expect end users to be highly skilled record keepers, with hours of their day devoted to keeping records perfectly. Records management as a profession is under increasing pressure to develop approaches and solutions that perfectly balance these competing priorities.

This article will address an approach colloquially known as records management by stealth – otherwise known as compliance by design. Whilst the concept of records management by stealth is relatively straightforward, the execution of it has been patchy. This leads to some important questions:

- What exactly is records management by stealth?
- Why has execution been patchy?
- Why aren't we seeing more of this? and
- Why hasn't it become the norm in our industry?

To help answer these questions, I will be reviewing the current state of play in an Australian context, examining some solutions and sharing a case study to give practical guidance on ways forward, or at the very least to start the process of rethinking how we go about delivering records management by stealth.

What is records management by stealth?

Records management by stealth delivers compliant records management with minimal interaction from people. Put simply, records management 'just happens' without people feeling they are working specifically on record management tasks or

being distracted from their actual job.

There are different flavours of records management by stealth: An approach may be system centric, business process centric or people and culture centric.

What drives this is putting the end user experience front and centre. Different approaches achieve this aim: It may be a traditional Electronic Document and Records Management System (EDRMS) software that is configured to offer alternative, more user-friendly taxonomies or repurposing other platforms such as O365 and SharePoint to build in records management functionality.

Other approaches rely on auto-classification/auto-harvesting of records to a single records management repository – an example of this is the Australian Government's Digital Records Transformation Program which in essence embodies this aim.

As always, there will be the vendor-led approach, much the same as we've seen recently in the UK and Europe with the EU General Data Protection Regulation: There will be someone, somewhere who will aim to sell a solution that solves all your problems with the flick of a switch.

And, of course, fit for purpose software will always form an integral part of our solution set. We also need to be mindful of our own skill sets to ensure we are personally equipped to cope with these pressures and challenges.

So, whether you are just starting out in planning a records management program or looking to increase the efficacy of an existing one, read on for some options for planning and delivering records management by stealth.

Firstly, we will look at the challenges in our industry and how we as a profession may be part of the problem.

A challenging landscape

The challenges we face today in records management are many. I am sure we have all encountered at some point in our careers, challenges such as:

- user acceptance of the solutions we provide;
- getting recognition and support for our programs;
- the challenges of managing vast numbers of records contained in legacy systems;
- keeping up with modern ways of working based on people expecting access anytime, anywhere, from any device;
- user reluctance to move away from shared drives or network drives and their hierarchical/folder-centric approach;
- not enough resources to deliver programs and projects;
- comments such as 'we don't need EDRM, we have enterprise search'; and
- a dilution of focus on compliance and good records management, replaced by a focus on software solutions as the answer to everything.

What has been the response to these challenges? There are numerous examples of poor record-keeping reports in the media and in government audits and reviews. Over the last few years, public-sector audits and review of record-keeping compliance in government show that compliant records management is still patchy.

Records and information governance professionals, along with senior staff and business managers who hold ultimate accountability for records compliance, can do more to address these challenges.

Are records managers part of the problem?

How does your organisation see you and your colleagues and the profession which you represent? Perhaps a difficult question to ask, and with answers that may make us uncomfortable. It is tough to acknowledge that records management teams are not always viewed as providers of a critical service to an organisation.

The perception persists that records teams are responsible for paper records only and are to be found in the basement. One of the most unflattering descriptions I have heard of a records management team is 'Business Prevention Unit'. And perhaps this perception leads to under-resourcing, inadequate job grades and fighting to be a contributor to the right kinds of projects.

Anecdotally, I hear from business managers that the protocols around records management are seen as too restrictive, too costly, too inflexible and not adequate to support modern ways of working.

Regardless of the truth of these statements, if there is a perception problem, then there is an actual problem. There are strategies we can employ that enable us to provide

(Continued over)

Figure 1. SharePoint Online to Content Manager integration – functional overview.

compliant records programs that are seen as adding value, rather than cost and difficulty, to our business partners within our organisations. Usually these strategies are risk-based rather than prescriptive.

I would like to explore what this might look like:

■ Structure the records function to act as a trusted advisor, aligning with businesses and functions within your organisation – Job roles move away from operational, process-bound activity to consultancy and advisory. Records function sets policy and provides tools and guidance and provides a second line of defence in the operational risk framework.

■ Work with existing records staff to upskill. Build an in-house skills program if needed. Records teams traditionally hold a wealth of corporate knowledge which can be shaped and repurposed.

■ Identify and cultivate a team and personal brand – There is a plethora of writings available on the importance of having a personal brand, which can also extend to our teams. Investigate what works for you, and what works for the culture in your organisation.

■ Strategic alignments in the workplace – Who in your organisation is seen as an innovator? Or who has the 'loudest' voice when it comes to decision-making? There are some obvious areas to align with where we work towards common goals: the compliance, risk, legal, information security and internal audit functions are some examples. How to build a strategic alignment? It can be very beneficial to deliver a tactical solution to this business area, so they can become another champion for your records programme. Work on joint projects. Give a presentation at their team meetings on joint goals. Offer secondments across the teams for cross-skilling.

Now that we have some strategies, we can use on our own teams to be better prepared to deliver compliance by design, let us look at solutions to achieving records management by stealth. To start with, we need a strong foundation layer for managing retention in flexible, perhaps non-traditional ways.

A strong foundation based on risk-based records policy

Managing large volume of records means a focus on managing records that is risk-based and that assumes all records are not created equal.

Identify high value/high risk records (there may be some overlap with vital records).

■ All records need to be managed but not all records are created equal.

■ Low risk/low value records are more suitable for automatic disposal in an EDRMS. Sampling and spot checks are used rather than explicit approvals for each disposal action.

■ This enables us to ensure that resources are focused on high value/high risk records, rather than stretching too thin to cover all records, many of which may be of limited or short-term value.

Blanket retention assists managing records where record-by-record appraisal is not feasible or not cost-effective

■ Blanket retention means applying a single disposal class to a large group of records that may technically fit in to multiple disposal classes.

■ An analysis is usually required, using a data discovery tool such as Micro Focus ControlPoint, that can identify duplicates, redundant and low value records, and help to understand content.

■ From this, if high value records are identified, these should be targeted for management in an EDRMS.

■ For the remainder of records, an appraisal can be made to pick the 'safest' disposal class which ensures over-retention is kept to a minimum.

Managing large volume of records means a focus on managing records that is risk-based and that assumes all records are not created equal.

■ Evidence of the analysis and risk assessments used, plus appropriate authorisation, must be retained to ensure defensible disposal.

Use of rolled up or 'big bucket' retention is becoming more widespread.

■ Disposal classes are rolled up into bigger groupings to provide a much smaller number of disposal classes to work with. The Australian Government Administrative Functions Disposal Authority Express (AFDA Express) is a good example of this. In AFDA Express, 1068 retention categories are rolled up to 88.

■ This supports applying retention and disposal in electronic systems and provides a manageable, defensible way to control the 'big data' problem from a records disposal perspective.

Once we have a strong, risk-based foundation layer, we can look at solutions.

An overview of solutions

Here is a quick overview of software solutions in the Australian market. This is not intended to be exhaustive and is from my view as a practitioner and a consultant.

EDRMS, also known as Enterprise Content Management (ECM), systems are at the core of the market, but there are some non-traditional approaches emerging. It is interesting to note that in 2017 Gartner redefined ECM as Content Services Platforms. In that year, 19 vendors met the criteria for the new Magic Quadrant for Content Services Platforms (as usual with a fee charged for inclusion).

Traditional EDRMS

■ In Australia, particularly in the Australian public sector and state governments, there is almost a de facto standard of using Micro Focus Content Manager, which for many years was called TRIM and that name stubbornly sticks.

■ Other traditional or long-standing EDRMS are iManage, IBM Records Manager, IBM FileNet Content Manager, OpenText, Objective and Technology One ECM.

Traditional EDRMS with custom front end/enhancement

We are increasingly seeing organisations use their EDRMS solution as a platform on which custom interfaces are built.

A higher education institution in Sydney, Australia, used their EDRMS as a repository for archival images. A custom Web front end allowed the public to browse tagged photos through a 'tag cloud', bringing this rich historical resource to life.

Another higher education institution in Sydney uses their EDRMS to drive a custom Web-based workflow solution tackling critical business processes such as handling allegations of misconduct. The EDRMS is the core platform, and the workflow solution is a Web-based layer that provides seamless access to a process. Critical records are captured in to the EDRMS as part of this process.

EDRMS alternatives

It is no surprise that organisations are looking to leverage their Microsoft enterprise investment to provide a records management solution. Microsoft introduced the Records Centre Template to Microsoft Office SharePoint Server in 2007. It is still the solution for out-of-the-box records management in SharePoint.

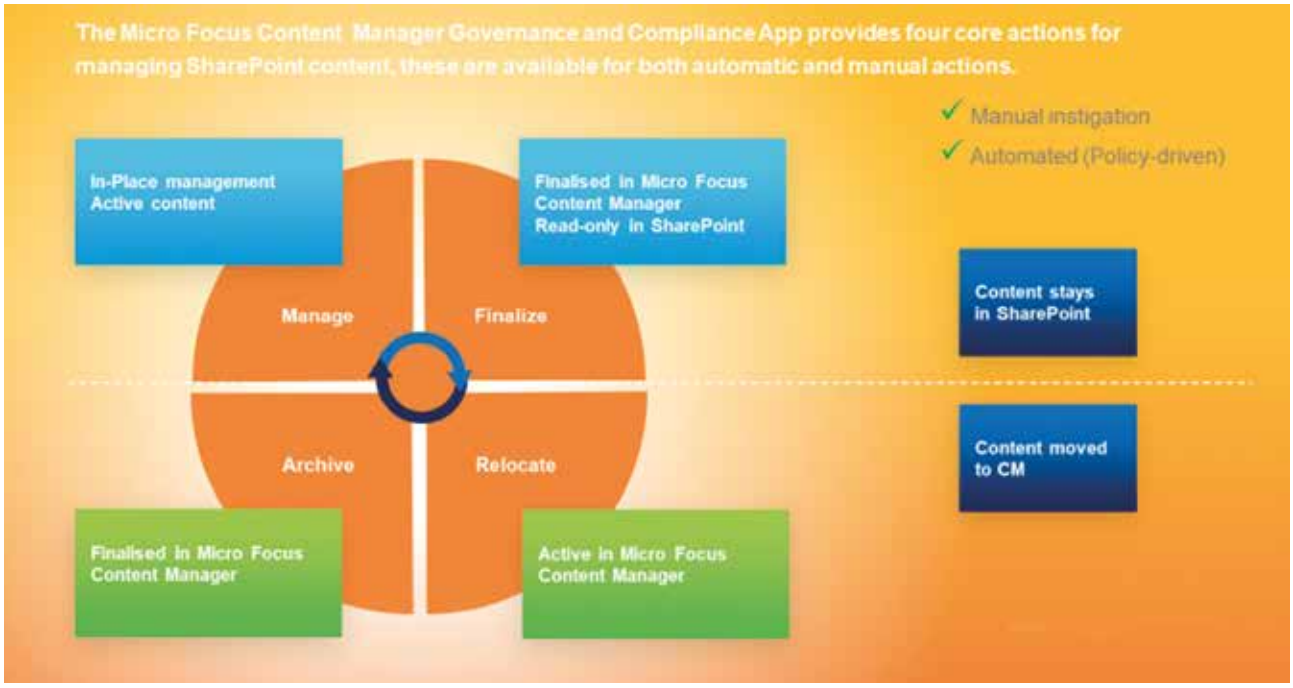


Figure 2. How the Content Manager App manages content.

Other software vendors have seen an opportunity to provide a different flavour of records management in SharePoint such as RecordPoint and AvePoint.

Alfresco launched in 2005 as an open-source document management solution which rapidly evolved to Web content management. Fairly new into the market in Australia is the German ELO Digital Office Document Management System, which has been available in its home country of Germany since 1996. There are now many alternative EDRMS offerings from suppliers such as FileBound, DocuWare, Laserfiche and Hyland.

Emerging technology/compliance engines

This is an interesting space to watch as innovative solutions are brought to market.

- Cube was launched by The Content Group in 2011 to address structured and unstructured information in financial services organisations. Cube provides not only a software solution but backs this up with a real-time knowledge base for industry trend analysis across many jurisdictions around the globe.
- Offering 'enterprise compliance as a service', EncompaaS is due to enter the market in the first half of 2019, providing governance over on-premise and cloud-based information, including in-place records management.

Case Study

We have looked at different approaches and software solutions in the market, so how are organisations in Australia using these approaches? We will look at one case study in detail. This is a combined case study, where we look at the same solution implemented by two very different organisations. This is written from a consultant's perspective, helping these organisations design and deliver a solution.

Organisation 1

Industry: Infrastructure project/public–private partnership

User base: Approximately 900 staff with large number of external base users on collaboration platforms

Solution: Traditional EDRMS, SharePoint front end, line of business system integration

The State of Victoria has embarked on a significant number of infrastructure projects to support a rapidly expanding population. Known as Victoria's Big Build, there are more than 40 major transport projects under way with a budget of AUS$38 billion.

Much of the work is being delivered via a public-private partnership model. Such a large-scale program of work introduces very complex information management needs.

Ultimately this is a government project which is subject to public records legislation, but it also has the additional commercial document management elements of a significant infrastructure project. This case study is on one of the largest projects within Victoria's Big Build.

Organisation 2

Industry: Higher education

User base: Approximately 15,000

Solution: Traditional EDRMS, SharePoint front end and rolled up retention

This University is one of Australia's oldest tertiary institutions. It has used a traditional EDRMS for close to 20 years and faces the challenge of professional and academic staff increasingly wanting access anywhere, anytime to corporate information.

It is subject to legislation and standards as defined by the Public Record Office, Victoria. A solution was devised to use a SharePoint front end to the traditional EDRMS, combined with rolled up retention for easy application of disposal.

For both organisations, the key components of the selected solution are Micro Focus Content Manager, integrated with Microsoft SharePoint Online.

Why this approach? Very early on, it was recognized that the only way to address the records legislative requirements and provide a modern platform for staff to work within, was to combine two pieces of software: Content Manager, to provide a robust, compliant records management back end, and SharePoint Online, to deliver secure collaboration spaces available through any mobile device.

Integration is provided by an add-on application from Micro Focus called the Content Manager Governance and Compliance SharePoint App.

User interfaces are fairly standard: desktop PC, corporate mobile devices including phones and tablets, plus a wide range of devices through bring-your-own-device.

(Continued over)

Stage 1 - Readiness Assessment

Both organisations started with a readiness assessment, to address two different issues, before proceeding with the integration between Content Manager and SharePoint.

Organisation 1 – Strategic review of information repositories.

This organisation already had SharePoint Online for intranet deployed to staff. There were over 30 line of business applications also holding business information. The strategic review identified all information repositories, mapped out the lifecycle of records contained within the repositories and determined the end state: that is, would records be managed in place or be transferred to Content Manager.

This piece of work provided a clear roadmap for how and when records would be managed not just across SharePoint, but all line of business applications.

Organisation 2 – SharePoint Information Architecture and review of retention.

This organisation was considered a SharePoint 'greenfield' site. Microsoft SharePoint Online and Office 365 had been made available to staff, but in a very Laissez-faire way – minimal training and support, no overarching information architecture and no standards.

In order to provide a good foundation for integrating Content Manager and SharePoint, a full information architecture for SharePoint was developed, supported by a structured provisioning process through a Service Desk.

The information architecture for SharePoint included:

- site taxonomy - site collections/sites;
- naming standards for sites and libraries; base set of parent content types;
- enterprise metadata/term store;
- naming standards for site columns;
- permissions and access controls;
- access controls;
- library configurations;
- web part on pages;
- search; and
- interaction with other O365 content/storage features such as OneDrive.

Stage 2: The integration

The integration is provided by the Content Manager Governance and Compliance App. The diagram on the previous page shows a functional view of how SharePoint Online, Content Manager and the Content Manager App interact.

SharePoint Online. SharePoint Online is the collaboration platform. Here, people will develop and share content, with their teams, across their organisation and with authorised external parties. Access may be from multiple device types, and organisations may introduce two-factor authentication or other security protocols for added security.

Content Manager. Content Manager is the records management compliance engine. Here is where the business classification scheme, retention schedules and disposal actions occur. Each disposal action is authorised, and a small record stub is retained for destroyed records, to support defensible retention.

Content Manager App. The App is loaded in to the SharePoint App Catalog and applied to site collections and sites. It provides management over SharePoint content. Content may be actively managed by the App – content is put under management, a metadata stub is created in Content Manager with a URL to the SharePoint item, the content lives in SharePoint until it is no longer active content, then it can be archived to Content Manager. While under management, a full audit trail of activity on that content in SharePoint is written to Content Manager for full auditability.

Content may be passively managed by the App – at the end of content life cycle, such as decommissioning or closing a site, all content can be archived to CM in one process.

The key to managing or archiving content is content mapping.

How content mapping works

Compliance by design is central to content mapping. Essentially, we do not want to interfere with how end users work and structure their information in SharePoint. SharePoint is a collaboration platform. Information will be structured around projects, teams, work product or business processes. This may not align with how information needs to be structured for records retention. So, to bridge this gap, we apply content mapping

Metadata: Standard and custom columns in SharePoint are mapped to associated standard and additional fields in Content Manager.

Content types: SharePoint content types are used to identify different types of documents and apply specific metadata. These are mapped to Content Manager record types, which serve the same purpose within Content Manager.

Libraries: SharePoint libraries are allocated one or more Content Manager folders to contain content. It is the Content Manager folder that has business classification terms and a retention category applied.

Most of the mapping is driven by policies and rules and does not require manual input.

The trigger for when content is managed and then archived from SharePoint to Content Manager is defined by lifecycle management policies. The way we build this mapping is compliance by design.

Stage 3: Ongoing monitoring

The Content Manager App provides a range of searches to monitor managed content. All managed records have a metadata stub, which is allocated a unique record number.

All sites and libraries are created as records with their URL captured. At any time, an administrator can identify which sites or
libraries are under management and retrieve managed content.

Our two case study organisations have taken the important first steps for delivering records management by stealth. The near future will see their solutions bedded down and refined through continual review and improvement.

Records management is frequently seen as a cost to the business where its value is not always apparent.

Compliance by design enables us to deliver records management solutions, where records are identified, captured and managed through their lifecycle, with minimal end user input. We have looked at a range of approaches within an Australian context.

No matter whether you are just starting out building a records management programme, or you have years of experience, hopefully you will find something to help you on your journey.

This is an edited version of an article originally published in Business Information Review, a quarterly peer-reviewed academic journal that publishes articles on information and knowledge management.

Nicola Sanderson

Principal Consultant, Informotion.
nicola.sanderson@informotion.com.au

Cyber Criminals Cash in with 'Formjacking'

Faced with diminishing returns from ransomware and cryptojacking, cyber criminals are doubling down on alternative methods, such as formjacking, to make money according to Symantec's annual Internet Security Threat Report.

Formjacking attacks are described as simple to implement – essentially virtual ATM skimming – where cyber criminals inject malicious code into retailers' websites to steal shoppers' payment card details.

On average, more than 4,800 unique websites are compromised with formjacking code every month.

Symantec blocked more than 3.7 million formjacking attacks on endpoints in 2018, with nearly a third of all detections occurring during the busiest online shopping period of the year – November and December.

While a number of well-known retailers' online payment websites, including Ticketmaster and British Airways, were compromised with formjacking code in recent months, Symantec's research reveals small and medium-size retailers are, by and large, the most widely compromised.

By conservative estimates, cyber criminals may have collected tens of millions of dollars last year, stealing consumers' financial and personal information through credit card fraud and sales on the dark web.

Just 10 credit cards stolen from each compromised website could result in a yield of up to US$2.2M each month, with a single credit card fetching up to US$45 in the underground selling forums. With more than 380,000 credit cards stolen, the British Airways attack alone may have allowed criminals to net more than US$17 million.

In recent years, ransomware and cryptojacking, where cyber criminals harness stolen processing power and cloud CPU usage from consumers and enterprises to mine cryptocurrency, were the go-to methods for cyber criminals looking to make easy money.

However, 2018 brought drop-offs in activity and diminishing returns, primarily due to declining cryptocurrency values and increasing adoption of cloud and mobile computing, rendering attacks less effective. For the first time since 2013, ransomware infections declined, dropping by 20 percent.

Nevertheless, enterprise ransomware infections jumped by 12 percent in 2018, bucking the overall downward trend and demonstrating ransomware's ongoing threat to organisations. In fact, more than eight in ten ransomware infections impact organisations.

Other findings of the report include:

- A single misconfigured cloud workload or storage instance could cost a company millions of dollars or land it in a compliance nightmare. In the past year alone, more than 70 million records were stolen or leaked from poorly configured S3 buckets.
- Supply chain and living off the land (LotL) attacks are now a mainstay of the modern threat landscape, widely adopted by both cyber criminals and targeted attack groups. In fact, supply chain attacks ballooned by 78 percent in 2018.

https://www.symantec.com/security-center/threat-report

What exactly is RPA?

By Kris Elliott

Robotic Processing Automation (RPA) is one of the latest emerging technologies in the Business Process Automation (BPA) landscape and currently has a lot of hype surrounding it. While some are heralding it as the future of BPA, out in the marketplace there is still a lot of uncertainty around what exactly it is. Businesses are unclear about how it could be used in their processes and about whether RPA is a useful solution or just another industry buzzword.

Here are a few pointers to help clear up some of the confusion and to explain some of the misconceptions behind some of the more commonly asked questions.

Are the Robots smart?

It's surprisingly common for RPA to get conflated with AI (Artificial Intelligence). This confusion isn't helped by the vendors who are out there coining marketing phrases like 'Intelligent Process Automation' and others that seem to hint that there is some kind digital sorcery involved. Fortunately, the folks at IEEE SA put their 432,000+ heads together across 160+ countries and came up with some standard definitions for these two technologies. The intention was to create a global standard around what these terms mean.

They describe RPA as:

"preconfigured software instance that uses business rules and predefined activity choreography to complete the autonomous execution of a combination of processes, activities, transactions, and tasks in one or more unrelated software systems to deliver a result or service with human exception management"

And they describe AI as:

"the combination of cognitive automation, machine learning (ML), reasoning, hypothesis generation and analysis, natural language processing and intentional algorithm mutation producing insights and analytics at or above human capability"

While all that seems horribly wordy and even more confusing, simply put, RPA mimics human behaviour in a scripted way, whereas AI is more a simulation of human cognition and intuition. Or to put it even more simply, RPA does what's it's told, whereas AI tries to think like us.

So, back to the original question: Are RPA robots smart? A solution can be a particularly clever one when it solves a problem in an innovative way, so in that respect RPA robots essentially inherit the cleverness of the person that programmed them.

However, because you are essentially pre-mapping all the tasks a robot can perform as a series of potentially complex IF/THEN/ELSE type decisions, it would be overly generous to suggest that the robot is intuitive, and outright fantastical to suggest that it's cognitive. There may well come a time when RPA and AI merge and you have a truly digital person capable of making unscripted decisions, but we are not there just yet.

Will the robots live forever?

Or in other words, is RPA a long-term solution? RPA can help solve a problem that many businesses are facing, which is 'How can we automate our processes to gain efficiencies when our systems have no integration options?' Today many systems have integration options ranging from APIs and direct tools, through to manual ingestion and flat file imports.

When these options are available, integration is significantly easier because the way has been paved for you. The folks that made the software built you the doorways you need to get your information into that system.

There are also many systems, particularly those of an older vintage, that don't have these options. For a variety of reasons, it might be impractical to update or replace those systems so the only way to get data in might be to simply have a person tirelessly pound their keyboard. This functional restriction creates an unavoidable bottleneck, however now RPA can help overcome it.

By providing the ability for data to be extracted from/inputted into the fields of a user interface, RPA can provide

a level of data integration with systems that have no other integration options. This means it definitely has short term and medium term benefits.

However, in the longer term you would need to ask what the strategy is around upgrading or replacing those systems, and whether that upgrade or replacement would introduce an API or other integration methods that would make the robot redundant. Legacy systems are not immortal. At some point their age and suitability will need to be addressed, and when that time comes the RPA tool may also fall on the digital scrapheap.

Are all Robots are created equally?

RPA is the name given to a technology, not to a particular product. As such, it's important to realise that just as with any technology, not all products are created equally. You can go online right now and likely find some small freeware utilities that have since tried to ride the RPA wave by working the word 'Robotic' into their marketing. Does that mean those tools are examples of RPA…?

It's also important to understand that because RPA is an emerging technology, people are not necessarily using the term 'RPA' exactly same way. What one person means when talking about Robotic Processing may well be different to what another person hears, because to each of them RPA means something different. (For clarity, I'm using the IEEE SA descriptions above)

Generally speaking, RPA solutions fall into two primary categories: Attended and Unattended. The attended robots are typically workstation based and designed to quickly preform a series of tasks based on a preprogramed sequence of events. These tasks will usually mimic human behaviour of how a person would do the same task.

Often the user at the workstation will be able to see the applications flash open and closed as the Robot goes about its business at high speed. These kinds of robots are driven by individual tasks, with some of the RPA tools allowing you to add a button over the top of your existing applications.

This then appears as if it is part of your normal application toolbar. Furthermore, this allows the user to activate the robot on-demand on an 'as needed' basis.

It is similar in many respects to a Word Macro that applies a series actions to your document, however in this case the robot act outside of a single application and can be made to do pretty much whatever a user can do.

At the other end of the scale are the Unattended Robots. These are typically either server-based or hosted and are usually used for batch processing multiple records rather than being called upon on-demand. For example, you could provide it with a file containing extracted invoice data and it could automatically enter that data into your finance system one record at a time the way a person would, so that a person doesn't have to it.

So, to sum up, RPA has the makings of being a very important arrow in the BPA quiver but it's important to ensure your expectations are realistic. It is absolutely fine to maintain a cautious optimism around RPA, but just bear in mind that in many cases RPA should probably be positioned as more of a 'Plan B' if API integration isn't an option. However, in many other cases it may well be the ideal solution.

If you have any questions or would like to have a chat about how we can help, please contact us today.

Kris Elliott

Solution Sales Executive, UpFlow Solutions
kris.elliott@upflowsolutions.co.nz

RPA and AI across the intelligent automation spectrum

By Lee Beardmore, Capgemini Business Services

It's true to say that RPA has taken us a long way towards unlocking productivity benefits tied up in manual processes. It has galvanized a mindset that things can change without a need for massive systems reengineering.

Although wholesale change isn't always a realistic option for most organization, RPA acts as a catalyst to help businesses progress and add value, enabling them to build strategic plans around investments they've already made into their legacy systems. It doesn't preclude big change – it simply supports a faster release of benefits alongside greater change initiatives, so that everyone's a winner!

The expansion into artificial intelligence (AI) is the next step of this more granular, faster form of transformation, with more and more business activities either wholly or partially automated by increasingly sophisticated means.

Classifying solution components

At Capgemini, we use a framework called the "Five Senses of Intelligent Automation" to help classify and structure solution components on the intelligent automation spectrum.

This framework takes an "automation first" approach to understanding technology, and is based on the observation that almost every solution in which AI is involved consists of five senses. Combinations of these senses deliver automation systems that offer dramatic improvements over their manual counterparts.

Naturally, this must come with some process restructuring – it's not possible to generate significant benefits if you automate the current "as is" process state. Processes must be optimized with an automation-first mindset.

Practical uses

With all of this in mind, here are some real-world use cases that combine RPA and AI into broader intelligent automation solutions:

■ Process discovery – often the biggest question for RPA is: "Where do I build the robots and what benefit will I achieve?" Analytics, machine learning, and AI provides an evidence-based, bottom-up view of what is actually happening in an organization's operational processes that helps understand how to change processes, where to deploy robots, and assesses the benefits once they've been deployed. This can be compared and contrasted with the traditional top-down view provided by process leaders and operators.

■ Managing unstructured data – RPA is a transport mechanism for getting raw data such as documents, forms, correspondence, contracts, and other free text content to AI components. RPA is surrounded by these AI modules – such as computer vision, pattern matching, classifiers, and natural language processing – which deliver specific capabilities to carry out subjective processing tasks that have traditionally been done by people. RPA is then used, alongside APIs, to input the answers into the target systems.

■ Corporate memory – one area that AI can really help is in knowledge management. Leveraging cognitive search engines and knowledge bases to inform customers and employees quickly can have a huge impact on their satisfaction. Although not directly related to RPA, corporate memory is an essential ingredient in the AI mix offering an automation capability that can divert interactions towards viable self-service and away from asking an agent or colleague.

■ The conversational interface – my children are constantly talking to their devices. It's a natural (and sometimes amusing) activity, and this style of conversation, whether voice or textural, is increasing dramatically. As chatbots and voicebots continue to offer a new user experience, RPA can open up access to an organization's application estate – particularly those that are difficult to integrate with – enabling them to participate in the new world of conversational interfaces.

■ Speed to insight – RPA can be leveraged to improve productivity of corporate reporting and support the generation of insight and interpretation of data. RPA supports the "last mile" of supplementary analysis needed to hone in on a key piece of insight. AI can be used to model and predict through a traditional machine learning approach, or through natural language generation techniques to create a grammatically correct, narrative summary of the findings within a block of raw data.

As new AI techniques and solutions come on to market, the spectrum of intelligent automation continues to expand – and it's already changing the future of work in a radical but positive way.

The ability to introduce these connected, yet granular solutions is helping drive a dual-speed transformation and a new era of business and IT alignment.

Lee Beardmore

Vice President and CIO, Capgemini Business Services

lee.beardmore@capgemini.com

Why Data and Analytics Are Key to Digital Transformation

By Christy Pettey, Gartner

Information as an asset is still in the "early adoption" phase, which makes it a competitive differentiator for leading organizations as they focus on digital transformation. In turn, data and analytics become strategic priorities.

Data and analytics are the key accelerant of an organization's digitization and transformation efforts. Yet today, fewer than 50% of documented corporate strategies mention data and analytics as fundamental components for delivering enterprise value. Gartner predicts that this will change quickly. By 2022, 90% of corporate strategies will explicitly mention information as a critical enterprise asset and analytics as an essential competency.

"A company's ability to compete in the emerging digital economy will require faster-paced, forward-looking decisions," says Douglas Laney, distinguished VP analyst at Gartner. "Data and analytics leaders need to assert themselves into corporate strategic planning to ensure that data and analytics competencies are incorporated within the highest-level public-facing enterprise plans."

Still, many companies continue to struggle under the weight of traditional business models and analog business process that discount the potential of data and analytics. Others recognize their potential but cannot make the cultural shift or commit to the information management and advanced analytics skills and technology investments necessary to realize that potential.

Strategies to elevate enterprise value

As the role of the chief data officer (CDO) takes hold — gaining authority and influence on par with other executives — organizations will move away from merely using data as a resource and analytics as reporting and decision-making support tools. Data and analytics will become the centrepiece of enterprise strategy, focus and investment.

Laney offers recommendations aimed at building and elevating an organization's data and analytics competency within the organization.

- Collect and socialize examples of the internal and external economic benefits from data and analytics that your organization (or other similar organizations or industries) has generated.
- Offer or insist on being involved in corporate strategic planning to ensure that data and analytics competencies are incorporated, if not already featured, within these plans. Communicate this information internally and publicly in annual reports, investor conferences, etc.
- Measure and communicate the value of the organization's information assets to help shift the culture into believing and behaving as if information is an actual asset.
- Build, buy and borrow advanced analytics competencies (such as data science or machine learning) beyond traditional business intelligence and embed them throughout the business.

ABBYY

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

ABBYY is a global leader in content IQ technologies and solutions. ABBYY offers a complete range of AI-based technologies and solutions transforming business documents and content into business value.

By providing digital transformation solutions to financial services, insurance, transportation, healthcare and other industries, the company helps organizations achieve the next wave of growth by understanding customers and delivering responsive real-time intelligent systems.

The flexibility of ABBYY AI solutions enables customers to utilize a diverse range of advanced technologies, platforms and solutions for classification, text analytics, data and entity extraction, and data validation via any communication channel and in any format.

ABBYY technologies are used and licensed by some of the largest international enterprises and government organizations, as well as SMBs and individuals.

The company maintains offices in Australia, Cyprus, France, Germany, Japan, Russia, Spain, Taiwan, the UK, Ukraine, and the United States.

ESKER

Document Process Automation

Tel: +61 2 8596 5100
Fax: +61 2 8596 5175
Email: info@esker.com.au
Web: https://www.esker.com.au

Esker is a global leader in cloud-based document process automation solutions. Esker's solutions are compatible with all geographic, regulatory and technology environments, helping over 11,000 companies around the world improve efficiency, visibility, and cost savings associated with the processing and exchange of information.

Founded in 1985, Esker operates in North America, Latin America, Europe and Asia Pacific with global HQ in Lyon, France and US headquarters in Madison, Wisconsin and AUS/NZ headquarters in Sydney, Australia since 1997.

Esker's solutions span the order-to-cash and purchase-to-pay cycles — allowing organisations to automate virtually any business process:

- Order Processing: automated entry and routing of incoming customer orders
- Accounts Receivable: automated sending and archiving of paper and e-invoices
- Collections Management: streamlined post-sale collection interactions
- Accounts Payable: automated entry and routing of incoming supplier invoices
- Purchasing: electronic processing and delivery of supply chain documents

OPEX

Contact: Byron Knowles, Business Development Manager - APAC
Phone: +61 484 596 470 (m)
Email: bknowles@opex.com
Web: www.opex.com/contact/sales-contact/

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 nd 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 fulfillment operations.

OPEX has developed innovative prep reducing scanners that address the root causes of workflow issues our customers face.

Minimising preparation, paper handling, and other manual tasks not only improves efficiency, but also results in superior transaction integrity and information security.

As documents are removed from envelopes/folders and scanned, operators can view each image to ensure it is properly captured.

This prevents time-consuming and costly re-scanning later in the process. Moving image capture upstream also reduces information management risks.

ELO Digital Office

Contact: Rainer Krause – MD
Tel: 02 9460 0406
Email: eloinfo@elodigital.com.au
Web: www.elo.com/en-au

ELO Digital is a truly global ECM company with Australian expertise! Servicing more than 1,000,000 users in over 40 countries, ELO has become the natural choice in ECM. With more than 30,000 live projects the ELO product suite provides process enhancements, stability and compliance.

The Australian based subsidiary engages with Certified Business Partners to deliver 1st class solutions for Records Management, Document Management, Accounts Payable processing, Workflow Management, Mobile access and much more.

ELO provides consultancy, development and support services from its offices in Australia – we are local and global. ELO's solutions can be deployed onsite, in the cloud or as a hybrid solution either as a CAPEX or OPEX such as subscriptions, SaaS.ELO is fully scalable from as little as 5 users to large enterprises in excess of 10,000 users.

ELO is a Federal, State and Local Government supplier compliant with Australian standards as well as GDPR and FDA requirements.

DocsCorp

Tel: 1300 559 451
Email: info@docscorp.com
Web: www.docscorp.com

DocsCorp is a leading provider of productivity software for document management professionals worldwide. Our offices and products span the globe with over 500,000 users in 67 countries. Our clients are well known and respected global brands that rely on DocsCorp for their technology needs. Our mission is to provide document professionals who use enterprise content management systems with integrated, easy-to-use software and services that extend document processing, review, manipulation and publishing workflows inside and outside their environment to drive business efficiency and to increase the value of their existing technology investment.

- Our solutions include:
- pdfDocs - a project-centric PDF management application that gives users the ability to create, collate, edit, redact, annotate, and secure PDF content.
- contentCrawler - intelligently assesses image-based documents in content repositories for batch conversion to text-searchable PDFs, making every document searchable and retrievable.
- compareDocs - delivers unparalleled levels of efficiency and accuracy in the document comparison process.
- cleanDocs - the only product on the market that offers two points of defence against sending unsecure emails: metadata cleaning and email recipient checking.

Kapish

a Citadel Group Company

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

Kapish is a member of the Citadel Group (ASX: CGL). Citadel solve complex problems and lower risk to our clients through our tailored advisory, implemen tation and managed services capabilities.

With over 250 staff nationwide and n ability to 'reach back' and draw on the expertise of over 1,500 people, we are specialists at integrating know-how, systems and people to provide information securely on an anywhere-anytime-any device basis.

Servicing both large and small, public and private sector organisations across all industries, our team of highly qualified staff have global experience working with all versions of Micro Focus Content Manager (CM). It is this experience coupled with our extensive range of software solutions that enable our customers and their projects to be delivered faster, more cost effectively and with more success.

At Kapish we are passionate about all things Content Manager. As a Tier 1, Micro Focus Platinum 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, Content Manager. Quite simply, our products for CM make record-keeping a breeze.

FileBound Australia

Phone: 1300 375 565
Email: sales@filebound.com.au
Web: www.filebound.com.au

FileBound is a cloud-native document management system with advanced workflow capabilities that automates the flow of enterprise work.

FileBound is able to be deployed in organisations of all sizes and features capture, document management, workflow, electronic forms, analytics, mobile access (IOS and Android) and much more.

It presents in a single, easy-to-use application that manages business processes from beginning to end and reliably connects people and information.

FileBound provides organisational efficiencies, drives out manual paper-based processes to decrease costs, increase productivity and support compliance with internal and external mandates.

FileBound users have the flexibility to create a variety of solutions from complex AP automations to simple document archival and retrieval processes.

InoTec Innovative Technology

Tel: 02 6040 9325
Contact: https://inotec.com.au/contact-us/

InoTec Pty Ltd (IPL) in Australia and New Zealand is the only factory subsidiary of InoTec Organisationssysteme GmbH (IOG) in Germany (a 40 million Euro per Annum Company). Throughout the rest of the world IOG operates through distribution partners and is rapidly growing to be the supplier of choice for mid to high volume document scanners. IPL is 80% locally owned with the factory retaining a 20% interest and working closely with us and our Australian contracts.

Within AU / NZ, IPL does not manufacture but has secured distributorships with the following companies:

- Zeutschel GmbH – Book, Film and Fiche Scanners
- WideTEK GmbH wide format scanners
- Mekel film, fiche and aperture card scanners
- I2Scan image batching software
- Digitech Scanning Software
- ABBYY Scanning Solutions Software

ezescan transforming paper into knowledge™

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

EzeScan is one of Australia's most popular production capture applications and software 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.

Solutions range from centralised records capture, highly automated forms and invoice processing to decentralised enterprise digitisation platforms which uniquely align business processes with digitisation standards, compliance and governance requirements.

With advanced indexing functionality and native integration with many ECM/EDRMS, EzeScan delivers a fast, cost effective method to transform your manual business processes into intelligent digital workflows.

EzeScan benefits include:

- initiate intelligent automated processes;
- accelerate document delivery;
- minimise manual document handling;
- capture critical information on-the-fly; and
- ensure standards compliance.

EPSON EXCEED YOUR VISION

Contact: Clyde Rodrigues
Phone: 0429 487 013
Email: crodrigues@epson.com.au
Web: www.epson.com.au/products/scanners

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.

UPFLOW

Phone: 1300 790 360
Email: info@upflow.com.au
Web: www.upflow.com.au

UpFlow is a channel-first provider of Document Capture, RPA, Document Management, Workflow, Electronic Forms and Integration software products and services.

UpFlow distributes and resells products such as PSIcapture, Flow Integration Platform, Ratchet-X RPA, Doc Mgt an FileBound.

PSIcapture is an innovative document capture platform engineered to combine automation, efficiency, stability and Enterprise-class scalability. PSIcapture provides unmatched integration with just about any ECM or ERP platform [e.g. SharePoint, Xero, Trim, Objective etc.] and allows the utmost in flexibility for deployment in large or small organisations.

Ratchet-X is a mid-market Robotic Process Automation solutions that provides attended or unattended Bots for the automaton of enterprise work.

Flow is a fully featured Integration Platform that can connect an exhaustive list line-of-business systems with each other.

DocMgt and FileBound are Document Management, Electronic Form and Workflow platforms that deliver exceptional ROI for most work automation projects.

If you want to add high quality business automation products to your list of products and services then contact UpFlow today.

Alaris a Kodak Alaris business

Contact: Angelo Krstevski
Email: Angelo.Krstevski@kodakalaris.com
Tel: 0419 559960
Web: https://www.alarisworld.com/en-au

Alaris, a Kodak Alaris business, is a leading provider of information capture solutions that simplify business processes.

Digital Transformation is the need of the hour for many organisations, and it starts with information and data capture.

We exist to help the world make sense of information with smart, connected solutions powered by decades of image science innovation.

Alaris drives automation through every business process dependent on document and data capture so that you can get the right information to the right place at the right time.

Our award-winning range of scanners, software and services are available worldwide, and through our network of channel partners. For more information, please visit AlarisWorld.com.

INFORMOTION SMARTER SAFER FASTER

Tel: 1300 474 288
Email: info@informotion.com.au
Web: https://informotion.com.au

INFORMOTION is an innovative professional services organisation specialising in the design and implementation of modern information management, collaboration and governance solutions – on-premises, in the cloud or hybrid. INFORMOTION's workflow tools, custom user interfaces and utilities seamlessly combine to deliver compliance, collaboration, capture and automation solutions that provide greater business value and security for all stakeholders. We can help you map and successfully execute your digital transformation strategy.

Boasting the largest specialist IM&G consulting teams in Australia with experience that spans over twenty years, INFORMOTION consultants have a deep understanding of business and government processes and the regulatory frameworks that constrain major enterprises. Our compliance experience is second-to-none.

INFORMOTION is a certified Micro Focus Platinum Partner and global Content Manager implementation leader. We are also an accredited Microsoft Enterprise Business Partner, Ephesoft Platinum Partner and EncompaaS Diamond Partner.

Changing The Way We Hire Using Natural Language Processing

By Jeremy Manjorin, COO & Co-Founder of True Reply

Recruiting for today's workforce is a complex and time-consuming endeavour. Recruiters and HR personnel assess the needs of a role and establish parameters for their posts and searches. They then collect the data in the form of resumes from a variety of inputs (job boards like LinkedIn, Indeed, and many more), and then analyse all of that data to find potential matches.

They then begin the arduous process of pre-screening potential matches in an endless cycle of phone calls and emails.

In the US alone, according to the Bureau of Labor Statistics, there were roughly 5.8 million job openings in December of 2017 (BLS Dec 2017). Along with this, there were approximately 5.2 million separations (quits, layoffs, discharges, etc.) measured in this same time period. While unemployment is historically low, the number of jobs needing filling per month is still incredibly large. Additionally, 42% of people ages 18-34 are considering a new job and 20% of people over 35 are considering a new job (Fit Small Business). What this equates to, is that month over month, there are millions of job applications and interviews being conducted in the US alone.

Reviewing each application takes time and resources. Recruiters must be strategic in the way they broadcast new positions such that the positions can be filled appropriately. However, recruiters are inundated by candidates and their resumes, and pre-screening even a small percentage of them takes a lot of time and money. But there is a way to expedite this process...

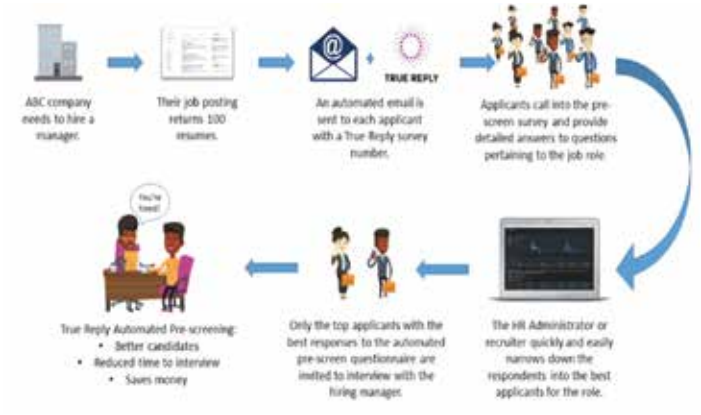
Automated Pre-screening via True Reply

The True Reply platform excels at is allowing people to answer open-ended questions via a voice interface, letting candidates elaborate on or add details to their responses. Where the value to the recruiter or HR representative comes in, is where the platform transcribes the audio data, provides detailed analytics and allows the pre-screen questionnaire administrator to review keywords in order to quickly narrow down the applicants into the top prospective candidates, quickly, easily and best of all, cost-effectively.

For instance, a company is looking to hire a sales manager for one of their new products. They use an external recruiter to begin the search for them. The recruiting firm posts the job opening on all the usual job boards and within a few days they have an influx of over 100 resumes. Of those 100, maybe only 20 of them are viable candidates, however, that's still 20 pre-screen interviews the recruiter needs to run. This can take hours of time to connect with the potential candidates and ask them a battery of standard questions in relation to the posting.

With True Reply, once a resume is submitted and reviewed, the recruiter can send an automated response to those 20 potential candidates and include a QR code or dial-in number for the potential candidates to call into and take a pre-screening questionnaire. The questionnaire can be as long or as short as it needs to be (generally 10 questions to ensure enough data is collected to decide whether or not to pursue this candidate further).

The candidate dials into the survey, relieving the recruiter of the need to reach out and contact potential candidates, and answers open-ended qualitative questions, meaning the questions can ask the candidate to provide details and elaborate on topics as necessary. The candidate finishes the survey, and their audio data is saved, indexed and transcribed and analysed for context using True Reply's Natural Language Processing (NLP) engine.



The True Reply platform allows for open-ended data collection via phone or Alexa powered devices. Because of the way it can automatically collect, process and analyse voice-based content, it has the potential to significantly impact recruiting and hiring, changing the way we screen candidates for open positions.

The HR administrator or recruiter gets this data in realtime and can review the analysis and reporting via the True Reply data visualization dashboard, showing keywords and other details which the HR admin or recruiter can then drill down into.

Through this advanced data collection and analysis, the recruiter can quickly assess the responses and decide which candidates would be the best to follow-up with or provide to the hiring managers for interviews.

The value for HR administrators and recruiters is undeniable. An automated pre-screening method would provide the following:

- Saving the recruiter time by automating the pre-screening process.
- Reducing calls and call-backs as well as the time to manually pre-screen.
- Saving the recruiting company money by allowing them to process more applicants quickly and effectively.
- Saving the hiring company time and money by focusing interview efforts on more qualified candidates through a more effective vetting process.

Using True Reply to setup a pre-screen questionnaire is extremely simple. The admin simply enters the questions in the True Reply platform. The platform automatically generates the number and/or QR code, and the recruiter publishes that number as part of the application process, either within the job posting or as part of an automated follow-up email.

She or he can then quickly analyse the results of the audio data collected from the pre-screen questionnaire via the True Reply dashboard in real time. The decision can then be made to follow-up with the best candidates in person with a much higher degree of confidence, all while saving the recruiter time and the hiring company money.

TrueReply.com

Managing Social Media Records is not Impossible!

By Colin Anderson, Practice Manager at Citadel

Now and into the future, the most successful companies will be transparent with their clients and other businesses, interacting dynamically via an ever-growing number of social media platforms. The challenge to maintain compliant records can seem overwhelming but there is no need to throw your hands up in despair.

Today, everything is digital as we constantly look at ways to do things faster and easier. The Australian community is seeking more engagement from businesses and expect full accountability and transparency.

Social media allows businesses to collaborate, participate, contribute and reuse online information as part of normal business activity. If your business uses social media, the National Archives of Australia advises that the information created is a Commonwealth record and needs to be managed properly, and kept in a usable and accessible form.

WhatsApp messages present a challenge to FOI requests, given they are encrypted and unlikely to exist in a 'material form' having not being officially recorded within an organisation.

Moira Paterson, Professor of Law at Monash University recently stated 'If the FOI Act is to operate effectively, WhatsApp messages must be filed in such a way that they can readily be searched and retrieved. They must also be preserved consistently with the retention requirements in the Archives Act. It is unlikely that current practice is fully consistent with these requirements.

"If WhatsApp messages do exist, can be found and are stored in searchable form they are potentially accessible via FOI. But to call them up could involve huge workload requirements.'

Social media is dynamic and the content is ever changing, and many businesses have already begun the process of recording their social media data.

Monitoring a range of social media platforms across a business can be time consuming and inaccurate due to lack of visibility across mobile platforms such as WhatsApp. It is important that key information of discussions, deliberations and decision making on these devices is captured.

The National Archives also states that information received on a mobile device are subject to the same FOI requirements as desktop records, and it is crucial that these records are captured within a business's records management system.

Recording of information can be done using technical means, which involves software which creates logs

and records of information within instant messenger or social media applications, or procedural which requires staff to create a file note with key information of discussions or decisions made at the time of the message and save it in your company's records management system, or other endorsed business system, as soon as possible. This can become even more complex with non-written communication such as voicemail.

End-to-End Security of Social Media Records

The Citadel-Social platform offers a simple end-to-end solution to monitor, secure, and archive social media communications such as WhatsApp. We give your business the freedom to:

- Capture and catalogue the content of WhatsApp and other social media applications
- Customise our advanced policy engine to define what content to flag, block, or monitor
- Capture and audit conversation content from day one of implementation, or optionally capture content before implementation
- Review and search all archives content, including customisable retention management
- Implement and scale quickly, with informed consent for your employees – no need to install an app or custom software on employee devices

Citadel-Social is a simple AI tool that delivers essential security and compliance across a wide range of digital channels, with a number of additional functionalities including automatic social media platform monitoring and tailored alerts. It can even shut down fake social media accounts mimicking your business.

Find Out More at https://citadelgroup.com.au/social-safeguard/ or Contact Us for a Free Demo. https://citadelgroup.com.au/contact-us

Why Your 1st Generation E-signature Solution Isn't Working For You Anymore

By Howard Schulman

Advances over the last several years have led to the development of more efficient ways of doing business. Back in the late 1990s, one way that companies sought to address customers' changing expectations was by incorporating e-signatures into their business transactions.

Today, many organizations use e-signature software to encrypt documents likes sales contracts or employment paperwork that an employee, partner or client needs to provide. And companies have reaped the benefits. The number of worldwide e-signature transactions jumped from 89 million in 2012 to 754 million in 2017. But what worked back in 2000 fails to address the enormous customer service gap that has emerged over the last decade, particularly with regards to serving customers on their mobile phones.

Mobile Takes Flight: A seismic shift is taking place and the electronic signature your organization's using could be causing your conversion and sales rates to plummet. The reason is that within the last couple of years, mobile web usage compared to desktop has skyrocketed. Some stats to consider: The percentage of people visiting mobile devices grew from 57 % to 63%; the percent of time spent on mobile devices increased from 40% to 49%; and the mobile bounce rate dropped from 52% to 47%.

Most first-generation e-signature solutions require mobile users to access their email, and then present their documents in full A4 presentation on small screens. So, while they are in fact mobile accessible, they fail to deliver a mobile-optimized experience.

Customer-Centric vs. System-Driven: First generation e-signatures aren't accounting for the development and proliferation of Integrated Customer Management Systems (ICMS). The phrase was coined by Amdocs way back in 2004. Driven by the concept that price and quality of service have become negligible differentiators for companies, customer experience emerged as the primary way service providers can stand apart from competitors.

ICMS have been developed to align people, processes and technology to enable service providers to deliver the customer experience they intend. With regards to e-signatures and other aspects of document collection, shifting from a system-driven to a customer-centric corporate culture means that such features as agent/customer co-browsing and the ability to collect docs and ID from anywhere are what today's increasingly distracted and mobile customers have come to expect.

So, while first generation e-signature solutions offer basic digital signatures, they are notoriously ineffective in delivering the complete experience businesses want to deliver and customers expect.

Real Time Doc Review and Collaboration: In many instances, the documents businesses send to customers are not as clear as they might hope for. They often are misunderstood and cause the customer to hesitate or abandon their process. Customers oftentimes need some guidance and clarification that rudimentary digital signatures don't account for.

As a result, such signatures are typically sent and forgotten. Question: do your customers have the ability to review documents live and collaborate with an agent on answering any and all questions?

What You Stand to Lose: New research points to an enormous CX gap. While customers have come to expect instantly-completed business interactions everywhere, even from their mobile phones, many businesses are unable to deliver. That's because contact centres lack the solutions required to make their solutions agile enough to simplify complex processes for today's increasingly distracted, mobile customers.

Specifically, it's the critical last mile of the customer journey that often requires customer consent, documentation, visualization, payments, signatures, submission of documents/ID and more.

The mismatch between today's on-the-go customers and desk-oriented technologies has made it nearly impossible to deliver the instant, mobile, compelling and memorable experiences that today's customers demand with basic, dated e-signature solutions.

The next Generation of e-signatures: Most of the electronic signature choices you may have already heard of probably use digital secure technology. And chances are that they are ESIGN and UETA compliant as well. But these are rather basic criteria to meet. To enhance the customer experience and drive business value, you'll need to use an e-signature that's more in line with the behaviour of today's consumers.

Below, are some key drivers to consider:

1) Is it easy to use? If your clients are required to scan documents, they're more likely to abandon the entire e-signature process. To boost completion rates, it's crucial that your users' experience be seamless, particularly for on-the-go customers, so that they can complete any task directly from their mobile phone in one shot.

2) Is it flexible? You'll want to use an e-signature that enables different solutions, like agent-assisted or self-serve options. For your agents, an e-signature solution should be easily incorporated into your organization's wider processes and workflows, including contracting, form filing and collections. And if you manage to find an e-signature that integrates with your current CRM system, all the better.

3) Is it in realtime? To increase form completion rates, your e-signature should facilitate an open, realtime and secure customer-agent collaboration. For instant processing, it's important to find a solution that's compatible with your organization's document generation and other systems. A next generation e-signature that enables live collaborative document review and instantly completed signatures will enhance the customer experience while reducing the chance of abandonment due to customer frustration.

4) Is it comprehensive? Ideally, your revamped e-signature will be able to facilitate the completion of the entire process, everything from ID/document collection to form-filling and payments. Ultimately, the goal of every agent/customer interaction is to close as quickly as possible, with electronic signatures being one component of this process.

Since their introduction in the late 1990s, basic digital signatures have enabled parties to contract with one another remotely and digitally, but haven't evolved much beyond that. Meanwhile, next generation e-signature solutions that are part of a wider, customer-centric system are making it possible for agents to instantly collect documents, e-signatures and payments while customers are on the phone.

As a result, workflows are streamlined, customer satisfaction tick up and completion rates increase. In short, next-generation e-signatures unlock enormous value from customer interactions, removing friction that frustrates customers.

Howard Schulman is Operations Director at Lightico, a provider of provides digital contracting and identity verification technology.

https://www.lightico.com

Adlib tackles RPA Unstructured Data

Adlib Software, a developer of file analytics and data enrichment solutions, has launched Adlib Elevate 2.4 to enable Robotic Process Automation (RPA) systems to leverage data from unstructured documents (email, MS Office, CAD and other formats) from various document repositories.

With this release, Adlib Elevate significantly expands the list of ecosystems where data can be efficiently drawn from including, but not limited to: SharePoint Online, OpenText / Documentum, Box and Salesforce.com.

In addition to new out of the box connectivity, this release of Adlib Elevate also increases the processing speed and scalability of the platform ensuring maximum throughput and uptime.

The latest release also offers new data analysis and advanced data extraction capabilities - including the ability to perform free-form or templated operations - where highly targeted data can be found and revealed to process automation or business insight systems. This allows for increased automation and greater data-driven insights into the content hidden in unstructured documents including at-risk PII, critical customer data and high-value corporate IP.

https://www.adlibsoftware.com/adlibelevate.aspx

a.k.a. updates taxonomy toolkit

Synercon has launched a version 3-6-2 release of its a.k.a. information governance software focused on providing more tools to make collaboration easier and optimising performance for a range of daily tasks. With the drive towards digital transformation and auto-classification, a.k.a. is being used to manage much larger meta datasets.

"Within each organisation, we're finding more people engaged in the task of metadata and taxonomy development, importing, editing and deploying into SharePoint and multiple other information systems, the company notes.

In response to this, a.k.a 3.6.2 includes a redesigned Interactive Report Wizard. There's a new feature for saving Themes (fonts, colours and home page text) for future use. The ability to load and save Interactive Reports as zip files has also been added. Still more wizards have been added - for creating Inbuilt Reports, for creating Audit Reports, and for importing and exporting to SharePoint.

In the last release, a range of Cloud Storage Options (Drop Box, SharePoint and OneDrive Personal) were added for easier importing and exporting to and from the cloud. These functions have now been extended across all import and export actions, including Interactive Reporting.

To enhance collaboration, Work Trays have been added to provide a place where users can add shortcuts to items in order to create work lists. Aliasing has been enabled to provide the ability to create shortcuts to items, which enable items to 'appear' in multiple folders within the a.k.a. library.

Performance improvements to make working with extremely large data sets significantly easier include faster loading of large hierarchical schemes in the Architect, faster exporting for XML files from the Library and the Architect, and faster backup and restore of a.k.a. databases.

Users who publish very large interactive reports can now select a multi-file XML option. By chopping up the XML file into much smaller files, we have made report loading and refreshing a much better user experience.Another improvement for large datasets has been to improve drag and drop in the Architect module. Top terms can now be dropped into ANY empty space, instead of having to scroll to the end of the scheme.

PSIcapture 7.2 gets inside LOB apps

PSIcapture 7.2 has now been released, extending the ability to migrate beyond conventional content management systems into primary line of business applications via new migrations for Microsoft Dynamics GP, Box and Intuit Quickbooks Desktop. These join the long list of PSIcapture migrations that are provided free with all license levels.

Box customers can leverage PSIcapture to automate content creation in the Box platform directly. The migration pairs nicely with its counterpart migration template. You can use this template when creating a new capture profile to speed up your implementations.

The new QuickBooks Desktop migration allows QuickBooks Desktop customers to utilize PSIcapture to create bills, purchase orders, and several other transaction types within QuickBooks Desktop. Choose any of the seven available Transaction Types to work with and create capture profiles with header and line item mappings from pre-defined templates. Available transaction types and templates currently include: Bill; Vendor Credit; Invoice; Credit Memo; Purchase Order; Sales Order; and Journal Entry.

Also, data lookups are provided, including: Customers; Vendors; Accounts; Items; Classes; and Terms

Microsoft Dynamics GP users can harness PSIcapture to generate payables invoices, purchase orders, and several other transaction types within Dynamics GP. Choose any of the six available transaction types to work with and create profiles mappings from pre-defined templates.

Available templates currently include: General Ledger (GL) Transaction; Payables; redit Memo; Payables Invoice; Purchase Order; Receivables Credit Memo; and Return Material Authorization (RMA).

The Laserfiche API has been updated to version 10.2 for increased performance and enhanced migration features. Psigen has corrected multi-record index data migration and migration to grouped field types; added the ability to assign metadata to folders via templates selected during configuration; and added the ability to set the OCR text on migrated images files.

http://upflow.com.au/

AvePoint Enhances Teams Sharing

AvePoint has announced updates to its Cloud Governance solution that will enhance an organization's ability to safely collaborate with external users in Microsoft Teams.

Office 365 has more than 155 million monthly active users worldwide and Microsoft Teams is the fastest growing business application in Microsoft's history.

The commercial adoption rate of Office 365 and Microsoft Teams is accelerating as organizations experience an increase in productivity and collaboration by leveraging a modern, digital workplace.

Organizations are now looking to duplicate this modern collaboration experience with external users, but need to mitigate security and data governance risks.

The new update to AvePoint Cloud Governance allows organizations to safely collaborate with external users by providing more granular control over which Office 365 workspaces and data can be shared with external parties.

New policy level controls - which can be applied to Office 365 Groups, Microsoft teams and Modern SharePoint Team sites - ensure each workspace has the appropriate level of external sharing based on the use and type of information stored in that workspace.

GoodReader 5 PDF Reader for iOS

The launch of GoodReader 5 promises a fresh look and deeper document security for iPhone and iPad users.

GoodReader 5 delivers an all-new interface that makes viewing documents on an iPhone or iPad even easier – including a split-screen view for iPad which enables users to view two documents or even different sections of the same document simultaneously.

This feature is especially useful for comparing documents such as drafts of contracts or researching for homework assignments.

GoodReader 5 offers a completely new user interface designed to be faster and more intuitive. Though current users will find the functionality and usability to be familiar, everything is new.

Usability improvements include:

■ A redesigned PDF viewer with smoother scrolling, zooming, and page turning.

■ A new way to read PDFs, featuring continuous "pageless" scrolling.

■ A new pictures viewer, including a more modern look and feel, smooth and fast image loading, and a quick preview bar of all pictures in the folder.

■ Split Screen (iPad only), enabling viewing of two files or different parts of the same file side-by-side.

■ A new PDF Reflow mode with a continuous "pageless" scroll of pure text extracted from a PDF, with a graphical preview of actual PDF pages shown at every page break.

GoodReader is currently available on the App Store for US$5.99 while users may purchase the Pro Pack as an in-app upgrade for the introductory price of US$5.99.

For more information, visit GoodReader.com.

contentCrawler now works with Dropbox

DocsCorp has extended the reach of its bulk document processing platform, contentCrawler, to Dropbox and Dropbox Business to ensure documents are 100% searchable in the cloud and on-premises. contentCrawler is powered by the ABBYY OCR engine.

DocsCorp estimates that up to 45% of documents in Dropbox are image and PDF files that cannot be searched. When important business information can't be found, it undermines an organization's productivity and regulatory compliance.

contentCrawler intelligently assesses documents in Dropbox for OCR processing to determine if a text layer needs to be added to an image document. Once the text layer is added, the entire contents of the document can be searched using the Dropbox search functionality.

contentCrawler can also run in Compression mode to reduce file size and save on associated storage costs.

contentCrawler is available to all Dropbox account types and supports 180 languages including German, Portuguese, and Chinese.

"More than half of the Fortune 500 companies rely on Dropbox to collaborate on and manage key business intelligence," said DocsCorp Co-Founder and President Dean Sappey.

"It is incredibly important they have the information they need at their fingertips, not hidden in non-searchable files. Searching without limits will empower Dropbox users to make better-informed business decisions every day."

www.docscorp.com/OCR-for-Dropbox/

EzeScan links up with Box Cloud

Outback Imaging Pty Ltd, the home of EzeScan, has announced its integration with Box cloud ECM to provide cost-effective capture solutions for both hard copy and digital born documents. The integration with EzeScan will give joint customers significate advantages allowing them to effortlessly register and upload their content to Box.

Kevin Blackley, International Development Manager, EzeScan said, "Box users can use EzeScan's production batch scanning capabilities to digitise documents directly to Box, including both hard copy and digital born documents including email".

"Box users can now leverage EzeScan's intelligent capture capabilities to automatically name files to an organisation's standard naming conventions, browse to Box folders and seamlessly upload to Box. Additionally, they can import from Box for processing FOI requests." said Mr Blackley

"EzeScan also enables users to create searchable PDFs (or PDF/A) for *content* search in Box," said Mr Blackley.

EzeScan's capture solution has no volume scanning restrictions and supports a large range of scanner hardware including desktop scanners and multifunction devices.

www.ezescan.com

DocAuto unveils WorkSpace Manager 2.1

DocAuto has announced the availability of WorkSpace Manager 2.1, which allows the security of multiple iManage Work systems to be combined as documents and structures are migrated from one system to another.

"We continue to see an increase in the amount of merger activity in law firms," said David Kiefer, CEO at DocAuto.

"Merging multiple iManage systems is increasingly common and is becoming more nuanced.

"We have had the ability to translate metadata and security for years, but now we have added a deeper level of control to allow document security, user and group security access to be migrated independently to suit the firm's organisational changes."

www.docauto.com

Forms Signature plug-in for SharePoint

KWizCom, a developer of SharePoint Forms & Workflows, as well as numerous other powerful SharePoint web parts, add-ons and apps for Office 365 (SharePoint Online), has unveiled a new add-on for SharePoint users, the Signature Pad Column.

The newly released Signature Pad Column is a SharePoint plug-in that allows non-technical end users to easily add signature field to their SharePoint list forms. This SharePoint solution enables business users to require end-user signature when submitting a SharePoint list form.

They just simply add it to their form just like any other field. Once users sign the saved item, signing user name and signing timestamp are saved.

Moreover, SharePoint business users can just looki at the list view to find out which items have been signed and which were not, or have been updated after they were signed, i.e. signature invalidated.

A no-cost evaluation version of Signature Pad Column is available.

http://www.kwizcom.com

The Truth about Information Security Certification

By Brent Kuhl

In today's digital environment, a commitment to risk management and mitigation is particularly important. You can't be too careful when it comes to trusting a business with securely managing your information. Protecting your commercially sensitive customer and personal information is critical.

The CEO of global standards organisation BSI, Howard Kerr, has advised that Australian certification for ISO 27001 has now grown to an estimated 450 certificates, which is still relatively small.

ISO certification is more than a compliance exercise. The ISO/IEC 27001 Information Security standard is an internationally recognised best practice model that provides a systematic approach for mitigating security risks by ensuring the correct people, processes and technical controls are in place to counter specific cyber threats.

Companies that comply with ISO/IEC 27001 have demonstrated that they identify security risks, use processes to manage the identified security risks and proactively address issues before a breach occurs.

Many businesses today claim they are secure by leveraging existing cloud provider certifications and stating that their cloud services are covered under ISO/IEC 27001 certification; unfortunately this is simply not the case. An ISO 27001 certification requires demonstrated adherence to security best practices for information systems under their control.

This independent certification goes well beyond certification of the cloud environment. It's crucial to request independent security certification of an information system that runs on cloud infrastructure. Failing to do so increases the likelihood of a compromise of information assets, systems & people and potentially exposes organisations to data breaches.

The Citadel Group is a leading Australian software and services company which is ISO/IEC 27001 certified for their secure cloud based Citadel-IX solution, which is crucial to Citadel's purpose of 'Keeping People and Information Safe'.

Citadel works closely with the most secure Australian government departments and businesses to provide information management solutions that solve their unique challenges. Many of their clients are facing information management challenges such as increased data holdings, requirements to deliver services more efficiently and combating the ever-evolving cyber threats targeting their most sensitive information and critical systems.

Citadel-IX is the only fully (end-to-end) ISO27001 certified Content Manager Cloud Solution in Australia. Citadel-IX provides the flexibility, scalability and security that makes a real difference to businesses faced with the challenge of secure enterprise information management. Citadel-IX was purpose-built to meet the needs of Citadel's extended client base across Australia.

https://citadelgroup.com.au/citadel-ix/

Brent Kuhl

General Manager Solutions,
The Citadel Group

Cash Collections Management Solution

Esker has announced the launch of its Collections Management automation solution in Australia, building on the success of the solution in the U.S. and France.

Esker's cloud-based solution optimises collections management by decreasing costs, accelerating payments and reducing DSO (Days Sales Outstanding).

Collections management complements and enhances Esker's existing accounts receivable (AR) offering, improving the cash collections process by automating what should be automated (e.g., task lists, collection calls needed, sending account statements and payment reminders, etc.) while providing real-time visibility on collection performance.

Automating this stage delivers numerous benefits, including:

■ Higher staff productivity: Modernised tools replace spreadsheets, helping staff to better organise collections activities, maximise productivity and focus on more customer-centric, value- added tasks.

■ Faster customer payments: From automated collection call lists and payment reminders to a central location for all account information, automation creates a more effective collections process.

■ Increased visibility: Dashboards with live analytics allow users to oversee daily activities and monitor KPIs (Key Performance Indicators).

■ Greater collaboration: Team members and customers interact on a shared platform rather than remaining siloed, strengthening the overall customer experience.

Faced with poor payment behaviour and lengthy invoice to cash conversion, Australian businesses are looking to reverse the trend and accelerate their cash collection cycle to preserve cash flow and increase their competitiveness in the region.

According to a recent market study by Atradius, "Payment Practices Barometer APAC 2018," 4 out of 10 invoices in Australia are paid late with an average delay of 32 days.

"For companies seeking to modernise the whole of their AR processes, collections management brings a number of sophisticated capabilities, from collections forecasting to dispute resolution," said Christophe DuMonet, Managing Director at Esker Australia.

"We are confident collections management will add a more dynamic dimension to our current AR solution offering."

https://www.esker.com.au/solutions/order-cash/collections-management/

Alaris launches SME scanner range

Alaris, a Kodak Alaris business, has unveiled its next generation of information capture solutions. The Alaris E1000 Series Scanners are the latest addition to the IN2 family of document scanners, imaging software and services.

Packing all the intelligence of a larger device into a streamlined, desktop scanner, they are targeted at small office/home office environments, reception areas and workgroups.

Productivity-boosting features include the ability to power up and start scanning in less than 10 seconds and fast throughput. The E1025 and E1035 models scan at speeds up to 25 pages per minute (ppm)/50 images per minute (ipm) and up to 35ppm/70ipm, respectively.

They are easy to set up, enabling users to scan right out of the box and integrate with existing business processes and applications, from network to Cloud, through Alaris Smart Touch Software. Alaris E1000 Series Scanners are backed by a one-year warranty and repair and maintenance services to optimize uptime and productivity.

Built-in Perfect Page technology dynamically optimizes the image quality of every page for more accurate information extraction, often delivering higher quality images than the original. The new E1000 Series Scanners also support barcode reading in the box, providing accurate read results every time.

Alaris E1000 Series Scanners feature an 80-sheet automatic document feeder (ADF), the largest in their class, and offer exceptional media handling capabilities. Alaris' proprietary Intelligent Document Protection feature 'listens' for problems and alerts users before jams or misfeeds occur, safeguarding valuable documents and further improving efficiency. The devices can scan a variety of paper sizes and weights and Alaris integrated flatbeds further expand the scanners' capability.

The Integrated Passport Accessory and Integrated Legal Flatbed Accessory offer users more flexibility to scan a variety of document types. With the Passport Accessory, a passport scan can be completed in less than two seconds. Using the Legal Flatbed Accessory, customers can scan up to legal size exception documents such as folders, books and fragile items.

Software and Services

Alaris scanners and software are designed to work together. The E1000 Series comes bundled with Alaris Smart Touch Software. Offering one-touch simplicity, this technology simplifies scanning, accelerates document retrieval and improves productivity and collaboration.

Smart Touch functionality eliminates complicated multi-step scanning processes. It features an intuitive icon-based interface that makes it easy to get the right information to the right place. Users can configure up to nine different functions to suit specific scanning needs, automatically attach scanned documents to an email, create image only or searchable PDF files, scan documents into multiple file formats, and send to destinations including Microsoft Office, Adobe Acrobat, Microsoft SharePoint and cloud destinations.

Alaris Capture Pro Software and Alaris Info Input Solution, to further improve productivity and automate workflows, are available as one-year subscriptions in addition to existing perpetual licensing options.

https://www.alarisworld.com

Dynamsoft Improves Barcode Decoding

Dynamsoft has released a new version of its Barcode Reader Software Development Kit with several new updates that include improved performance for decoding blurred or fuzzy barcodes and average barcode read speed increases of 5-10 percent. Dynamsoft Barcode Reader v6.5 SDK has significantly improved the success rate for decoding blurred PDF417 barcodes. In addition, recognition rates were also significantly improved for fuzzy 1D, QR and DataMatrix barcodes.

This helps organizations reduce workflow disruptions that would normally be caused by barcode reading obstacles. The updated decoding algorithm for the SDK also has reduced misreading rates for 1D barcodes and Aztec barcodes.

These improvements come soon after Dynamsoft made available a JavaScript API Edition, based on WebAssembly, to enable cross-browser and cross-platform online barcode scanning. That December update enabled developers with new conveniences for users. Users can scan barcodes in real-time from a browser using their smartphone without requiring an app download.

There's also no need to capture an image and send it to a server for reading. This saves bandwidth and improves efficiency. In many cases, businesses use a browser-based system for pre-defined workflows. So, the JavaScript web API from the SDK will integrate easily into such workflows.

http://www.dynamsoft.com

Kofax adds Automated Process Discovery

Kofax has announced the availability of Kofax Robotic Process Automation (RPA) 10.4, the latest version of the Kofax RPA solution that now includes Automatic Process Discovery and Robotic Lifecycle Management with Git (an open source version-control system for tracking programing changes).

Automated Process Discovery records, maps and analyzes targeted business processes, applications and actions – human interactions via the desktop and multiple internal and external business applications and reference sites. It also provides insight into existing processes and tasks and helps identify repetitive tasks that can be performed by RPA robots.

Benefits include:

- Leveraging human creativity and ingenuity in working with multiple and complex applications when designing RPA robots.
- Designing RPA robots quicker and more accurately with volumetric and exception path analysis.
- Low-impact process discovery, which records and logs user interactions data with no effect on any day-to-day business.

Kofax RPA's cognitive document automation applies powerful, AI-based intelligence to learn and process unstructured document data.

Sydney startup enters capture market

A small team of developers and data scientists based in Sydney is seeking to disrupt the enterprise capture market with a cloud-based machine learning platform and Google Vision OCR.

Sypht has established a proprietary SaaS platform on the Amazon Cloud that uses computer vision, machine learning and natural language processing to pull apart and reconstitute the largely unstructured data in bills, receipts, invoices, & identity documents such as payslips, passports and drivers' licenses along with generic extraction from any document, with more extraction capability in the pipeline to come.

Established in 2018, Sypht is part of the BPAY Group in partnership with BCG Digital Ventures, a subsidiary of the Boston Consulting Group. Target applications include accounts payable (invoice and receipt digitisation), bill payments, bill comparison and switching for energy and identity verification required for credit & loan applications.

CEO Warren Billington said Sypht already has commercial agreements in place providing a number of proof of concept trials with major clients in Australia and overseas.

"So, we're very much in production," said Billington.

"I think we've started to really prove that the original hypothesis was right, that there is a need to apply a different approach to document extraction and data extraction using machine learning."

More than 45,000 businesses in Australia are registered as BPAY billers, and these bills are generally provided as paper or PDF documents. As each business has the ability to customise their bill, there is no standard template, which illustrates the challenge in using template-based data extraction.

In contrast to traditional template driven extraction systems, Sypht employs a machine-learning approach that allows Sypht to extract data at high speed and accuracy across a diversity of documents.

Sypht was born out of a process which began in early 2018 when the BPAY Group partnered with BCG Digital Ventures, to develop some concepts for new businesses aligned with the core strengths of BPAY Group. Out of a large number of initial concepts, only two were selected to the final seed funding stage, Sypht and Lodge. Lodge is an online platform for landlords and property investors allowing them to self-manage rental.

"There is such a strong focus for a lot of enterprises around understanding their digital transformation journeys and documentation is still a major impediment to that transformation. Manual processing of documentation is still very time consuming and in addition to the cost impact it is prone to error," said Billington.

"But also, the main focus for us is not just about back-end process automation and driving efficiency there, it's also the impact that this can have on customer experience. For example, if you're applying for a loan or going through an insurance claim process, or anything of that nature that requires the upload of what inherently is not one document but multiple, different document types, it's a long and tedious process.

"Firstly, you have to find them and they're often in different formats quite often. You then have to send those through manually. It's not a particularly great experience and takes a lot of time. Being able to automate that process and reduce the friction, both from an organisation perspective, and from a customer perspective, is going to have a major impact on the overall experience of the organisation and the overall experience of the customer. That then starts to have an impact on the brands that are adopting these types of technologies. It's going to give them an edge and differentiation against their competitors.

"Therefore, from our perspective, this isn't just a cost saving exercise. It's also an opportunity to be able to provide better experiences, better services, product innovation back to customers. Which can then drive incremental revenue and drive conversions more strongly based on just a better frictionless experience."

The core of the Sypht development team, which now numbers over 10, came across from the founding team when the new venture was established. Sypht has also established a self-serve platform that allows potential clients, developers and channel partners to easily sign up and register to test the API at www.sypht.com.

"The financial services area is certainly the starting point for us on the basis of complex network relationships that we're able to be introduced to through BPAY Group and BCG Digital Ventures globally. Although, we certainly believe there are opportunities to leverage our platform across broader verticals and in other markets on the basis of it being a SaaS based platform," said Billington

"We are initially working directly with organisations, but I think there are some great opportunities for us to develop a strong partnership network. I think the Robotic Process Automation (RPA) space overall is attracting a lot of attention and spend as part of overall digital transformation projects.

"RPA is promoted as a silver bullet to provide every desired outcome around process automation, and I'm clearly hearing in market that that is not the case and enterprises are seeing some significant gaps. Which is why I think we're starting to see a broader term around intelligent automation incorporating machine learning technologies and capabilities like those Sypht can provide. So, we see a good opportunity to partner alongside those RPA businesses, and the professional services organisations that support them and we're starting to build some success there," said Billington.

https://www.sypht.com/

The role of unstructured data in AI

By Jayant Lakshmikanthan

The process of making AI systems interact more like humans makes some people uncomfortable, but AI is not about replacing humans. In reality, it is much more about removing the robot from humans.

A big part of AI's value lies in automating manual processes and analysing vast amounts of data quickly so that humans are free to accomplish higher-order tasks that require reason and judgment.

To get to this point, however, AI systems must be able to communicate with users and analyse natural forms of data (aka: Unstructured data) — all of the free-flowing stuff that is unable to be packaged in a neat way, things like voice, images and text.

Unstructured data is vital to the development of an AI system. The better an AI system communicates with users, the more it can learn on its own and, therefore, the more efficient it will be. This is important because if an AI system requires a user to interact only in a structured format, its components are dramatically limited. For AI to be successful, it has to make sense out of messy information.

In this context, let's dive deeper into how unstructured data comes into play.

The challenges of unstructured data

In the human world, you and I do not speak by protocol when we carry on a conversation. We say whatever pops into our heads, in some configuration that may or may not follow convention.

We use slang, incorporate sarcasm and crack jokes. It is not natural for us to organize our everyday language and the information we wish to convey into neat columns and rows. Speech is natively unstructured.

If you've ever interacted with Amazon's Alexa, you know that, while the Echo system has generally become quite proficient at understanding free-form commands, the lack of a defined protocol can sometimes cause problems — or at least humorous responses when Alexa attempts to answer queries that don't fit the mould.

Amazon has poured massive resources and millions of dollars into creating and perpetually refining the algorithms that enable this human-like voice to respond to commands, but as adept as Echo has become at deciphering free-flowing language, Alexa still has flaws.

The Alexa example highlights the complexity of one type of unstructured data. An AI system's ability to process and create a numerical equivalent to text is also a tall order, especially when you consider nuance and the importance of context.

And imagine a machine trying to 'understand' what is happening in that picture from your family vacation or an image in an art history textbook covering Impressionism.

The complications associated with processing unstructured data are perhaps the biggest obstacles for AI in the enterprise. Yet, they are not insurmountable.

The importance of expertise

Unstructured data is inherently noisy. As such, it requires substantial expertise to cut through, tease out and detect patterns, and then develop models that recognize those patterns.

Data scientists are pushing aggressively to improve AI systems, and the biggest successes underscore that human instinct and experience are required. This usually happens when a team is focused on a very narrow application of AI.

Let's take the workers' compensation claims process as an example. Teams of data scientists with a deep knowledge of claims can create predictive models based on key indicators they spot. They incorporate unstructured data such as diagnostics, drug information, claim notes and more.

In doing so, the AI system assesses early indicators and determines that a certain claim might be denied. It can then provide an alert to users.

A claims representative can figure out how to intervene and give a particular claim more care to prevent the claimant's lawyer from getting involved (typically denied claims wind up involving a lawyer, which gets very expensive and takes a long time to resolve).

In this case, it is easy to see how the AI system provides assistance to its users, and there is also a tremendous boost in accuracy when that unstructured data is incorporated versus relying on structural data alone.

There is a goldmine of information and insight in the unstructured data (e.g. information about comorbidities) that just doesn't find its way into structured data consistently.

With each additional piece of information, the AI system gets smarter and results improve. This translates to greater efficiency and lower claims costs.

This is just one example of one benefit from incorporating unstructured data into an enterprise AI system. It takes time and diligence to crack the code, but the payoff is gaining a level of insight that has never been possible before - and getting it in a matter of minutes or hours compared to days or weeks.

Unstructured data is the key

Moving forward, it's plain to see that every AI system needs to interact with users in a natural way. Organizations must have a sharp focus on this. In fact, there is a huge gap in a company's offering if unstructured data analysis is not part of the roadmap.

While unstructured data is challenging, Amazon, Google, Apple and others have opened a lot of opportunities for AI applications. We can take these advances and apply them to enterprise applications where they have an enormous business impact.

By taking the time to apply expertise and sound data science, we can make big breakthroughs. We will not only improve accuracy in data analysis through unstructured data but also achieve fundamentally new ways of thinking, communicating, and utilizing information in the future.

Jayant Lakshmikanthan

Founder and CEO of CLARA analytics

TECH IN GOV

6-7 August 2019
National Convention Centre, Canberra

The Latest Innovation in Tech, Cyber Security, and Identity

Join us for the 13th Annual Tech in Gov
Australia's largest ICT event for Government leaders

LEADING-EDGE INSIGHTS FROM TOP GOVERNMENT AND INDUSTRY SPEAKERS

Major General Marcus Thompson AM
Head Information Warfare,
Department of Defence

Speaking Topic:
The Australian Defence Force's approach to cyber space operations

Manal al-Sharif
Forbes Top 50 Women in Tech 2018, TIME Magazine's 100 Most Influential People in the World

Speaking Topic:
The drive for freedom, empowerment, women in tech and social activism

Tobias Feakin
Ambassador for Cyber Affairs,
Department of Foreign Affairs and Trade

Speaking Topic:
The 2019 International Cyber Engagement Strategy Progress Report

Stephen Scheeler
Former CEO,
Facebook (Australia and New Zealand)

Speaking Topic:
Inside Facebook: The secrets behind Facebook's meteoric rise and how you can apply them to your business

Jonathan Thorpe
Head of Digital Identity,
Digital Transformation Agency

Panel Discussion:
Government digital customer service

Anil John
Technical Director, Silicon Valley Innovation Program,
Department of Homeland Security (USA)

Speaking Topic:
Self sovereign identity, blockchain and digital transformation

Robinson Roe
Managing Director,
OneTrust

Speaking Topic:
Why privacy regulation is great for the public & private sectors

Kate Carruthers
Chief Data & Insights Officer,
UNSW Sydney

Speaking Topic:
Cyber security: Data governance

James Horne
Managing Director,
Balance Internet

Panel Discussion:
Building the "Citizen Experience"

Eibhlis Stuckey
Founder and Technical Group Head,
MobileDigital

Speaking Topic:
Digital transformation

REGISTER ONLINE AND GET
10% OFF

USE
CODE IDM10
TO BOOK YOUR PLACE*

Visit: www.techingov.com.au
Call: +61 2 8908 8555

Co-located with: CYBER SECURITY in GOVERNMENT | IDENTITY EXPO

**Offer valid until 31 May 2019*
Information valid at the time of print and may change.

Fast & Efficient Document Management

EPSON
EXCEED YOUR VISION

EPSON WorkForce Business Scanners

The professional's choice for easy, fast and reliable document scanning.

- Advanced paper handling
- Superior image processing
- Ultra-fast and efficient
- Includes Document Capture Pro to scan directly to the cloud

Learn more visit
www.epson.com.au/scanners

EPSON WorkForce DS-70000

EPSON WorkForce DS-7500

EPSON WorkForce DS-570W

Document Capture PRO